



# **Metals Industry Research** and **Development Center**

CITIZEN'S CHARTER 2024 (6<sup>th</sup> Edition)

March 2024



### METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER

To develop and expand the metals industry of the Philippines, Republic Act No. 4724, dated 18 June 1966, established the Metals Industry Development center (MIDC). The Center was primarily tasked to work for close rapport between the government and the industry to foster the advancement of metals, engineering and allied industries in the country.

This was amended by Republic Act No. 6428, dated 31 May 1972, reorganizing and renaming the MIDC into the Metals Industry Research and Development Center (MIRDC), giving it corporate existence and enlarging its powers. The administration of the Center and the exercise of its corporate authority were vested exclusively in a Board of Trustees organized under this Act.

Later presidential issuances reflected the Center's change of thourust and direction. These were Executive Order No. 602, transferring the MIRDC from the National Science Development Board (now Department of Science and Technology) to then Ministry of Trade & Industry (now Department of Trade & Industry) for policy and program coordination and direction; Presidential Decree No. 1765, reorienting its thourust from research and development to direct assistance to the metals industry; and Executive Order No. 128, transferring the Center from the Department of Trade & Industry to the Department of Science & Technology as a separate and attached agency.

Finally, Executive Order No. 494 dated 6 December 1991 transformed the MIRDC into a regular government agency of the Department of Science and Technology. This was fully implemented on 27 May 1993.







### PERFORMANCE PLEDGE

We, the officials and employees of the Metals Industry Research and Development Center commit to serve you **B E S T**:



### **UILDING A REPUTABLE ORGANIZATION**

We uphold honesty, decency, and transparency in all our transactions. We commit to serve customers promptly, efficiently and reliably.



#### **XCELLENCE IN ALL WE DO**

We empower employees to take responsible actions and deliver excellent performance.

We commit to continually improve organizational effectiveness thorough our quality and environmental management systems, comply with applicable statutory and regulatory requirements, and provide products and services with the highest standards of quality and reliability to meet customer satisfaction.



### **ERVICE BEFORE SELF**

We put our professional duties to take precedence over personal desires and interests.

We commit to serve customers professionally, responsibly and competently and abide by the Center's rules and regulations and the code of conduct and ethical standards for public officials and employees being a productive and law abiding citizen and public servant.



#### **RUST AND RESPECT FOR EVERYONE**

We value diversity and treat with justness and fairness every individual at work.

We commit to serve customers of any group, sector, status, gender, culture, or religion with utmost courtesy, vigor and enthusiasm.

All these we pledge, because **YOU** deserve the **BEST**!



### **LIST OF SERVICES**

ANALYSIS AND TESTING DIVISION	7
External Services	7
I. In-House Testing Services	8
II. In-House Calibration Services	29
III. In-plant Services	45
FINANCE AND ADMINISTRATIVE DIVISION	68
External Services	68
I. Employee Records Requisition and Verification	69
Internal Services	
I. Employee Records Requisition and Verification	72
II. General Services	74
III. Purchasing of Supplies and Materials	77
IV. Recruitment, Selection and Placement	84
V. Transportation Services	94
MATERIALS AND PROCESS RESEARCH DIVISION	97
External Services	97
I. Additive Manufacturing Services	98
II. Contract Research/ Joint Research Services	107
III. Physical Metallurgy Laboratory Services	113
A. Physical Metallurgy Laboratory Services - Laboratory Test and Analysis	113
1. Failure Analysis/Failure Investigation	113
2. Fractographic Evaluation	113
3. Metallurgical Sample Preparation	121
4. Optical and Electron Microscopy	127
B. Physical Metallurgy Laboratory Services - In-plant Metallographic Replication	134
C. Physical Metallurgy Laboratory Services - Metals Certification/Classification	
OFFICE OF THE EXECUTIVE DIRECTOR	146
External Services	146
I. MOLD TECHNOLOGY SUPPORT CENTER	147
A. Metalworking Services	148
1. Job processing (Actual Time)	
Service Request on Job Processing (Quoted Jobs)	
3. Use of Facility/Equipment (Time Sharing Jobs)	
I. TECHNICAL SOLUTIONS SERVICES SECTION	
A. Metalcasting, Metalworking and Heat Treatment Jobs	163
1. Metal Processing (Actual Time)	165



Service Request on Metal Processing (Quoted Jobs)	170
3. Use of Facility/Equipment (Time Sharing Jobs)	181
PLANNING AND MANAGEMENT DIVISION	186
Internal Services	
I. Information System Development or Enhancement	187
II. Technical Support	192
PROTOTYPING DIVISION	195
External Services	195
I. Contract Research/ Joint Research Services	196
TECHNOLOGY DIFFUSION DIVISION	203
External Services	203
I. Industrial Training Services*	204
A. Industrial Training Services - Packaged Training Programs (Face-to-Face)	204
B. Industrial Training Services - Packaged Training Programs (Online)	208
C. Industrial Training Services - Regional Training Programs (Face-to-face)	212
D. Industrial Training Services - Regional Training Programs (Online)	
E. Industrial Training Services - Regular Training Programs (Face-to-face)	217
F. Industrial Training Services - Regular Training Programs (Online)	
II. Technology Advisory and Business Development Services	
A. Technology Advisory and Business Development Services - Short-term Consultancy Services	
B. Technology Advisory and Business Development Services - Long-term Consultancy Services	
C. Technology Advisory and Business Development Services - Conduct of Measurement Audit	
D. Technology Advisory and Business Development Services - Technology Licensing	244
Internal Services	
I. Assistance to Staff Development Unit (SDU) of MIRDC	250
FEFDRACK AND COMPLAINTS MECHANISMS	252



### **ANALYSIS AND TESTING DIVISION**

### **External Services**



### I. In-House Testing Services

The following testing and analytical services are offered by the Center's Laboratories for the Metals, Engineering and Allied Industries in ensuring high quality of metal and metal products necessary for the continued competitiveness in both local and foreign markets.

- A. Analytical Laboratories Section (ALS)
- 1. Analytical Laboratories Section Corrosion Testing Services

Corrosion Laboratory provides the following services that can determine or assess the physical properties and corrosion resistance of various coatings for metals and its allied products.

- a. Complete Adhesion Tests of Dry-Film Organic Coatings on Metal Sheets
- b. Complete Physical Tests for Plain and Prepainted Galvanized Sheets
- c. Salt Spray Testing of Metals and Metal Products
- d. Thickness Determination of Dry-Film Organic Coatings on Metal Sheets
- e. Thickness Determination of Metallic Coatings on Various Base Metals
- f. Determination of Mass Coating (MC) per Unit Area for Plain/Prepainted G.I Sheets and G.I Wires
- 2. Analytical Laboratories Section Physico-Chemical Testing Services

These services are offered by Physico-Chemical Laboratory to analyze and determine the elemental composition of Ferrous and Non-Ferrous based metal samples. The analysis can either be destructive or non-destructive.

- a. Chemical Analysis using Spark Optical Emission Spectrometer (OES)
- b. Computation on Carbon Equivalent (CE)
- c. Chemical Analysis using Wet and Instrumental Method
- d. Chemical Analysis using X-ray Fluorescence (XRF) Spectrometer
- B. Physical Laboratories Section (PLS)
- 1. Physical Laboratories Section Auto-Parts Testing Services

These services are offered by Auto-parts Testing Laboratory to evaluate, monitor and test different auto-parts samples for their compliance with the standard, quality, safety and research.

- a. Fatique Test
- b. PUV Dimensional Measurement
- c. Tire Endurance Test
- d. Vibration Test



### 2. Physical Laboratories Section - Mechanical Metallurgy Testing Services

The Mechanical Metallurgy Laboratory offers the following destructive testing services to determine the mechanical properties of metallic samples:

- a. Tension Testing
- b. Test on Threaded Fasteners
- c. Complete Physical Tests of Equal Leg Angle Steel Bar
- d. Complete Physical Tests of Reinforcing Steel Bars
- e. Complete Physical Tests of Wires
- f. Hardness Test
- g. Test of Nails
- h. Test on LPG Cylinders for Requalification
- i. Test on New LPG Cylinders
- j. Breaking load/Proof load Test on Metallic Samples
- k. Hydrostatic Testing on Metallic Samples
- I. Tests on Welds

### 3. Physical Laboratories Section - Non-destructive Testing Services

The Non-destructive Laboratory offers the following testing of metal and metal products such as inspection of welds, shafting, load bearing parts in structural steel building, railways, airplane plants which are also used for product certification.

- a. Penetrant Testing
- b. Magnetic Particle Testing
- c. Radiographic Testing
- d. Ultrasonic Testing
- e. Ultrasonic Thickness Gauging

Office/Division:	Analysis and Testing Division		
Classification:	Highly Technical		
Type of	G2C – Government to 0	Citizen	
Transaction:	G2B – Government to E	Business Entity	
	G2G – Government to (	Government	
Who may avail:	All		
CHECKLIST OF	REQUIREMENTS	WHERE TO SECURE	
1. Submission of San	nples for Testing		



### **Non-destructive Testing Services**

1.1.a For penetrant and Magnetic Particle Testing, Ultrasonic Thickness Gauging, samples should be prepared prior to testing. Paint should be strip or removed, there should be no foreign material such as oil, dirt, grit, weld spatter and slag, etc.

### **Physico-Chemical Testing Services**

For Chemical Analysis using Spark Optical Emission Spectrometer (OES)

1.1.a Sample/s must have flat surface with minimum width/diameter of 16mm and thickness of 2 mm

# For Chemical Analysis using Wet and Instrumental Method

1.1.a Sample/s with at least 50 grams metal sample weight in chips or compact form

1.1.b For Wires: 1 meter long

### **Corrosion Testing Services**

For Complete Adhesion Tests of Dry-Film Organic Coatings on Metal Sheets

1.1.a One pc. with 1 ft. x width of the coil (W x L) dimension

# For Complete Physical Tests for Plain and Prepainted Galvanized Sheets

1.1.a One (1) pc. with 1 ft. length x standard width of the coil dimension for Triple Spot or 1 pc. 1 ft. x 1 ft. (L x W) for Average Test

# For Salt Spray Testing of Metals and Metal Products

1.1.a The sample must be not bigger than the salt spray chamber with 50" x 29" x 25" (LxWxH) dimension

# For Thickness Determination of Dry-Film Organic Coatings on Metal Sheets

1.1.a One (1) piece of sample with at least 3" x 6" dimension



For Thickness Determination of Metallic Coatings on Various Base Metals  1.1.a Sample must have flat surface with minimum width/diameter of 20 mm  For Determination of Mass Coating (MC) per Unit Area for Plain/ Prepainted G.I Sheets and G.I Wires  1.1.a For Plain/Prepainted Sheets:     Average MC: 1 pc 1ft x 1ft (L x W)     Triple Spot MC: 1 pc with 1ft L x     width (W) of the coil  1.1.b For Wires: 1 meter long	
1.2 One (1) Authorization Letter (for person other than Company's representative)	Company/Industry requesting for testing
1.3 One (1) Company ID and one (1) government issued ID	Company/Industry requesting for testing
1.4 For BPS endorsed samples: one (1) original or photocopy of BPS Request for Test for each laboratory and uploaded Request for Test on PCIMS	Department of Trade and Industry Bureau of Philippine Standards (DTI-BPS)
1.5 For students: one (1) Letter of Request for Discount and School ID	School/University where the student is enrolled
2. Claiming of Test Certificates	
2.1. One (1) original or photocopy of issued Technical Service Request (TSR)	MIRDC-Analysis and Testing Division Head Office (ATD-DHO) Centralized Receiving Area, Ground Floor, Gold Building
2.2. One (1) original or photocopy of issued Official Receipt	MIRDC-Finance and Admin Division, Cashier Office, Ground Floor, Gold Building
2.3. One (1) Authorization Letter (for person other than Company's representative)	Company/Industry requesting for testing
2.4. One (1) Company ID and one (1) government issued ID	Company/Industry requesting for testing
2.5 Property Entry/Exit Slip	MIRDC-Analysis and Testing Division Head Office (ATD-DHO) Releasing Area, Ground Floor, Gold Building



CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Proceed to ATD-DHO Centralized Receiving area	1.1 Interview the customer to determine what specific tests/calibration he/she needs 1.2 Refer the customer to the laboratory personnel concerned	None	3 minutes	Production Planning Control Officer I ATD-DHO or Administrative Assistant I ATD-DHO or Authorized Contract of Service Personnel ATD-DHO
2. Request for the required tests/analysis	2.1 Evaluate sample/s and check required parameters for testing  2.2 Receive the required documents  2.3 Generate two (2) Technical Service Request (TSR) forms using Unified Laboratory Information Management System (ULIMS) to be signed by the customer and the laboratory representative.		17 minutes	For ALS Supervising Science Research Specialist ALS or Senior Science Research Specialist ALS (Physico- Chemical Laboratory) or Science Research Specialist II ALS (Corrosion Laboratory)  For PLS Supervising Science Research Specialist PLS or Senior Science Research Specialist Specialist Specialist



	1			
				PLS (Non-
				destructive
				Testing
				Laboratory)
				or
				Senior Science
				Research
				Specialist
				PLS
				(Mechanical
				Metallurgy
				Laboratory)
				or
				Science
				Research
				Specialist II
				PLS (Auto-parts
				Testing
				Laboratory)
3. Sign the two	3.1 Review	None	10 minutes	For ALS
(2) Technical	TSR, affix			Supervising
Service	signature and			Science
Request (TSR)	give one (1)			Research
Form	copy to			Specialist
	customer. TSR			ALS
	will serve as			or
	claim stub			Senior Science
				Research
	3.2 Update			Specialist
	Google			ALS (Physico-
	Monitoring			Chemical
	Sheet			Laboratory)
				or
	3.3 Label			Science
	sample/s			Research
	submitted			Specialist II
	according to			ALS (Corrosion
	TSR			Laboratory)
				For PLS
				Supervising
				Science
				Research
				Specialist
				PLS
				or



				T
				Senior Science
				Research
				Specialist
				PLS (Non-
				destructive
				Testing
				Laboratory)
				or
				Senior Science
				Research
				Specialist
				PLS
				(Mechanical
				`Metallurgy
				Laboratory)
				or
				Science
				Research
				Specialist II
				PLS (Auto-parts
				Testing
				Laboratory)
4. Proceed to	4. Issue Order	See Table of	5 minutes	Administrative
Cashier for	of Payment	Testing Fees		Officer IV
payment and				Financial
present the				Management
TSR		Students can		Section
		avail 20%		or
		discount on total		Administrative
		cost		Officer V
				Financial
		Additional 30%		Management
		on total cost for		Section
		rush analysis on		
		some		
		parameters		
5. Wait for the	5.1 Accept	None	10 minutes	Administrative
issuance of	payment based			Officer V
Order of	on the Order of			Administrative
Payment and	Payment			and General
pay.				Services
	5.2 Issue the			Section
	Official Receipt			or
				Administrative
				Officer II
				Administrative



				and General Services Section
6. Track the status of service requested at mirdc.dost.go v.ph/tracking/ using the issued TSR Reference Number as reference.	6. Conduct sample preparation	None	3 working days	For ALS Laboratory Inspector I ALS (Physico- Chemical Laboratory) or Metals Technologist III ALS (Corrosion Laboratory)
				For PLS Science Research Specialist II PLS (Nondestructive Testing Laboratory) or Science Research Specialist II PLS (Mechanical Metallurgy Laboratory) or Science Research Specialist II PLS (Auto-parts Testing Laboratory
7. Request for witnessing the conduct of the actual testing (optional) on the schedule set by the	7. Conduct Test/Analysis of sample/s.	None	10 working days (Testing time may vary depending on the method used and quantity of samples	For ALS Senior Science Research Specialist ALS or



1				
concerned			received,	Science
laboratory.			maximum of 14	Research
-			days. Queuing	Specialist II
			system applies)	ALS
				,
				For PLS
				Senior Science
				Research
				Specialist
				PLS (Non-
				destructive
				Testing
				Laboratory)
				or
				Senior Science
				Research
				Specialist
				PLS
				(Mechanical
				`Metallurgy
				Laboratory)
				or
				Science
				Research
				Specialist II
				PLS (Auto-parts
				Testing
				Laboratory
8. Return to	8. Check	None	10 minutes	Production
MIRDC on the		None	10 minutes	
	documents and			Planning
completion	advise customer			Control Officer I
date indicated	to settle			ATD-DHO
in the TSR or	balance, if any.			or
as per status				Administrative
on the online				Assistant I
tracking system				ATD-DHO
to claim the				or
certificate/s				Authorized
				Contract of
Proceed to				Service
ATD-DHO				Personnel
Releasing				ATD-DHO
Area. and				
present the				
customer's				



TSR, Official Receipt, Authorization Letter (if representative)				
9. Proceed to Cashier and settle balance.	9. Issue the Official Receipt	See Table of Fees	15 minutes	Administrative Officer IV Financial Management Section or Administrative Officer V Administrative and General Services Section
10. Return to ATD-DHO Releasing Area and present Official Receipt	10. Check Official Receipt and have the customer signed on the Pink Copy (Laboratory's Receiving copy) of Test Certificate and give the original copy to customer	None	5 minutes	Production Planning Control Officer I ATD-DHO or Administrative Assistant I or Authorized Contract of Service Personnel ATD-DHO
11. Sign the Pink Copy of Test Certificate	11.1 Issue Property Entry/Exit Slip	None	3 minutes	Production Planning Control Officer I ATD-DHO or Administrative Assistant 1 or Authorized Contract of Service Personnel ATD-DHO



	11.2 Call the laboratory personnel to bring the tested samples at ATD-DHO for releasing.	None	10 minutes	Production Planning Control Officer I ATD-DHO or Administrative Assistant I or Authorized Contract of Service Personnel ATD-DHO
12. Sign the Property Entry/Exit Slip.	12. Stamp TSR with "RELEASED" and return to customer together with the OR.	None	3 minutes	Production Planning Control Officer I ATD-DHO or Administrative Assistant I or Authorized Contract of Service Personnel ATD-DHO
13. Customer fills out Customer/Clien t Satisfaction Survey Form when necessary	13. Collect and file the filled-up Customer/ Client Satisfaction Survey Form	None	5 minutes	Production Planning Control Officer I ATD-DHO or Administrative Assistant I or Authorized Contract of Service Personnel ATD-DHO
14. Present to the gate guard the Property Entry/Exit Slip	14. Check the Property Entry/Exit Slip and the items to be taken out	None	1 minute	Security Guard on duty MIRDC
		TOTAL	13 days, 1 hour	and 37 minutes



SITUATION	UATION ACTION LOCATION OF REMARKS				
OHOAHON	AUTION	ACTION	KLINAKKO		
If sample requires machining	Client may avail of the services of MIRDC-Technical Services Solution (TSS) with a corresponding fee	Technical Services Solution (TSS), Ground Floor, Titanium Building	Samples are machined to specimen as per standard in case full size testing is not possible.		
For Client securing PS Mark Certification	The Test Certificate shall be uploaded to PCIMS sent directly to BPS. No copy of the Test Certificate shall be issued to the Client.	ATD-DHO Releasing Area, Ground Floor, Gold Building	BPS Policy		
Too hard samples that can't be drilled may require annealing process	Client may avail of the services of MIRDC-Technical Services Solution (TSS) with a corresponding fee	Technical Services Solution (TSS), Ground Floor, Titanium Building	Hardness shall be reduced to ≤ 20HRC		
When there is no available test jig/fixture in the laboratory	Customer shall provide the required test jig/fixture	Preferred machine shop of the customer	The supplied fixture shall conform to customer's requirements. This can be retrieved after the test.		
For Salt Spray, the above processing time is only applicable for 24 to 120-hour salt spray test request.	The laboratory will add appropriate processing time for every additional hours of exposure time.	ATD-DHO Centralized Receiving Area, Ground Floor, Gold Building	Salt spray test is conducted on a scheduled basis due to availability of machine, personnel and time of submission of sample/s.		
For sample requiring Grade Verification after chemical analysis	Client may avail of the Metal Classification/Certific ation service of Physical Metallurgy Laboratory with a corresponding fee	Physical Metallurgy Laboratory, Ground Floor, Titanium Building	A complete chemical analysis of the sample is a pre-requisite		
For internal jobs (jobs requested by other Unit/Section/Divisi on)	The same procedure applies from Job Acceptance to Releasing	ATD-DHO Centralized Receiving Area, Ground Floor, Gold Building	Laboratory testing/calibration fees are waived.		



### **TABLE OF FEES**

### **AUTO-PARTS TESTING SERVICES**

PUV DIMENSIONAL MEASUREMENT							
	FEE						
A. Class 2 and 3	PhP 17,830/unit						
I. Overall height, width and length	PhP 4,110/meas.						
II. Wheel base and front and rear overhang	PhP 2,140/meas.						
III. Cabin Dimensions	PhP 1,150/meas.						
IV. Seat Dimensions and Seat Layout	PhP 1,640/meas.						
V. Space for each standing passenger	PhP 1,520/meas.						
VI. Step Board Dimensions	PhP 1,640/meas.						
VII. Service Door Dimensions	PhP 650/meas.						
VIII. Emergency Exit Dimensions	PhP 650/meas.						
IX. Hand Rails	PhP 1,150/meas.						
X. External Projections	PhP 4,110/meas.						
XI. Field of Vision	PhP 1,640/meas.						
B. Class 1	PhP 20,500/unit						
I. Overall height, width and length	PhP 4,110/meas.						
II. Wheel base and front and rear overhang	PhP 2,140/meas.						
III. Cabin Dimensions	PhP 1,150/meas.						
IV. Seat Dimensions and Seat Layout	PhP 1,640/meas.						
V. Step Board Dimensions	PhP 1,640/meas.						
VI. Service Door Dimensions	PhP 650/meas.						
VII. Emergency Exit Dimensions	PhP 1,640/meas.						
VIII. Hand Rails	PhP 1,150/meas.						
IX. External Projections	PhP 4,110/meas.						
X. Field of Vision	PhP 3,120/meas.						

TIRE ENDURANCE TEST						
	FEE					
1. Load/Speed Performance Test						
I. Motorcycle	PhP 4,800/sample					
II. Passenger Car	PhP 8,100/sample					
III. Truck/Buses	PhP 11,200/sample					
2. Tire Endurance Test						
I. Motorcycle	Per quotation basis					
II. Passenger Car	Per quotation basis					
III. Truck/Buses	Per quotation basis					
0. Photo	PhP 80/photo					
0. Witnessing of Test	PhP 250/TSR/Day					
0. Courier Service	PhP 120/TSR					



### **MECHANICAL METALLURGY TESTING SERVICES**

1. Tension Test	
1.1 <1500mm²	₱ 390/sample
1.2 >1500mm²	₱ 670/sample
2. Test on Threaded Fasteners	₱ 375/sample
2.1 Axial Tension Test	₱ 375/sample
2.2 Shear Test	₱ 375/sample
3. Complete Physical Tests of Equal Leg Angle Steel Bar	
3.1 Tension Using Shimadzu 50kN	₱ 390/sample
3.2 Dimension Test	₱ 230/sample
3.3 Out of square Test	₱ 205/sample
3.4 Test of Camber	₱ 185/sample
3.5 Variation in Mass	₱ 50/sample
4. Complete Physical Tests of Reinforcing Steel	·
<u>Bars</u>	
4.1 Tension Test	
4.1.1 <1500mm²	₱ 390/sample
4.1.2 >1500mm <sup>2</sup>	₱ 670/sample
4.2 Bend Test	₱ 190/sample
4.3 Variation in Mass	₱ 50/sample
4.4. Deformation Measurement	₱ 50/sample
4.5. Variation in Mass	₱ 50/sample
5. Complete Physical Tests of Wires	
5.1 Tension	₱ 390/sample
5.2 Physical Appearance	₱ 125/sample
5.3 Dimension Test	₱ 300/sample
5.4 Torsion Test	₱ 225/sample
5.5 Winding Test	₱ 225/sample
6. Hardness Test	
6.1 Rockwell, 5 Indentations	₱ 140
6.2 Brinell, 2 Indentations	₱ 180
6.3 Vickers, 5 Indentations	₱ 240
6.4 Micro Vickers, 1 Indentation	₱ 270
6.5 Microdur, 5 Indentations	₱ 180
7. Tests of Nails	
7.1 Tension Test (Using Shimadzu 50kN)	₱ 390/sample
7.2 Bend Test	₱ 190/sample
7.3 Dimensional for Nails	₱ 350/sample
8. Test on LPG Cylinders for Requalification	



8.1. Air Leak Test	
8.1.1 2 Piece Cylinder	₱ 1,600/sample
8.1.2 3 Piece cylinder	₱ 2,500/sample
8.2. Hydrostatic Test	F 2,300/Sample
	₱ 3,650/sample
8.2.1 2 Piece Cylinder	₱ 4,750/sample
8.2.2 3 Piece cylinder  9. Test on New LPG Cylinders	F 4,750/Sample
9.1 Tension Test	₱ 200/sampla
9.2 Bend Test	₱ 390/sample
9.3 Burst Test	₱ 190/sample
	₽ 1 550/somple
9.3.1 2-Piece Cylinder	₱ 1,550/sample
9.3.2 3-Piece cylinder	₱ 3,500/sample
9.4. Macroexamination	₱ 1,330/sample
10. Breakingload/Proofload Test on Metallic Samples thru Tension/Compression/Flexure	
10.1 Manhole Cover / Grating	₱ 1,250/sample
10.2 Clevis Assembly	₱ 1,325/sample
10.3 Turn Buckle, 1"- 2"	₱ 745/sample
10.4 Turn Buckle, > 2"	₱ 1,480/sample
10.4 Turn Buckle, > 2 10.5 Wire Rope ≥ 1 ½"	₱ 1,250/sample
10.6 Small Samples (< 15kg)	₱ 355/sample
10.7 Big Samples (15 to 35kg)	₱ 655/sample
10.8 Heavy Sample (above 35kg)	₱ 1,550/sample
10.9 7 wire strands	₱ 1,250/sample
11. Hydrostatic Testing on Metallic Sample	Based on Quotation
	Bassa on Quotation
12. Tests on Welds	₱ 200/semple
12.1 Tension	₱ 390/sample
12.2 Bend	₱ 190/sample
12.3 Macroexamination	₱ 1,330/sample
13. Sample Preparation	₱ 125/semple
13.1 Notching	₱ 125/sample
13.2 Grinding	₱ 85/sample
13.3 Cutting	₱ <i>F</i> 0/22mm-1-
13.3.1 Oxy-acetylene	₱ 50/sample
13.3.2 Up to 1in <sup>2</sup>	₱ 160/sample
13.3.3 1-4in <sup>2</sup>	₱ 220/sample
14. Other Fees	B 00/ L 1
14.1 Photo	₱ 80/photo
14.2 Witnessing	₱ 250/TSR/day
14.3 Courier	₱ 120



### NON-DESTRUCTIVE TESTING SERVICES

	FEE
Liquid Penetrant Testing	
1.1. Visible	PhP370/ sq. ft.
1.2 Visible	PhP360/ linear ft.
1.3 Fluorescent	PhP420/ sq. ft.
1.4 Fluorescent	PhP370/ linear ft.
2. Magnetic ParticleTesting	
2.1. Visible	PhP410/ sq. ft.
2.2 Visible	PhP380/ linear ft.
2.3 Fluorescent	PhP430/ sq. ft.
2.4 Fluorescent	PhP390/ linear ft.
3. Radiographic Testing (3.5" x 17" Film)	
3.1. 10mm thick and below	PhP540.00
3.2 >10-25 mm thick	PhP570.00
3.3 >25-35 mm thick	PhP620.00
3.4 >35-50 mm thick	PhP660.00
4. Ultrasonic Testing	
4.1. Flaw Detection (per sq.ft.)	PhP385.00
4.2 Flaw Detection (per In.ft.)	PhP420.00
4.3 Thickness Gaging (per point)	PhP60.00
5. Witnessing	PhP 250/TSR/day

### PHYSICO-CHEMICAL TESTING SERVICES

Chemical Analysis using Spark Optical Emission Spectrometer (OES)								
1. FERROUS-BASED SAMPLES								
1.1 Complete Analysis (C,Si,Mn,P,S,Cr,Mo,Ni,Cu)	₱ 3550/sample							
1.2 Additional elements (B,V,Nb,Ti, Mg)	₱ 395/element							
1.3 Carbon Equivalent (CE)	₱ 750/sample							
2. FOR BPS-ENDORSED SAMPLES								
2.1 Weldable Rebars, Equal Leg Angle Bars, LPG Cylinders (C,Si,Mn,P,S)	₱ 3,550/sample							
2.2 Non-Weldable Rebars (P,S)	₱ 1,810/sample							
3. NON-FERROUS BASED SAMPLES								
COPPER AND COPPER	RALLOYS							
3.1 Complete Analysis (Pure Copper) (Cu,Sn,Pb,Fe,Al,Ni,Mn,Ag,P,S,Co,Sb)	₱ 3,900/sample							
3.2 Additional elements	₱ 395/sample							



(Bi,Si,Zn)	
3.3 Complete Analysis (Brass,Bronze and other	
Copper Alloys)	₱ 3,900/sample
(Cu,Sn,Pb,Fe,Al,Ni,Mn,Ag,P,S,Co,Zn)	
3.4 Additional elements	₱ 395/sample
(Bi,Si,Mg)	
ALUMINUM AND ALUMINU	JM ALLOYS
3.5 Complete Analysis	₱ 2 000/somple
(Al,Mn,Mg,Cu,Zn,Ni,Cr,Pb,Fe,Ti)	₱ 3,900/sample
3.6 Additional elements	₱ 395/sample
(Ag,Bi,Co,P)	F 393/Sample
Chemical Analysis using X-ray Fluorescence (XR	RF) Spectrometer
4.1 Scanning	₱ 2,200/sample
4. OTHER FEES	
4.1 Sample preparation (for rebars, 10mm,	
12mm Ø)	₱ 190/sample
4.2 Metal Identification	₱ 750/sample
4.3 Witnessing Fee	₱ 250/TSR
4.4 Photo	₱ 80/shot



### **Chemical Analysis using Wet and Instrumental Method**

MATERIAL	INFRARED COMBUSTION	WET/ELECTROLYSIS					AAS	UV-VIS		TOTAL COST
Ferrous Based										
Low Alloy Steel	C,S	Si	Р				Mn,Ni,Cu,Cr	Мо		
	₱650/element	<b>₱</b> 1130	<b>₱</b> 1160				₱670/element	₱1530		₱7,800.00
Cast Iron	C,S	Si	Р				Mn,Ni,Cu,Cr	Мо		
	₱650/element	<b>₱</b> 1130	<b>₱</b> 1160				₱670/element	₱1730		₱8,000.00
Stainless Steel	C,S	Si	Р	Ni	Cr		Mn,Cu	Мо		
	₱650/element	₱1130	<b>₱</b> 1160	₱1120	₱840		₱670/element	₱1530		₱8,420.00
Manganese Steel	C,S	Si	Р	Mn			Cu,Ni,Cr	Мо		
	₱650/element	₱1130	<b>₱</b> 1160	₱1620	₱1620		₱670/element	₱1530		₱8,750.00
Tool Steel	C,S	Si	Р				Mn,Ni,Cu,Cr	Мо		
	₱650/element	<b>₱</b> 1130	<b>₱</b> 1160				₱670/element	₱1730		₱8,000.00

#### Non-Ferrous Based

Solder, Lead Base, Tin Base, Babbitt and other similar alloys

a. Pb(rem)			Sn, Sb, Cu, Ag, Ni, Fe, Bi, Zn, Al ₱670/element	₱6,030 .00
b. Pb(rem)	Sb	Sn B725	Cu, Ag, Ni, Fe, Bi, Zn, Al	
>20% c. Sn (rem) >75%	₱680	₱725	Pb, Sb, Cu, Ag, Ni, Fe, Bi, Zn, Al	₱6,095.00 ₱6,030.00
c. Sn (rem), Pb (wet) (> 75%) (=/<20%)	Pb ₱1140	Sb ₱680	Cu, Ag, Ni, Fe, Bi, Zn, Al ₱670/element	₱6,510.00

Complete chemical analysis shall be done if Pb and Sn are to be reported.

It is possible to analyze one or more elements provided Pb is not to be reported and % Sn is less than 75%.



(cont): Chemical analysis using Wet and Instrumental Method

MATERIAL	INFRARED COMBUSTION	WET/ELECTROLYSIS			WET/ELECTROLYSIS		uv-vis		TOTAL COST
Copper Based Metals									
Copper (Pure)		Cu				Cd, Co, Fe, Mn, Ni, Ag, Zn			
99.75% and over		₱1085				₱670/element			₱5,775.00
Brass	s	Cu				Pb, Sn, Al, Ni, Fe, Mn, Sb, Ag, Co	P		
Zn (rem)	₱650	₱1085		1		₱670/element	₱1100		₱8,865.00
Bronze	S	Cu	Sn			Pb, Al, Ni, Fe, Mn, Sb, Ag, Co	Р		
Zn (rem) if > 5%, Cu > 40%	₱650	₱1085	₱725			₱670/element	₱1100		₱8,920.00
Bronze	S	Cu	Sn			Zn, Pb, Al, Ni, Fe, Mn, Sb, Ag, Co	Р		
if Zn < 5% /Cu Alloys	₱650	₱1085	₱725			₱670/element	₱1100		₱9,590.00
Copper - Lead Alloy	S ₱650	Cu ₱1085	Pb ₱1140			Zn, Sn, Al, Ni, Fe, Mn, Sb, Ag, Co ₱670/element	P ₱1100		₱10,005.00
Cu-Ni Alloy/ Cu-Ni-Zn Alloy		Cu	Ni			Pb, Sn, Fe, Mn, Al, Sb, Co, Ag			
Zn (rem)		₱1085	₱1120			₱670/element			₱7,565.00
Cu-Ni Alloy/ Cu-Ni-Zn Alloy		Cu	Ni			Zn, Pb, Sn, Fe, Mn, Al, Sb, Co, Ag			
Zn < 5%		₱1085	₱1120			₱670/element			₱8,235.00
Manganese - Copper Alloy	C,S ₱650/element	Cu ₱1085	Mn ₱1620	P ₱1100					₱5,105.00

MATERIAL	INFRARED COMBUSTION		WET/ELECTROLYSIS	AAS	uv-vis			TOTAL COST			
Aluminum Based											
Aluminum (Pure)				Mn, Mg, Cu, Zn, Ni, Cr, Pb, Sn	Si	Fe	Ti				
Al (rem)				₱670/element	₱1130	₱670	<b>₱</b> 730	₱7,890.00			
Al - Si Alloy		Si		Mn, Mg, Cu, Zn, Ni, Cr, Pb, Sn	Fe	Ti					
Al (rem)		₱1130		₱670/element	<del>₱</del> 670	<del>₱</del> 730		₱7,890.00			
Al - Si - Mg Alloy		Si		Mn, Cu, Zn, Ni, Cr, Pb, Sn	Fe	Ti					
Al (rem)		₱1130		₱670/element	₱670	₱730		₱7,220.00			



### Nickel Alloys

	₱650/element	₱1130	₱1120	₱840	₱1160	₱1280	₱670/element	₱1530		₱11,040.00
Ni - Cr - Fe Alloy	C,S	Si	Ni	Cr	Р	Fe	Mn, Al, Co, Cu	Мо		
	₱650/element	₱1130	₱1120	₱840	₱1160		₱670/element	₱1530		₱10,430.00
Ni - Cr Alloy	C,S	Si	Ni	Cr	Р		Mn, Al, Co, Fe, Cu	Мо		
Al (rem)	₱650/element	₱1085	₱1120				₱670/element			₱6,185.00
Nickel - Copper Alloy	C,S	Cu	Ni			Mn, Al, Co, Fe				
Nickel (Pure) Al (rem)	C,S ₱650/element	Si ₱1130	Ni ₱1120			Mn, Cu, Co, Fe ₱670/element			₱6,230.00	

Zinc (Pure)		Cu, Fe, Cd, Pb, Al, Sn, Mg	
Zn (rem)		₱670/element	₱4,690.00

### NON-ISO

Silver Brazing		Cu	Ag			
AI (rem)		₱1085	₱1160			₱2,245.00
Silver Brazing		Cu	Ag	Zn, Cd		
Al (rem)		₱1085	<b>₱</b> 1160	₱670/element		₱3,585.00
High P Brazing Alloy		Cu	Ag		Р	
AI (rem)		₱1085	₱1160		<del>₱</del> 1100	₱3,345.00
OTHER FEES						
Metals						
Identification	₱750.00/s	sample				
Witnessing						
Fee	<b>₱250.00</b> /7	ΓSR				
Photo	<b>₱80.00</b> /sh	not	·	 ·	·	



### **CORROSION TESTING SERVICES**

Rate (Php) per sample

Determination of Mass Coating (MC) per Unit Area for Plain/Prep Plain Wires Average of Single Spot	ainted GI Sheets and
GI Sheet	430.00
GI Wire	420.00
Prepainted GI Sheet	540.00
Triple Spot GI Sheet	520.00
Prepainted GI Sheet	590.00
Thickness Determination of Dry-Film Organic Coatings on Metal Thickness Test (Top Coat/Back Coat/Total Thickness)	<u>Sheets</u> 480.00
Complete Adhesion Tests of Dry-Film Organic Coatings on Metal Sheets	
Bend Test	240.00
Tape Test	215.00
Impact Test	300.00
Pencil Hardness Test	250.00
Complete Physical Tests for Plain and Prepainted Galvanized Sh For GI Sheets	<u>eets</u>
Package 1 –Triple Spot MC, Bend Tests	760.00
Package 2 – Averaging MC, Bend Tests	670.00
For Prepainted Sheets	
Package 3 –Triple Spot MC, Paint Thick, Bend, Tape,	2,075.00
Impact, Pencil Hardness Test	2,070.00
Package 4- Averaging MC, Paint Thick. Bend, Tape, Impa	ct, 2,025.00
Pencil Hardness Test	
Salt Spray Testing of Metals and Metal Products	
For the First Sample:	0.440.00/045
Weekday Weekend	2,410.00/24hrs
vveckenu	3,060.00/24hrs* *applicable for
rea	uests beyond 96 hrs
Additional Sample	300.00
Thickness Determination of Metallic Coatings on Various Base M	etals
Coulometric- Single Layer	570.00
· · · · · · · · · · · · · · · · · · ·	



Additional Layer 300.00 Magnetic Induction 550.00

Specific Gravity 250.00

Sample Preparation (Stripping of Coating)

GI Wires 100.00 GI Sheets/Prepainted GI Sheets/Blackened Samples 120.00

Other Fees

Witnessing 250.00/TSR Photo 80.00/shot

### **II. In-House Calibration Services**

In-house calibration services conducted at MIRDC Instrumentation and Metrology Laboratories, covers the parameters on Dimensional Metrology, Pressure, Torque, Force, Weight (Electronic Balances or Non-automatic weighing scale), Thermometry and Electrical Instruments. These services are provided for the metals, engineering and allied industries through comparison with MIRDC laboratory reference standards to ensure their accuracy and traceability to System International (SI) units through standards maintained by a National Measurement Institute.

Office/Division:	Analysis and Testing Division – Instrumentation and Metrology Section (IMS)			
Classification:	Highly Technical			
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government			
Who may avail:	All			
CHECKLIST	OF REQUIREMENTS	WHERE TO SECURE		
1. Submission In	struments/ Equipment			
must be in good was services do not in Client shall provid (batteries, manual)	le all the accessories ls, charger, power supply, ment deemed necessary	Company requesting for calibration		
1.2 Technical Ser	vice Request (TSR) form	Analysis and Testing Division Head Office (ATD-DHO) Centralized Receiving Area		



1.3 One (1) Authorization Letter (for person other than Company's representative)	Company requesting for calibration
1.4 One (1) Company ID and one (1) government issued ID	Company requesting for calibration
1.5 For students: one (1) Letter of Request for Discount and School ID	School/University requesting for calibration
2. Claiming of Calibration Certificates	
2.1. One (1) original or photocopy of issued Technical Service Request (TSR)	MIRDC-Analysis and Testing Division Head Office (ATD-DHO) Centralized Receiving Area, Ground Floor, Gold Building
2.2 Payment (cash or company dated check)	Client/Industry requesting for in plant services
2.3 One (1) original or photocopy of issued Official Receipt, and Invoice (if applicable)	Cashier Office, MIRDC-Finance and Admin Division, Ground Floor, Gold Building
2.4. One (1) Authorization Letter (for person other than Company's representative)	Company/Industry requesting for calibration
2.5. One (1) Company ID and one (1) government issued ID	Company/Industry requesting for calibration
2.6 Property Entry/Exit Slip	MIRDC-Analysis and Testing Division Head Office (ATD-DHO) Releasing Area, Ground Floor, Gold Building

CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Proceed to ATD-DHO Centralized Receiving Area and submit instruments subject for In-house Calibration service.	1.1 Evaluate instrument/s and check the functionality test and the required	None  No down payment is required for all in-	15 minutes	Senior Science Research Specialist IMS (Officer in Charge) or
Calibration Scrvice.	parameters for calibration.  1.2 Generate three (3) copies (One copy for the Customer, for the Laboratory, and for ATD-DHO)	house calibration service.		Senior Science Research Specialist IMS (Metrology) or Science Research Specialist II IMS (Instrumentation)



	1	T		
2. Review the contents of TSR to ensure that all the requirements for	of Technical Service Request (TSR) forms using Unified Laboratory Information Management System (ULIMS). 2.1 Review TSR, affix signature and give one (1)	None	5 minutes	Senior Science Research Specialist IMS (Officer in
the conduct of inhouse calibration service are met, and then sign the Technical Service Request (TSR) Form (in 3 copies) that were generated by the receiving personnel.  The TSR furnished to customer will also serve as claim stub.	copy to customer.  2.2 Update Google Monitoring Sheet  2.3 Put tag or labels on each instrument for in-house calibration service			Charge) or Senior Science Research Specialist IMS (Metrology) or Science Research Specialist II IMS (Instrumentation)
3. Present all company required documents, if applicable (PO, Receiving documents copies, etc.)	3.1 Receive the required documents, if applicable (PO, Receiving documents copies, etc.)  3.2 Distribute the instrument/ equipment to laboratory areas as per parameter.	None	3 minutes	Senior Science Research Specialist IMS (Officer in Charge) or Senior Science Research Specialist IMS (Metrology) or Science Research Specialist II IMS (Instrumentation)



4. Track the status of service requested at mirdc.dost.gov.ph /tracking/ using the issued TSR Reference Number.	4. Conduct calibration	None	14 working days (Calibration time may vary depending on the method used and quantity of samples received, Queuing system applies)	Senior Science Research Specialist IMS (Metrology) or Science Research Specialist II IMS (Instrumentation)
5. Return to MIRDC to claim the Calibration Certificate.  Proceed to ATD-DHO Centralized Receiving Area. and present the original copy of TSR form.  In case of lost original copy of the TSR, the person who claims the calibration certificates and/ or items, must present a signed letter from the listed Customer, stating that such person is authorized to retrieve said items.	5.1 Evaluate the TSRs customer's copy.  5.2 Check documents and advise customer to settle balance, if any.	None	5 minutes	Production Planning Control Officer I ATD-DHO or Administrative Assistant I or Authorized Contract of Service Personnel ATD-DHO
6. Proceed to Cashier for payment and present the TSR	6. Issue Order of Payment	Refer to DOST AO No. 006 Series of 2018, prescribed calibration fees	5 minutes	Administrative Officer IV Financial Management Section or Administrative Officer V



				Financial
				Management
- 107 to 6		<u> </u>	10	Section
7. Wait for the	7.1 Accept	None	10 minutes	Administrative
issuance of Order	payment based			Officer V
of Payment and	on the Order of			Administrative and General Services
pay.	Payment			Section
	7.2 Issue the			or
	Official Receipt			Administrative
	оо.о тооо.р т			Officer II
				Administrative and
				General Services
				Section
8. Go back to ATD-	8. Check	None	5 minutes	Production
DHO Releasing	Official Receipt	140110	O minutes	Planning Control
Area and present	and have the			Officer I
Official Receipt	customer			ATD-DHO
	signed on the			or
	Pink Copy			Administrative
	(Laboratory's			Assistant I
	Receiving			ATD-DHO
	copy) of			or A : : !!= = =!
	Calibration Certificate and			Authorized Contract of Service
	give the original			Personnel
	copy to			ATD-DHO
	customer			7(12 5110
9. Sign the Pink	9.1 Issue	None	3 minutes	Production
Copy of the	Property			Planning Control
Certificates	Entry/Exit Slip			Officer I
				ATD-DHO
				or
				Administrative
				Assistant I
				ATD-DHO
				or <i>Authorized</i>
				Contract of Service
				Personnel
				ATD-DHO
	9.2 Call the	None	15 minutes	Production
	laboratory			Planning Control
	personnel to			Officer I



Property Entry/Exit Slip	Exit Slip and the items to be taken out			WIIRDC
12. Present to the gate guard the	12. Check the Property Entry/	None	1 minute	Security Guard on duty MIRDC
11. Customer fills out Customer/Client Satisfaction Survey Form	11.1 Let the customer fill out the Customer/Clien t Satisfaction Survey Form  11.2 Collect and file the Customer/Client Satisfaction Survey Form	None	5 minutes	Production Planning Control Officer I ATD-DHO or Administrative Assistant I ATD-DHO or Authorized Contract of Service Personnel ATD-DHO
10. Sign the Property Entry/Exit Slip.	10. Stamp TSR with "RELEASED" and return to customer the TSR, OR together with the Calibration Certificates and Property Entry/Exit Slip	None	3 minutes	ATD-DHO  Production Planning Control Officer I ATD-DHO or Administrative Assistant I ATD-DHO or Authorized Contract of Service Personnel ATD-DHO
	bring the tested samples at ATD-DHO for releasing.			ATD-DHO or Administrative Assistant I ATD-DHO or Authorized Contract of Service Personnel



SITUATION	ACTION	LOCATION OF ACTION	REMARKS
For multiple jobs or TSRs requests and complexity of the instruments evaluated and received within the day	Conduct of calibration will be on scheduled basis depending on the availability of laboratory reference standard and calibration officers  14 working days from receipt of sample, depending on the quantity and complexity of test / calibration performed.	Analysis and Testing Division, Instrumentat ion and Metrology Section, Ground Floor, Gold Building	Queueing system (First In First Out)
For un-stable laboratory environmental condition due to Air-Conditioning system and other Influence Quantity factors	The Client will be informed that the stabilization time process will be extended.	Analysis and Testing Division, Instrumentat ion and Metrology Section, Ground Floor, Gold Building	Queueing system (First In First Out)
For complex instrument not included in the Fees and Charges in the DOST Administrative Order No.006	The Client will be provided with Quotation approved by the Head of Agency or his Authorized Representative. The calibration process will only commence upon approval/acceptance of the quotation and the corresponding issuance of Purchase Order by the client	Analysis and Testing Division, Instrumentat ion and Metrology Section, Ground Floor, Gold Building	Follow MIRDC procedure on Tender Request and Contract
For internal jobs (jobs requested by other Unit/Section/Divisi on)	The same procedure applies from Job Acceptance to Releasing	ATD-DHO Centralized Receiving Area, Ground Floor, Gold Building	Laboratory testing/calibrati on fees are waived.



### **TABLE OF CALIBRATION FEES**

(Per DOST Administrative Order No. 006, series of 2018 "Prescribe Calibration Fees for ITDI, MIRDC, PAG-ASA and Regional Metrology Laboratories (RMLs)")

Type of Equipment/Device	Fees (Pesos)
ELECTRICAL	
AC Current Source/Standard	
up to 50A	2,650.00
per succeeding range	750.00
AC Voltage Source/Standard	
up to 1000V	1,750.00
r succeeding range	550.00
Ammeter (AC,20 A)	
1 to 2 ranges	750.00
1 to 5 ranges	1,200.00
Ammeter (DC,2 A and below)	
1 to 2 ranges	700.00
1 to 5 ranges	1,150.00
Ammeter (DC,above 2 A)	1 000 00
1 to 2 ranges	1,000.00 1,700.00
1 to 5 ranges AC Clampmeter (up to 500A)	1,700.00
up to 500A	800.00
per succeeding range	300.00
Current Shunt, (AC, 10 A)	1,300.00
Current Shunt, (AC, 50 A)	1,650.00
Current Shunt, (DC, 10 A)	1,400.00
Current Shunt, (DC, 50 A)	1,700.00
DC Current Source/Standard	
Up to 50A	2,100.00
per succeeding range	900.00
DC Voltage Source/Standard	
by direct measurement	
up to 1000V	1,400.00
per succeeding range	650.00
by transfer method	
up to 1000V	2,600.00
per succeeding range	1,100.00
DC Clampmeter	
up to 500A	900.00
per succeeding range	350.00



Decade Resistance Box (per dial)	1,100.00
Double Bridge	
1st range	1,800.00
per succeeding range	1,100.00
Earth Tester	4 250 00
1st range	1,350.00
per succeeding range Electronic Load	400.00
	1 200 00
up to 20A per succeeding range	1,200.00 800.00
Groundstrap Tester/Checker	000.00
1st range	550.00
per succeeding range	330.00
High Voltage Meter (up to 10 kV )	000.00
Up to 10 kV	2,000.00
per succeeding range	1,150.00
Insulation Tester (Megohmeter)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
up to 1000V	1,050.00
per succeeding range	350.00
Megohmmeter	
up to 1000MΩ	1,090.00
per succeeding range	350.00
Kelvin Bridge	
up to	1MΩ
per succeeding range	1,250.00
Millivolt Potentiometer	
Up to 100mV	1,850.00
per succeeding range	900.00
Multimeter, Analog	2,250.00
Multimeter, Digital,	0.050.00
3 ½ digits	3,250.00
4 ½ digits	5,050.00
5 ½ digits	7,900.00 10,150.00
6 ½ digits Ohmmeter	10, 130.00
100m $\Omega$ to 100G $\Omega$	900.00
per succeeding range	350.00
Ohmmeter (0-14 pH)	700.00
Puncture Tester	700.00
1st range	950.00
per succeeding range	400.00
Puncture w/ Insulation Tester	
Up to 5Kv AC/DC, 2A AC/DC, and 100 M $\Omega$	1,950.00
Up to 5Kv AC/DC, 2A AC/DC, and 100 $M\Omega$	



Rheostat	550.00
Stopwatch (15 minutes. minimum)	680.00
Standard Resistor	
by direct measurement	3,150.00
by ratio	4,250.00
Surface Resistance Checker	
1st range	850.00
per succeeding range	510.00
Tachometer	700.00
Ultrasonic Tester	1,600.00
Variable AC Transformer	700.00
Voltmeter, (1000V, AC/DC)	
1st range	700.00
per succeeding range	350.00
Tachometer	700.00
Wattmeter (AC 240V, 5A)	
1st range	1,800.00
per succeeding range	900.00
Wattmeter (DC 240V, 5A)	
1st range	1,845.00
per succeeding range	800.00
Wheatstone Bridge	3,350.00
Temperature	
Clinical Thermometer (-20 to 80°C)	1,700.00
Digital Thermometer, T/C	
1st range	1,800.00
per succeeding range	500.00
Digital Thermometer, Add'l Probe	1,800.00
Digital Thermometer, RTD	
1st range	1,800.00
per succeeding range	500.00
Glass/Filled/Bimetallic Thermometer	
-30 +120 °C (1st 5 points)	1,750.00
per additional point	500.00
0 to 100 °C (1st 5 points)	1,700.00
per additional point	500.00
0 to 200 °C (1st 5 points)	1,700.00
per additional point	500.00
0 to 350 °C (1st 5 points)	1,750.00
per additional point	500.00
50 to 600 °C (1st 5 points)	1,700.00
per additional point	500.00
Furnace	0.400.00
50 to 500°C, single test point	2,100.00
per additional test point	500.00
500 to 1000°C, single test point	2,700.00



per additional test point	650.00
Oven/Freezer -30 to +500 °C, single test point	2,100.00
per additional test point	500.00
RTD Calibrator/Simulator	
1st range	2,100.00
RTD Probe/Wire, Industrial	
-30 to +500 °C (1st 5 points)	1,950.00
per additional test point RTD Probe/Wire, Standard	750.00
-30 to +500 °C (1st 10 points)	3,700.00
per additional test point	900.00
Surface Temperature Probe	000.00
50 to 300 °C	1,400.00
Sling Psychourometer (bulb-type)	
0 to 50 °C	1,940.00
Temperature Controller (RTD, T/C)	1,800.00
Temperature Indicator (RTD,T/C)	1,800.00
Temperature Recorder (RTD,T/C) Single-point	
1st range	1,800.00
per succeeding range	450.00
Multi-point	
1st range	2,900.00
per succeeding range	650.00
Thermocouple Calibrator/Simulator	2 200 00
1st range	2,200.00
per succeeding range Thermocouple Probe/Wire	650.00
-30 to +100 °C (1st 5 points)	1,750.00
per additional test point	500.00
0 to 100 °C (1st 5 points)	1,250.00
per additional test point	500.00
0 to 200 °C (1st 5 points)	1,450.00
per additional test point	500.00
0 to 300 °C (1st 5 points)	1,750.00
per additional test point 0 to 500 °C (1st 5 points)	500.00 1,850.00
per additional test point	500.00
50 to 1000 °C (1st 5 points)	2,000.00
per additional test point	500.00
Thermohygrograph	1,450.00
Electronic/Dial Thermohygrometer	1,550.00
Hygrograph	650.00
Electronic/Dial type hygrometer	700.00
Thermostat	750.00
Water Bath, -30 to +500 °C	



1st temperature setting per additional temperature setting	2,100.00 550.00
PRESSURE	
Current to Pressure (I/P) Transducer	1,400.00
Pressure to Current (P/I) Transducer	1,400.00
Differential Transmitter (D/P Cell)  Electronic	1,400.00
Pneumatic	1,300.00
Pressure Gauge	1,300.00
Pneumatic, industrial grade	900.00
Hydraulic, industrial grade	900.00
Test Gauge	
Pneumatic	2,300.00
Hydraulic	2,300.00
Pneumatic Deadweight Pressure Tester	2,950.00
Measurement of Piston Diameter	700.00
Weighing of Deadweight (per piece)	250.00
Hydraulic Deadweight Pressure Tester	2,850.00
FORCE	
Electronic Balance	4.050.00
500 g capacity and below	1,350.00
above 500 g capacity up to 100 kg Gram Gauge	1,550.00 900.00
Push-Pull Gauge up to 100 kg	1,100.00
Rockwell Hardness Tester (per scale)	2,350.00
UTM	2,000.00
for one range	3,700.00
for additional ranges	1,545.00
Torque Wrench	·
single direction	1,300.00
dual direction	1,950.00
DIMENSIONAL MEASUREMENT	
Dimensional Inspection (per sample)	500.00
Roundness Measurement	500.00
Surface Roughness Assessment	500.00
Straightness Measurement Radius Gauge	500.00 500.00
Impact Specimen	500.00
G.I. Pipes	500.00
Machine Components/Equipment	000.00
Parts/Instruments not included in the list	500.00
Roundness Measurement	800.00
(conventional method)	
Pneumatic Pressure Calibrator	
0 to 40 bar (1st range)	2,300.00
per succeeding range	1,300.00
Pneumatic Controller	1,000.00



Pneumatic Indicator Pneumatic Recorder Pneumatic Pressure Switch Pressure Measuring Instrument (Barometer, Barograph, Electronics)	900.00 1,000.00 900.00
(reg. 6 test points) 700hPa – 1040hPa per succeeding test points  Mercurial Barometer (reg. 6 test points) 700hPa – 1040 hPa per succeeding test points  Torque Meter single direction	700.00 250.00 850.00 300.00 1,950.00
dual direction Triple Beam Balance Non-Automatic Weighing Instruments Electronic Type 0-100 kg	3,250.00 1,140.00 1,550.00
Performance Testing  Mechanical Type (up to 1 ton)  Electronic Type  up to 1 ton	1,550.00 1,550.00
additional fee in excess ton Straightness Measurement (conventional method) Dimensional Measurement using	70.00 750.00
LASER per sample 0-300 mm range Dimensional Measurement using CMM per hour.	2,150.00
Conventional measurement using V. caliper, Dial Gauge, O. micrometer, etc. Vernier Caliper	500.00
0 - 150 mm range 0 - 250 mm range above 150 - 200 mm range above 200 - 300 mm range above 300 - 600 mm range above 600 - 1000 mm range	850.00 1,225.00 950.00 1,225.00 1,300.00 1,300.00
External Micrometer 0 - 25 mm range above 25 - 100 mm range above 100 - 150 mm range above 150 - 200 mm range above 200 - 250 mm range above 250 - 300 mm range Setting Rod calibration per piece	700.00 800.00 1,000.00 1,250.00 1,600.00 1,800.00 550.00



Tubular Micrometer calibration for	
Micrometer head only	1,500.00
Depth Micrometer	750.00
Feeler Gauge per leaf	300.00
Combination Set	
Centering Head	700.00
Protractor Head	1,000.00
Square Head	1,000.00
Steel Rule	650.00
Dial Gauge, Dial Thickness Gauge	
and Dial Test Indicators using	
calibration tester	
0-20.0 mm range	850.00
Dial/Thickness Gauge with	
Non-Removable Handle	
0-50 mm range	1,650.00
Height Master, 0-310mm, per column	2,700.00
Vernier and Digimatic Height Gauge	
0 - 600 mm range	1,000.00
Gauge Block	700.00
Grade 0 (per piece)	700.00
Grade 1 (per piece)	550.00
Grade 2 (per piece)	360.00 150.00
Deburring (per piece) Rectangular Gauge Block	150.00
Grade 0 (Steel)	1,160.00
Grade 1 (Steel)	1,030.00
Grade 2 (Steel)	1,030.00
Fixed Gauge (Plug/Go-No Go) per side	850.00
Pin Gauge (per piece)	300.00
Toolmakers Microscope	2,800.00
Optical Projector	2,800.00
Mu-Checker (for one range)	1,800.00
per additional setting range	850.00
Calibration Tester	2,300.00
Caliper Checker - 600 mm and below	2,900.00
Precision Check Master	·
600 mm and below	3,300.00
Precision Straight Edge	
1000 mm and below	1,500.00
Granite Surface Plate	
Diagonal Length in mm:	
Over up to including 354mm	3,500.00
354mm to 566mm	3,600.00
566 mm to 891mm	4,000.00
891 mm to 1414mm	4,300.00
1414 mm to 2236mm	4,500.00



2236 mm to 2968mm Dial Caliper Gauges	4,700.00 1,400.00
Machine Tools: (using LASER)	
Linear Positioning Error per axis/meter	3,600.00
Straightness Error per axis/meter	3,600.00
Squareness per axis/meter	7,200.00
Steel Rule	,
0-300 mm	500.00
above 300-600 mm	650.00
above 600-1000 mm	900.00
above 1000-1500 mm	900.00
above 1500-2000 mm Steel Rule (using LASER)	900.00
0-1000 mm range	1,100.00
above 1000 – 1500 mm range	2,150.00
above 1500 – 2000 mm range	2,800.00
Glass Scale	•
0-100 mm, max. 10 points	600.00
0-200 mm, max. 10 points	800.00
0-300 mm, max. 10 points	900.00
0-400 mm, max. 10 points	900.00
Dimensional Measurement using  LASER per sample	
0-300 mm range	2,150.00
Dimensional Measurement using	2,100.00
CMM per hour.	500.00
Conventional Measurement	500.00
Coordinate Measuring Machine	
Linear Error/Axis	4,300.00
Straightness of axis	4,300.00
Squareness of axis	4,300.00
Precision Square 200 x 300 mm and smaller	1,550.00
Precision Square Master (using LASER)	2,900.00
Bevel Protractor	1,350.00
Precision Level per scale	1,200.00
Rockwell Hardness Tester (per scale)	2,350.00
UTM	
for one range	3,700.00
for additional ranges	1,545.00
Bore Gauge – 300 mm and below Microindicators	1,900.00 1,650.00
Vernier Depth Gauge	1,200.00
Ball Bar Testing	2,500.00
Digimatic Indicator	1,650.00
Comparison of LASER using:	



UMM for x-axis only (combined) Precision Square Master MASSES	3,900.00 4,900.00
NAWI, Electronic Type Only	
(On-site Calibration)	
up to 2kg	
(using OIML Class E2)	2,000.00
up to 60 kg	
(using OIML Class F1)	1,530.00
up to 200kg	
(using OIML Class F2)	1,530.00
up to 300kg	4 500 00
(using OIML Class M1)	1,530.00
Snap Gauge/Snap Meter, 0-25mm	4 700 00
0 – 25 mm	1,700.00
25 – 100mm	2,100.00
Carpenter Square	1 500 00
Squareness Linear Scale per leg	1,500.00 800.00
De-burring of other Small Tools	750.00
Caliper Type Inside Micrometer	1,650.00
Depth Micrometer	700.00
Tape Measure	700.00
up to 10m	700.00
additional fee per meter	70.00
Digital Thickness Gauge	70.00
(Non-removable)	1,650.00
Dial Gauges (>20mm)	1,650.00
NAWI, Electronic & Mechanical Types	1,000.00
(Base Laboratory or On-site Calibration)	
High Accuracy II	
(using OIML Class F2)	1,200.00
Medium Accuracy II & Ordinary III	,
(using OIML Class M1 and	
substitution material)	1,080.00
Add'l fee for every ton thereafter	
in excess of 1 ton	



#### **III. In-plant Services**

In-plant services conducted at customer's plant-site, covers the parameters on: Dimensional Metrology, Pressure, Torque, Force, Weight (Electronic Balances or Non-automatic weighing scale), Thermometry and Electrical Instruments, Hardness Test, Hydrostatic Test, Liquid Penetrant Testing (PT), Magnetic Particle Testing (MT), Ultrasonic Testing (UT), Coating Thickness, and Chemical Analysis using X-ray Fluorescence (XRF) Spectrometer. These services are provided for the metals, engineering and allied industries using MIRDC standards and testing equipment.

Office/Division:	Analysis and Testing Division		
Classification:	Highly Technical		
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government		
Who may avail:	All		
CHECKLIST OF R	EQUIREMENTS	WHERE TO SECURE	
1.1 Quotation with Term	ns and Condition	Analysis and Testing Division Laboratory	
1.2 Purchase Order if a	pplicable	Client/Industry requesting for in plant services	
1.3 Technical Service R	Request (TSR) form	Orm MIRDC-Analysis and Testing Division Head Office (ATD-DHO) Centralized Receiving Area, Ground Floor, Gold Building	
1.4.a Complete sample description/specification requirements, and payn company dated check) 1.4.b For In-Plant Calil Fifty (50)% (down payn charges is required	oration service:	Client/Industry requesting for in plant services	
1.5 Provision of air-conductransportation (land/ sea personnel, materials an necessary from MIRDC vice versa.	a/ air) of MIRDC d equipment to the plant site and	Client/Industry requesting for in plant services	
1.6 One (1) Authorization other than Company's r	` •	Client/Industry requesting for in plant services	
1.7 One (1) Company II government issued ID	1.7 One (1) Company ID and one (1) Company requesting for calibration		
1.8 For students: one ( for Discount and Schoo	,	School/University requesting for calibration	



2. Claiming of Test/Ca Certificates	libration			
2.1. One (1) original or photocopy of issued Technical Service Request (TSR)		MIRDC-Analysis and Testing Division Head Office (ATD-DHO) Centralized Receiving Area, Ground Floor, Gold Building		
2.2 Payment (cash or company dated check)  For In-plant calibration service: Fifty (50)% balance for full payment of the total charges		Client/Industry requesting for in plant services		
2.3 One (1) original or p Official Receipt, and Inv			ce and Admin d Floor, Gold B	Division, Cashier
2.4. One (1) Authorization other than Company's re	on Letter (for person		· · · · · · · · · · · · · · · · · · ·	r in plant services
2.6. One (1) Company I government issued ID		Client/Industry	y requesting fo	r in plant services
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCES- SING TIME	AGENCY ACTION
1. Request for quotation for in-plant testing/calibration service via phone or email  RFQs can be emailed to calibration@mirdc.dos t.gov.ph; mirdc.metrologylab@g mail.com	1.1. Review the received request for quotation 1.2. Prepare quotation including Terms and Conditions	None	3 working days  (Average time for all the signatories to sign the quotation)	For ALS Supervising Science Research Specialist ALS or Senior Science Research Specialist ALS (Physico- Chemical Laboratory) or Science Research Specialist II ALS (Corrosion Laboratory)  For PLS Supervising Science



		Research
		Specialist
		PLS
		or
		Senior Science
		Research
		Specialist
		PLS (Non-
		destructive
		Testing
		Laboratory)
		or
		Senior Science
		Research
		Specialist
		PLS (Mechanical
		Metallurgy
		Laboratory)
		or
		Science
		Research
		Specialist II
		PLS (Auto-parts
		Testing
		Laboratory)
		Senior Science
		Research
		Specialist
		IMS (Officer in
		Charge)
		or
		Senior Science
		Research
		Specialist
		IMS (Metrology)
		or
		Science
		Research
		Specialist II
		Chief
		Supervising
		Research
		Specialist
		ATD
		or
		01



				Deputy Executive Director Technical Services or Executive Director MIRDC IMS (Instrumentation)
2. Receive quotation via email.	2.1. Send the quotation electronically via email.	None	3 minutes	Production Planning Control Officer I ATD-DHO or Administrative Assistant I ATD-DHO or Authorized Contract of Service Personnel ATD-DHO
3. Proceed to ATD-DHO Centralized Receiving Area, and request for required in-plant service.  Present Quotation, Purchase Order and other documents, if applicable	3.1. Evaluate the Quotation and Purchase Order  3.2 Generate two (2) Technical Service Request (TSR) forms using Unified Laboratory Information Management System (ULIMS) to be signed by the customer and the laboratory representative. For calibration, generate three (3) copies of TSR.	None	15 minutes	Supervising Science Research Specialist ALS or Senior Science Research Specialist ALS (Physico- Chemical Laboratory) or Science Research Specialist II ALS (Corrosion Laboratory)



	<u> </u>			
	Note: Schedule of in-plant service is set by the laboratory			Supervising Science Research Specialist PLS
4. Sign all copies of Technical Service Request (TSR) Form generated by the receiving personnel	4.1 Review TSR, affix signature and give one (1) copy to customer that will serve as claim stub 4.2 Update Google Monitoring Sheet	None	5 minutes	Senior Science Research Specialist PLS (Non- destructive Testing Laboratory) or Senior Science Research Specialist PLS (Mechanical Metallurgy Laboratory) or For IMS Senior Science Research Specialist IMS (Officer in Charge) or Senior Science Research Specialist IMS (Metrology) or Science Research Specialist IMS (Metrology) or Science Research Specialist II IMS (Instrumentation)
5. Proceed to Cashier for payment and present the TSR.	5.1 Issue Order of Payment	See Table of Fees 50% Down Payment Required for In-plant	5 minutes	Administrative Officer IV Financial Management Section or



		calibration service; Client may opt to pay in full.  Refer to DOST AO No. 006 Series of 2018, prescribed calibration fees		Administrative Officer V Financial Management Section
6. Wait for the issuance of Order of Payment and pay.	6.1 Accept and process payment based on the Order of Payment 6.2 Issue the Official Receipt	None	10 minutes	Administrative Officer V or Administrative Officer II Administrative and General Services Section
7. During the scheduled in-plant service, proceed to the concerned ATD Laboratory to pick-up the laboratory personnel  Customer shall provide air-conditioned means of transportation (land/sea/air) of MIRDC personnel, materials and equipment from MIRDC to the calibration site and vice versa.	7.1 Secure all the testing/calibration standards and equipment on the vehicle provided by the customer.	None	5 minutes	For ALS Senior Science Research Specialist ALS or Science Research Specialist II ALS For PLS Senior Science Research Specialist PLS (Nondestructive Testing Laboratory) or Senior Science Research Specialist



				PLS (Mechanical Metallurgy Laboratory) For IMS Senior Science Research Specialist IMS (Metrology) or Science Research Specialist II IMS (Instrumentation)
8. Travel going to the plant-site	8.1 Travel going to the plant-site	None	2 hours  (estimated travel time if within NCR)  Travel time varies on location of plant site.	For ALS Senior Science Research Specialist ALS or Science Research Specialist II ALS
9. Arrival at plant site location.  The customer shall provide competent machine/ equipment operator to assist MIRDC personnel.  The customer shall provide hotel accommodations (for overnight stay) to MIRDC personnel	9.1 Conduct inplant testing/calibration.	None	5 hours (average time allotted per day upon arrival at plant site location)	For PLS Senior Science Research Specialist PLS (Non- destructive Testing Laboratory) or Senior Science Research Specialist PLS (Mechanical Metallurgy Laboratory) For IMS Senior Science Research Specialist IMS (Metrology) or



				Science Research Specialist II IMS (Instrumentation)
10. Travel back to MIRDC	10.1 Travel back to MIRDC	None	2 hours  (estimated travel time if within NCR)	For ALS Senior Science Research Specialist ALS or
	10.2 Secure all the testing/calibration standards and equipment back to the laboratory	None	5 minutes	Science Research Specialist II ALS For PLS Senior Science Research Specialist PLS (Non- destructive Testing Laboratory) or Senior Science Research Specialist PLS (Mechanical Metallurgy Laboratory) For IMS Senior Science Research Specialist IMS (Metrology) or Science Research Specialist II IMS (Instrumentation)



	1	1	1	
11. Track the status of service requested at mirdc.dost.gov.ph/trac king/ using the issued TSR Reference Number.	11.1 Prepare Test/Calibration Report including computation and evaluation of measurement of uncertainty (MU) whenever applicable  11.2 Prepare Test/Calibration Certificate including typing, signing and sealing	None	1 day	For ALS Supervising Science Research Specialist ALS or Senior Science Research Specialist ALS (Physico- Chemical Laboratory) or Laboratory Inspector II ALS (Physico- Chemical Laboratory) or Science Research Specialist II ALS (Corrosion Laboratory) or Metals Technologist III ALS (Corrosion Laboratory)  For PLS Supervising Science Research



Specialist PLS or Senior Science Research Specialist PLS (Nondestructive Testing Laboratory) or Metals Technologist II PLS (Nondestructive Testing Laboratory) or Senior Science Research Specialist PLS (Mechanical Metallurgy Laboratory) or Laboratory Inspector II PLS (Mechanical Metallurgy Laboratory) For IMS Senior Science Research Specialist IMS (Officer in Charge) or Senior Science Research Specialist IMS (Metrology) or Administrative Assistant III ATD-DHO



		or Science Research Specialist II IMS (Instrumentation) or Administrative Assistant I ATD-DHO



12. Return to MIRDC to claim the certificate/s,  Proceed to ATD-DHO Releasing Area and present the customer's TSR, Official Receipt, Authorization Letter (if representative),	12.1 Check documents and advise customer to settle balance, if any.	None	5 minutes	Production Planning Control Officer I ATD-DHO or Administrative Assistant I ATD-DHO or Authorized Contract of Service Personnel ATD-DHO
13. Proceed to Cashier to settle the balance.	13.1 Receive balance payment and issue the Official Receipt	See Table of Fees Refer to DOST AO No. 006 Series of 2018, prescribed calibration fees	15 minutes	Administrative Officer IV Financial Management Section or Administrative Officer V Administrative and General Services Section
14. Return to ATD- DHO Releasing Area and present Official Receipt	14.1 Check Official Receipt and have the customer signed on the Pink Copy (Laboratory's Receiving copy) of Test/Calibration Certificate and give the original copy to customer	None	5 minutes	Production Planning Control Officer I ATD-DHO or Administrative Assistant I ATD-DHO or Authorized
15. Sign the Pink Copy of the Certificates	15.1 Stamp TSR with "RELEASED" and return to customer together with the OR after the customer signs the pink copy of the Certificates	None	5 minutes	Contract of Service Personnel ATD-DHO



16. Customer fills out Customer/Client Satisfaction Survey Form	16.1 Let the customer fill out the Customer Satisfaction Survey Form  16.1 Collect and file the Customer Satisfaction Survey Form	None	5 minutes	
	TOTAL	5 days	, 2 hours and	23 minutes

SITUATION	ACTION	LOCATION OF ACTION	REMARKS
For multiple jobs or TSRs requests and complexity of the instruments evaluated and received within the day	Conduct of in-plant services will be on a scheduled basis depending on the availability of laboratory reference standard/equipment and laboratory personnel. However, additional days will be included depending on the quantity and complexity of all required parameters determined on-site.	Company Plant site/ On-site	Queueing system (First In First Out)
For complex samples not included in the Fees and Charges in the DOST Administrative Order No.006	The Client will be provided with Quotation approved by the Head of Agency or his Authorized Representative. The in-plant services will only commence upon approval/acceptance of the quotation and required payment	Analysis and Testing Division, Gold Building	Concerned Laboratories
For internal jobs (jobs requested by other Unit/Section/Division)	The same procedure applies from Job Acceptance to Releasing	ATD-DHO Centralized Receiving Area, Ground Floor, Gold Building	Laboratory testing/calibrati on fees are waived.

## **TABLE OF FEES**



### **IN-PLANT TESTING SERVICES**

Hardness Test	
Microdur, 5 Indentations	₱ 180/sample
Photo	₱ 80/sample
Grinding	₱ 85/sample
Hydrostatic Testing on Metallic Samples	Based on
	Quotation
Photo	₱ 80/sample
Magnetic Particle Testing Penetrant Testing	₱ 2,000/day (for 2 personnel, within Metro Manila)
	₱ 3,000/day (for 2 personnel, outside Metro Manila)
Ultrasonic Testing	₱ 3,000/day (for 2 personnel, within Metro Manila) ₱ 3,600/day
	(for 2 personnel, outside Metro Manila)
Thickness Determination of Metallic Coatings on Various Base Metals (Magnetic Induction)	₱ 550/sample
Chemical Analysis using X-ray Fluorescence (XRF) Spectrometer	₱ 2,000/sample
Inplant Fee (for two personnel)	
Within Metro Manila	₱ 2,000
Outside Metro Manila	₱ 3,000



#### **TABLE OF CALIBRATION FEES**

(Per DOST Administrative Order No. 006, series of 2018 "Prescribe Calibration Fees for ITDI, MIRDC, PAG-ASA and Regional Metrology Laboratories (RMLs)")

Type of Equipment/Device	Fees (Pesos)
ELECTRICAL	
AC Current Source/Standard	
up to 50A	2,650.00
per succeeding range	750.00
AC Voltage Source/Standard	
up to 1000V	1,750.00
r succeeding range	550.00
Ammeter (AC,20 A)	
1 to 2 ranges	750.00
1 to 5 ranges	1,200.00
Ammeter (DC,2 A and below)	700.00
1 to 2 ranges	700.00
1 to 5 ranges	1,150.00
Ammeter (DC,above 2 A) 1 to 2 ranges	1,000.00
1 to 5 ranges	1,700.00
AC Clampmeter (up to 500A)	1,700.00
up to 500A	800.00
per succeeding range	300.00
Current Shunt, (AC, 10 A)	1,300.00
Current Shunt, (AC, 50 A)	1,650.00
Current Shunt, (DC, 10 A)	1,400.00
Current Shunt, (DC, 50 A)	1,700.00
DC Current Source/Standard	
Up to 50A	2,100.00
per succeeding range	900.00
DC Voltage Source/Standard	
by direct measurement	
up to 1000V	1,400.00
per succeeding range	650.00
by transfer method	
up to 1000V	2,600.00
per succeeding range	1,100.00
DC Clampmeter	
up to 500A	900.00
per succeeding range	350.00
Decade Resistance Box (per dial)	1,100.00



Double Bridge	
1st range	1,800.00
per succeeding range	1,100.00
Earth Tester	4.050.00
1st range	1,350.00
per succeeding range	400.00
Electronic Load	4 200 00
up to 20A	1,200.00 800.00
per succeeding range Groundstrap Tester/Checker	000.00
1st range	550.00
per succeeding range	330.00
High Voltage Meter (up to 10 kV)	000.00
Up to 10 kV	2,000.00
per succeeding range	1,150.00
Insulation Tester (Megohmeter)	,
,	
up to 1000V	1,050.00
per succeeding range	350.00
Megohmmeter	
up to $1000 \mathrm{M}\Omega$	1,090.00
per succeeding range	350.00
Kelvin Bridge	4140
up to	1ΜΩ
per succeeding range	1,250.00
Millivolt Potentiometer	1 050 00
Up to 100mV	1,850.00 900.00
per succeeding range Multimeter, Analog	2,250.00
Multimeter, Digital,	2,230.00
3 ½ digits	3,250.00
4 ½ digits	5,050.00
5 ½ digits	7,900.00
6 ½ digits	10,150.00
Ohmmeter	,
100m $\Omega$ to 100G $\Omega$	900.00
per succeeding range	350.00
Ohmmeter (0-14 pH)	700.00
Puncture Tester	
1st range	950.00
per succeeding range	400.00
Puncture w/ Insulation Tester	4.050.00
Up to 5Kv AC/DC, 2A AC/DC, and 100 M $\Omega$	1,950.00
Resistance Box	EEO 00
1st five points	550.00 150.00
per succeeding point Rheostat	550.00
ו/וובחפומו	550.00



Stopwatch (15 minutes. minimum) Standard Resistor	680.00
by direct measurement	3,150.00
by ratio	4,250.00
Surface Resistance Checker	.,=00.00
1st range	850.00
per succeeding range	510.00
Tachometer	700.00
Ultrasonic Tester	1,600.00
Variable AC Transformer	700.00
Voltmeter, (1000V, AC/DC)	
1st range	700.00
per succeeding range	350.00
Tachometer	700.00
Wattmeter (AC 240V, 5A)	
1st range	1,800.00
per succeeding range	900.00
Wattmeter (DC 240V, 5A)	
1st range	1,845.00
per succeeding range	800.00
Wheatstone Bridge	3,350.00
Temperature	
Clinical Thermometer (-20 to 80°C)	1,700.00
Digital Thermometer, T/C	
1st range	1,800.00
per succeeding range	500.00
Digital Thermometer, Add'l Probe	1,800.00
Digital Thermometer, RTD	
1st range	1,800.00
per succeeding range	500.00
Glass/Filled/Bimetallic Thermometer	
-30 +120 °C (1st 5 points)	1,750.00
per additional point	500.00
0 to 100 °C (1st 5 points)	1,700.00
per additional point	500.00
0 to 200 °C (1st 5 points)	1,700.00
per additional point	500.00
0 to 350 °C (1st 5 points)	1,750.00
per additional point	500.00
50 to 600 °C (1st 5 points)	1,700.00
per additional point	500.00
Furnace	2 100 00
50 to 500°C, single test point	2,100.00 500.00
per additional test point	
500 to 1000°C, single test point per additional test point	2,700.00 650.00
per additional test point	00.00



Oven/Freezer	
-30 to +500 °C, single test point	2,100.00
per additional test point	500.00
RTD Calibrator/Simulator	
1st range	2,100.00
RTD Probe/Wire, Industrial	
-30 to +500 °C (1st 5 points)	1,950.00
per additional test point	750.00
RTD Probe/Wire, Standard	
-30 to +500 °C (1st 10 points)	3,700.00
per additional test point	900.00
Surface Temperature Probe	
50 to 300 °C	1,400.00
Sling Psychourometer (bulb-type)	
0 to 50 °C	1,940.00
Temperature Controller (RTD, T/C)	1,800.00
Temperature Indicator (RTD,T/C)	1,800.00
Temperature Recorder (RTD,T/C)	
Single-point	
1st range	1,800.00
per succeeding range	450.00
Multi-point	
1st range	2,900.00
per succeeding range	650.00
Thermocouple Calibrator/Simulator	
1st range	2,200.00
per succeeding range	650.00
Thermocouple Probe/Wire	
-30 to +100 °C (1st 5 points)	1,750.00
per additional test point	500.00
0 to 100 °C (1st 5 points)	1,250.00
per additional test point	500.00
0 to 200 °C (1st 5 points)	1,450.00
per additional test point	500.00
0 to 300 °C (1st 5 points)	1,750.00
per additional test point	500.00
0 to 500 °C (1st 5 points)	1,850.00
per additional test point	500.00
50 to 1000 °C (1st 5 points)	2,000.00
per additional test point	500.00
Thermohygrograph	1,450.00
Electronic/Dial Thermohygrometer	1,550.00
Hygrograph	650.00
Electronic/Dial type hygrometer	700.00
Thermostat	750.00
Water Bath, -30 to +500 °C	
1st temperature setting	2,100.00



per additional temperature setting	550.00
PRESSURE	
Current to Pressure (I/P) Transducer	1,400.00
Pressure to Current (P/I) Transducer	1,400.00
Differential Transmitter (D/P Cell)	
Electronic	1,400.00
Pneumatic	1,300.00
Pressure Gauge	
Pneumatic, industrial grade	900.00
Hydraulic, industrial grade	900.00
Test Gauge	0.000.00
Pneumatic	2,300.00
Hydraulic  Programatic Deadweight Programs Teater	2,300.00
Pneumatic Deadweight Pressure Tester  Measurement of Piston Diameter	2,950.00 700.00
Weighing of Deadweight (per piece)	250.00
Hydraulic Deadweight Pressure Tester	2,850.00
FORCE	2,000.00
Electronic Balance	
500 g capacity and below	1,350.00
above 500 g capacity up to 100 kg	1,550.00
Gram Gauge	900.00
Push-Pull Gauge up to 100 kg	1,100.00
Rockwell Hardness Tester (per scale)	2,350.00
UTM	
for one range	3,700.00
for additional ranges	1,545.00
Torque Wrench	4 000 00
single direction	1,300.00
dual direction  DIMENSIONAL MEASUREMENT	1,950.00
Dimensional Inspection (per sample)	
Roundness Measurement	500.00
Surface Roughness Assessment	500.00
Straightness Measurement	500.00
Radius Gauge	500.00
Impact Specimen	500.00
G.I. Pipes	500.00
Machine Components/Equipment	
Parts/Instruments not included in the list	500.00
Roundness Measurement	800.00
(conventional method)	
Pneumatic Pressure Calibrator	0.000.00
0 to 40 bar (1st range)	2,300.00
per succeeding range	1,300.00
Pneumatic Controller	1,000.00



Pneumatic Indicator Pneumatic Recorder Pneumatic Pressure Switch Pressure Measuring Instrument (Barometer, Barograph, Electronics)	900.00 1,000.00 900.00
(reg. 6 test points) 700hPa – 1040hPa per succeeding test points  Mercurial Barometer (reg. 6 test points) 700hPa – 1040 hPa per succeeding test points  Torque Meter single direction	700.00 250.00 850.00 300.00 1,950.00
dual direction Triple Beam Balance Non-Automatic Weighing Instruments Electronic Type 0-100 kg	3,250.00 1,140.00 1,550.00
Performance Testing  Mechanical Type (up to 1 ton)  Electronic Type	1,550.00
up to 1 ton additional fee in excess ton Straightness Measurement (conventional method)	1,550.00 70.00 750.00
Dimensional Measurement using  LASER per sample  0-300 mm range  Dimensional Measurement using	2,150.00
CMM per hour. Conventional measurement using V. caliper, Dial Gauge, O. micrometer, etc.	500.00
Vernier Caliper 0 - 150 mm range 0 - 250 mm range above 150 - 200 mm range above 200 - 300 mm range above 300 - 600 mm range above 600 - 1000 mm range	850.00 1,225.00 950.00 1,225.00 1,300.00 1,300.00
External Micrometer 0 - 25 mm range above 25 - 100 mm range above 100 - 150 mm range above 150 - 200 mm range above 200 - 250 mm range above 250 - 300 mm range Setting Rod calibration per piece	700.00 800.00 1,000.00 1,250.00 1,600.00 1,800.00 550.00



Tubular Micrometer calibration for	
Micrometer head only	1,500.00
Depth Micrometer	750.00
Feeler Gauge per leaf	300.00
Combination Set	
Centering Head	700.00
Protractor Head	1,000.00
Square Head	1,000.00
Steel Rule	650.00
Dial Gauge, Dial Thickness Gauge	
and Dial Test Indicators using	
calibration tester	
0-20.0 mm range	850.00
Dial/Thickness Gauge with	
Non-Removable Handle	
0-50 mm range	1,650.00
Height Master, 0-310mm, per column	2,700.00
Vernier and Digimatic Height Gauge	
0 - 600 mm range	1,000.00
Gauge Block	
Grade 0 (per piece)	700.00
Grade 1 (per piece)	550.00
Grade 2 (per piece)	360.00
Deburring (per piece)	150.00
Rectangular Gauge Block	
Grade 0 (Steel)	1,160.00
Grade 1 (Steel)	1,030.00
Grade 2 (Steel)	1,030.00
Fixed Gauge (Plug/Go-No Go) per side	850.00
Pin Gauge (per piece)	300.00
Toolmakers Microscope	2,800.00
Optical Projector	2,800.00
Mu-Checker (for one range)	1,800.00
per additional setting range	850.00
Calibration Tester	2,300.00
Caliper Checker - 600 mm and below	2,900.00
Precision Check Master	
600 mm and below	3,300.00
Precision Straight Edge	
1000 mm and below	1,500.00
Granite Surface Plate	
Diagonal Length in mm:	
Over up to including 354mm	3,500.00
354mm to 566mm	3,600.00
566 mm to 891mm	4,000.00
891 mm to 1414mm	4,300.00
1414 mm to 2236mm	4,500.00



2236 mm to 2968mm Dial Caliper Gauges	4,700.00 1,400.00
Machine Tools: (using LASER) Linear Positioning Error	
per axis/meter	3,600.00
Straightness Error per axis/meter	3,600.00
Squareness per axis/meter	7,200.00
Steel Rule	
0-300 mm	500.00
above 300-600 mm above 600-1000 mm	650.00 900.00
above 1000-1000 mm	900.00
above 1500-2000 mm	900.00
Steel Rule (using LASER)	
0-1000 mm range	1,100.00
above 1000 – 1500 mm range	2,150.00
above 1500 – 2000 mm range	2,800.00
Glass Scale	000.00
0-100 mm, max. 10 points 0-200 mm, max. 10 points	600.00 800.00
0-300 mm, max. 10 points	900.00
0-400 mm, max. 10 points	900.00
Dimensional Measurement using	
LASER per sample	
0-300 mm range	2,150.00
Dimensional Measurement using	500.00
CMM per hour.	500.00
Conventional Measurement Coordinate Measuring Machine	500.00
Linear Error/Axis	4,300.00
Straightness of axis	4,300.00
Squareness of axis	4,300.00
Precision Square	
200 x 300 mm and smaller	1,550.00
Precision Square Master (using LASER)	2,900.00
Bevel Protractor	1,350.00
Precision Level per scale  Rockwell Hardness Tester (per scale)	1,200.00 2,350.00
UTM	2,000.00
for one range	3,700.00
for additional ranges	1,545.00
Bore Gauge – 300 mm and below	1,900.00
Microindicators	1,650.00
Vernier Depth Gauge	1,200.00
Ball Bar Testing Digimatic Indicator	2,500.00 1,650.00
Comparison of LASER using:	1,000.00
1	



UMM for x-axis only (combined) Precision Square Master	3,900.00 4,900.00
MASSES	
NAWI, Electronic Type Only	
(On-site Calibration)	
up to 2kg	
(using OIML Class E2)	2,000.00
up to 60 kg	
(using OIML Class F1)	1,530.00
up to 200kg	
(using OIML Class F2)	1,530.00
up to 300kg	
(using OIML Class M1)	1,530.00
Snap Gauge/Snap Meter, 0-25mm	
0 – 25 mm	1,700.00
25 – 100mm	2,100.00
Carpenter Square	
Squareness	1,500.00
Linear Scale per leg	800.00
De-burring of other Small Tools	750.00
Caliper Type Inside Micrometer	1,650.00
Depth Micrometer	700.00
Tape Measure	
up to 10m	700.00
additional fee per meter	70.00
Digital Thickness Gauge	
(Non-removable)	1,650.00
Dial Gauges (>20mm)	1,650.00
NAWI, Electronic & Mechanical Types	
(Base Laboratory or On-site Calibration)	
High Accuracy II	4 000 00
(using OIML Class F2)	1,200.00
Medium Accuracy II & Ordinary III	
(using OIML Class M1 and	4 000 00
substitution material)	1,080.00
Add'I fee for every ton thereafter	
in excess of 1 ton	
In-Plant Charge	Db = 0.000.00
Within Metro Manila	Php 2,000.00 per
	Team
Outside Metro Manila	Php 3,000.00 per
	Team



# FINANCE AND ADMINISTRATIVE DIVISION

## **External Services**



## I. Employee Records Requisition and Verification

Requests for copies and/or verification of employee records/ employment.

Office/Division:	Finance and Administrative Division				
Classification:	Simple				
Type of Transact	tion:	on: G2G - Government to Government G2C - Government to Citizen G2B - Government to Business Entity			
Who may avail:		External clients			
CHECKLIS	ST OF	REQUIREMENTS		WHERE	TO SECURE
If internal employ	yee			1	
	Filled our FAD-AGSS and Central Records C (CRO) Requisition Slip			PAU, Administrative and General Services Section (AGSS)	
CLIENT STEPS	STEPS AGENCY ACTION FEES TO BE TIME		PROCESSING TIME	PERSON RESPONSIBLE	
For employee re	cords	requisition			
1. Submit duly filled out Requisition Slip	1.1 Stamp date received and identified type of request made.		None	10 mins	Administrative Assistant III FAD-AGSS, PAU
	1.2 Inform requesting party of document release date.			10 mins	
	1.3 Prepare requested document. (Refer to able 1.0 for list of documents and processing time)			5 days	
	1.4 Ro docur	elease requested nent.			
2. Receive requested document and fills out	requested out Customer/Client document and Satisfaction Survey		None	5 minutes	Administrative Assistant III FAD-AGSS, PAU
Customer/Client Satisfaction Form	2.2 Er	nd of transaction			
			TOTAL	5 days ar	nd 25 minutes



	PROCESSING TIME						
	TYPE OF DOCUMENTS	PROCESSING TIME	PERSON RESPONSIBLE				
a.	Certificate of Employment (COE)	None	2 days	Administrative Officer V, FAD-AGSS PAU			
b.	Certificate of Employment and Compensation (COEC)	None	2 days	Administrative Officer IV, FAD-AGSS PAU			
c.	Certificate of COC earned	None	3 days	Administrative Assistant III, FAD-AGSS PAU			
d.	Certified of no pending admin case/obligations	None	2 days	Administrative Officer V, FAD-AGSS PAU			
e.	Certificate of leave credits earned	None	3 days	Administrative Assistant III, FAD-AGSS PAU			
f.	Service record	None	2 days	Administrative Officer V, FAD-AGSS PAU			
g.	Statement of actual duties and responsibilities	None	2 days	Administrative Officer V, FAD-AGSS PAU			
h.	Clearance certificate (Certified copy only)	None	1 day	Administrative Officer IV, FAD-AGSS PAU			
i.	Copy of payslip	None	2 hours	Administrative Assistant III, FAD-AGSS PAU			
j.	Other documents in 201 file (photocopy only)	None	2 hours	Administrative Officer IV, FAD-AGSS PAU			
k.	Employment record verification	None	4 days	Administrative Officer V, FAD-AGSS PAU			



# FINANCE AND ADMINISTRATIVE DIVISION

# **Internal Services**



## I. Employee Records Requisition and Verification

Requests for copies and/or verification of employee records/ employment.

Office/Division:		Finance and Administrative Division				
Classification:		Simple				
Type of Transac	ction:	G2G - Government to Government				
Who may avail:		Internal clients				
CHECKL	IST OF	REQUIREMENTS		WHERE	TO SECURE	
If internal emplo	oyee					
Filled our FAD-A (CRO) Requisition		nd Central Records Office		PAU, Administrative and General Services Section (AGSS)		
CLIENT STEPS			FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE	
For employee re	ecords	requisition				
1. Submit duly filled out Requisition Slip	1.1 Stamp date received and identified type of request made.		None	10 mins	Administrative Assistant III FAD-AGSS, PAU	
	party c	1.2 Inform requesting party of document release date.		10 mins		
	1.3 Prepare requested document. (Refer to able 1.0 for list of documents and processing time)			3 days		
	1.4 Re docum	lease requested ent.				
2. Receive requested document and fills out	Custor	2.1 Collect the filled-out Customer/Client Satisfaction Survey Form.		5 minutes	Administrative Assistant III FAD-AGSS, PAU	
Customer/Clien t Satisfaction Form	2.2 En	d of transaction				
	TOTAL		3 days ar	nd 25 minutes		



	PROCESSING TIME							
	TYPE OF DOCUMENTS	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE				
I.	Certificate of Employment (COE)	None	2 days	Administrative Officer V, FAD-AGSS PAU				
m.	Certificate of Employment and Compensation (COEC)	None	2 days	Administrative Officer IV, FAD-AGSS PAU				
n.	Certificate of COC earned	None	3 days	Administrative Assistant III, FAD-AGSS PAU				
0.	Certified of no pending admin case/obligations	None	2 days	Administrative Officer V, FAD-AGSS PAU				
p.	Certificate of leave credits earned	None	3 days	Administrative Assistant III, FAD-AGSS PAU				
q.	Service record	None	2 days	Administrative Officer V, FAD-AGSS PAU				
r.	Statement of actual duties and responsibilities	None	2 days	Administrative Officer V, FAD-AGSS PAU				
s.	Clearance certificate (Certified copy only)	None	1 day	Administrative Officer IV, FAD-AGSS PAU				
t.	Copy of payslip	None	2 hours	Administrative Assistant III, FAD-AGSS PAU				
u.	Other documents in 201 file (photocopy only)	None	2 hours	Administrative Officer IV, FAD-AGSS PAU				
v.	Employment record verification	None	4 days	Administrative Officer V, FAD-AGSS PAU				



#### **II. General Services**

Provide general services such as but not limited to carpentry, plumbing, electrical, telephone line and air-conditioning unit repairs.

Office/Division:		Finance and Administrative Division					
Classification:		Complex					
Type of Transac	tion:	G2G - Government to Government					
Who may avail:		MIRDC Employ	yees / Pe	ersonnel			
CHECKLIS	T OF F	REQUIREMENT	S	WHERE	TO SECURE		
Request for Main	tenanc	e		General Mainter	nance Unit (GMU)		
CLIENT STEPS	AGE	NCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE		
1. Fill-up the Request for Maintenance form (GMU 001)	1.2 Do	etermine type / fication of	None	3 minutes 5 minutes	Engineer III or Engineer II or Engineer I FAD-GMU Engineer III or		
	plumb ACU, etc.) a	est (carpentry, ping, electrical, telephone line, and identify in responsible			Engineer II or Engineer I FAD-GMU		
	gener Order Comp Maint Mana	repare and rate Work through the outerized enance gement m (CMMS)	None	15 minutes	Engineer I FAD-GMU		
			None	15 minutes	Admin. Aide VI, FAD-GMU		



		T	T	1
	Computerized Maintenance Management System (CMMS)			
	1.5 Issue Work Order to person	None	5 minutes	Engineer I FAD-GMU
	responsible	None	30 minutes	Engineer III or
	1.6 Conduct initial assessment of the work requested and, if repairable, determine materials needed. If not repairable, inform requester.			Engineer II or Engineer I FAD-GMU
	·	None	15 minutes	Engineer III or
	1.7 Check availability of materials needed for the work requested. If materials are not available, inform requesting party to prepare Purchase Request.			Engineer II or Engineer I FAD-GMU
2. Inform delivery of materials needed	2.1 Receive and check appropriateness and/or completeness of materials.	None	15 minutes	Engineer III or Engineer II or Engineer I FAD-GMU
	2.2 Execute work request.	None	Time will depend on the type and scope of work.	Admin. Aide VI F or Admin. Aide III or Admin. Aide VI or Admin. Asst. III



	2.3 Once work is completed, indicate work details done in the Work Order and forward the same to	None	10 minutes	or Admin. Asst. IV FAD- GMU  Admin. Aide VI F or Admin. Aide III or Admin. Aide VI
3. Acknowledge	requesting party for signature.  3. Received the	None	20 minutes	or Admin. Asst. III or Admin. Asst. IV FAD-GMU Engineer I
the work done by signing at the "conforme" portion of the Work Order and submit the same to the GMU.	acknowledged Work Order and record details in the CMM.			FAD-GMU
4. Customer fills out Customer/Client Satisfaction Survey Form.	4. Collect and file the filled up Customer/ Client Satisfaction Survey Form	None	5 minutes	Admin. Aide VI, FAD-GMU
		TOTAL		d 18 minutes e execution of work



## III. Purchasing of Supplies and Materials

Procurement of requested supplies and materials including equipment using alternative mode of procurement.

Office/Division:	Office/Division: Finance and Administrative Division					
Classification:		Simple and	Highly Te	echnical		
Type of Transaction: G2G - Government to			o Government			
Who may avail: MIRDC Employees /			Personnel include	ding project personnel		
CHECKLIST	OF RE	EQUIREMEN	ITS	WHI	ERE TO SECURE	
For Requisition of	fItems					
Approved PPMP and Property Mar	•			End-user		
Approved Purcha	se Req	uest (PR)		End-user		
For purchasing of Signed Abstract of Approved Purcha	of Canva	, ,		Supply Manage	ement Unit (SMU)	
Receive PO deliv	eries			Property Mana	gement Unit (PMU)	
CLIENT STEPS		GENCY CTION	FEES TO BE PAID	PROCESSIN G TIME	PERSON RESPONSIBLE	
Locally available						
Prepare the     Purchase     Request and		eceive ved PR End-user	None	2 minutes	Administrative Officer I, FAD-SMU	
submit the approved PR to		ssign PR to nated buyer	None	5 minutes	Administrative Officer V, FAD-SMU	
FAD-AGSS- SMU	require specifi each i neces	ication of tem and sary ments in	None	5 minutes	Administrative Officer I, FAD-SMU or Senior Admin. Assistant I, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer V, FAD-SMU	



control record logbo enter numb	ved, assign of number, d in the ok, and control er in the	4 minutes	Administrative Officer I, FAD-SMU
send		13 minutes	Administrative Officer I, FAD-SMU or Senior Admin. Assistant I, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer V, FAD-SMU
budge and a notice follow a) Phi b) MII websi Socia accounts C) Couplace	eved total et is 50,000 bove, Post es to the ring:	27 minutes	Administrative Officer I, FAD-SMU or Senior Admin. Assistant I, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer V, FAD-SMU
lead t postir	nilGEPS None ime from ng to ng date.	5 days	Administrative Officer I, FAD-SMU or



			Senior Admin. Assistant I, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer V, FAD-SMU
1.8 Follow-up, gather and review quotations from suppliers  1.9 Prepare Petty Cash Voucher (PCV) and receive cash from Special Disbursing Officer (For Regular Purchases only)	None	3 days 2 days	Administrative Officer I, FAD-SMU or Senior Admin. Assistant I, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer V, FAD-SMU
1.10 Prepare Request for Vehicle, schedule pick-up of the items and forward purchased items to End-user (For Regular Purchases only)	None	3 days	Administrative Officer I, FAD-SMU or Senior Admin. Assistant I, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer V, FAD-SMU



	1 11 Propers	None	14 minutes	Administrative Officer I,
	1.11 Prepare	INOHE	14 111111111111111111111111111111111111	1
	AOC			FAD-SMU
				or
				Senior Admin. Assistant I,
				FAD-SMU
				or
				Administrative Officer III,
				FAD-SMU
				or
				Administrative Officer III,
				FAD-SMU
				or
				Administrative Officer V,
				FAD-SMU
	1.12 Forward	None	8 minutes	Administrative Officer I,
	AOC to end-user			FAD-SMU
	for evaluation			or
				Senior Admin. Assistant I,
				FAD-SMU
				or A tariain tari
				Administrative Officer III,
				FAD-SMU
				or
				Administrative Officer III,
				FAD-SMU
				or
				Administrative Officer V,
				FAD-SMU
2 Evaluate	2.1 Receive	None	2 days	
2. Evaluate		None	2 days	Administrative Officer I,
AOC and return	evaluated AOC			FAD-SMU
to FAD-AGSS-	from end-user			or
SMU				Senior Admin. Assistant I,
				FAD-SMU
				or
				Administrative Officer III,
				FAD-SMU
				or
				Administrative Officer III,
				FAD-SMU
				or
				Administrative Officer V,
				FAD-SMU



2.2 Route AOC to Bid and Awards Committee (BAC) members for signature 2.3 Prepare	None	3 days	Administrative Officer I, FAD-SMU  Administrative Officer I,
Purchase Order (PO) and assign PO number			FAD-SMU
2.4 Forward PO to Financial Management Section (FMS) for signature of signing authorities as to funds availability and approval of purchase	None	3 days	Administrative Officer I, FAD-SMU
2.5 Receive approved PO from FMS and forward to designated buyer	None	2 minutes	Administrative Officer I, FAD-SMU
2.6 Send approved PO to supplier and wait for conformed PO	None	2 days	Administrative Officer I, FAD-SMU or Senior Admin. Assistant I, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer III, FAD-SMU or Administrative Officer V, FAD-SMU
2.7 Print and prepare attachments of Conformed PO	None	9 minutes	Administrative Officer I, FAD-SMU or Senior Admin. Assistant I, FAD-SMU or



1	and forward to			Administrative Officer III,
	PMU			FAD-SMU
	FIVIO			or
				Administrative Officer III,
				FAD-SMU
				or
				Administrative Officer V,
				FAD-SMU
3. Receive the	3.1 Receive	None	5 days	Administrative Officer I,
requested items	conformed PO			FAD-PMU
and return the	and await for			or
signed DV, IAR	deliveries			Administrative Officer III,
and IRS to PMU				FAD-PMU
				or
				Administrative Officer V,
	0.0.0	<b>.</b> .	00 1 1	FAD-PMU
	3.2 Receive/	None	30 minutes	Administrative Officer I,
	Accept deliveries			FAD-PMU
				or Administrative Officer III,
				FAD-PMU
				or
				Administrative Officer V,
				FAD-PMU
	3.3 Inform end-	None	1 day	Administrative Officer I,
	user for		-	FAD-PMU
	inspection and			or
	receipt of			Administrative Officer III,
	requested items			FAD-PMU
				or
				Administrative Officer V,
	0.4 Duanana anal	Mana	0 -1	FAD-PMU
	3.4 Prepare and	None	2 days	Administrative Officer I,
	facilitate signing			FAD-PMU or
	of IAR, RIS and			Administrative Officer III,
	DV.			FAD-PMU
	When applicable,			or
	prepare also			Administrative Officer V,
	Property			FAD-PMU
	Acknowledgment			and
	Receipt (PAR) /			End-user
	Inventory			
	Custodian Slip			
	(ICS)			



4. Customer fills	4. Collect the	None	5 minutes	Administrative Officer I,
out Customer/	filled-up			FAD-SMU
Client	Customer/Client			or
Satisfaction	Satisfaction			Senior Admin. Assistant I,
Survey Form	Survey Form and			FAD-SMU
	submit to PMD.			or Administrative Officer III,
				FAD-SMU
				or
				Administrative Officer III,
				FAD-SMU
				or
				Administrative Officer V,
				FAD-SMU

### **End of Transaction**

TOTAL PROCESSING TIME							
CLASSIFICATION	FEES TO BE PAID	PROCESSING TIME					
Regular Items (Agency action from 1.1 to 1.5 and 1.8 to 1.10 only)	None	8 days and 29 minutes					
Other local items below 50,000 (excluding agency action 1.6, 1.7, 1.9, 1.10 and 3.4)	None	18 days, 1 hour and 51 minutes					
Other local items 50,000 and above (excluding agency action 1.9, 1.10 and 3.4)	None	24 days, 2 hours and 18 minutes					
Non-regular items according to terms and condition (excluding agency action 1.9, 1.10 and 3. 4, and delivery terms is more or less 5 days as specified in the PO)	None	22 days and more according to terms and conditions specified in the PO					

### • Process covered by RA 9184



## IV. Recruitment, Selection and Placement

Screening and selection of applicants to fill in the vacant position.

Office/Division	n:	Finance and Administrative Division				
Classification	:	Complex				
Type of Trans	action:	G2G - Gover	nment to C	Sovernment		
Who may avai	l:	End-user of t	he vacant	position		
CHECKI	IST OF F	REQUIREMEN	ITS	WHERE 1	TO SECURE	
If end-user						
Request for Employee (RFE) Technical Competency Requirements Actual Duties and Responsibilities			FAD-AGSS, PAU (Personnel Administrative Unit)			
All signed by th	ne Executi	ve Director				
If recruit is the qualified next-in-rank employees						
Online applicat	ion			https://recruitmen	t.mirdc.dost.gov.ph	
If the recruit is a disinterested qualified next-in-rank employees						
Filled-out waive	er of disin	terest		FAD-AGSS, PAU		
If recruit has u	ındergon	e the process	s of select	ion		
Completed Cor	mpetency	Rating Sheet	Form	End-user/immediate supervisor		
If applicant re	fuses to	undergo the e	examinatio	on or withdrew the	eir application	
Signed Waiver withdraw applic		notice of intent	to	Applicant		
CLIENT STEPS	AGEN	CY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE	
For Positions	below Sa	lary Grade 22	2			
1. Submit duly appropriateness of the qualification stated in the RFE based on the CSC qualification standard		10 minutes	Administrative Officer V, FAD-AGSS, PAU			
	1.2 Post position to:	vacant not limited	None	11 days	Administrative Officer IV, or Administrative Officer V,	



	a) CSC Bulletin of vacant positions b) MIRDC website c) MIRDC Bulletin Boards d) MIRDC Recruitment Management Information System (RMIS)			FAD-AGSS, PAU
	1.3 Check the completeness, authenticity of documents submitted and qualifications of the applicant against the position applied for through the RMIS.	None	5 minutes	Administrative Officer IV, or Administrative Officer V, FAD-AGSS, PAU
	1.4 Arrange schedule of applicant's interview and/or skills examination and send invitation through the RMIS.	None	1 hour	Administrative Officer IV, or Administrative Officer V, FAD-AGSS, PAU
	1.5 Facilitate interview with all interviewers and applicants and/or skills examination.	None	20 days	Administrative Officer IV, or Administrative Officer V, FAD-AGSS, PAU
2. Submit completed competency rating sheet	2.1 Receive and check completeness of ratings	None	5 minutes	Administrative Officer IV, FAD-AGSS, PAU
and together with applicant's documents	2.2 Conduct examinations to applicants	None	6 days	Administrative Officer V, or
	2.3 Conduct background	None	4 days	Administrative Officer IV, FAD-AGSS, PAU



investigation of applicants			
2.4 Arrange schedule of Human Resource Management and Personnel Selection Board (HRMPSB) deliberation, and prepare and disseminate notice of meeting	None	3 hours	Administrative Officer IV, FAD-AGSS, PAU
2.5 Consolidate, summarize and prepare deliberation documents	None	2 hours	Administrative Officer IV, FAD-AGSS, PAU
2.6 Facilitate the conduct of deliberation process	None	4 hours	Administrative Officer V, or Administrative Officer IV, FAD-AGSS, PAU
2.7 Prepare HRMPSB Resolution	None	2 hours	Administrative Officer V, FAD-AGSS, PAU
2.8 Prepare minutes of deliberation process	None	1 hour	Administrative Officer IV, FAD-AGSS, PAU
2.9 Route HRMPSB resolution for signature of member	None	7 days	Administrative Officer IV, FAD-AGSS, PAU
2.10 Forward signed HRMPSB Resolution to Executive Director for selection and approval of appointee	None	2 days	Administrative Officer V, FAD-AGSS, PAU



			,
2.11 Prepare letter to applicants on the result of application for signing of HRMPSB Chairperson	None	20 minutes	Administrative Officer V or Administrative Officer IV, FAD-AGSS, PAU
2.12 Release signed letter to applicants	None	3 days	Administrative Aide III FAD-AGSS, CRO
2.13 Inform selected applicants on the pre-appointment requirements	None	20 minutes	Administrative Officer V
2.14 Check the completeness of requirements submitted by selected applicants	None	10 minutes	Administrative Officer V
2.15 Prepare the following:	None		Administrative Officer V
a) Appointment paper		4 minutes	
b) Position Description Form		1 day	
2.16 Facilitate the signing of appointment by the highest HRM Officer, the PSB Chair and the Executive Director	None	3 days	Administrative Officer V
2.17 Issue Appointment to new appointee and ask date of assumption	None	5 minutes	Administrative Officer V
2.18 Prepare and post a notice	None	20 minutes	Administrative Officer V



	announcing the appointment of the newly hired/promoted employee			FAD-AGSS, PAU and Administrative Aide III FAD-AGSS, CRO
	2.19 Prepare memorandum on the assumption of new appointee and schedule Oath taking	None	20 minutes	Administrative Officer V FAD-AGSS, PAU
	2.20 Facilitate the Oath taking	None	2 hours	Administrative Officer V FAD-AGSS, PAU
	2.21 Coordinate onboarding/ orientation of new appointee	None	5 minutes	
3. Employee Assumes Office	3.1 Facilitate the conduct of onboarding/ orientation	None	4 hours	Administrative Officer V FAD-AGSS, PAU
4. End-user fills out Customer/Cli ent Satisfaction Survey Form	4.1 Collect and file the filled-out Customer/ Client Satisfaction Form  4.2 End of transaction.	None	5 minutes	Administrative Officer V, FAD-AGSS, PAU
		TOTAL	59 days, 5 hou	ırs and 9 minutes



For Positions ab	For Positions above Salary Grade 22					
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE		
1. Submit duly approved RFE	1.1 Review appropriateness of the qualification stated in the RFE based on the CSC qualification standard	None	10 minutes	Administrative Officer V, FAD-AGSS, PAU		
	1.2 Post vacant position not limited to: a) CSC website b) MIRDC website c) MIRDC Bulletin Boards d) MIRDC Recruitment Management Information System (RMIS)	None	11 days	Administrative Officer V, FAD-AGSS, PAU		
	1.3 Receive and check the completeness, authenticity of documents submitted and qualifications of the applicant against the position applied for through the RMIS.	None	5 minutes	Administrative Officer V, FAD-AGSS, PAU		
	1.4 Arrange schedule of applicants interview and/or skills assessments and send invitation through the RMIS.	None	1 hour	Administrative Officer V, FAD-AGSS, PAU		
	1.5 Facilitate individual and panel interviews	None	20 days	Administrative Officer V, FAD-AGSS, PAU		



	and/or skills assessment with all interviewers and applicants.			
2. Submit completed competency rating sheet and	2.1 Receive and check completeness of ratings	None	20 minutes	Administrative Officer V, FAD-AGSS, PAU
together with applicants documents	2.2 Schedule and inform applicants for examinations to be conducted by external provider.	None	2 hours	Administrative Officer V, FAD-AGSS, PAU
	2.3 Conduct background investigation of applicants.	None	4 days	Administrative Officer V, FAD-AGSS, PAU
	2.4 Arrange schedule of human Resource Management and Personnel Selection Board (HRMPSB) deliberation, prepare and disseminate notice of meeting.	None	3 hours	Administrative Officer V, FAD-AGSS, PAU
	2.5 Consolidate, summarize and prepare deliberation documents.	None	2 hours	Administrative Officer V, FAD-AGSS, PAU
	2.6 Facilitate the conduct of deliberation process.	None	4 days	Administrative Officer V, FAD-AGSS, PAU
	2.7 Prepare HRMPSB Resolution.	None	2 hours	Administrative Officer V, FAD-AGSS, PAU



2.8 Prepare minutes of deliberation process.	None	1 hour	Administrative Officer V, FAD-AGSS, PAU
2.9 Route HRMPSB resolution for signature of members.	None	7 days	Administrative Aide III FAD-AGSS, CRO
2.10 Forward signed HRMPSB Resolution to Executive Director for selection and approval of appointee	None	2 days	Administrative Officer V, FAD-AGSS, PAU
2.11 Prepare letter to applicants on the result of application for signing of PSB Chairperson.	None	5 minutes	Administrative Officer V, FAD-AGSS, PAU
2.12 Release signed letter to applicants.	None	3 days	Administrative Aide III FAD-AGSS, CRO
2.13 Inform selected applicants on the pre-appointment requirement.	None	20 minutes	Administrative Officer V, FAD-AGSS, PAU
2.14 Check the completeness of requirements submitted by selected applicants.	None	10 minutes	Administrative Officer V, FAD-AGSS, PAU



2.15 Prepare the following:  a) Appointment paper b) Position Description Form	None	5 minutes 1 day	Administrative Officer V, FAD-AGSS, PAU
2.16 Facilitate the signing of appointment by the highest HRM Officer, the HRMPSB Chair and the Executive Director.	None	3 days	Administrative Officer V, FAD-AGSS, PAU
2.17 Issue Appointment to new appointee and ask date of assumption	None	5 minutes	Administrative Officer V, FAD- AGSS, PAU
2.18 Prepare and post a notice announcing the appointment of the newly hired/promoted employee.	None	20 minutes	Administrative Officer V, FAD- AGSS, PAU and Administrative Aide III FAD-AGSS, CRO
2.19 Prepare memorandum on the assumption of new appointee and schedule Oath taking.	None	15 minutes	Administrative Officer V, FAD- AGSS, PAU
2.20 Facilitate the Oath taking.	None	10 minutes	Administrative Officer V, FAD- AGSS, PAU
2.21 Coordinate onboarding/ orientation of new appointee.	None	5 minutes	Administrative Officer V, FAD- AGSS, PAU



3. Employee assumes office.	3.1 Facilitate the conduct of onboarding/ orientation.	None	4 hours	Administrative Officer V, FAD- AGSS, PAU
	3.2 End of transaction			
4. End-user fills out Customer/Client Satisfaction	4.1 Collect the filled-out Customer/Client Satisfaction Form	None	5 minutes	Administrative Officer V, FAD-AGSS, PAU
Survey Form	4.2 End of Transaction			
		TOTAL	57 days, 1 h	our and 15 minutes

<sup>\*</sup>Prescribed period for the publication and posting of vacancies are covered under the revised 2018 Omnibus Rules of Appointment and Other Human Resource Actions (ORAOHRA) and RA 7041.

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SITUATION	ACTION	LOCATION OF ACTION	REMARKS		
If there were no applicants or the Executive Director/End-User requested for more applicants	Repost vacancies for additional applicants and accept additional applicants	FAD-AGSS, PAU	The 11 days posting will still have to be complied		
If the interviewer becomes unavailable to interview the applicant on the scheduled date of interview	Re-schedule the interview	FAD-AGSS, PAU	Subject to availability of the interviewer and the interviewee (additional no. of days will be added to agency action item 1.4 and 1.5)		
If the members of the HRMPSB are on official business or is unable to sign the HRMPSB Resolution for one reason or another.	The Resolution is endorsed to the other members of the HRMPSB until all the members have signed the Resolution.		The Resolution will be put on hold until all the members have signed the document (Additional number of days will be added to agency action item no. 2.9)		



## V. Transportation Services

Deliver passenger to destinations.

Office/ Division	n:	Finance and Administrative Division					
Classification	:	Complex					
Type of Transaction:		G2G - Gove	rnment to (	Government			
Who may avai	il:	MIRDC Emp	loyees / Pe	ersonnel			
CHECKL	IST OF	REQUIREME	NTS	WHER	E TO SECURE		
Approved Requ	uest for	Vehicle (GML		General Mainter	nance Unit		
CLIENT STEPS	AGEN	CY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE		
1. Submit approved Request for Vehicle	1.1 Receive and check completeness of the travel data		None	10 minutes	Admin. Aide VI, FAD-GMU		
	1.2 Determine destination and availability of vehicle and driver		None	5 minutes	Admin. Aide VI, FAD-GMU		
	1.3 Fill up and approve the Request for Vehicle and trip ticket form and attach the Vehicle Pre-Trip Safety checks and Customer /Client Satisfaction Survey form		None	5 minutes	Engineer III, FAD-GMU and Admin. Aide VI, FAD-GMU		
			None	5 minutes	<i>Admin. Aide VI,</i> FAD-GMU		



CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
	1.5 Fill-out Request for Fuel (GMU 017) and submit to assigned GMU Engineer for the release of payment for fuel	None	3 minutes	Admin. Aide VI FAD-GMU and Engineer II FAD-GMU
	1.6 Refuel at the accredited gasoline station along the way to destination  1.7 Provide transportation services to the requesting party  1.8 Fill-out Trip Ticket form (GMU 003) for signature of passenger/s	None	Time will depend on the destination	Admin. Aide IV FAD-GMU or Admin. Aide IV FAD-GMU or Admin. Aide IV FAD-GMU or Admin. Aide III FAD-GMU
2. Sign Trip Ticket Form	2.1 File signed Trip Ticket form and fill-out dispatching report.	None	5 minutes	Admin. Aide VI FAD-GMU  Admin. Aide IV FAD-GMU or Admin. Aide III FAD-GMU



3. Customer	3. Collect and file	None	5 minutes	Admin. Aide VI
fills out	the filled-up			FAD-GMU
Customer/Cli	Customer/ Client			
ent	Satisfaction			
Satisfaction	Survey Form			
Survey Form.				
		TOTAL	38 minutes (	excluding travel time)



# MATERIALS AND PROCESS RESEARCH DIVISION

**External Services** 



## I. Additive Manufacturing Services

Brief Description of the Service: 3D printing of objects using various materials and 3d printing technologies.

Office/Division:	Materials and Process Research Division					
Classification:	Highly Technical	OH				
	G2C - Government to Citizen					
Type of	G2B - Government to Business Entity					
Transaction:	G2G - Government to Government					
Who may avail:	All					
	LIST OF REQUIREMENTS	WHERE TO SECURE				
1. Submission of file	es					
1.1 3D file specifi	cations					
_	del with maximum dimensions of:					
- 500mr	nx500mmx2000mm					
- 330mr	mx240mmx300mm					
- 305mr	nx305mmx406mm					
- 400mr	nx300mmX250mm					
- 1100m	mx850mmx620mm	Company/Industry/Individual				
- 6000m	mx2400mmx2400mm	requesting for printing				
	nx760mmx700mm					
	n x 250mm x 300mm					
	n x 145mm x 175mm					
	s should be in STL, OBJ, 3MF, AMF					
format	I fall day for the day					
	d fabrication drawing					
	ormation, if available					
	al requirements	Company/Industry/Individual				
	nical requirements	requesting for printing				
	ocessing requirements					
1.3For students:	ace roughness, etc.)					
	of Request for Discount to Executive	School/University where the				
Directo	•	student is enrolled				
	copy of valid student ID	Student is enfolied				
	Printed Parts/Components					
2.1. (1) Original o	or Photocopy of issued Job Order (JO)	Process Research Section				
• • •	or Photocopy of issued Official Receipt	Cashier's Office, MIRDC-Finance and Administrative Division (FAD)				
2.3. (1) Original of	or Photocopy of Authorization Letter	<u> </u>				
` ,	than Company's representative)	Company requesting for printing				
2.4. (1) Company issued ID	/ ID/School ID and/or (1) government	Company requesting for printing				



CLIENT STEPS	AGENCY	FEES TO	PROCESSING	PERSON
	ACTION	BE PAID	TIME	RESPONSIBLE
1. Submit files for printing and other requirements to the Process Research Section (AMCen)	1.1 Evaluate files for printability and discuss internally the parameters, printer settings and additional processes including post-processing requirements	None	1 hour	Senior Science Research Specialist, and/or Science Research Specialist II, and/or Metals Technologist V, and/or Metals
	1.2 Discuss and agree with the client on the parameters, printer settings, and additional processes including post-processing requirements	None	1 hour	Technologist III, PRS  Chief, MPRD and Deputy Executive Director for R&D
	1.3 Generate Quotation and have it signed by authorized signatories	None	3 days	Senior Science Research Specialist, and/or Science Research Specialist II, PRS
	1.4 E-mail quotation to client	None	1 minute	



2.Review and approve quotation and emailed back signed quotation	2.1 Receive signed quotation and generate Job Order			Senior Science Research Specialist, and/or Science Research
	2.2 Email JO to client for approval	None	10 minutes	Specialist II, PRS
3. Review, approve and sign Job Order and emailed back	3.1 Receive signed Job Order and process JO	None	1 day	- same as step 1 –
None	3.2 Conduct 3D printing  3.3 Post processing (annealing, polishing etc.)  3.4 Evaluation of the 3D printed sample, if required (Conduct measurement for dimensional accuracy)	None	14 days	Metals Technologist V, and/or Metals Technologist II, and/or Metals Technologist II, PRS and/or Metals Technologist II,
	3.5 Inform client that item is ready for pickup	None	1 minute	Senior Science Research Specialist, and/or Science Research Specialist II, PRS
4. Return to MIRDC and proceed to PRS (AmCen Bldg) to claim item	4. Generate Delivery Receipt (DR), in five copies.	None	5 minutes	Senior Science Research Specialist,



				and/or
				Science Research Specialist II, PRS
5. Proceed to Cashier's Office (Gold Building) "Order of Payment" Window and submit DRs for payment	5.1 Received and Review the DR  5.2 Issue Order of Payment and endorse documents to Cashier	See attached Standard Fees and Charges	15 minutes	Administrative Officer IV or Administrative Officer V Financial Management Section
6. Pay the required fees and received the Official Receipt, copy of the DR stamped "Paid"	6.1 Accept and process payment based on the Order of Payment 6.2 Issue the Official Receipt (OR) 6.3 Stamp "PAID" on the DRs and return them to customer. Retain blue copy of the DRs	None	5 minutes	Administrative Officer V Cashier or Administrative Officer II Cashier, Administrative and General Services Section
7. Proceed to the AMCen Building	7. None	None	5 minutes	
8. Sign "Items received by:" in the Delivery Receipt and submit DRs and present OR	8. Check DR and OR. Return DRs; retain yellow and pink copies of the DR.	None	3 minutes	- same as step 1 -



9. Customer fills out Client Satisfaction Measurements (CSM)	9. Collect and file the Client Satisfaction Measurements (CSM) (if physical)	None	5 minutes	- same as step 1 –
10. Surrender DR to security personnel	10. Return white copy of DR and retain green copy	None	1 minute	Security Personnel stationed at the Main Gate or Security Outpost
		TOTAL	18 days, 2 hou	rs and 51 minutes

SITUATION	ACTION	LOCATION OF ACTION	REMARKS
Witnessing during 3D printing preparation requested by client.	Witnessing can be accommodated on an agreed schedule and therefore will move the target completion on a later date.	Process Research Section, AMCen	Target date of completion will start only after witnessing has been completed, and not on the date job was accepted.
Printed items additional machining and quality assurance requirements	Client to enter job in TSSS.	Technical Solution Services	Separate target processing time.
Client requests for copy of printing parameters used for the JO	MIRDC can provide Printing Parameter Sheet, if required, as approved by MPRD, Division Chief	Process Research Section, AMCen	Available upon request



Printing process failed and/or stopped due to power interruption	Inform the client about the incident.  Inform the client that the duration of the 3D printing service will exceed the agreed target due to power interruption.  Set a target date with the appropriate number of days added to accommodate the client's request as agreed by both parties.	Process Research Section, AMCen	Target date of completion will be reflected in the Job Order to be conformed by the client
For Internal Technical Service Requests	Same procedure applies (as listed above)	Process Research Section, AMCen	Steps 1.3, 1.4, 2.1, 4, 5, 6, 8 and 10 are not applicable to internal clients.  For step 8, only the copy of the JO is needed for claiming/pick-up.  Internal Service Request will queue along with External Service Requests
If the client's job request exceeds the following dimensions or parameters:  For files with maximum dimension of 500mm x 500mm x 2000mm Volume: 400mm x 400mm x 1000mm Infill: 10%  Approx. Weight: 25600g Print speed: 40mm/s Layer height 0.5mm	Inform the client that the duration of the 3D printing service will exceed 15 days.  Set a target date with the appropriate number of days added to accommodate the client's request as agreed by both parties.	Process Research Section, AMCen	Target date of completion will be reflected in the Job Order to be conformed by the client



Files with maximum dimension of 330mm x 240mm x 300mm Volume: 320mm x 230mm x 290mm Infill: 20% Approx. Weight: 5750g Print speed: 60mm/s Layer height 0.2mm		
Files with maximum dimension of 300mm x 300mm x 400mm Volume: 285mm x 290mm x 390mm Infill: 10% Approx. Weight 4960g Print speed: 40mm/s Layer height: 0.3mm		
For files with maximum dimension of1100mm x 850mm x 620mm Volume: 950mm x 750mm x 470mm Infill: 50% Approx. Weight: 157300g Print speed: 25mm/s Layer height 2mm		
For files with maximum dimension of 6000mm x 2400mm x 2400mm Volume: 2000mm x 1000mm x 1000mm Infill: 5% Approx. Weight: 350000g Print speed: 5mm/s Layer height 5mm		
Files with maximum dimension of 600mm x 760mm x 600mm Volume: 575mm x 750mm x 600mm		



Infill: 70%		
Approx. Weight: 177500g		
Print speed: 25mm/s		
Layer height 2mm		
For files with maximum		
dimension of 250mm x		
250mm x 300mm		
Volume: 160mm x		
160mm x 160mm		
Infill: 100%		
Approx. Weight: 11000g		
Resolution: 30µm		
recolution: copini		
For files with maximum		
dimension of 145mm x		
145mm x 175mm		
Volume:		
140mm x 140mm x		
168mm		
Approx. Weight: 3970g		
Resolution: 50 microns		



#### STANDARD FEES AND CHARGES

No.	Type of Equipment	Method	Capacity	Fees and Charges, PhP/ Hr
1	Ultimaker S5	FFF 3D Printing	330mmx240m mx300mm	209.01
2	Leapfrog Xcel	FFF 3D Printing	500mmx500m mx 2000mm	322.44
3	Intamsys Funmat Pro 410 HT	FFF 3D Printing	300mmx300m mx400mm	305.47
4	Hyrel Hydra 16AS	FFF 3D Printing/ Viscous Solution Printing	400mmx300m mx250mm	399.82
5	Gigabot X XLT	Pellet 3D Printing	600mmx760m mx600mm	344.32
6	Cosine AM1	Pellet 3D Printing	1100mmx850 mmx620mm	895.38
7	Erectorbot 2088 HD	Pellet 3D Printing	6000mmx240 0mmx2400m m	2,027.77
8	Formlabs Form2	SLA 3D Printing	145mmx145m mx175mm	217.15
9	3DCeram C900	Ceramic SLA 3D Printing	300mmx300m mx100mm	2,150.72
10	EOS M290	DMLS 3D Printing	250mmx250m mx300mm	2,559.63
11	Shot Peeing	Post processing (for DMLS)	250mmx250m mx300mm	297.45
12	Sintering Furnace	Post processing (for DMLS)	250mmx250m mx300mm	281.67
13	De-binding Kiln	Post processing (for Ceramic SLA)	120mm diam x 750mm	382.87
14	Sintering Kiln	Post processing (for Ceramic SLA)	300mmx300m mx100mm	338.36
15	Form Wash	Post processing (for SLA)	145mmx145m mx175mm	223.60
16	Form Cure	Post processing (for SLA)	145mmx145m mx175mm	220.50

Note: Fees inclusive of removing supports Other Fees: Feedstock materials



#### II. Contract Research/ Joint Research Services

This service is offered to conduct research and development in partnership with the private/government firms with the aim to improve their products and processes.

Failure Analysis/Failure Investigation of metal parts and components with identified deliverables needing research and development falls under this service. If none, please refer to *Physical Metallurgy Laboratory Services - Failure Analysis/Failure Investigation*.

Office/Division:	Materials and Process Research Division				
Classification:	Highly Technical				
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government				
Who may avail:	All				
CHECKLIST OF REQUIREME	NTS	WHERE TO SECURE			
1. Submission of Proposal					
1.1 Letter of Intent		Client			
1.2 Concept / Drawing / Design		Client			
1.3 Sample Product/ Material		Client			
<ul> <li>1.4 For Failure Analysis/Investigation:</li> <li>1.4.1 Failed part/component (fracture surface must be protected from further damage and contamination).</li> <li>1.4.2 Applicable test results, depending on nature of failure, metal grade, size of sample, etc.</li> </ul>		Company/Industry requesting for testing (failed parts/components, relevant documents, and other tests not mentioned below)			
<ul><li>a. Chemical analysis (OES, wet method, etc.)</li><li>b. Positive material identification (PMI) using XRF analyzer</li></ul>		Chemical Laboratory, ATD, MIRDC or from any other chemical laboratory of choice (chemical analysis)			
c. Tensile test d. Hardness test e. Bend test		Mechanical Testing Laboratory, ATD, MIRDC or from any other mechanical laboratory of choice (tensile test, hardness test, bend test)			
f. Non-destructive tests (radiog ultrasonic, magnetic particle	Non-destructive Testing Laboratory, ATD, MIRDC or from any other non- destructive laboratory of choice (NDT)				



g. Fractographic Evaluation	Physical Metallurgy Laboratory				
h. Macroexamination	(fractographic evaluation,				
i. Metallography	macroexamination, metallography, SEM,				
j. Scanning Electron Microscopy (SEM)	EDS, metallurgical sample preparation,				
<ul><li>k. Energy Dispersive Electron Microscopy (EDS)</li></ul>	etc)				
Metallurgical Sample Preparation					
m. Other tests not identified above but					
deemed necessary upon assessment.					
1.4.3 Relevant documents (incident report, photos on site of incident, materials specification and technical requirements, maintenance and inspection record, etc).					
1.4.4 Sample/s for testing needs complex sectioning/cutting.	Technical Solution Services Section (TSSS), MIRDC (complex cutting services)				
2. Claiming of R&D Output					
0.4. 0 (4) 0 !:!:::! Dl. : (***********************************					

2. Claiming of R&D Output				
2.1. One (1) Original or Photocopy of issued Project Order (PO)	MPRD			
2.2. One (1) Original or Photocopy of issued	Cashier Office, MIRDC-Finance and			
Official Receipt	Administrative Division (FAD)			

CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Customer inquiry	1.1 Attend to	None	1 hour	Chief, MPRD
(Walk-in or	customer inquiry			together with
Electronic mail)	4 0 D			the prospective
Fan wells in	1.2 Review whether			MPRD
For walk-in	the inquiry is a			Researcher
customers, A. Proceed to MPRD-	contract/joint research for MPRD			Or Supervising
DHO, AMCen	and assign to			Supervising Science
Building.	researcher,			Research
Dananig.	otherwise, refer			Specialist,
B. Proceed to	inquiry to concerned			operanot,
Physical Metallurgy	division			Physical
Laboratory,				Metallurgy
Titanium Building	1.3 Request the			Laboratory
for Failure	customer to submit			
Analysis/Investigatio	Letter of Intent			
n concerns.				
2. Submit Letter of	2.1 Receive Letter of	None	10 minutes	Chief, MPRD,
Intent (LOI) - for	Intent			together with



projects other than Failure Analysis/ Investigation	2.2 Assign and discuss with MPRD researcher			the concerned Supervising SRS and assigned MPRD Researcher
3. With assistance from MIRDC, prepare and submit proposal using prescribed form. Revise, if needed.	3.1 Review submitted proposal, including customer requirements, deliverables, workplan and line-item-budget (LIB).  3.2 Submit and present proposal to R&D Committee for review and approval.  3.3 Inform client of the comments. Jointly, revise the proposal if needed and resubmit to R&D Committee.	None	12 days  (exclusive of time for negotiation process and time securing appointment schedule from R&D committee)	Assigned MPRD Researcher
4. Review Memorandum of Agreement (MOA)/ Research Funding Agreement (RFA) and provide feedback.	4.1 Once the proposal is approved, prepare and send copy of the Memorandum of Agreement (MOA) to Customer for review and comments.  4.2 Review feedback and amend MOA as needed.	None	4 days	Assigned MPRD researcher



5. Sign the MOA/RFA and submit signed copies to assigned MPRD researcher.  Receive agency signed copies of MOA/RFA.	4.3 Prepare five (5) copies of revised MOA and send to client for signing.  5.1 Receive the MOA and route for MIRDC officials' signatures.  5.2 Return agency signed copy of the Contract/MOA to client for notarization.	None	3 days	Assigned MPRD Researcher
6. Notarize MOA/RFA.  Submit copies to: Notary Public – two (2) copies Client – one (1) copy End-user/ Project – one (1) copy MIRDC Legal Officer– one (1) copy	6.1 Receive notarized MOA.	None	5 minutes	Assigned MPRD Researcher
7. Accomplish and sign two (2) copies of Project Order (PO). Provide required details.  Receive one (1) copy of PO.	<ul> <li>7.1 Fill-out two (2) copies of Project Order (PO) Form.</li> <li>7.2 Review and Sign PO by Receiving staff.</li> <li>7.3 Issue a copy of PO to client.</li> </ul>	None	30 minutes	Chief, MPRD  Assigned MPRD Researcher



8. Proceed to Cashier's Office "Order of Payment (O.P.)" Window and present the PO for payment.	8.1 Receive and Review the PO.  8.2 Create O.P. manually.  8.3 Reflect invoice details or application of deposit if there is any.  8.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (OR).	None	15 minutes	Administrative Officer IV Or Administrative Officer V Financial Management Section
9. Pay the required fee (if paying in cash) and Receive OR, copy of PO stamped "PAID"	9.1 Receive documents and process Official Receipt based on the O.P.  9.2 Receive payment (cash) Stamp "PAID" all documents. If payment is in the form of check, review the check as to amount, date and signatory.  9.3 Release to Client O.R. and all billing documents except accounting copy.	Contract Cost highly depende d on the complex ity of the project, duration, and delivera bles of the project.	5 minutes	Administrative Officer V or Administrative Officer II Administrative and General Services Section



10. None	10.1 Implement Research and Development project based on approved workplan/ duration.  10.2 Inform customer on the completion of the project.	None	Depending on the approved workplan	Assigned MPRD Researcher
11. Proceed to MPRD, present copy of OR and and PO.  Sign applicable documents.  Accept/receive R&D Project output/s and documents.	11.1 Turn-over /release the Research and Development Project Output/s.  11.2 Prepare and request the customer to sign the Property Entry/Exit Slip, Acknowledgement Receipt of Equipment, Certificate of Project Completion/ Certificate of Acceptance, and/or Failure Analysis/ Investigation Report, as applicable.	None	1 hour	Assigned MPRD Researcher
12. Fill out Customer/Client Satisfaction Survey Form and submit to MPRD staff.	12.1 Collect and file the filled-up Customer/Client Satisfaction Survey Form	None	5 minutes	Assigned MPRD Researcher
		TOTAL	19 days 3 hours (exclusive of acti implementation)	



SITUATION	ACTION	LOCATION	REMARKS
The inquiry in Agency Action 1.1 requires more than one engineering / science field.	Meeting with experts/ researchers may be required.	MIRDC	Will take longer time depending on the assessments / arguments of experts/ researchers.
If the R&D Committee has concerns / comments that need to be addressed in Agency Action 3.3	Coordinate with the client and inform them on the concerns / comments.  Provide necessary actions to address the concerns / comments.	MIRDC	Will take longer time depending on the next schedule of review of the R&D Committee
Projects above Php 2M will be subject to approval of the MIRDC Governing Council (GC)	Project proposal will be included in the Agenda for the Meeting or subject to a referendum	Venue of GC Meeting	Process will take additional time.

### **III. Physical Metallurgy Laboratory Services**

A. Physical Metallurgy Laboratory Services - Laboratory Test and Analysis

Highly Technical Tests and Evaluations

- **1. Failure Analysis/Failure Investigation** It is a process of collecting information and data through different metallurgical, mechanical and chemical tests, and analyze these information and test results to determine the cause of failure. (. (*For cases with identified deliverables needing research and development*, please refer to Contract/Joint Research)
- **2. Fractographic Evaluation** It is a process of collecting information and data by observing the fracture surface of a fractured metal using visual, optical microscope, and electron microscope to determine mode of fracture.

Office/Division:	Materials and Process Research Division
Classification:	Highly Technical
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government
Who may avail:	All



CHECKLIST OF REQUIREMENTS	WHERE TO SECURE
1. Submission of samples	
1.4 For Failure Analysis/Investigation: 1.4.1 Failed part/component (fracture surface must be protected from further damage and contamination). 1.4.2 Applicable test results, depending on nature of failure, metal grade, size of sample, etc	Company/Industry requesting for testing (failed parts/components, relevant documents, and other tests not mentioned below)
<ul> <li>a. Chemical analysis (OES, wet method, etc.)</li> <li>b. Positive material identification (PMI) using XRF analyzer</li> </ul>	Chemical Laboratory, ATD, MIRDC or from any other chemical laboratory of choice (chemical analysis)
c. Tensile test d. Hardness test e. Bend test	Mechanical Testing Laboratory, ATD, MIRDC or from any other mechanical laboratory of choice (tensile test, hardness test, bend test)
f. Non-destructive tests (radiography, ultrasonic, magnetic particle, penetrant)	Non-destructive Testing Laboratory, ATD, MIRDC or from any other non- destructive laboratory of choice (NDT)
<ul> <li>g. Fractographic Evaluation</li> <li>h. Macroexamination</li> <li>i. Metallography</li> <li>j. Scanning Electron Microscopy (SEM)</li> <li>k. Energy Dispersive Electron Microscopy (EDS)</li> <li>l. Metallurgical Sample Preparation</li> </ul>	Physical Metallurgy Laboratory (fractographic evaluation, macroexamination, metallography, SEM, EDS, metallurgical sample preparation, etc)
m. Other tests not identified above but deemed necessary upon assessment.	
1.4.3 Relevant documents (incident report, photos on site of incident, materials specification and technical requirements, maintenance and inspection record, etc).	
1.4.4 Sample/s for testing needs complex sectioning/cutting.	Technical Solution Services Section (TSSS), MIRDC (complex cutting services)



1.5 For students (who will pay for the service): Write a letter addressed to the Executive Director requesting for discount, endorsed by adviser. Provide one (1) copy to Physical Metallurgy Lab and bring School ID

School/University where the student is enrolled

2.Claiming of test certificates and retrieving of	samples
Client to bring the following:	
2.1 One (1) Original or Photocopy of issued Job Order (JO) 2.2	Issued by Physical Metallurgy Lab
2.2 One (1) Original or Photocopy of issued Official Receipt	Issued by Cashier Office, FAD
2.3. One (1) Original or Photocopy of Authorization Letter (for person other than Company's representative)	Client
2.4. One (1) Company ID/School ID and/or One (1) government issued ID	Client/Client's Representative

CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1.Submit sample	1.1 Evaluate	None	1 hour	Senior Science
for testing and	sample/s and			Research
other	discuss			Specialist
requirements to	additional			or
Physical	processes and			Supervising
Metallurgy Lab,	requirements, if			Science
Titanium Building.	necessary.			Research
				Specialist,
Accomplish two	1.2 Label			Or
(2) copies of Job	sample/s			Metals
Order (JO) by	submitted and			Technologist IV
providing	mark agreed			or
company details	orientation/test			Metals
and signing on "conforme"	area			Technologist II
portion.	1.3 Generate			Physical
	JO in two (2)			Metallurgy
Receive one (1) copy of JO.	copies			Laboratory



	1.4 Review and			
	Sign JO by Receiving staff			
	1.5 Issue a copy of JO to client			
2. Present Visitor's Pass for signature.	2.1 Sign and return Visitor's Pass	None	1 minute	- same as step 1 -
Receive signed Visitor's Pass				
3. Proceed to Cashier's Office "Order of Payment (O.P.)" Window and present the JO for payment.	3.1 Receive and Review the JO.  3.2 Create O.P. manually.  3.3 Reflect invoice details or application of deposit if there is any.  3.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (OR).	None	10 minutes	Administrative Officer IV or Administrative Officer V Financial Management Section
4. Pay the required fee (if paying in cash) and Receive OR, copy of JO stamped "PAID"	4.1 Receive documents and process Official Receipt based on the O.P.  4.2 Receive payment (cash) Stamp "PAID" all documents. If payment is in the form of check, review the check as to amount, date and signatory.	Fractogra phic Evaluatio n – Php 7,000.00 Failure Analysis /Failure Investigat ion - Php 25,000.0 0 plus	5 minutes	Administrative Officer V or Administrative Officer II Administrative and General Services Section



	4.3 Release to Client O.R. and all billing documents except accounting copy.	Other tests and sample preparati ons as deemed necessar y.  Please refer to "Table of Fees" at the end of this table.		
5. None.  (Client may witness upon request and payment of corresponding fees)	5.1 Laboratory staff to conduct sample preparations and test and analysis per customer instructions and applicable test methods.	None	Fractographic Evaluation – 19 days  Failure Analysis/ Failure Investigation – 19 days (provided all required tests have been completed and results submitted)	- same as step 1 -



6. Present copy of JO, OR, and other applicable documents at Physical Metallurgy Lab, Titanium BuildingSign laboratory's file copy of test reports/certificate s and "Items retrieved by:" portion of laboratory's file copy of JOReceive test reports/certificate s and samples.	6.1 Check JO and OR.  6.2 Record OR No. and Amount on JO (Phys Met copy) and return OR to client.  6.3 Issue Test Reports/ Certificates  6.4 Return samples to Client	None	10 minutes	- same as step 1
7. Fill out Customer/Client Satisfaction Survey Form and submit to Phys Met staff	7.1 Collect and file the filled-up Customer/Client Satisfaction Survey Form	None	5 minutes	- same as step 1 -
8. Present MIRDC Visitor's Pass for signature.  Receive signed	8. Sign and return MIRDC Visitor's Pass	None	1 minute	- same as step 1 -
Visitor's Pass.				
		TOTAL	19 days, 1 hou	r 32 minutes



Physical Metallurgy	Cost/sample
Metallurgical Sample Preparation	
Cutting	140.00
Mounting	
Hot Mounting	80.00
Cold Mounting	360.00
Metallographic Grinding	400.00
Metallographic Polishing	350.00
Etching	120.00
2. Thickness of Coating (inclusive of grinding, polishing, etching; and one (1) high magnification photo and one (1) low magnification photo per test point)	2,200.00
3. Scanning Electron Microscopy	
Conductive Sample	2,000.00
Non-conductive Sample	2,600.00
4. Energy Dispersive Spectroscopy	2,000.00
5. Macroexamination	1,850.00
6. Metallography (inclusive of grinding, polishing. Etching; and one (1) high magnification photo and one (1) low magnification photo per test point)	
Plain Carbon Steel	1,600.00
Cast Iron	2,000.00
Aluminum/Aluminum Alloy	2,050.00
Copper/Copper Alloy	2,200.00
Thickness of Coating	2,200.00
Stainless Steel	2,250.00
Low Alloy Steel/High Alloy Steel	2,250.00
Boiler Tubes	2,500.00
Galvanized Sheet	2,500.00
Multi-layered Bearings	2,600.00
Weldments	3,500.00
Lead/Lead Alloy	3,800.00
7. Metal Classification/Certification (per sample)	750.00
Fractographic Evaluation (exclusive of other tests and fees for use of equipment)	7,000.00
Failure Investigation (exclusive of other tests and fees for use of equipment)	25,000.00
10. Photomicrography (per additional photograph)	80.00



SITUATION	ACTION	LOCATION OF ACTION	REMARKS
Witnessing during testing is requested by client.	Witnessing can be accommodated on an agreed schedule and therefore will move the target completion on a later date.	Physical Metallurgy Laboratory, Titanium Building	Reckoning of target date of completion will start from the date of witnessing, and not on the date job was accepted.
Laboratories of subsequent processes requested for deferment.	Final steps in the preparation of samples will be deferred.	Physical Metallurgy Laboratory, Titanium Building	Reckoning of target date of completion will take a pause during this period.
Sample needs complex cutting.	Client to enter job in TSSS.	Technical Solution Services Section	Separate target processing time.
Up to five (5) samples can be prepared (from grinding to etching) for one day.	One (1) day will be added for every additional five (5) samples.	Physical Metallurgy Laboratory, Titanium Building	May exceed the three (3) days processing time for simple jobs if more than five samples, depending on the complexity of sample preparations needed.
Internal client avails the service	Same procedure applies.	Physical Metallurgy Laboratory, Titanium Building	Steps 2, 3, 4 and 8 are not applicable to internal clients.  For step 6, only the copy of the JO is needed for claiming of results.
Students request for a 20% discount.	Same procedure applies.	Physical Metallurgy Laboratory, Titanium Building	The discounts are automatically granted provided that  1. They can provide one (1) copy of a letter addressed to the Executive Director, endorsed by their adviser,



			requesting for discount, as well as their School ID.  2. They are paying for the service individually (not through school or company).
Multiple tests are required for failure analysis.	Same procedure applies.	Physical Metallurgy Laboratory, Titanium Building	Lead time of 19 days will start once all required tests have been completed and the results submitted to Physical Metallurgy Laboratory.

**3. Metallurgical Sample Preparation** – It is performed on samples to reduce the size and/or prepare the surface as required by the test equipment or test method.

Office/Division:	Materials and Process Research Division		
Classification:	Simple		
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government		
Who may avail:	All		
CHECKLIS	T OF REQUIREMENTS	WHERE TO SECURE	
1. Submission of sa	1. Submission of samples		
1.1 Metallurgical Sample Preparation     - bigger/thicker samples may require complex cutting/sectioning process not available in Physical Metallurgy Lab		Company/Industry requesting for testing (samples)  Physical Metallurgy Laboratory (simple cutting services and mounting)  Technical Solution Services Section (TSSS), MIRDC (complex cutting services)	



1.2 For students (who will pay for the service):     Write a letter addressed to the Executive Director requesting for discount, endorsed by adviser.     Provide one (1) copy to Physical Metallurgy Lab and bring School ID      2. Retrieving of samples			School/University student is en	ersity where the nrolled
Client to bring the				
2.1 One (1) Origina Order (JO)	al or Photocopy o	f issued Job	Issued by Physic	cal Metallurgy Lab
2.2 One (1) Origina Receipt	al or Photocopy of	f issued Official	Issued by Cashie	er Office, FAD
2.3. One (1) Original or Photocopy of Authorization Letter (for person other than Company's representative)			Client	
2.4. One (1) Company ID/School ID and/or One (1) government issued ID		Client/Client's Representative		
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Submit sample for testing and other requirements to Physical Metallurgy Lab, Titanium Building.  Accomplish two (2) copies of Job Order (JO) by providing company details and signing on "conforme" portion.  Receive one (1) copy of JO.  1.1 Evaluate sample/s and discuss additional processes and requirements, if necessary.  1.2 Label sample/s submitted and mark agreed orientation/tes t area.  Receive one (1) copy of JO.  1.3 Generate JO in two (2) copies.  1.4 Review and Sign JO by Receiving staff.		30 minutes	Senior Science Research Specialist or Supervising Science Research Specialist, or Metals Technologist IV or Metals Technologist II  Physical Metallurgy Laboratory	



		T		T
	1.5 Issue a copy of JO to client.			
2. Present Visitor's Pass for signature.	2.1 Sign and return Visitor's Pass.	None	1 minute	
Receive signed Visitor's Pass.				- same as step 1 -
3. Proceed to Cashier's Office "Order of Payment (O.P.)" Window and present the JO for payment.	3.1 Receive and Review the JO.  3.2 Create O.P. manually.  3.3 Reflect invoice details or application of deposit if there is any.  3.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (OR).	None	10 minutes	Administrative Officer IV Or Administrative Officer V Financial Management Section
4. Pay the required fee (if paying in cash) and Receive OR, copy of JO stamped "PAID"	4.1 Receive documents and process Official Receipt based on the O.P.  4.2 Receive payment (cash) Stamp "PAID" all documents. If payment is in the form of check, review the check as to amount,	Please refer to  "Table of Fees" at the end of this table.	5 minutes	Administrative Officer V Administrative and General Services Section or Administrative Officer II Administrative and General Services Section



	date and signatory.  4.3 Release to Client O.R. and all billing documents except accounting copy.			
5. None.  (Client may witness upon request and payment of corresponding fees)	5.1 Laboratory staff to conduct sample preparations and test and analysis per customer instructions and applicable test methods.	None	1 day 4 hours	Metals Technologist IV or Metals Technologist II  Physical Metallurgy Laboratory
6. Present copy of JO, OR, and other applicable documents at Physical Metallurgy Lab, Titanium BuildingSign "Items retrieved by:" portion of the laboratory's file copy of JOReceive samples.	6.1 Check JO and OR. 6.2 Record OR No. and Amount on JO (Phys Met copy) and return OR to client. 6.3 Return samples to Client	None	10 minutes	- same as step 1 -
7. Fill out Customer/ Client Satisfaction Survey Form and submit to Phys Met staff	7.1 Collect and file the filled-up Customer/ Client Satisfaction Survey Form	None	5 minutes	- same as step 1 -



8. Present MIRDC Visitor's Pass for signature.	8. Sign and return MIRDC Visitor's Pass	None	1 minute	- same as step 1 -
Receive signed Visitor's Pass.				
		TOTAL	1 day, 5 hou	rs and 2 minutes

Physical Metallurgy	Cost/sample
Metallurgical Sample Preparation	
Cutting	140.00
Mounting	
Hot Mounting	80.00
Cold Mounting	360.00
Metallographic Grinding	400.00
Metallographic Polishing	350.00
Etching	120.00

SITUATION	ACTION	LOCATION OF ACTION	REMARKS
Witnessing during testing is requested by client.	Witnessing can be accommodated on an agreed schedule and therefore will move the target completion on a later date.	Physical Metallurgy Laboratory, Titanium Building	Reckoning of target date of completion will start from the date of witnessing, and not on the date job was accepted.
Laboratories of subsequent processes requested for deferment.	Final steps in the preparation of samples will be deferred.	Physical Metallurgy Laboratory, Titanium Building	Reckoning of target date of completion will take a pause during this period.
Sample needs complex cutting.	Client to enter job in TSSS.	Technical Solution Services Section	Separate target processing time.



Up to five (5) samples can be prepared (from grinding to etching) for one day.	One (1) day will be added for every additional five (5) samples.	Physical Metallurgy Laboratory, Titanium Building	May exceed the three (3) days processing time for simple jobs if more than five samples, depending on the complexity of sample preparations needed.
Internal client avails the service	Same procedure applies.	Physical Metallurgy Laboratory, Titanium Building	Steps 2, 3, 4 and 8 are not applicable to internal clients.  For step 6, only the copy of the JO is needed for claiming of results.
Students request for a 20% discount.	Same procedure applies.	Physical Metallurgy Laboratory, Titanium Building	The discounts are automatically granted provided that  1. They can provide one (1) copy of a letter addressed to the Executive Director, endorsed by their adviser, requesting for discount, as well as their School ID.  2. They are paying for the service individually (not through school or company).



#### 4. Optical and Electron Microscopy

- a. Thickness of Coating It is a measurement of the thickness of coating material/s on a particular substrate using optical microscope.
- b. Energy Dispersive Spectroscopy (EDS) It is an analytical technique used in conjunction with scanning electron microscopy (SEM) to determine which chemical elements are present in a sample and estimate their relative abundance.
- c. Scanning Electron Microscopy (SEM) Evaluation of samples using the Scanning Electron Microscope.
- d. Macroexamination It is a process of collecting information and data of a sample on a macro level by conducting visual inspection and use of stereomicroscope as applicable. Usually, this technique is a vital step in the failure analysis.
- e. Metallography This describes the microstructure and micro constituents of a metal using microscope.

Office/Division:	Materials and Process Research Division		
Classification:	Complex		
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government		
Who may avail:	All		
CHECKLIST	OF REQUIREMENTS	WHERE TO SECURE	
1. Submission of sa	mples		
1.1 Thickness of Coating - samples may need additional sample preparation such as mounting, grinding, polishing and/or etching  1.2 SEM/EDS maximum of 2 inches (height) x 4 inches (width/diameter) - bigger/thicker samples may require complex cutting/sectioning process not available in Physical Metallurgy Lab - smaller/thinner samples may require additional mounting process		Company/Industry requesting for testing (samples)  Physical Metallurgy Laboratory (simple cutting services and mounting)  Technical Solution Services Section (TSSS), MIRDC (complex cutting services)	



- gold sputtering coating is highly				
recommended for non-conductive samples				
1.3 Macroexamination				
- bigger/thicker	samples for			
stereomicrosco	pe viewing may	require		
complex cutting	g/sectioning proc	ess not		
•	ysical Metallurgy			
1.4 Metallography	,			
0 . ,	diameter/width ar	nd height of		
at least 10mm		J		
- bigger/thicker	samples may re	quire		
complex cutting	g/sectioning proc	ess not		
available in Ph	ysical Metallurgy	Lab		
- smaller/thinne	er samples may r	equire		
	nting process (de	•		
technician's ev		•		
1.5 For students (	who will pay for t	he service):		
	ddressed to the E		Cabaal/Ulaiss	- u-:4
Director reques	sting for discount,	endorsed by		ersity where the
	e one (1) copy to		student is enrolled	
Metallurgy Lab	and bring Schoo	l ID		
2. Claiming of test ce			mples	
Client to bring the f			_	
2.1 One (1) Origina		f issued Job	Januard by Dhysia	ol Motollurgy Lob
Order (JO)	. ,		issued by Physic	al Metallurgy Lab
2.2 One (1) Origina	al or Photocopy of	f issued		0// 545
Official Receipt			Issued by Cashie	er Office, FAD
2.3. One (1) Origina		of		
\ /	etter (for person		Client	
Company's rep				
2.4. One (1) Compa		and/or One	OII	
(1) government	•	J. 10.7 G. 1 G. 1 G	Client/Client's Re	epresentative
( )	AGENCY	FEES TO	PROCESSING	PERSON
CLIENT STEPS	ACTION	BE PAID	TIME	RESPONSIBLE
1. Submit sample for	1.1 Evaluate	None	30 minutes	Senior Science
testing and other	sample/s and			Research
requirements to	discuss			Specialist
Physical Metallurgy	additional			or
Lab, Titanium	processes and			Supervising
Building.	requirements,			Science
	if necessary.			Research
Accomplish two (2)	-			Specialist,
copies of Job Order	1.2 Label			or
(JO) by providing	sample/s			Metals
company details and	submitted and			Technologist IV
	mark agreed			or



signing on "conforme" portion.  Receive one (1) copy of JO.	orientation/tes t area  1.3 Generate JO in two (2) copies  1.4 Review and Sign JO by Receiving staff  1.5 Issue a			Metals Technologist II  Physical Metallurgy Laboratory
	copy of JO to client			
2. Present Visitor's Pass for signature.	2.1 Sign and return Visitor's Pass	None	1 minute	- same as step 1 -
Receive signed Visitor's Pass				
3. Proceed to Cashier's Office "Order of Payment (O.P.)" Window and present the JO for payment.	3.1 Receive and Review the JO. 3.2 Create O.P. manually. 3.3 Reflect invoice details or application of deposit if there is any.	None	10 minutes	Administrative Officer IV Financial Management Section Or Administrative Officer V Financial Management Section
	3.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (OR).			



4. Pay the required fee (if paying in cash) and Receive OR, copy of JO stamped "PAID"	4.1 Receive documents and process Official Receipt based on the O.P.  4.2 Receive payment (cash) Stamp "PAID" all documents. If payment is in the form of check, review the check as to amount, date and signatory.  4.3 Release to Client O.R. and all billing documents except accounting copy.	Please refer to "Table of Fees" at the end of this table.	5 minutes	Administrative Officer V or Administrative Officer II Administrative and General Services Section
<ul><li>5. None.</li><li>(Client may witness upon request and payment of corresponding fees)</li></ul>	5.1 Laboratory staff to conduct sample preparations and test and analysis per customer instructions and applicable test methods.	None	Thickness of Coating/ SEM/ EDS – 3 days 4 hours  Macroexaminat ion/Metallograp hy - 5 days 4 hours	- same as step 1 -
6. Present copy of JO, OR, and other applicable documents at Physical Metallurgy Lab, Titanium Building.	6.1 Check JO and OR. 6.2 Record OR No. and Amount on JO (Phys Met	None	10 minutes	- same as step 1 -



Sign laboratory's file copy of test reports/certificates and "Items retrieved by:" portion of laboratory's file copy of JO.  Receive test reports/certificates and samples.	copy) and return OR to client.  6.3 Issue Test Reports/ Certificates  6.4 Return samples to Client			
7. Fill out Customer/Client Satisfaction Survey Form and submit to Phys Met staff	7.1 Collect and file the filled-up Customer/Clie nt Satisfaction Survey Form	None	5 minutes	- same as step 1 -
8. Present MIRDC Visitor's Pass for signature.  Receive signed Visitor's Pass.	8.1 Sign and return MIRDC Visitor's Pass	None	1 minute	- same as step 1 -
	TOTAL	Thickness of Coating/SEM/EDS = 3 days, 5 hours and 2 minutes  Macroexamination/Metallography = 5 days, 5 hours and2 minutes		



Physical Metallurgy	Cost/sample
1. Thickness of Coating (inclusive of grinding, polishing, etching; and one (1) high magnification photo and one (1) low magnification photo per test point)	2,200.00
2. Scanning Electron Microscopy	
Conductive Sample	2,000.00
Non-conductive Sample	2,600.00
3. Energy Dispersive Spectroscopy	2,000.00
4. Macroexamination	1,850.00
5. Metallography (inclusive of grinding, polishing. Etching; and one (1) high magnification photo and one (1) low magnification photo per test point)	
Plain Carbon Steel	1,600.00
Cast Iron	2,000.00
Aluminum/Aluminum Alloy	2,050.00
Copper/Copper Alloy	2,200.00
Thickness of Coating	2,200.00
Stainless Steel	2,250.00
Low Alloy Steel/High Alloy Steel	2,250.00
Boiler Tubes	2,500.00
Galvanized Sheet	2,500.00
Multi-layered Bearings	2,600.00
Weldments	3,500.00
Lead/Lead Alloy	3,800.00
6. Photomicrography (per additional photograph)	80.00



SITUATION	ACTION	LOCATION	REMARKS
		OF ACTION	
Sample for thickness of coating job needs complex sample preparation such as electroplating, precision cutting and mounting.	Appropriate number of days will be added.	Physical Metallurgy Laboratory, Titanium Building	Additional payment for cutting and mounting.
Witnessing during testing is requested by client.	Witnessing can be accommodated on an agreed schedule and therefore will move the target completion on a later date.	Physical Metallurgy Laboratory, Titanium Building	Reckoning of target date of completion will start from the date of witnessing, and not on the date job was accepted.
Sample needs complex cutting.	Client to enter job in TSSS.	Technical Solution Services Section	Separate target processing time.
For metallography, up to five (5) samples can be prepared (from grinding to etching) for one day.	One (1) day will be added for every additional five (5) samples.	Physical Metallurgy Laboratory, Titanium Building	May exceed the seven (7) days processing time for complex jobs if more than five samples, depending on the complexity of the sample preparations needed.
Internal client avails the service	Same procedure applies.	Physical Metallurgy Laboratory, Titanium Building	Steps 2, 3, 4 and 8 are not applicable to internal clients.  For step 6, only the copy of the JO is needed for claiming of results.
Students request for a 20% discount.	Same procedure applies.	Physical Metallurgy Laboratory, Titanium Building	The discounts are automatically granted provided that  1. They can provide one (1) copy of a letter addressed to the Executive Director, endorsed by their



	adviser, requesting for discount, as well as their School ID. 2. They are paying for the service individually (not through school or company).
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#### B. Physical Metallurgy Laboratory Services - In-plant Metallographic Replication

Non-destructive sampling and inspection technique to replicate a microstructure, usually performed to industrial/manufacturing plant parts and components such as boilers, heaters, piping, etc.

Office/Division:	Materials and Process Research Division				
Classification:	Highly Technical				
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government				
Who may avail:	All				
CHECKLIST	OF REQUIREMENTS	WHERE TO SECURE			
1. Submission of re	quest				
Agency. Indicated a. Name of Plant address where will be perform b. Proposed sche metallographic c. Material type/g samples/comp d. Target Test Po components) e. Type of test th standard, if av	edule of in-plant complication grade of the ponents points (with photographs of the lat is required (provide copy of	Company/Industry requesting for testing			



2. Claiming of test certificates		
2.1. One (1) Original or Photocopy of issued Job Order (JO)	Physical Metallurgy, Titanium Building	
2.2. One (1) Original or Photocopy of issued Official Receipt	Cashier Office, MIRDC-Finance and Administrative Division (FAD)	
2.3. One (1) Original or Photocopy of Authorization Letter (for person other than Company's representative)	Company requesting for testing	
2.4. One (1) Company ID and/or (1) government issued ID	Company requesting for testing	

CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Submit Letter of Request to the Chief SRS, MPRD. (Walk-in or electronic mail)  Receive quotation thru electronic mail.	1.1 Discuss with concerned personnel.  1.2 Evaluate required test, material type. Check availability of materials, equipment, and personnel on the requested dates, and discuss additional processes and other terms and conditions with client, if any.  1.3 Prepare quotation and send to client.	None	5 days	Supervising Science Research Specialist, Or Senior Science Research Specialist, Physical Metallurgy Laboratory
2. Submit required documents and	2.1 Generate Job Order	None	20 minutes	Senior Science Research
present MIRDC-				Specialist



issued quotation to Physical Metallurgy Laboratory, Titanium building.  Accomplish two (2) copies of Job Order (JO) by providing company details and signing on "conforme" portion.  Receive one (1) copy of JO.	(JO) in two (2) copies.  2.2 Review and Sign JO by Receiving staff.  2.3 Issue a copy of JO to client.			or Supervising Science Research Specialist, or Metals Technologist IV or Metals Technologist II  Physical Metallurgy Laboratory
3. Present Visitor's Pass for signature.  Receive signed	3.1 Sign and return Visitor's Pass	None	1 minute	- same as step 2
Visitor's Pass  4. Proceed to Cashier's Office "Order of Payment (O.P.)" Window and present the JO for payment.	4.1 Receive and Review the JO.  4.2 Create O.P. manually.  4.3 Reflect invoice details or application of deposit if there is any.  4.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (OR).	None	10 minutes	Administrative Officer IV Or Administrative Officer V Financial Management Section
5. Pay the required fee (if paying in cash) and Receive	5.1 Receive documents and process Official	As quoted. Please refer to "Table of	5 minutes	Administrative Officer V Administrative and General



OR, copy of JO stamped "PAID"	Receipt based on the O.P.  5.2 Receive payment (cash) Stamp "PAID" all documents. If payment is in the form of check, review the check as to amount, date and signatory.  5.3 Release to Client O.R. and all billing documents except accounting copy.	Fees" at the end of this table.		Services Section or Administrative Officer II Administrative and General Services Section
6. None	6.1 Laboratory staff to prepare pertinent travel documents, conduct metallographic replication, and prepare Test Reports/Certifi cates.	None	14 days (exclusive of travel time, safety orientation and other required plant/company procedures)	- same as step 2 -
7. Present copy of JO, OR, and other applicable documents at Physical Metallurgy Lab, Titanium Building.	7.1 Check JO and OR.  7.2 Record OR No. and Amount on JO (Phys Met copy) and	None	30 minutes	- same as step 2 -



		TOTAL	19 days, 1 hou	ır and 12 minutes
9. Present MIRDC Visitor's Pass for signature.  Receive signed Visitor's Pass.	9.1 Sign and return MIRDC Visitor's Pass	None	1 minute	- same as step 2 -
8. Fill out Customer/Client Satisfaction Survey Form and submit to Phys Met staff	8.1 Collect and file the filled-up Customer/ Client Satisfaction Survey Form	None	5 minutes	- same as step 2 -
Sign laboratory's file copy of test reports/certificates and "Items retrieved by:" portion of laboratory's file copy of JO.  Receive test reports/certificates and samples.	return OR to client.  7.3 Issue Test Reports/ Certificates  7.4 Return samples to Client			



Physical Metallurgy	Cost/sample
1. Metallurgical Sample Preparation	
Cutting	140.00
Mounting	
Hot Mounting	80.00
Cold Mounting	360.00
Metallographic Grinding	400.00
Metallographic Polishing	350.00
Etching	120.00
2. Macroexamination	1,850.00
3. Metallography (inclusive of grinding, polishing. Etching; and one (1) high magnification photo and one (1) low magnification photo per test point)	
Plain Carbon Steel	1,600.00
Cast Iron	2,000.00
Aluminum/Aluminum Alloy	2,050.00
Copper/Copper Alloy	2,200.00
Thickness of Coating	2,200.00
Stainless Steel	2,250.00
Low Alloy Steel/High Alloy Steel	2,250.00
Boiler Tubes	2,500.00
Galvanized Sheet	2,500.00
Multi-layered Bearings	2,600.00
Weldments	3,500.00
Lead/Lead Alloy	3,800.00
10. Photomicrography (per additional photograph)	80.00

SITUATION	ACTION	LOCATION OF ACTION	REMARKS
Up to ten (10) samples can be prepared and replicated per day.	Appropriate number of days will be added for every additional samples.	Requesting plant/company	A maximum of 50 samples can be prepared and replicated for the estimated five (5) days conduct of metallographic replication.
Client requested additional samples during actual conduct of job.	Client must inform immediately the Physical Metallurgy thru e-mail for any	Physical Metallurgy Laboratory	Appropriate number of days will be added to the original target date of completion.



	additional or deviation from original agreement.  Client must execute additional job order.		
Internal client avails the service	Same procedure applies.	Physical Metallurgy Laboratory, Titanium Building	Steps 3, 4, 5 and 9 are not applicable to internal clients.  For step 6, travel documents are not needed for services availed by internal clients.
			For step 7, only the copy of the JO is needed for claiming of results.

Total processing time does not include the time allotted by client in reviewing the quotation prior to signing of Job Order and the travel time from MIRDC to plant/company and vice versa for the actual conduct of job.

#### C. Physical Metallurgy Laboratory Services - Metals Certification/Classification

This process determines the most probable type and grade of a metal sample given the result of chemical analysis and based on available reference standard.

Office/Division:	Materials and Process Research Division			
Classification:	Complex			
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government			
Who may avail:	All			
CHECKLIST OF REQUIREMENTS WHERE TO SECURE				
1. Submission of ch				
1.1 If client has no chemical analysis result of the sample yet, submit sample/s to MIRDC-ATD-DHO Centralized Receiving area. Follow ATD-DHO procedure on Chemical Analysis and Metals Identification services.		Company/Industry requesting for testing (sample for chemical analysis and metals identification)		
1.2 If client has chemical analysis result, proceed to Physical Metallurgy Laboratory, Materials Research Section		Company/Industry requesting for testing		



Write a letter a Director reque adviser. Provide Metallurgy Lal	who will pay for the addressed to the Exesting for discount, de one (1) copy to and bring School	School/University where the student is enrolled		
2. Claiming of test				
2.1. One (1) Origin Order (JO)	nal or Photocopy o	f issued Job	Physical Metallu Building	
` '	nal or Photocopy o	f issued	Cashier Office, N	
Official Receipt			and Administrative	ve Division (FAD)
2.3. One (1) Original or Photocopy of Authorization Letter (for person other than Company's representative)			Company requesting for testing	
2.4. One (1) Com (1) government is	pany ID/School ID sued ID	and/or one	Company reques	sting for testing
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Submit chemical analysis result and other applicable requirements to Physical Metallurgy, Titanium Building.  Accomplish two (2) copies of Job Order (JO) by providing company details and signing on "conforme" portion.  Receive one (1) copy of JO.	1.1 Generate Job Order (JO) in two (2) copies.  1.2 Review and Sign JO by Receiving staff.  1.3 Issue a copy of JO to client.	None	10 minutes	Senior Science Research Specialist or Supervising Science Research Specialist, or Metals Technologist IV or Metals Technologist II Physical Metallurgy Laboratory
Present Visitor's     Pass for signature.  Receive signed	2.1 Sign and return Visitor's Pass	None	1 minute	- same as step 2 -
Visitor's Pass.  3. Proceed to Cashier's Office "Order of Payment (O.P.)" Window and	3.1 Receive and Review the JO.	None	10 minutes	Administrative Officer IV Or



present the JO for payment.	3.2 Create O.P. manually.  3.3 Reflect invoice details or application of deposit if there is any.  3.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (OR).			Administrative Officer V Financial Management Section
4. Pay the required fee (if paying in cash) and Receive OR, copy of JO stamped "PAID"	4.1 Receive documents and process Official Receipt based on the O.P.  4.2 Receive payment (cash) Stamp "PAID" all documents. If payment is in the form of check, review the check as to amount, date and signatory.  4.3 Release to Client O.R. and all billing documents except accounting copy.	Php 750.00 per sample	5 minutes	Administrative Officer V or Administrative Officer II Administrative and General Services Section
5. None	5.1 Laboratory staff to perform job and prepare Test Certificates.	None	3 days	Senior Science Research Specialist or



				Supervising Science Research Specialist Physical Metallurgy Laboratory
6. Present copy of JO, OR, and other applicable documents at Physical Metallurgy Lab, Titanium Building.  Sign laboratory's	6.1 Check JO and OR. 6.2 Record OR No. and Amount on JO (Phys Met copy) and return OR to client.	None	5 minutes	- same as step 1 -
file copy of test reports/certificates. Receive test reports/certificates and samples.	6.3 Issue Test Reports/ Certificates.			
7. Fill out Customer/Client Satisfaction Survey Form and submit to Phys Met staff	7.1 Collect and file the filled-up Customer/Client Satisfaction Survey Form	None	5 minutes	- same as step 2 -
8. Present MIRDC Visitor's Pass for signature.  Receive signed Visitor's Pass.	8.1 Sign and return MIRDC Visitor's Pass	None	1 minute	- same as step 2 -
		TOTAL	3 days and	37 minutes



Physical Metallurgy	Cost/sample
1. Metal Classification/Certification (per sample)	750.00

SITUATION	ACTION	LOCATION OF ACTION	REMARKS
Up to five (5) samples of the same material type and reference standard can be performed without additional days.	Appropriate number of days will be added for every additional samples.	Physical Metallurgy Laboratory	None
Or			
Up to two (2) samples of different material type and/or reference standard can be performed without additional days.			
Client avails chemical analysis service from ATD- DHO.	Client can obtain JO even without chemical analysis results.	Physical Metallurgy Laboratory, Titanium Building	ATD-DHO will release the chemical analysis results directly to the Physical Metallurgy Laboratory staff once completed.
Internal client avails the service	Same procedure applies.	Physical Metallurgy Laboratory, Titanium Building	Steps 2, 3, 4 and 8 are not applicable to internal clients. For step 6, only the copy of the JO is needed for claiming of results.



Students request for a 20% discount.	Same procedure applies.	Physical Metallurgy Laboratory, Titanium Building	The discounts are automatically granted provided that  1. They can provide one (1) copy of a letter addressed to the Executive Director, endorsed by their adviser, requesting for discount, as well as their School ID.  2. They are paying for the service individually (not through school or company).
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# OFFICE OF THE EXECUTIVE DIRECTOR

# **External Services**



## I. MOLD TECHNOLOGY SUPPORT CENTER



### A. Metalworking Services

Metalworking is the processing of ferrous and non-ferrous materials into useful products. The center utilizes conventional and specialized machining processes in the development of tools, dies, molds, jigs and fixtures, and other components/parts.

Metal working services in MTSC include conventional lathe machining, conventional milling, 3-axis CNC milling, Electrical Discharge Machining (Wirecut and Sinker), Plastic Injection, Grinding, Mold Repair (Laser/TIG Welding), and Dimensional Inspection (CMM). MTSC also offers rental of facilities and machines to mold and die companies through time-sharing schemes.

#### **FACILITIES AND CAPABILITIES:**

Machining Centers – are advanced computer-controlled machine tools used for machining of parts, usually metal, by material removal.

MTSC has the following facilities:

- Machining Center 12K rpm, Sirius 1250
- Machining Center 20K rpm, Sirius-UL+
- Machining Center 32K rpm, Sirius-UM+

**Plastic Injection Molding Machine** – is a machine for manufacturing plastic products by injecting molten plastic to a mold. The process is known to be an injection molding process.

MTSC has three plastic injection machines, all electric and horizontal types with the capacity of 110T, 220T, and 350T.

**Surface Grinding Machine** – is a machine tool that uses a grinding wheel for removing the material from the surface of the workpiece to provide precision ground surfaces, either to a critical size or to a surface finish.

MTSC has three surface grinding machines of different sizes.

**Electrical Discharge Machining (EDM)** – is a process of removing material from a workpiece using a rapid sequence of electrical discharges between the dielectric fluid and submerge electrodes.

MTSC has EDM Wirecut and EDM Sinker.

The Mold Technology Support Center (MTSC) is also equipped with conventional machines like lathe machine, drilling machine, and milling machine. It also has its own quality assurance laboratory with 3D Coordinate Measuring Machine (CMM) and measuring microscope. MTSC has the capability to do mold repairs using laser and TIG Welding.



# 1. Job processing (Actual Time)

Office/Division:  Office of the Deputy Executive Director for Research and Development – Mold Technology Support Center			
Classification:	Highly Technical		
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government		
Who may avail:	All		

CHECKLIST OF REQUIREMENTS	WHERE TO SECURE
Specifications  2 Sample Product / Workpiece	Company/Industry requesting for use of facilities with the Center's personnel to operate the required
4. Customer-supplied Materials and Toolings.	facilities

CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Proceed to MTSC and provide the sample product or product drawing and specifications. Inquire about the availability of required facility/ies and machine operator/s.	1.1 Evaluate the product sample or product drawing if within the Center's capability.  1.2 Check and evaluate customer supplied materials.  1.3 Determine the scope of work, required process/es, available machine/s, operators, & tools.  1.4 Inform the customer on the schedule of fees.	none	30 minutes	Metals Technologist III or Metals Technologist IV or Science Research Specialist II, or Senior Science Research Specialist, MTSC



2. Request for actual time of service	2.1 Prepare and issue Technical Service Request (TSR) form.	none	5 minutes	Project Assistant II MTSC
3. Review and sign TSR and submit customersupplied materials	3.1 Receive the materials, put proper labels, and store them in a designated area.  3.2 Provide (Prepare)the Property Entry & Exit Pass Slip (PEES)	none	20 minutes	Project Assistant II or Metals Technologist IV or Science Research Specialist II, MTSC
4. Fill-up Property Entry/ Exit Slip (PEES) for all materials supplied / provided	4.1 Receive the filled up and signed PEES	none	10 minutes	Project Assistant II or Metals Technologist IV or Science Research Specialist II, MTSC
5. Concur the target completion date based on the TSR.	5.1 Determine Target Completion Date (TCD) and schedule the job.	none	1 hour	Project Assistant II or Science Research Specialist II, MTSC
	5.2 Issue job ticket for monitoring of job/s.			



6. Monitor the status of job at mirdc.dost.gov.ph/tracking using the issued TSR as reference number	6.1 Process the job.  6.2 Record the man-hour and machine hour utilized on the job tickets.	none	10 minutes + (Total time of machine/manhour depends on the Target Completion Date (TCD) and machinist's skill)	Science Research Specialist II, MTSC
7. Secure PEES and DR.	7.1 Prepare DR for the completed job.	none	5 minutes	Project Assistant I or Project Assistant II
8. Proceed to the Cashier for payment.	8.1 Receive and review the document presented.  8.2 Create Order of Payment (O.P.) manually.  8.3 Reflect application of deposit if necessary.  8.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (O.R.).	none	10 minutes	Project Assistant II or Supervising Science Research Specialist, MTSC or Project Assistant I
9. Pay the required fee and receive OR, copy of DR and other billing documents	9.1 Receive documents and process OR based on the OP. Indicate details e.g., TIN, address,	As stated in the Order of Payment	5 minutes	Project Assistant I or Supervising Science Research Specialist, MTSC or



	business style, if required by customer.  If payment is in the form of a check, review the check as to amount, date and signatory.  9.2 Receive payment. Stamp "PAID" all documents.  9.3 Release OR and all billing documents except			Project Assistant II
10.1 Present the OR and the stamped DR  10.2 Inspect the finished product/sample	accounting copy.  10.1 Record the OR number and update the ONEshop upon the release of the items.  10.2 Release the finished product/sample and stamp the DR "released"	None	10 minutes 5 minutes	Project Assistant II or Science Research Specialist II, MTSC
Questionnaire using the Customer/ Client Satisfaction Survey Form	file the filled-up Customer/Client Satisfaction Survey Form.	none	o minutes	or Project Assistant II, MTSC



12. Give the PEES and the copies of DR to the guard upon exit at MTSC	12.1 Inspect the product and materials brought in based on the entry pass presented.  12.2 Record on the logbook.	None	5 minutes	Security Guard MTSC
	the logbook.	TOTAL		55 minutes + total and man-hours

# 2. Service Request on Job Processing (Quoted Jobs)

Office/Division: Classification: Type of Transaction: Who may avail:	Office of the Deputy Executive Director for Research and Development – Mold Technology Support Center  Highly Technical  G2C - Government to Citizen  G2B - Government to Business Entity  G2G - Government to Government					
CHECKLIST OF REQU	JIREMENTS	WHERE TO SECURE				
<ol> <li>Technical Drawing and 2. Sample Product</li> <li>Production Materials</li> <li>PWD/Senior Citizen's discount.</li> <li>Letter request for a distudents.</li> <li>Approved Quotation</li> </ol>	s ID for availing of	1-3. Company/Industry requesting for Machining				
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID TIME PROCESSING PERSON RESPONSIB				

CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
Proceed to MTSC.  Present the client- approved technical drawing.	<ul><li>1.1 Review the approved technical drawing.</li><li>1.2 Stamp "approved" if technical drawing is</li></ul>	None	10 minutes	Project Assistant II or Science Research Specialist II, MTSC



	acceptable, else redraw.  1.3 Prepare and issue TSR.			
2. Review and sign TSR and submit customer-supplied materials	2.1 Check the submitted materials, put proper labels and store them in a designated area.  2.2 Issue the Property Entry/ Exit Pass Slip (PEES)	None	10 minutes	Project Assistant II or Science Research Specialist II, MTSC
3. Fill-out Product Entry Exit Slip (PEES) for all materials supplied.	3.1 Receive the filled out and signed PEES  3.2 Forward the documents and materials to the shop.  3.4 Endorse to shop for determination of Target Completion Date (TCD) and scheduling.	None	5 minutes	Project Assistant II or Science Research Specialist II, MTSC
4. Monitor the status of job at mirdc.dost.gov.ph/tracking using the issued TSR as reference number	4.1 Execute the job.		10 minutes + (Total time of machine/man- hour depends on the Target Completion Date (TCD) and machinist's skill)	Project Assistant II or Metals Technologist III or Metals Technologist IV or Science Research Specialist II, MTSC



5.1 Present the TSR.	5.1 Prepare DR for the completed job	none	10 minutes	Project Assistant I or Project Assistant II,
5.2 Retrieve PEES and DR.	based on TSR.			MTSC
6. Proceed to the Cashier for payment.	6.1 Receive and review the document presented. 6.2 Create Order of Payment (O.P.) manually. 6.3 Reflect application of deposit if necessary. 6.4 Forward O.P. and other documents to Cashier.	none	10 minutes	Project Assistant I or Project Assistant II or Supervising Science Research Specialist II, MTSC
7. Pay the required fee and receive OR, copy of DR and other billing documents	7.1. Receive documents and process OR based on the OP. Indicate details e.g., TIN, address, business style, if required by customer.  If payment is in the form of a check, review the check as to amount, date and signatory.  7.2. Receive payment (cash/check).	As stated in the Order of Payment	7 minutes	Project Assistant I or Project Assistant II or Supervising Science Research Specialist II, MTSC



	Stamp "PAID" all documents.  7.3. Release OR and all billing documents but keep the accounting copy.			
8. Proceed to the shop and present the OR and the stamped DR  9.1 Inspect the product.	8.1 Record the OR number and update the "ONEShop" for the release of the items  9.1 Release the product and stamp the DR "RELEASED"	None	10 minutes	Project Assistant I or Project Assistant II or Science Research Specialist II or Science Research Specialist II, MTSC
10. Fill up the Survey Questionnaire using the Customer/Client Satisfaction Survey Form	10. Collect and file the filled-up Customer/Client Satisfaction Survey Form	None	5 minutes	Project Assistant I or Project Assistant II, MTSC
11. Give the PEES and the copies of DR to the guard upon exit at MTSC	11.1 Inspect the product and materials brought in based on the entry pass presented.  11.2. Record on the logbook.	None	5 minutes	Security Guard, MTSC
	TOTAL	82 min	utes + total mach	nine and man-hours



## 3. Use of Facility/Equipment (Time Sharing Jobs)

Office/Division:	Office of the Deputy Executive Director for Research and Development – Mold Technology Support Center (MTSC)
Classification:	Complex
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government
Who may avail:	All

CHECKLIST OF REQUIREMENTS	WHERE TO SECURE
Qualifications of Machinist	
2. Machine Requirements (type of machine and duration of use)	1-3. Customer requesting for rental of facilities
3. Raw materials, tools, and accessories (as	
needed)	4. MTSC Staff
4. Certification for Operator's Competency	

**FEES PROCESSING PERSON** TO BE **CLIENT STEPS AGENCY ACTION** TIME **RESPONSIBLE PAID** Project Assistant I 1. Inquire about 1.1 Determine the none 15 minutes the availability required type of or machine/s and of the required Project Assistant II facility to MTSC duration of use. or staff. Science Research 1.2 Check the Specialist II, availability of **MTSC** machines and tools to be used. 1.3 Inform customers of the schedule of fees. 2. Request for 2.1 Prepare and 5 minutes - same as step 1 none the use of the issue Technical Service Request facility. (TSR) form. Project Assistant I 3. Review and 3.1 Issue Request None 5 minutes sign TSR. for Issuance of or Official Receipt for Project Assistant II Time Sharing Jobs or and request the Supervising Science Research Specialist, customer to proceed to Cashier **MTSC** for payment of



	deposit for the Machine Bond.			
4. Pay to the Cashier a Deposit for Machine Bond and show O.R. to MTSC staff.	4.1 Review and record the O.R. number in the Technical Service Request Form  4.2 Issue Property Entry-Exit Slip (PEES).	P2,500 deposit for every machine to be used	10 minutes	- same as step 3 –
5. Bring in raw materials, other tools, and accessories.	5.1 Inspect and document the materials, put proper labels, and store them in a designated area.  5.2 Provide the Property Entry & Exit Pass Slip (PEES)	none	30 minutes	Metals Technologist III or Metals Technologist IV or Science Research Specialist II MTSC
6. Fill out Property Entry- Exit Slip (PEES) for all materials brought in.	6.1 Receive the filled-out and signed PEES  6.2 Forward the TSR to the shop.	none	5 minutes	Project Assistant I or Project Assistant II or Science Research Specialist II, MTSC
7.1 Proceed to the designated MTSC machine, for orientation and validation of machinist's skill.	7.1 Validate and approve the Authorization Slip for Machine Utilization	None	10 minutes (Total time of machine utilization depends on the customer's product and operator's efficiency)	Metals Technologist III or Metals Technologist IV or Science Research Specialist II or Science Research Specialist II, or Senior Science Research Specialist, MTSC



7.2 Fill out and submit the Authorization Slip for Machine Utilization after using the machine (daily basis) to MTSC Staff.	7.2 Fill up Billing Slip for Time Sharing Job Order.			
8. Secure PEES and DR.	8.1 Prepare Delivery Receipt (DR)	None	5 minutes	Project Assistant I or Project Assistant II or Science Research Specialist II, MTSC
9. Proceed to the Cashier for payment.	9.1 Receive and review the document presented.  9.2 Create Order of Payment (O.P.) manually.  9.3 Reflect application of deposit if necessary  9.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (O.R.).	none	10 minutes	Project Assistant I or Project Assistant II or Supervising Science Research Specialist, MTSC
10. Pay the required fee and receive OR, copy of DR and other billing documents.	10.1 Receive documents and process OR based on the OP. Indicate details e.g., TIN, address, business style, if required by customer.	As stated in the Order of Payment	5 minutes	- same as step 9 –



11. Retrieve product and materials brought in and present the OR and stamped DR.	If payment is in the form of a check, review the check as to amount, date and signatory.  10.2 Receive payment. Stamp "PAID" all documents. 10.3 Release OR and all billing documents except accounting copy. 11.1 Record the OR number and indicate in the "ONEShop" the release of the items  11.2 Stamp the DR "RELEASED"	None	10 minutes	Project Assistant I or Project Assistant II or Science Research Specialist II, MTSC
12. Fill up the Survey Questionnaire using the Customer/Client Satisfaction Survey Form	12.1 Collect and file the filled-up Customer/ Client Satisfaction Survey Form.	None	5 minutes	Project Assistant I or Project Assistant II, MTSC
13. Give the PEES and the copies of DR to the guard upon exit at MTSC	13.1 Inspect the product and materials brought in based on the entry pass presented.  13.2 Record on the logbook.	None	5 minutes	Security Guard, MTSC
			TOTAL	2 hours

## Note:

1. The issuance of Certificate of Competency for operators varies depending on the present skills of the applicant.



## **Schedule of Fees**

Meta	al Working Technology Services	Rate per	r hour*
I.	CNC MACHINES	Time Sharing	Actual Time
	CNC EDM Wirecut (SPM)	₱870.00	₱1050.00
	CNC EDM Sinker (UNITECH)	₱540.00	₱720.00
	CNC Milling Machine (12000 rpm)	₱1380.00	₱1560.00
	CNC Milling Machine (20000 rpm)	₱1200.00	₱1390.00
	CNC Milling Machine (32000 rpm)	₱1390.00	₱1580.00
II.	DIE AND MOLD REPAIR		
	Laser Welding Machine	₱440.00	₱610.00
	TIG Welding	₱400.00	₱570.00
III.	MEASUREMENT AND QUALITY CONTROL		
	СММ	₱930.00	<b>₱</b> 1,180.00
	Microscope	₱100.00	₱350.00
IV.	SURFACING MACHINES		
	Surface Grinder (Dae San DGS-520MB)	₱140.00	₱310.00
	Surface Grinder (Dae San DGS-2070 2S)	₱630.00	₱800.00
	Surface Grinder (Dae San DGS-1260A)	₱510.00	₱680.00
V	PLASTIC INJECTION MACHINES		
	Woojin Plaimm Injection Machine 110T	₱590.00	₱760.00
	Woojin Plaimm Injection Machine 220T	₱1060.00	₱1230.00
	Woojin Plaimm Injection Machine 350T	₱1590.00	₱1845.00
VI.	CONVENTIONAL MACHINE TOOLS		
	Lathe Machine	₱500.00	₱650.00
	Milling Machine	₱320.00	₱460.00
	Drilling Machine	₱210.00	₱360.00

#### Note:

<sup>\*</sup> Harmonized with MIRDC Rates. Subject to adjustment once proposed MTSC Rates is approved by the MIRDC Governing Council.



## I. TECHNICAL SOLUTIONS SERVICES SECTION



### A. Metalcasting, Metalworking and Heat Treatment Jobs

#### 1. Metalcasting

The MIRDC specializes in metalcasting of ferrous and non-ferrous alloys. Using specialized metalcasting technologies such as investment casting and conventional casting capabilities, MIRDC undertakes prototype production of engineered and decorative products. Likewise, casting product localization, alloy formulation can also be accommodated through contract research activity. MIRDC also offers rental of facilities to SME's through a time-sharing scheme.

#### **FACILITIES AND CAPABILITIES:**

#### **Conventional Casting Section**

**Patternshop** - capable of producing wood, polymer and metal patterns.

**Molding Shop** - employs furan molding process using a 4-ton capacity continuous mixer.

**Melting Shop** - Consists of:

- crucible furnace for melting non-ferrous alloys with the following capacities:
  - 50 kg

- 100 kg
- high frequency induction furnaces capable of melting ferrous alloys, with the following capacities:
  - 50 kg (non-ferrous)
- 50 kg (ferrous)
- 100 kg

■ 150 kg

#### **Precision Casting**

**Investment Casting** (Ceramic Shell Process) - This process involves dipping the entire cluster of heat-disposable pattern into a ceramic slurry and coating with ceramic material until a self-supporting shell has been formed. The coated cluster is then dewaxed, fired at high temperature and poured with molten metal. MIRDC has complete facilities for this process.

**Shell Molding** - This process produces castings with relatively accurate and smooth surfaces. Cores and molds are considerably strong and can be easily mass produced. MIRDC has the following facilities:

- Resin Coated Sand Mixer cold sand high speed mixer with a capacity of 60 kg per batch
- 3 Shell Core Shooters
- 3 Shell Molding Machines



#### Casting Design and Process/Quality Control Capabilities:

In order to attain its quality objectives and meet the specified requirements of the customers, MIRDC utilizes different control and testing equipment to ensure the quality of cast products.

### **Sand Testing Equipment**

- Compressive Strength
- Moisture Teller
- Permeability Meter
- Mold Hardness Tester

- Bending Strength Tester
- Rotap Machine
- Clay Content Determinator

#### **Metallurgical Microscope** – Olympus

#### **Pyrometers**

- Immersion Type
  - Type K, -70 1370°C
  - Type S, 25 1770°C

Aside from short series experimental production and product development, MIRDC also offers time-sharing of its facilities to foundries with limited capabilities.

#### 2. Metalworking and Plastic Injection

Metalworking is processing metals and metal products to create individual parts. The Center utilizes conventional and specialized machining processes in the development of tools, dies, molds, jigs and fixtures, and components.

Metalworking in MIRDC includes conventional machining (lathe and milling), CNC lathe machining, CNC milling, 5-axis machining, gear hobbing, Electrical Discharge Machining (EDM), Grinding, Mold Repair, Dimensional Inspection, and Welding Processes (SMAW, GMAW, GTAW).

Also, the center provides plastic injection services using 80 tons, 150 tons and 350 tons capacity plastic injection machines.

#### 3. Heat Treatment

The Center offers (1) Vacuum Heat Treatment and (2) Conventional Heat Treatment to enable MSMEs to meet prevailing and future requirements of the M&E industries.



## MIRDC's heat treating capability includes:

- direct hardening
- case hardening (pack carburizing)
  softening processes (tempering, annealing, normalizing, stress relieving)

# 1. Metal Processing (Actual Time)

Office/Division:	Office of the Deputy Executive Director for Research and Development - Technical Solutions Services Section (TSSS)				
Classification:	Highly Technical				
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government				
Who may avail:	All				
CHECKLIST OF	REQUIREMENTS		WHERE TO SE	CURE	
or 3D) and Spe 2. Products / Sam 3. Casting Pattern 4. Customer-supp Toolings 5. Required Parar Specifications f Jobs	ple / Workpiece , if needed lied Materials and	Company/Industry requesting for service			
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESS ING TIME	PERSON RESPONSIBLE	
1. Proceed to the TSSS Office and secure Technical Service Request (TSR) for Actual Time.	1.1 Check and evaluate customer supplied materials and determine the scope of work  1.2 Prepare and issue Technical Service Request	None	25 minutes 15 minutes	Science Research Specialist II or Production Cost Estimator II or Production Cost Estimator III, TSSS	
	(TSR) form.  1.3 Review and Sign TSR		5 minutes		



2. Review and sign TSR	2.1 Receive signed TSR  2.2 Issue Property Entry & Exit Slip (PEES)	None	1 minute 5 minutes	Science Research Specialist II or Production Cost Estimator II or Production Cost Estimator III, TSSS
3. Fill-out the Entry Portion of the Property Entry Exit Slip (PEES) for all materials supplied / provided and submit the customer- supplied materials	3.1 Receive, review and sign the filled-out PEES (Entry).  3.2 Receive the materials, put proper labels and store them in a designated area.	None	5 minutes 20 minutes	Production Cost Estimator II or Production Cost Estimator III or Metals Technologist III, TSSS
4.Track the status of service request at mirdc.dost.gov.p h/tracking using the issued TSR as reference number, or through MOCG telephone number or email address	4.1 Process the technical service request.  4.2 Retrieve the job tickets for the completed job	None	15 days 10 minutes	Metals Technologist III or Metals Technologist IV or Metals Technologist V or Sup. Science Research Specialist or Sr. Science Research Specialist or Science Research Specialist II TSSS



	4.3 Update the Oneshop System once the TSR is completed and ready for release.		5 minutes	
5.1 To get the finished product, proceed to the TSSS Office and present the TSR.	5.1 Validate TSR		1 minute	Science Research Specialist II or Production Cost Estimator III, TSSS
5.2 Secure PEES. Fill-out the Exit Portion of the PEES for all materials/ supplies to be retrieved.	5.2 Receive and review PEES (Exit).	(Refer to Prescribed Machine Rates for MIRDC	2 minutes	or Production Cost Estimator II, TSSS or Metals Technologist III
	5.3. Compute the actual cost and prepare DR based on job tickets.	Facilities- 2019 as approved by the OSEC)	5 minutes	
5.3 Secure Delivery Receipt (DR).	Actual Cost = No. of Hours Machine is used x Actual Time Rate of Machine + No. of Man-hours x Man Rate		3 minutes	



	5.4 Approve and sign the DR			
6. Proceed to the Cashier's Office "Order of Payment" Window and present the DR.	6.1 Receive and review the document presented. 6.2 Create Order of Payment (O.P.) manually. 6.3 Reflect invoice details or application of deposit if there is any; 6.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (O.R.).	None	10 minutes	Administrative Officer IV, or Administrative Officer V, Financial Management Section
7. Pay the required fee and receive OR, copy of DR and other billing documents	7.1. Receive documents and process OR based on the OP. Indicate details e.g., TIN, address, business style, if required by customer.  If payment is in the form of a check, review the check as to amount, date and signatory.  7.2 Receive payment. Stamp "PAID" all documents.	As stated in the Order of Payment	5 minutes	Administrative Officer V or Administrative Officer II Administrative and General Services Section



	7.3 Release OR and all billing documents except accounting copy.			
8.1 Proceed to TSSS and present the OR and the stamped DR	8.1 Record the OR number, stamp the DR "released", and update the ONEShop upon the release of the items	None	5 minutes 5 minutes	Science Research Specialist II or Production Cost Estimator III, TSSS or Production Cost Estimator II,
8.2 Inspect the finished product/sample	8.2 Release the finished product/sample and give the PEES (exit) to customer			TSSS or Metals Technologist III
9. Fill up the Customer/Client Satisfaction Survey Form	9.1 Collect and file the Customer/Client Satisfaction Survey Form	None	5 minutes	Science Research Specialist II or Production Cost Estimator III, TSSS or Production Cost Estimator II, TSSS or Metals Technologist III
10. Present to the gate guard the Property Entry/Exit Slip and Delivery Receipt	10.1 Check the Property Entry/ Exit Slip and the items to be taken out	None	2 minutes	Security Guard on duty MIRDC
	TOTAL	15	days, 2 hours and	d 14 minutes



# 2. Service Request on Metal Processing (Quoted Jobs)

Office/Division:	Office of the Deputy Executive Director for Research and Development - Technical Solutions Services Section (TSSS)						
Classification:	Highly Technical						
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government						
Who may avail: All							
CHECKLIS	T OF REQUIREME	NTS	WHERE	TO SECURE			
<ol> <li>Product / S</li> <li>Permits and Fabrication</li> <li>Production</li> <li>PWD/Senion</li> <li>discount</li> </ol>	Drawing and Specifications Sample / Workpiece nd Licenses for Munitions on n Materials nior Citizen's ID for availment of quest for discount for student			ssued ID			
CLIENT STEPS	AGENCY ACTION	FEES TO					
1. Proceed to the TSSS Office. Present the approved quotation and technical drawing and request for TSR.	1.1 Verify the quotation and technical drawing.  1.2 Check and evaluate customer supplied materials.  1.3 Prepare and issue TSR reflecting target completion date.  1.4 Review and sign the TSR	None	2 minutes 5 minutes 5 minutes	Science Research Specialist II or Production Cost Estimator II or Production Cost Estimator III, TSSS			
2.Review and sign TSR and submit customer-supplied materials.	2.1 Receive signed TSR 2.2 Issue the Property Entry & Exit Slip (PEES)	None	1 minute 5 minutes				



3. Fill-out the Entry Portion of the Product Entry Exit Slip (PEES) for all materials supplied/ provided.	3.1 Receive the filled out and signed PEES (Entry)  3.2 Receive the materials, put proper labels and store them in a designated area.  3.3 Forward the documents and materials to the shop.	None	5 minutes 20 minutes 1 hour	Science Research Specialist II or Production Cost Estimator III, TSSS or Production Cost Estimator II, TSSS or Metals Technologist III
4. Track the status of service request at mirdc.dost.g ov.ph/trackin g using the issued TSR as reference number, or through MOCG telephone number or email address	4.1 Process the technical service request.	None	15 days and 5 minutes	Metals Technologist III or Metals Technologist IV or Metals Technologist V or Sup. Science Research Specialist or Sr. Science Research Specialist or Science Research Specialist II TSSS



	4.2 Update the Oneshop System once the TSR is completed and ready for release.		5 minutes	
5.1 To get the finished product, proceed to the TSSS Office	5.1 Validate TSR		1 minute	Science Research Specialist II or Production Cost
and present the TSR.		(Refer to Prescribe d Machine		Estimator III, TSSS
5.2 Secure PEES. Fill-out the Exit Portion of the PEES for	5.2 Receive and review PEES (Exit).	Rates for MIRDC Facilities- 2019 as	2 minutes	
all materials/ supplies to be retrieved.	5.3 Prepare DR based on the approved quotation.	approved by the OSEC)	5 minutes	Sup. Science Research Specialist
5.3 Secure Delivery Receipt (DR).	5.4 Approve and sign the DR		3 minutes	
6. Proceed to the Cashier's Office "Order of Payment" Window and	6.1 Receive and review the document presented.			Administrative Officer IV, Financial Management Section
present the DR.	6.2 Create Order of Payment (O.P.) manually.	None	10 minutes	or Administrative Officer V, Financial
	6.3 Reflect invoice details or application of			Management Section



	deposit if there is any;  6.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (O.R.).			
7. Pay the required fee and receive OR, copy of DR and other billing documents	7.1 Receive documents and process OR based on the OP. Indicate details e.g., TIN, address, business style, if required by customer.  If payment is in the form of a check, review the check as to amount, date and signatory.  7.2 Receive payment. Stamp "PAID" all documents.  7.3 Release OR and all billing documents except accounting copy.	As stated in the Order of Payment	5 minutes	Administrative Officer V Administrative and General Services Section or Administrative Officer II Administrative and General Services Section
8.1. Proceed to TSSS and present the OR and the stamped DR	8.1 Record the OR number, stamp the DR "released", and update the ONEShop upon the release of the items	None	5 minutes	Science Research Specialist II or Production Cost Estimator III, TSSS



8.2. Inspect the finished product/sample	8.2 Release the finished product/sample and give the PEES (exit) to customer		5 minutes	
9. Fill up the Customer/Client Satisfaction Survey Form	9.1 Collect and file the Customer/Client Satisfaction Survey Form	None	5 minutes	Science Research Specialist II or Production Cost Estimator III, TSSS
10. Present to the gate guard the Property Entry/Exit Slip and DR	10.1 Check the Property Entry/ Exit Slip and the items to be taken out	None	2 minutes	Security Guard on duty MIRDC
	TOTAL	15 days, 2 hours and 51 minutes		

SITUATION	ACTION	LOCATION OF ACTION	REMARKS
For Internal Technical Service Requests	Same procedure applies (as listed above)	TSSS Office	Internal Service Request will queue along with External Service Requests
For multiple job requests received within the day	Machining, Metal Fabrication, Metal Casting and Heat Treatment will be on scheduled basis depending on the availability of machine and personnel after completion of the prior job/s.	Shop	Queueing system (First in First out)



For complex products and the drawing contains more than 8 pages (A3 or A4 size paper)	Meeting with engineers and technician	TSS Office	Review of drawings will take longer time in order to visualize the product.
If the number of workpiece is more than 3 pcs / the size is more than 1 foot in length or width or height:	Assign additional machines of the same capability/capacity and operator.  The Technical Service Request will be queued if the same type of machines are not available.	Shop	Machining Process will require longer set-up time and machining time
If the number of workpieces for Gear Making is more than 3 pcs / the size is more than 1 meter in length or width or height.	Assign additional machines of the same capability/capacity and operator.  The Technical Service Request will be queued if the same type of machines are not available.	Shop	Gear Hobbing/ Welding Process will consume longer set-up time and machining time resulting to extended processing time
If the workpiece has multi-part features.	Meeting with engineers and technicians  Assign additional programmer	TSS Office	Preparation (and analysis of gear using gear software KissSoft for (Gear Hobbing) and providing CAM program as required (with tooling inventory as reference to programming) / Prepare and analyze gear using gear software (KissSoft) and provide CAM program as required (with tooling inventory as reference to programming)will consume



			longer in designing , encoding, drawing and programming.
If the number of workpiece is more than 3 pcs / the size is more than 1 foot in length or width or height:	Assign to additional QA machines and operators.  The workpieces will queue if other QA machines are not available	QA Room	Set-up workpiece /Perform quality assurance procedure / Measurements of Job will consume longer set-up time and machining time
If corrective/prev entive maintenance of machines is not implemented due to unavailability of spare parts locally	The technical service request will be queued pending completion of preventive or corrective maintenance of equipment	Shop	Communicate with the customer for possible extension of target delivery date of the technical service request
Customer supplied materials that need forklift or lifter	Coordinate with the forklift/lifter operator for the mobilization/acceptance of the materials	TSSS Office	Extended processing time for the receiving activity
For technical service request that falls on product development category and require multimachining activities	Coordinate with shop for the multi-machining activities	Shop	Subject to queueing and extended machining process
New clients previously not included in the Oneshop database	Get client details and encode in the Oneshop database	TSSS Office	Extended processing time for the receiving activity



## **Schedule of Fees**

I	Foundry Services As Quoted		
II	Metal Casting Services	Rate p	er Hour
	A. Conventional Casting	Time Sharing	Actual Time
	1. Molding		
	Furan Mixer	670.00	810.00
	Sand Reclaimer	110.00	290.00
	Forklift	280.00	430.00
	2. Fettling		
	Shot Blasting	1,660.00	1,800.00
	Angle Grinder	100.00	275.00
	Pneumatic Chipping Hammer	210.00	630.00
	Silicon Arc Air Gouging Machine	3,550.00	3,700.00
	Oxyacetylene Kit	20.00	230.00
	3. Pattern Shop		
	Drill Press	80.00	260.00
	Bandsaw	80.00	260.00
	Wood Lathe	70.00	265.00
	Rotary Machine	50.00	245.00
	Bench Table Saw	80.00	260.00
	Wood Planer	170.00	320.00
	Disc Grinder	150.00	305.00
	B. Investment Casting		
	1. Wax Pattern		
	Wax Melting Tank	90.00	280.00
	Wax Curing Tank	120.00	290.00
	Wax Injection Machine	100.00	330.00
	Hot Plate/Soldering Iron	110.00	280.00
	Ceramic Mold Making		
	Slurry Mixer with parts	130.00	300.00
	Fluidized Bed	70.00	240.00
	Dust Collector	80.00	260.00
	3. Dewaxing		
	Autoclave Machine	680.00	850.00
	4. Shellfiring		
	Shellfiring Furnace	130.00	405.00
	5. Fettling		



	Sand Blasting		200.00	370.00
	Knockoff Machine		160.00	350.00
	Cut-off Machine		210.00	380.00
	Denyu Belt Sander/Polishing		120.00	290.00
	Compressor (Sullair)		1,240.00	1,410.00
	C. Melting (Conventional/Investmen	t)		
	50 Kg Induction Furnace - Non F	errous	2,050.00	2,220.00
	50 Kg Induction Furnace - Ferro	us	2,380.00	2,550.00
	100 Kg Induction Furnace (New)	)	3,530.00	3,700.00
	150 Kg Induction Furnace (New)	)	4,850.00	5,020.00
	150 Kg Induction Furnace (Old Inductotherm)		4,265.00	4,500.00
	250 Kg Induction Furnace (Old Inductotherm)		6,760.00	6,930.00
	500 Kg Induction Furnace (Old Inductotherm)		12,270.00	12,430.00
	Crucible Furnace		1,670.00	1,840.00
Ш	Heat Treatment			
	A. Conventional			
	Direct Hardening (without tempering)		,060.00 (up to 25Kg nal Php 82.00 per k	
	B. Pack Carburizing (without tempe	ring		
	Tempering/Stress Relieving	PhP 1,560.00 (up to 25Kg); additional Php 62.00 per Kg above 25Kg		
	Annealing/Normalizing	PhP 1,860.00 (up to 25Kg); additional Php 62.00 per Kg above 25Kg		
	C. Vacuum Heat Treatment	<u>I</u>		
	Hardening (without tempering)	PhP 15,100.00 (up to 30Kg); additional Php 500.00 per Kg above 30Kg		
	Tempering		,600.00 (up to 30Kg	



Met	al Working Technology Services	Rate per	hour
I.	Advance Machining, Tool and Die Shop	Time Sharing	Actual Time
	A. CNC MACHINES		
	CNC EDM Sinker (Sodick A50)	230.00	610.00
	CNC EDM Sinker (Mitsubishi EA12D)	540.00	860.00
	EDM Drill (Sodick K1C)	170.00	535.00
	EDM Drill (Oscarmax SD550)	230.00	590.00
	CNC EDM Wirecut (Sodick A500W)	570.00	930.00
	CNC EDM Wirecut (Robocut α-C600i)	870.00	1,180.00
	CNC Milling Machine (Mazak FJV25)	890.00	1,080.00
	CNC Milling Machine (Mazak VTC16)	840.00	1,020.00
	CNC Milling Machine (Mazak VCS 430A)	1,200.00	1,390.00
	CNC Milling Machine (Samsung Rhino LCV850)	1,380.00	1,560.00
	CNC Milling Machine - High Speed (Makino F5)	1,390.00	1,580.00
	CNC Milling Machine - CNC/Manual (Makino KE55)	750.00	940.00
	CNC Lathe w/ Milling Machine (Takisawa LA200M)	930.00	1,110.00
	CNC Lathe (Mazak QT6T)	740.00	920.00
	CNC Lathe (Mazak Quick Turn Smart 150s)	950.00	1,130.00
	CNC 5-Axis Milling (Mazak Variaxis j-600/5X)	1,800.00	2,010.00
	CNC 5-Axis Lathe (Mazak Integrex i-200)	1,930.00	2,150.00
	CNC 5-Axis Milling Machine (Okuma MU 6300V)	2,790.00	3,010.00
	B. DIE AND MOLD REPAIR		
	Laser Welding Machine (Sisma SWA150)	440.00	740.00
	Mould Repair (TechnoCoat MicroDepo)	220.00	555.00
	C. MEASUREMENT AND QUALITY CONTROL		
	CMM Robotic Arm (Romer Multi Gauge 6-Axis)	270.00	650.00
	CMM (Mitutoyo Beyond 504)	26.000	610.00
	CMM (Mitutoyo Crysta-Apex S 7106)	930.00	1,390.00
	Profile Projector (Sigmascope MT:500-933)	100.00	470.00
	D. GRINDERS		
	Surface Grinder - Big (Perfect PFG 80150AHR)	510.00	795.00
	Surface Grinder - Small (Perfect PFG 60100AHR)	440.00	740.00
	Surface Grinding Machine (Kuroda GS-62Z)	370.00	680.00
	Surface Grinding Machine (Jones and Shipman 540H)	140.00	515.00
	Cylindrical Grinding Machine (Palmery)	630.00	890.00



II.	PLASTIC INJECTION SHOP		
	I. PLASTIC INJECTION MACHINES		
	Sumitomo 80T	370.00	540.00
	Sumitomo 150T	590.00	760.00
	Sumitomo 350T	1,060.00	1,230.00
	Mitsui Pre-heating	90.00	325.00
	Plastic Crusher	80.00	330.00
III.	GEAR MAKING FACILITY		
	A. GEARMAKING MACHINES		
	CNC Gear Hobber (Mitsubishi GE 25A)	2,510.00	2,720.00
	CNC Gear Shaper (Mitsubishi ST 25CNC)	2,680.00	2,900.00
	CNC Gear Shaver (Mitsubishi FE30A)	1,670.00	1,880.00
	Gear Software (KISSSoft/KISSSys)	1,020.00	1,230.00
	CMM Gear Measuring System (Zeiss Duramax RT)	860.00	1,070.00
	Dynamic Balancer (CIMAT CMTI500HZP)	700.00	1,200.00
	Internal Broaching Machine (AXISCO CHI0510)	750.00	1,060.00
IV.	CONVENTIONAL MACHINING SHOP		
	A. CONVENTIONAL MACHINES		
	Turning (Lathe Machines)	500.00	650.00
	Milling (Milling Machines)	320.00	500.00
	Grinding (Grinding Machines)	210.00	370.00
	Drilling (Drilling Machines)	210.00	360.00
	Press working (Press working Machines)	200.00	350.00
	Fabrication (Fabrication Machines)	160.00	310.00
	SMAW (Welding Machines)	160.00	360.00
٧.	WELDING AND FABRICATION SHOP		
	A. WELDING MACHINES		
	MIG/TIG-Welding (MillerDynasty 350)	240.00	410.00
	TIG-Welding (Miller Sychrowave 200)	260.00	430.00
	TIG-Welding (Miller Diversion 165)	210.00	380.00
	TIG-Welding (OTC-Accutig 300P)	400.00	570.00
	MIG/TIG-Welding (OTC-Digital Dyna Autp XD 350S)	470.00	630.00
	MIG/TIG-Welding (Miller Thunderbolt XL)S)	530.00	700.00
	Spot Welding Machine (Tecna)	490.00	660.00
	B. PRESSES AND ROLLERS		
	Power Press with Uncoiler (Chin Fong)	690.00	890.00
	Hydraulic Die Spotting Press (Taitian)	1,150.00	1,720.00
	Turret Punch Press (Amada)	1,520.00	2,470.00



	Press Brake (Amada RG-60)	450.00	615.00
	Universal Rolling Machine (Nanjing Shengda)	540.00	1,250.00
C.	CUTTING, DRILLING AND POLISHING MACHINES		
	Hydraulic Shear (Amada GXII 1230)	930.00	1,100.00
	Shearing Machine	390.00	560.00
	Cutting machine (Thermal Dynamics 120S)	820.00	990.00
	Polishing Machine (Metabo)	170.00	340.00
	Drilling Machine (Magnetic Drill)	170.00	340.00
	Portable Drilling Machine	280.00	450.00
	Air Compressor (Ingersoll Rand)	280.00	450.00

# 3. Use of Facility/Equipment (Time Sharing Jobs)

		e Deputy Executive Director for			
Office/Division:	Research a	nd Development - T	echnical Solutions		
	Services Se	Services Section (TSSS)			
Classification:	Complex				
	G2C - Gove	ernment to Citizen			
Type of Transaction:	G2B - Gove	rnment to Business	Entity		
	G2G - Government to Government				
Who may avail:	All				
CHECKLIST OF REQUIRE	MENTS	WHERE 1	TO SECURE		
CHECKLIST OF REQUIREM  1. Qualifications of Machinist	MENTS	WHERE 1	TO SECURE		
		WHERE 1			
<ol> <li>Qualifications of Machinist</li> <li>Machine Requirements (type of</li> </ol>			uesting		
<ol> <li>Qualifications of Machinist</li> <li>Machine Requirements (type of duration of use)</li> </ol>	machine and	1-3. Customer req	uesting		
<ol> <li>Qualifications of Machinist</li> <li>Machine Requirements (type of duration of use)</li> <li>Raw materials, tools and access</li> </ol>	machine and	1-3. Customer req	uesting		
<ol> <li>Qualifications of Machinist</li> <li>Machine Requirements (type of duration of use)</li> <li>Raw materials, tools and access needed)</li> </ol>	machine and	1-3. Customer req	uesting es		
<ol> <li>Qualifications of Machinist</li> <li>Machine Requirements (type of duration of use)</li> <li>Raw materials, tools and access</li> </ol>	machine and	1-3. Customer req for rental of facilities 4. MIRDC-TSSS M	uesting es		

CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Proceed to TSSS Office and request for the use of facility/ies – inquire for the availability of required facility/ies.	1.1 Prepare and issue Technical Service Request (TSR) form.  1.2 Review and sign the TSR	None	15 minutes 5 minutes	Science Research Specialist II or Production Cost Estimator II or Production Cost Estimator III TSSS



	1	T		
2. Review and sign TSR.	2.1 Issue "Request for Issuance of Official Receipt for Time Sharing Jobs" (FM-TSSS- 03-006)	None	10 minutes	Science Research Specialist II or Production Cost Estimator II or Production Cost Estimator III TSSS
3. Pay to the Cashier a deposit for Machine Bond and show O.R. to TSSS staff.	3.1 Receive and review presented documents and payment, and issue Official Receipt.  3.2 Review and record the O.R. number in the Technical Service Request Form  3.2 Issue Property Entry Exit Slip (PEES).	P2,500 deposit for every machine to be used	15 minutes	Administrative Officer IV, and Production Cost Estimator II or Production Cost Estimator III, TSSS or Science Research Specialist II or Metals Technologist III
4. Fill-out the Entry Portion of the Property Entry Exit Slip (PEES) for all materials/ supplies provided	4.1 Receive and review the filled out and signed PEES (Entry). 4.2 Receive the materials, put proper labels and store them in a designated area. 4.2 Forward the TSR and materials	None	3 minutes 10 minutes	Metals Technologist III or Science Research Specialist II or Production Cost Estimator II or Production Cost Estimator III or
	to the shop.  4.3 Issue Authorization Slip		20 minutes 2 minutes	Sr. Science Research Specialist, TSSS or



	for Machine Utilization			Supervising Science Research Specialist, TSSS
5.1 Proceed to the designated shop, check and use/operate the MIRDC machine.  5.2 Fill out the Authorization Slip for Machine Utilization at the end of use of the machine during the day.  5.3 Submit the Authorization Slip for Machine Utilization to the head of the shop.	5.1 Receive, validate and approve the Authorization Slip for Machine Utilization	None	20 minutes (Total machine utilization time varies depending on the agreed time between MIRDC and customer)	Senior Science Research Specialist or Supervising Science Research Specialist, TSSS
6.1. Secure PEES at TSSS upon completion of the TSR and fill- out the Exit Portion of the Property Entry Exit Slip (PEES) for all materials/suppli	6.1 Receive and review PEES (Exit). 6.2 Compute the actual cost and prepare the Delivery Receipt (DR).  Actual Cost =	(Refer to Prescribe d Machine Rates for MIRDC Facilities-	2 minutes 5 minutes	Science Research Specialist II or Production Cost Estimator III, TSSS
es to be retrieved.  6.3 Secure Delivery Receipt (DR).	Number of Hours Incurred x Time Sharing Rate of Machine  6.3 Approve and sign the DR	2019 as approved by the OSEC)	3 minutes	
7. Proceed to the Cashier's	7.1 Receive and review the	None	10 minutes	Administrative Officer IV,



Office "Order of Payment" Window and present the DR.	document presented.  7.2 Create Order of Payment (O.P.) manually.  7.3 Reflect invoice details or application of deposit if there is any;			Financial Management Section or Administrative Officer V, Financial Management Section
	7.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (O.R.).			
8. Pay the required fee and receive OR, copy of DR and other billing documents	8.1 Receive documents and process OR based on the OP. Indicate details e.g., TIN, address, business style, if required by customer.  If payment is in the form of a check, review the check as to amount, date and signatory.  8.2 Receive payment. Stamp "PAID" all documents.  8.3 Release OR and all billing documents except accounting copy.	As stated in the Order of Payment	5 minutes	Administrative Officer V, or Administrative Officer II, Administrative and General Services Section



9. Proceed to TSSS and present the OR and stamped DR	9.1 Record the OR number, stamp the DR "released", and update the ONEShop upon the release of the items	None	5 minutes	Science Research Specialist II or Production Cost Estimator III, TSSS
	9.2 Release the finished product/sample and give the PEES (exit) to customer		5 minutes	
10. Fill up the Customer/Client Satisfaction Survey Form	10. Collect and file the Customer/Client Satisfaction Survey Form	None	5 minutes	Production Cost Estimator III or Science Research Specialist II, TSSS
11. Present to the gate guard the Property Entry/Exit Slip and DR	11. Check the Property Entry/ Exit Slip and the items to be taken out	None	2 minutes	Security Guard on duty MIRDC
		TOTAL	2 hours ar	nd 22 minutes

#### Note:

- Total time of machine utilization will vary depending on the customer's product and on the operator's efficiency.
   The issuance of Certificate of Competency for operators varies depending on the present skills of the applicant.



# Planning and Management Division Internal Services



## I. Information System Development or Enhancement

Clients may request for development of new programs / systems. Clients may also request for enhancement or modification of existing Information Systems being maintained by PMD-MIS.

The request can be done by filling-up the MIS 001 Form – IT Job Order form which can be downloaded on Center's Intranet site <a href="http://10.10.120.5/mirdcintranet">http://10.10.120.5/mirdcintranet</a>. Requests can be made by MIRDC employees, Contract of Service (CoS) or Job Order (JO) personnel endorsed by the Division Chief. For electronic record purposes, the MIS personnel will input the request thru the IT Help Desk System.

	1			
Office/Division:	Planning and Management Division			
Classification:	Highly Technical			
Type of Transaction:	G2G - Governme	ent to Gov	ernment	
Who may avail:	MIRDC regular e Order (JO) perso		, Contract of Serv	rice (COS) and Job
Stage I - Analysis a	nd design of sys	tem for de	evelopment or m	odification
	F REQUIREMEN		•	TO SECURE
1. Approved MIS 001	Form – IT Job Or	der	Intra	anet site
1. IT Job Ticket			IT Help [	Desk System
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Client fill-up IT job order form, include type of system development or enhancement and submit to PMD-MIS after approval of the Division Chief.	1.1 Availability of form and accessibility thru Intranet site.	None	10 minutes	Information Systems Analyst III or Information Systems Analyst I, Planning and Management Division



CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
2. Client discusses scope, objective, duration, system requirements, and cost (if needed) with PMD-MIS staff.  (Analysis Phase)	2.1 Set-up/schedule meeting with client.  2.2 Prepare workplan for development or enhancement.  2.3 Identify business process requirements and functional design.  2.4 Prepare System requirement.  2.5 Input request information in IT Help Desk System	None	8 days	Information Systems Analyst III or Computer Programmer III or Information Systems Researcher II or Information Systems Analyst I, Planning and Management Division
Client reviews and approves design solutions.  (Design Phase)	3.1 Present workplan and proposed concept design to client.  3.2 Revise as necessary until approval is secured.	none	10 days	Computer Programmer III or Information Systems Researcher II or Information Systems Analyst I Planning and Management Division



CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
	3.3 Workplan is then approved and noted.			Planning Officer III or Planning Officer IV, Planning and Management Division
4. Client conforms to completed request by signing the MIS 001 Form – IT Job Order.	4.1 Availability and retrieval of the form.	None	10 minutes.	Information Systems Analyst III, Planning and Management Division
		TOTAL (Stage I)	18 days a	nd 20 minutes

Stage II – Systems Programming					
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE	
1. After approval of systems design, client shall await for the status update of the system development or enhancement from the responsible PMD-MIS personnel.  (Development Phase)	1.1 Start of system programming / source code programming.	None	System programming will be based on approved workplan / schedule	Information Systems Analyst III Or Computer Programmer III or Information Systems Researcher II or Information Systems Analyst I, Planning and Management Division	



2. Client shall be required to test the system and shall fill up the System Evaluation Form - MIS 007.  (Testing Phase)	2.1 Prepare for user orientation.  2.2 Prepare initial guidelines and Powerpoint presentation on how to use the system.  2.3 Prepare memo / letter / email notification as necessary.  2.4 Assist client on system testing.	None	7 days	Information Systems Analyst III Or Computer Programmer III Or Information Systems Researcher II Or Information Systems Analyst I, Planning and Management Division
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
3. After testing and there are no error / program bugs, client shall approve user acceptance.	3.1 Collect client's system evaluation /test report.  3.2 Prepare / provide user acceptance.	None	1 day	Computer Programmer III or Information Systems Researcher II or Information Systems Analyst I, Planning and Management Division



4. If error / program bugs found, client shall coordinate and re-submit new testing report to concerned MIS staff, until the system conformed to the Client requirements.  4.1 Collect system evaluation /test report.  4.2 Apply revisions to the system as necessary.  4.3 Prepare / provide user acceptance.  None  3 days  Computer Programmer III  or Information Systems Researcher II  or Information Systems Analyst I  or Planning Officer IV Planning and	. 0	4.1 Collect	NODE	3 43/6	I OMBLITOR			
shall coordinate and re-submit new testing report to concerned MIS staff, until the system conformed to the Client requirements.  shall coordinate evaluation /test report.  systems Researcher II or Information Systems Researcher II or Information Systems Researcher II or Information Systems Analyst I or Planning Officer III or Planning Officer IV			140110	5 days	· ·			
and re-submit new testing report to concerned MIS staff, until the system conformed to the Client requirements.  A.2 Apply revisions to the system as necessary. requirements.  A.3 Prepare / provide user acceptance.  A.4 Information Systems Researcher II or Information Systems Analyst I or Planning Officer IV								
testing report to concerned MIS staff, until the system conformed to the Client requirements.  4.2 Apply revisions to the system as necessary.  7 The systems and to the Client requirements.  4.3 Prepare / provide user acceptance.  8 Systems Researcher II or Information Systems Analyst I or Planning Officer III or Planning Officer IV					<u> </u>			
concerned MIS staff, until the system conformed to the Client requirements.  4.2 Apply revisions to the system as necessary.  4.3 Prepare / provide user acceptance.  4.3 Apply revisions to the system as necessary.  4.3 Prepare / provide user acceptance.  An apply revisions to the system as necessary.  An apply revision t		/test report.						
staff, until the system conformed to the Client requirements.  System conformed the system as necessary.  requirements.  4.3 Prepare / provide user acceptance.  or Information Systems Analyst I or Planning Officer III or Planning Officer IV					1			
system conformed to the Client requirements.  to the Client or  4.3 Prepare / provide user acceptance.  Information Systems Analyst I Or Planning Officer III Or Planning Officer IV								
to the Client requirements.  A.3 Prepare / provide user acceptance.  Systems Analyst I or Planning Officer III or Planning Officer IV					<u> </u>			
requirements.  4.3 Prepare / provide user acceptance.  or Planning Officer III or Planning Officer IV	1	_						
4.3 Prepare / Planning Officer III provide user acceptance.		necessary.			Systems Analyst I			
provide user acceptance. or Planning Officer IV	requirements.	_			~ .			
acceptance. Planning Officer IV		•			Planning Officer III			
		•			~ .			
		acceptance.			•			
					Planning and			
4.4 Marked Management								
the system Division		,			Division			
development		development						
or		l •.						
enhancement		enhancement						
request as		•						
completed or		•						
close in IT		close in IT						
Help Desk		Help Desk						
System		System						
5. Fill out 5.1 Collect None 5 minutes Concerned MIS	5. Fill out	5.1 Collect	None	5 minutes	Concerned MIS			
Customer/Client and file the staff	Customer/Client	and file the			staff			
Satisfaction Customer/	Satisfaction	Customer/						
Survey Form thru Client	Survey Form thru	Client						
printed form or Satisfaction	printed form or	Satisfaction						
google form Survey Form.	google form	Survey Form.						
TOTAL 11 days and 5 minutes			TOTAL	11 days a	nd 5 minutes			
(Stage II) (exclusive of programming)			(Stage II)					
End of Systems Programming and Overall Transaction for	\ 1 3 3/							
Systems Development or Modification	End of S	, , ,						



# **II. Technical Support**

Clients may request PMD-MIS for technical support such as but not limited to the following: check-up of Information and Communications Technology (ICT) equipment (desktop, laptop, printer, scanner, wireless device, biometrics, etc.); software installation, uploading of website files and social media modification, repair of ICT equipment, virus detection, network access, account reset, and simple system error.

The request can be done by filling-up the online request form which can be accessed at <a href="http://10.10.120.5/mirdcintranet">http://10.10.120.5/mirdcintranet</a>, -> Information System Menu -> IT Help Desk or <a href="https://it-helpdesk-mirdc.ap.ngrok.io/">https://it-helpdesk-mirdc.ap.ngrok.io/</a>. Requests can be made by MIRDC employees, Contract of Service (CoS) and Job Order (JO) personnel.

				1
Office/Division:	Planning and Mar	nagemer	nt Division	
Classification:	Simple			
Type of Transaction:	G2G - Governme	nt to Gov	vernment	
Who may avail:	MIRDC regular ei Job Order (JO) pe		s, Contract of Ser	vice (COS) and
CHECKLIST OF	REQUIREMENTS	3	WHERE 7	TO SECURE
1. IT Job Ticket (online	e request)		IT Help D	esk System
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Client login to IT Help Desk System, submit request online.	1.1 Maintain the availability and accessibility of the IT Help Desk system.	None	5 minutes	Computer Programmer III or Information Systems Analyst I Planning and Management Division
2. Client awaits for the evaluation / assessment of PMD-MIS. Client will get email notification via IT Help Desk autogenerated email.	2.1 Check / review request if within MIS scope / capability, if within scope, assign to appropriate personnel; if not	None	10 minutes	Information Systems Analyst III or Computer Programmer III Planning and Management Division



	T			
	within scope,			
	provide			
	feedback to			
	client.			
	2.2 Assigned			
	personnel to			
	further check /		10 minutes	Information
	evaluate			Systems Analyst
	request and			III
	move the job			or
	ticket to			Administrative
	appropriate			Assistant III
	status ex.			Or
	ongoing,			Data Controller II
	cancelled or for			Or
	evaluation.			Information
	evaluation.			Systems Analyst I
				or
				Information
				Systems
				Researcher II
				or
				Computer
				Programmer III
				Planning and
				Management
				Division
3. Client provides	2.1 Assigned	None	2 days	Information
PMD-MIS technical	3.1 Assigned	NOHE	and 4 hours	
support staff with	personnel shall		and 4 nours	Systems Analyst III
• •	apply			
access to the ICT	appropriate			Or Administrative
equipment, or to	action and			Administrative
any device /	update status of			Assistant III
software for	job ticket. Client			Or Data Caretrallar II
checking. Client can	will receive an			Data Controller II
also monitor the	email			Or Information
status of the	notification re:			Information
request via the IT	status of job			Systems Analyst I
Help Desk.	request.			Or
	-\ If			Information
	a) If equipment is			Systems
	repairable by			Researcher II
	PMD- MIS or			or
	by external			Computer
	repair services			Programmer III,



disposition.  4. Client receives auto-generated email notification that request has been completed. Client may fill out the Customer/Client Satisfaction Survey Form thru printed form or online Google Form.  4.2. Maintain the availability and accessibility of the IT Help Desk system for clients who would like to fill out the online CSM Google Form via the IT Help Desk.  TOTAL 2 days, 4 hours and 30 minutes		<ul> <li>item will be repaired.</li> <li>b) If equipment is not anymore repairable – no further action is to be taken.</li> <li>3.2 Assigned personnel will notify client of the status of the equipment (eg. repair has been completed; or if external repair services is required; or equipment is unrepairable and for</li> </ul>			Planning and Management Division
TOTAL 2 days, 4 hours and 30 minutes	auto-generated email notification that request has been completed. Client may fill out the Customer/Client Satisfaction Survey Form thru printed form or online Google	4.1. Collect and file the Customer/ Client Satisfaction Survey Form.  4.2. Maintain the availability and accessibility of the IT Help Desk system for clients who would like to fill out the online CSM Google	None	5 minutes	
FOO OF HADSACTION					s and 30 minutes



# PROTOTYPING DIVISION

**External Services** 



#### I. Contract Research/ Joint Research Services

Contract Research and Joint Research services of MIRDC apply research findings to gain new knowledge and create new or improved technologies that are marketable and economically feasible for the metals engineering and allied industries. These services includes design and simulation, products development, automation of process and equipment, and equipment prototyping.

Office/Division:		Prototy	Prototyping Division			
Classification:		Highly				
Type of Transaction:		G2B -	Gover	nmen	t to Citizen t to Business Entit t to Government	ty
Who may avail:		All				
CHECKLIST OF REQ	UIREMEN	NTS WHERE TO SECURE				
1. Submission of Proposal						
1.1 Letter of Intent				Clie	nt	
1.2 Concept / Drawing / diagram	Design /	Schema	atic	Clie		
1.3 Sample Product/ Ma				Clie	nt	
	2. Claiming of R&D Output					
2.1. One (1) Original of Project Order (JO)	,			PD		
2.2. One (1) Original of Official Receipt	r Photoco	py of iss		Adm	hier Office, MIRDO ninistrative Division	
CLIENT STEPS	AGEN ACTI		FEI TO PA	BE	PROCESSING TIME	PERSON RESPONSIBLE



	1.3 Request the customer to submit Letter of Intent			Division Researcher
2. Submit Letter of Intent (LOI)	2.1 Receive Letter of Intent 2.2 Assign and discuss with PD researcher	None	10 minutes	Chief Science Research Specialist and / or Supervising Science Research Specialist and / or Senior Science Research Specialist and the assigned Prototyping Division Researcher
3. With assistance from MIRDC, prepare and submit proposal using prescribed form. Revise, if needed.	3.1 Identify and discuss with the client the requirements, needs and responsibilities of the concerned parties for the contract/ joint research.  3.2 Assist the client in the preparation of the proposal, including workplan and line-itembudget (LIB).  3.3 Submit and present proposal to R&D	None	(exclusive of time securing appointment schedule from R&D committee)	Chief Science Research Specialist and / or Supervising Science Research Specialist and / or Senior Science Research Specialist and the assigned Prototyping Division Researcher



	Committee for review and approval.  3.4 Inform customer of the comments. Jointly, revise the proposal if needed and resubmit to R&D Committee.			
4. Review Memorandum of Agreement (MOA)	4.1 Once the proposal is approved, prepare and send copy of the Memorandum of Agreement (MOA) to Customer for review and comments.  4.2 Review feedback and amend MOA as needed.  4.3 Prepare five (5) copies of revised MOA and send to client for signing.	None	4 days	Chief Science Research Specialist and / or Supervising Science Research Specialist and / or Senior Science Research Specialist and the assigned Prototyping Division Researcher



5. Sign the MOA and submit signed copies to assigned PD researcher.  Receive agency signed copies of MOA.	5.1 Receive the MOA and route for MIRDC officials' signatures.  5.2 Return agency signed copy of the	None	3 days	Chief Science Research Specialist and / or Supervising Science Research Specialist and / or Senior Science
	Contract/MOA to client for notarization.			Research Specialist and the assigned Prototyping Division Researcher
6. Notarize MOA.  Submit copies to: Notary Public – two (2) copies Client – one (1) copy End-user/ Project – one (1) copy MIRDC Legal Officer– one (1) copy	6.1 Receive notarized MOA.	None	5 minutes	Chief Science Research Specialist and / or Supervising Science Research Specialist and / or Senior Science Research Specialist and the assigned Prototyping Division Researcher
7. Accomplish and sign two (2) copies of Project Order (PO). Provide required details.  Receive one (1) copy of PO.	7.1 Fill-out two (2) copies of Project Order (PO) Form.  7.2 Review and Sign PO by Receiving staff.  7.3 Issue a copy of PO to client.	None	30 minutes	Chief Science Research Specialist and / or Supervising Science Research Specialist and / or Senior Science Research Specialist



				and the assigned Prototyping Division Researcher
8. Proceed to Cashier's Office "Order of Payment (O.P.)" Window and present the PO for payment.	8.1 Receive and Review the PO.  8.2 Create O.P. manually.  8.3 Reflect invoice details or application of deposit if there is any.  8.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (OR).	None	15 minutes	Administrative Officer IV Or Administrative Officer V Financial Management Section
9. Pay the required fee (if paying in cash) and Receive OR, copy of PO stamped "PAID"	9.1 Receive documents and process Official Receipt based on the O.P.  9.2 Receive payment (cash) Stamp "PAID" all documents. If payment is in the form of check, review the check as to amount, date and signatory.  9.3 Release to Client O.R.	Contract Cost highly depende d on the complexit y of the project, duration, and deliverab les of the project.	5 minutes	Administrative Officer V or Administrative Officer II Administrative and General Services Section



10 None	and all billing documents except accounting copy.	None	Donording	Chief Saismas
10. None	Implement Research and Development project based on approved workplan/ dura tion.  10.2 Inform customer on the completion of the project.	INUTIE	Depending on the approved workplan.	Chief Science Research Specialist and / or Supervising Science Research Specialist and / or Senior Science Research Specialist and the assigned Prototyping Division Researcher
11. Proceed to PD, present copy of OR and PO.  Sign applicable documents.  Accept/receive R&D Project output/s and documents.	11.1 Turn-over /release the Research and Development Project Output/s.  11.2 Prepare and request the customer to sign the Property Entry/Exit Slip, Acknowledgem ent Receipt of Equipment, Certificate of Project Completion/ Certificate of Acceptance, and/or Failure Analysis/ Investigation	None	1 hour	Chief Science Research Specialist and / or Supervising Science Research Specialist and / or Senior Science Research Specialist and the assigned Prototyping Division Researcher



	Report, as applicable.				
12. Fill out Customer Satisfaction Survey and submit to PD staff.	12.1 Issue Customer Satisfaction Survey.	None	5 minutes	Chief Science Research Specialist and / or Supervising Science Research Specialist and / or Senior Science Research Specialist and the assigned Prototyping Division Researcher	
	TOTAL	19 days, 3 hours and 10 minutes (exclusive of actual implementation)			

SITUATION	ACTION	LOCATION	REMARKS
The inquiry in Agency Action 1.1 requires more than one engineering / science field.	Meeting with experts/ researchers may be required.	MIRDC	Will take longer time depending on the assessments / arguments of experts/ researchers.
If the R&D Committee has concerns / comments that need to be addressed in Agency Action 3.3	Coordinate with the client and inform them on the concerns / comments.  Provide necessary actions to address the concerns / comments.	MIRDC	Will take longer time depending on the next schedule of review of the R&D Committee
Projects above Php 2M will be subject to approval of the MIRDC Governing Council (GC)	Project proposal will be included in the Agenda for the Meeting or subject to a referendum	Venue of GC Meeting	Process will take additional time.



# **TECHNOLOGY DIFFUSION DIVISION**

**External Services** 



# I. Industrial Training Services\*

A. Industrial Training Services - Packaged Training Programs (Face-to-Face)

Package training program is a revenue generating training activity designed exclusively to an individual and/or group/organization/association to be held in-plant or at MIRDC or other venue mutually agreed upon by both parties.

Office/Division:	Technology Diffusion Division - Industrial Training Section (ITS)
Classification:	Highly Technical
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government
Who may avail:	AII

CHECKLIST OF REQUIREMENTS	WHERE TO SECURE
Accomplished Training Inquiry Logsheet (TIL)	MIRDC/TDD- ITS Office
Letter of Request (LER)	Client

CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSIN G TIME	PERSON RESPONSIBLE
1. Supply information required on the Training Inquiry	1.1 Receive inquiry on TI L or LER.	None	5 minutes	Training Specialist I, Program Design and Promotion (PDP) Unit or
Logsheet (TIL) or submit Letter of Request (LER)	1.2 Conduct Training Requirement Analysis (TRA) to assess the client's training needs and evaluate if within MIRDC's capability through email or phone call.  1.3 Prepare and send approved Quotation to client.	None	2 days & 4 hours	Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit
2. Submit acceptance letter	2.1 Receive	None	2 minutes	(vacant)



(through fax, email or submit	acceptance letter			Training Specialist I, Program Design and Promotion (PDP) Unit
personally)	2.2 Inform client on the date/s of training and send link for participants to register.	None	3 minutes	or Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit  Training Specialist II, Program Design and Promotion (PDP) Unit or (PIE) Training Specialist II, Program Implementation and Evaluation (PIE) Unit
	2.3 Prepare the materials and the logistics necessary to hold the training	None	4 days and 40 minutes	or (PDP)/ (PIE) Training Specialist III, Program Design and Promotion (PDP) Unit/ Program Implementation and Evaluation (PIE) Unit
3. Present billing documents e.g.Invoice, S/A, to Cashier's Office "Order of Payment" window.	3.1 Receive and review documents presented. If needed, ask the customer to receive invoice/SOA.	None	5 minutes	Administrative Officer IV, or Administrative Officer V, Financial Management Section
	3.2 Create Order of Payment (O.P.) manually.			
	3.3 Reflect on the Invoice/ SOA details or application of			



	deposit if there is any;  3.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (O.R.)			
4. Pay the required fee and Receive Official Receipt and other billing documents	4.1 Receive Order of Payment and other billing documents. Accept payment and prepare Official Receipt based on Order of Payment. Indicate details e.g. TIN, address, business style, if required by customer.	As indicated in the Order of Payment	5 minutes	Administrative Officer V or Administrative Officer II, Administrative and General Services Section
	4.2 Stamp "PAID" to all billing documents.  4.3 Release Official Receipt and other billing documents  4.4 Record the OR No. to ITS Training Program Tracker	None	2 minutes	Training Specialist I, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Implementation and Evaluation (PIE) Unit or Training Specialist III, Implementation and Evaluation (PIE) Unit



5. Attend the training	5.1 Conduct Training	None	Depends on the program	Resource Speaker
Trainee should submit the following: pre & post-examination,	5.2 Monitor/check attendance of participant/s.	None	5 minutes	Training Specialist I, Program Implementation and Evaluation (PIE) Unit or
training evaluation	5.3 Prepare necessary documents for the issuance of e-certificate/s.	None	5 minutes	Training Specialist II, Progrram Implementation and Evaluation (PIE) Unit or Training Specialist III,
6. Fill-out	5.4 Prepare training e-certificate/s	None	15 minutes	Program Implementation and Evaluation (PIE) Unit
Customer/ Client Satisfaction Survey Form and submit to ITS staff.	6.1 Collect and file the filled-up Customer/Client Satisfaction Survey Form	None	5 minutes	
7. Receive training certificate/s (E-Certificates will be sent to registered email account)	7.1 Send e-certificate.	None	5 minutes	
·		TOTAL	8 days, 5 h	ours and 37 minutes

SITUATION	ACTION	LOCATION OF ACTION	REMARKS
If the training requested by the client is not within the MIRDC capability	Inform the client and/or refer to the appropriate institution.	ITS Office	



## B. Industrial Training Services - Packaged Training Programs (Online)

Package training program is a revenue generating training activity designed exclusively to an individual and/or group/organization/association conducted in a virtual platform.

Office/Division:	Technology Diffusion Division - Industrial Training Section (ITS)
Classification:	Highly Technical
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government
Who may avail:	All

CHECKLIST OF REQUIREMENTS	WHERE TO SECURE
Accomplished Training Inquiry Logsheet (TIL)	MIRDC/TDD- ITS Office
Letter of Request (LER)	Client

CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Supply information required on the Training Inquiry Logsheet (TI L) or submit Letter of Request (LER)	1.1 Receive inquiry on TIL or LER.  1.2 Conduct Training Requirement Analysis (TRA) to assess the client's training needs and evaluate if within MIRDC's capability. Through email or phone call.	None	5 minutes 2 days	Training Specialist I, Program Design and Promotion (PDP) Unit or Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit
	1.3 Prepare and send approved Quotation to client.	None	2 days & 4 hours	



2. Submit acceptance letter (through fax, email or submit personally)  2.2 Inform client on the date/s of training, prepare and send link for participants to register and the zoom link.  2.3 Prepare the materials and the logistics necessary to hold the training  3. Present billing documents, e.g. Invoice, S/A, to Cashier's Office "Order of Payment" window.  2.1 Receive and review documents presented. If customer to receive of Payment" window.  2.2 Inform client on the date/s of training, prepare and send link for participants to register and the zoom link.  None 3 minutes Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Administrative Officer IV, or Administrative Officer V, Financial Management Section  3. Present billing documents, presented. If customer to receive invoice/SOA. details or application of deposit if there is	acceptance letter (through fax, email or submit personally)  2.2 Inform client on the date/s of training, prepare and send link for participants to register and the zoom link.  2.3 Prepare the materials and the logistics necessary to hold the training  3. Present billing documents; e.g. Invoice, S/A, to Cashier's Office "Order of Payment" window.  2.2 Inform client on the date/s of training, prepare and send link for participants to register and the zoom link.  None 3 minutes  None 7 Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Imp		1	ı	T	T
personally)  on the date/s of training, prepare and send link for participants to register and the zoom link.  2.3 Prepare the materials and the logistics necessary to hold the training  3. Present billing documents; e.g. Invoice, S/A, to Cashier's Office "Order of Payment" window.  3.3 Reflect on the Invoice/SOA details or application of	personally)  on the date/s of training, prepare and send link for participants to register and the zoom link.  2.3 Prepare the materials and the logistics necessary to hold the training  3. Present billing documents; e.g. Invoice, S/A, to Cashier's Office "Order of Payment" window.  3.3 Reflect on the Invoice/SOA details or application of deposit if there is	letter (through	•	None	2 minutes	Promotion (PDP) Unit
materials and the logistics necessary to hold the training  Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation	materials and the logistics necessary to hold the training  3. Present billing documents; e.g. Invoice, S/A, to Cashier's Office "Order of Payment" window.  3. Receive and review documents or Administrative Officer V, Financial Management Section  3. Create Order of Payment" window.  materials and the logistics necessary to hold the training  Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Administrative Officer IV, Financial Management Section  Section  Section  Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluat		on the date/s of training, prepare and send link for participants to register and the	None	3 minutes	Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and
billing documents; presented. If needed, ask the customer to Cashier's Office "Order of Payment" window.    Solution	billing documents, e.g. Invoice, S/A, to Cashier's Office "Order of Payment" window.    Solution		materials and the logistics necessary to hold	None	2 hours	Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation
anv:	Larry,	billing documents; e.g. Invoice, S/A, to Cashier's Office "Order of Payment"	review documents presented. If needed, ask the customer to receive invoice/SOA.  3.2 Create Order of Payment (O.P.) manually.  3.3 Reflect on the Invoice/ SOA details or application of deposit if there is	None	5 minutes	Administrative Officer IV, or Administrative Officer V, Financial Management



	3.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (O.R.)			
4. Pay the required fee and Receive Official Receipt and other billing documents	4.1 Receive Order of Payment, and other billing documents. Accept payment and prepare Official Receipt based on Order of Payment. Indicate details e.g.TIN, address, business style, if required by customer.  4.2 Stamp "PAID" to all billing documents.  4.3 Release Official Receipt and other billing	As indicated in the Order of Payment	5 minutes	Administrative Officer V, or Administrative Officer II, Administrative and General Services Section
	documents			
	4.4 Record the OR No. to ITS Training Program Tracker	None	2 minutes	Training Specialist I, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation
5. Attend the	5.1 Conduct	None	Depends	and Evaluation (PIE) Unit  Resource Speaker
training	Online Training		on the	Training Specialist I
Trainee should submit the		None	program 30 minutes	Training Specialist I, Program Implementation and Evaluation (PIE) Unit



				<u>,                                    </u>
following: pre	5.2 Monitor/check			or Triangle
& post-	attendance of			Training Specialist II,
examination,	participant/s.	Nissa	F	Program Implementation
training		None	5 minutes	and Evaluation (PIE) Unit
evaluation.	E 2 Dranara			Or Training Chanielist III
	5.3 Prepare necessary			Training Specialist III, Program Implementation
	documents for the			and Evaluation (PIE) Unit
	issuance of e-			and Evaluation (1 12) Onit
	certificate/s.	None	30 minutes	
	5.4 Prepare			
	training e-			
	certificate/s			
6. Fill-in	6.1 PMD Staff	None	5 minutes	Planning Officer II,
Customer/	receives the online	None	5 minutes	Planning and
Client	submission of			Management Division
Satisfaction	Customer/Client			(PMD)
Survey Form	Satisfaction			, ,
and submit	Survey response			
online.				
7. Receive	7.1 Send e-	None	5 minutes	Training Specialist I,
training	certificate	None	3 minutes	Program Implementation
certificate/s	ocranoate			and Evaluation (PIE) Unit
(E-Certificates				or
will be sent to				Training Specialist II,
registered				Program Implementation
email account)				and Evaluation (PIE) Unit
				or Training On a siglic ( )
				Training Specialist III, Program Implementation
				and Evaluation (PIE) Unit
				and Evaluation (1 12) Office
		TOTAL	4 days, 7	hours and 37 minutes

SITUATION	ACTION	LOCATION OF ACTION	REMARKS
If the training requested by the client is not within the MIRDC capability	Inform the client and/or refer to the appropriate institution.	ITS Office	



## C. Industrial Training Services - Regional Training Programs (Face-to-face)

Regional training program is a non-revenue generating training activity conducted to different government institutions, associations, academe and/or group through a resource-sharing scheme.

Office/Division:	Technology Diffusion Division-Industrial Training Section (ITS)			
Classification:	Highly Technical			
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government			
Who may avail:	All			
CHECKLIS	ST OF REQUIREMEN	ITS	WHER	E TO SECURE
Accomplished Tra	aining Inquiry Form (T	IF)	MIRDC/TDD - IT:	S Office
Original copy of L	etter of Request (LER	R)	Client	
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Supply information required on the Training Inquiry Logsheet (TIL) or submit Letter of Request (LER)	1.1 Receive inquiry TIL or LER.  1.2 Conduct Training Requirement Analysis (TRA) to assess the client's training needs and evaluate if within MIRDC's capability. Through email or phone call.	None	5 minutes 2 days	Training Specialist I, Program Design and Promotion (PDP) Unit or Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit
	1.3 Prepare and send approved training program proposal to client.	None	2 days & 4 hours	



	1			
2. Submit signed Terms and Conditions	2.1 Received Signed Terms and Conditions.	None	2 minutes	Training Specialist I, Program Design and Promotion (PDP) Unit or
(through fax, email or submit personally)	2.2 Inform client on the date/s of training and send a link for participants to register.	None	3 minutes	Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit
	2.3 Prepare the materials and the logistics necessary to hold the training	None	4 days & 40 minutes	Training Specialist I, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or Training Specialist III, Program Implementation and Evaluation (PIE) Unit
3. Attend training.  Trainee must	3.1 Conduct the Training	None	Depends on the program	Resource Person
submit the pre and post- examination training	3.2 Monitor/check attendance of participant/s.	None	5 minutes	Training Specialist I, Program Implementation and Evaluation (PIE) Unit
evaluation and Customer/ Client Satisfaction Survey Form after the	3.3 Prepare necessary documents for the issuance of ecertificate/s.	None	5 minutes	or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or
training.	3.4 Prepare training e-certificate/s	None	15 minutes	Training Specialist III, Program Implementation and Evaluation (PIE) Unit



4. Fill-out Customer/ Client Satisfaction Survey Form and submit to ITS staff.	4.1 Collect and file the filled-up Customer/Client Satisfaction Survey Form	None	3 minutes	
5. Receive training certificate/s (E-Certificates will be sent to registered email account)	5.1 Send e-certificate/s.	None	5 minutes	- Same as step 3
		TOTAL	8 day, 5 ho	urs and 23 minutes

SITUATION	ACTION	LOCATION OF ACTION	REMARKS
If the training requested by the client is not within the MIRDC capability	Inform the client and/or refer to the appropriate institution.	ITS Office	

## D. Industrial Training Services - Regional Training Programs (Online)

Regional training program is a non-revenue generating training activity conducted to different government institutions, associations, academe and/or group conducted on a virtual platform.

Office/Division:	Technology Diffusion Division-Industrial Training Section (ITS)		
Classification:	Highly Technical		
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government		
Who may avail:	All		
CHECKLIST OF REQUIREMENTS WHERE TO SECURE			
Accomplished Training Inquiry Form (TIF) MIRDC/TDD - ITS Office			
Original copy of Letter of Request (LER)  Client			



CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Supply information required on the Training Inquiry Logsheet (TIL) or submit Letter of Request (LER)	1.1 Receive inquiry TIL or LER.  1.2 Conduct Training Requirement Analysis (TRA) to assess the client's training needs and evaluate if within MIRDC's capability through email or phone call.	None	5 minutes 2 days	Training Specialist I, Program Design and Promotion (PDP) Unit or Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit
	1.3 Prepare and send approved training program proposal to client.	None	2 days & 4 hours	
2. Submit signed Terms and Conditions	2.1 Received Signed Terms and Conditions.	None	2 minutes	Training Specialist I, Program Design and Promotion (PDP) Unit or
(through fax, email or submit personally)	2.2 Inform client on the date/s of training, prepare and send a link for participants to register and the zoom link.	None	3 minutes	Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit
	2.3 Prepare the materials and the logistics necessary to hold the training	None	2 days	Training Specialist I, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Program Implementation and Evaluation (PIE) Unit or



				Training Specialist III, Program Implementation and Evaluation (PIE) Unit
3. Attend training.	3.1 Conduct the Training	None	Depends on the program	Resource Person
Trainee should submit the following: pre & post-	3.2 Monitor/check attendance of participant/s.	None	30 minutes	Training Specialist I, Program Implementation and Evaluation (PIE) Unit
examination, training evaluation.	3.3 Prepare necessary documents for the issuance of ecertificate/s.	None	5 minutes	or Training Specialist II, Program Implementation and Evaluation (PIE) Unit
	3.4 Prepare training e-certificate/s	None	30 minutes	Training Specialist III, Program Implementation and Evaluation (PIE) Unit
4. Fills out Customer/ Client Satisfaction Survey Form and submit online.	4.1 PMD Staff receives the online submission of Customer/Client Satisfaction Survey response	None	2 minutes 5 minutes	Planning Officer II, Planning and Management Division (PMD) Staff



5. Receive	5.1 Send e-			Training Specialist I,
training	certifcate/s.			Program
certificate/s				Implementation and
(E-Certificates				Evaluation (PIE) Unit
will be sent to				or
registered email				Training Specialist II,
account).				Implementation and
				Evaluation (PIE) Unit
				or
				Training Specialist III,
				Implementation and
				Evaluation (PIE) Unit
		TOTAL	6 days, 5 ho	urs and 22 minutes

SITUATION	ACTION	LOCATION OF ACTION	REMARKS
If the training requested by the client is not within the MIRDC capability	Inform the client and/or refer to the appropriate institution.	ITS Office	

### E. Industrial Training Services - Regular Training Programs (Face-to-face)

Regular training program is a revenue generating activity being offered regularly to the public at specific scheduled dates and is conducted at MIRDC.

Office/Division:		Technolo	Technology Diffusion Division-Industrial Training Section (ITS)			
Classification:		Highly Te	Highly Technical			
Type of Transaction	on:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government				
Who may avail:		All				
CHECKLIST O	F REQUI	REMENT	S	WHERE TO SECURE		
1. Filled-up Reservation Form				MIRC	•	ficial email, Fax, Training fice
2. Curriculum Desi	gn provid	ovided to the client ITS Official email, Fax, Training Office			Fax, Training Office	
CLIENT STEPS AGENCY ACTION BE F		<u> </u>	PROCESSING	PERSON		



1. Submit filled out Seminar Reservation Form (RF) to Industrial Training Section (through fax, email, or submit personally)	1.1 Check and review the entries in the Reservation Form (RF)  1.2 Log in the Reservation Form (RF) Monitoring Sheet	None	5 minutes	Training Specialist I, Program Design and Promotion (PDP) Unit or Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit
2. Confirm reservation	2.1 Inform clients on the status of their reservation (confirmed or waitlisted) through phone or email and send a link for participants to register.	None	10 minutes	Training Specialist I, Program Design and Promotion (PDP) Unit or Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit
	2.2 Prepare the materials and the logistics necessary to hold the training	None	4 days & 40 minutes	Training Specialist I, Program Implementation and Evaluation (PIE) Unit or Training Specialist II, Implementation and Evaluation (PIE) Unit or Training Specialist III, Implementation and Evaluation (PIE) Unit
3. Request for Statement of Account (SOA)	3.1 Forward the accomplished Billing Request Form together with their Reservation Form to Cashiering Office	As per approved MIRDC Training Fees	10 minutes	Training Specialist I, Program Design and Promotion (PDP) Unit or Training Specialist II, Program Design and Promotion (PDP) Unit or



	3.2 Send approved SOA through email or fax (Original SOA will be given to the participants upon attendance to training)			Training Specialist III, Program Design and Promotion (PDP) Unit
4. Present copy of billing documents, e.g.Invoice, S/A, to Cashier's Office "Order of Payment" window.	4.1 Receive and review documents presented. If needed, ask the customer to receive invoice/SOA. 4.2 Create Order of Payment (O.P.) manually.	None	5 minutes	Administrative Officer IV, Financial Management Section or Administrative Officer V, Financial Management Section
	4.3 Reflect on the Invoice/SOA details or application of deposit if there is any;			
	4.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (O.R.)			
5. Pay the required fee and Receive Official Receipt, and billing documents  Note: In case of various checks for various	5.1 Receive Order of Payment, and billing documents. Accept payment and prepare Official Receipt based on Order	As indicated in the Order of Payment	5 minutes	Administrative Officer V or Administrative Officer II, Administrative and General Services Section



companies/partici pants, ITS staff shall gather checks altogether and its corresponding RFs and forward to Cashier's Office for processing of OP and issuance of OR on the same day.	of Payment. Indicate details e.g. TIN, address, business style, if required by customer.  5.2 Stamp "PAID" to all billing documents.  5.3 Release Official Receipt, and billing documents			Training Specialist I, Program
	5.4 Record the OR No. to ITS Training Program Tracker	None	2 minutes	Implementation and Evaluation (PIE) Unit or Training Specialist II, Implementation and Evaluation (PIE) Unit or Training Specialist III, Implementation and Evaluation (PIE) Unit
6. Attend training	6.1 Conduct Training.	None	Depends on the program	Resource Speaker
Trainee must submit the pre and post-examination Training	6.2 Monitor/ check attendance of participant/s.	None	5 minutes	Training Specialist I, Program Implementation and Evaluation (PIE) Unit or
evaluation.	6.3 Prepare necessary documents for the issuance of	None	5 minutes	Training Specialist II, Implementation and Evaluation (PIE) Unit or Training Specialist III,
	e-certificate/s. 6.4 Prepare training e- certificate/s	None	15 minutes	Program Implementation and Evaluation (PIE) Unit



7. Fill-out Customer/ Client Satisfaction Survey Form and submit to ITS staff.	7.1 Collect and file the filled-up Customer/Client Satisfaction Survey Form	None	3 minutes	
8. Receive training certificate/s (E-Certificates will be sent to registered email account).	8.1 Send e-certifcate/s.	None	5 minutes	
		TOTAL	4 days, 1 h	our and 50 minutes

### F. Industrial Training Services - Regular Training Programs (Online)

Regular training program is a revenue generating activity being offered regularly to the public at specific scheduled dates and is conducted in a virtual platform.

Office/Division:

Technology Diffusion Division-Industrial Training Se

Office/Division:		Technology Diffusion Division-Industrial Training Section (ITS)				
Classification:		Highly Te	chnic	al		
Type of Transaction:  G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government						
Who may avail:		AII				
CHECKLIST (	OF REQUI	REMENTS			WHERE TO	) SECURE
1. Filled-up Reserv	ation Forn	m MIRDC website, ITS Official email, Fax, Training Office				
2. Curriculum Des	sign provide	ed to the cl	ient	nt ITS Official email, Fax, Training Office		
CLIENT STEPS	AGENCY	ACTION		S TO PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Submit filled out Seminar Reservation Form (RF) to Industrial Training Section (through fax,	1.1 Check review the in the Res Form (RF 1.2 Log in Reservati	e entries servation ) n the	Non	е	5 minutes	Training Specialist I, Program Design and Promotion (PDP) Unit or Training Specialist II, Program Design and



email, or submit personally)	(RF) Monitoring Sheet			Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit
2. Confirm reservation	2.1 Inform clients on the status of their reservation (confirmed or waitlisted) through phone or email prepare and send a link for participants to register and the zoom link.	None	10 minutes	Training Specialist I, Program Design and Promotion (PDP) Unit or Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design
	2.2 Prepare the materials and the logistics necessary to hold the training		2 days	and Promotion (PDP) Unit
3. Request for Statement of Account (SOA)	3.1 Forward the accomplished Billing Request Form together with their Reservation Form to Cashiering Office  3.2 Send approved SOA through email or fax.	As per approved MIRDC Training Fees	10 minutes	Training Specialist I, Program Design and Promotion (PDP) Unit or Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit
4. Present copy of and billing documents if applicable, e.g. Invoice, S/A, to Cashier's Office "Order of	4.1 Receive and review documents presented. If needed, ask the customer to receive invoice/SOA.	None	5 minutes	Administrative Officer IV or Administrative Officer V, Financial Management



Payment"				Section
window.	4.2 Create Order of Payment (O.P.) manually.			GCGHOH
	4.3 Reflect on the Invoice/SOA details or application of deposit if there is any;			
	4.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (O.R.)			
5. Pay the required fee and Receive Official Receipt, and billing documents	5.1 Receive Order of Payment, Registration Form and other billing documents.	As indicated in the Order of Payment	5 minutes	Administrative Officer V or Administrative Officer II, Administrative and
Note: In case of various checks for various companies/partic ipants, ITS staff shall gather checks altogether and its corresponding	Accept payment and prepare Official Receipt based on Order of Payment. Indicate details e.g.TIN, address, business style, if required by customer.			General Services Section
RFs and forward to Cashier's Office for	5.2 Stamp "PAID" all documents.			
processing of OP and issuance of OR on the same day.	5.3 Release Official Receipt and billing documents			
	5.4 Record the OR No. to ITS Training Program Tracker	None	2 minutes	Training Specialist I, Program



account).		TOTAL	2 days 1 hou	ur and 49 minutes
8. Receive training certificate/s (E-Certificates will be sent to registered email	8.1 Send e-certificate/s.	None	5 minutes	- same as step 6 –
7. Fill-in Customer/ Client Satisfaction Survey Form and submit online.	7.1 PMD Staff receives the online submission of Customer/Client Satisfaction Survey response.	None	2 minutes	Planning Officer II, Planning and Management Division (PMD)
	6.4 Prepare training e-certificate/s	None	30 minutes	Training Specialist  III, Implementation and Evaluation (PIE) Unit
examination, training evaluation.	6.3 Prepare necessary documents for the issuance of ecertificate/s.	None	5 minutes	Evaluation (PIE) Unit or Training Specialist II, Implementation and Evaluation (PIE) Unit or Training Specialist
Trainee must submit the following: pre & post-	6.2 Monitor/check attendance of participant/s.	None	30 minutes	Training Specialist I, Program Implementation and
6. Attend training	6.1 Conduct Training.	None	Depends on the program	Resource Speaker
				Implementation and Evaluation (PIE) Unit or Training Specialist II, Implementation and Evaluation (PIE) Unit or Training Specialist III, Implementation and Evaluation (PIE) Unit Unit



SITUATION	ACTION	LOCATION OF ACTION	REMARKS
If Agency Action 2.1 needs changes: If the reserved participant is unable to attend	Ask client for the replacement of participant	ITS Office	Reflect the replaced participant on the list.
If no replacement	Cancel the reservation	ITS Office	The name of the reserved participants will be marked "Cancelled"
If cancellation of reservation is made less than 3 days before the scheduled seminar	Ask for a letter of cancellation. Call-up Waitlisted Clients on the available slot and inform if they could attend the scheduled seminar	ITS Office	Cancellation of reserved participants.

# MIRDC REGULAR SEMINAR/TRAINING FEES (Face-to-face)

ANALYSIS AND TESTING	
Title of Program /Duration/Course Description	Seminar Fee
Dimensional Metrology 1 Basic Measurement (24 hours) Discusses the history and basic concept of measurement and focuses on its uncertainty. It aims to provide the necessary knowledge and skills in proper handling and maintenance of different measuring instruments	PhP 5,800.00
Dimensional Metrology 2 Basic Length Calibration (Prerequisite: DM1-Basic Measurement) (24 hours) Explains the calibration and traceability concepts, general requirements for calibration and actual application using different instruments.	PhP 5,800.00



Dimensional Metrology 3 Limits & Fits & Inspection of Geometrical Tolerances (Prerequisite: DM1-Basic Measurement) (14 hours) Covers the general concept of ISO Limits and Fits, Geometric Tolerances and CMM application on Geometric Tolerance Inspection.	PhP 4,000.00
Uncertainty of Measurement Length Calibration Application (Prerequisite: DM2- Basic Length Calibration) (16 hours) Aims to understand and compute for the uncertainty of measurement in length calibration based on NATA Assessment of Uncertainties of Measurement (with reference to ISO-GUM)	PhP 4,000.00
Industrial Calibration (12 hours) Covers calibration principles and procedures on pressure, temperature, and mass.	PhP 4,000.00
Verification of Common Laboratory Instruments (12 hours) Discusses verification vs. calibration, immediate checking process, verification of common laboratory instruments and analysis of verification data using control charts	PhP 5,000.00
Metals Identification & Selection (16 hours) Discusses the different properties of metals, classification and uses of ferrous and non-ferrous metals, and pointers on metal selection.	PhP 4,000.00
Nondestructive Testing (40 hours) Covers liquid penetrant testing, magnetic particle inspection, radiography and ultrasonic testing methods.	PhP 8,400.00
Introduction to Advanced Ultrasonic Testing (Phased-Array Ultrasonic Testing-PAUT) (18 hours) Discusses the difference between conventional and advanced ultrasonic testing (PAUT), principle of PAUT, different basic techniques used in PAUT and perform basic calibration PAUT.	PhP 7,000.00



ENGINEERING, PRODUCTION AND PLANNING	
Title of Program /Duration/Course Description	Seminar Fee
Establishment of Preventive Maintenance System	
(20 hours) Focuses on the steps in setting up preventive maintenance program and Computerized Maintenance Management System (CMMS).	PhP 4,500.00
Product Costing	
(16 hours) Discusses the basic cost concepts, ways of cost classification and types of product costing system. It also includes the preparation of standard cost for specific products.	PhP 4,000.00
Production Planning & Control	
(18 hours)	
Discusses the role of PPC in an industrial firm, its principles, importance and various functions.	PhP 4,500.00
Cost Estimation for Machining Jobs	
(18 hours)	
Discusses the basic preparation of Cost Estimation of a simple machine products and determine the elements of costs and standard rates.	PhP 4,200.00
AC/DC Electricity on Automation Technology	
(24 hours) Provides knowledge in AC/DC Electricity Principles, discusses and interprets about Electrical Schematics and design, helps create Electrical Logic Circuits - its performance and operation with Input and Output Devices.	PhP 4,500.00

HIGH MACHINING TECHNOLOGY	
Title of Program /Duration/Course Description	Seminar Fee
Application of CAD/CAM (Computer-Aided Design/Computer-Aided Manufacturing) (40 hours) Covers NC Programming using CAD/CAM softwares. Import product models from CAD softwares. Create toolpaths and simulate cutting movements of CNC machines using Cimatron Mastercam software.	PhP 9,600.00
CNC Milling Programming & Operation	PhP 10,200.00



(38 hours) Provides knowledge in operation and programming of CNC milling machines, coding and encoding of programs using G-codes, M-codes	
Plastic Injection Molding Machine Programming & Operation (40 hours) Aims to provide skills and knowledge in machining using the SUMITOMO Plastic Injection Molding Machine.	PhP 8,900.00
CNC EDM Sinking Programming & Operation (40 hours) Provides knowledge in creating CNC-Wire Cutting EDM program and discusses the different types of wires and materials use in CNC-EDM Wire Cutting machine.	PhP 9,600.00
CNC EDM Wire Cutting, Programming & Operation (40 hours) Provides knowledge in the EDM Sinking process and discusses the functions of Die Electric Fluid and EDM Sinker Electrode.	PhP 9,600.00
Fundamentals of Gear Hobbing Operation (24 hours) Provides knowledge in Fundamentals of Gear Making and discusses gear hobbing operation.	PhP 11,750.00
Mold Assembly Using NX (18 hours) Discusses the principles of Mold Assembly Using NX and its processes.	PhP 5,200.00
Mold Wizard Design Process (24 hours) Discusses the principles of Mold Wizard and its processes.	PhP 5,200.00
Plastic Injection Mold Design (40 hours) Discusses the principles of Mold Design and uses of the NX software in Mold Design.	PhP 9,400.00
Plastic Injection Mold Assembly (24 hours) Discusses the fundamentals of Plastic Injection Mold Assembly and its processes.	PhP 6,700.00
NX CAD Fundamental Course (40 hours) Discusses the fundamentals of CAD. Covers 2D sketch, 3D design, design feature, associative copy/Geometry, Offset/Scale, detail feature of design.	PhP 9,000.00



MANAGEMENT AND PRODUCTIVITY IMPROVEMENT PROGRAM	
Title of Program /Duration/Course Description	Seminar Fee
Value Analysis/ Value Engineering I (38 hours) Deals with the improvement of cost consciousness throughout the	PhP 8,000.00
organization through an application of a systematic and team approach of an effective cost reduction in both product and service.	0,000.00
Project Management	
(30 hours) Discusses the project management framework, steps to project management process, application of computer software in project management.	PhP 7,000.00
Value Analysis/ Value Engineering for Die & Mold Industry	
(21 hours)  Deals with the improvement of cost consciousness throughout	
the organization through an application of VA systematics and discusses the practice in functional way to improve the	PhP 6,200.00
relationship between the product, function and cost as used to study mold or die.	

METALWORKING TECHNOLOGY	
Title of Program /Duration/Course Description	Seminar Fee
Electroplating Processes (18 hours) Focuses on the principles and process of electroplating, decorative chromium, hard chromium, gold/silver and zinc plating.	PhP 5,200.00
Heat Treatment of Steels (30 hours) Covers the different heat treatment processes of steel, i.e. annealing, normalizing, spheroidizing, tempering, stress relieving, direct hardening, carburizing, carbonitriding, tufftriding and flame hardening.	PhP 7,400.00
Metal Fabrication (30 hours)	PhP 8,200.00



Covers the fabrication processes applied to fabricate metal products, and the typical fabrication materials used.	
Shielded Metal Arc Welding (SMAW) (24 hours) Covers welding of metals in different positions and welding joints, common problems, causes and remedies in SMAW operation, knowledge of properties of metals & use of personal protective equipment as a standard working procedure.	PhP 9,000.00
TIG Welding on Carbon Steel Plates-Module I (30 hours) Provides knowledge and skills in TIG process, principle, advantages, limitation, techniques, causes and prevention of discontinuities encountered.	PhP 13,800.00
GMAW/MIG-MAG Welding on Carbon Steel Plates – Module I (30 hours) Provides knowledge and skills in MIG/MAG process, principle, advantages, limitation, techniques, causes and prevention of discontinuities encountered.	PhP 12,100.00

QUALITY MANAGEMENT SYSTEM	
Title of Program /Duration/Course Description	Seminar Fee
Customer Satisfaction Measurement	
(16 hours)	
Focuses on the fundamental concept of customer satisfaction	PhP 4,000.00
measurement through statistical analysis and interpretation of	
survey data.	
Internal Quality Audit	
(24 hours)	
Aims to realize the importance of internal quality audit as a tool	
in identifying improvement opportunities in the QMS; interpret	PhP 6,300.00
requirements of ISO 9001 in the context of audit; describe the	1111 0,500.00
roles and responsibilities of internal auditors; plan and conduct	
an audit in accordance with ISO 19011:2018 Standard.	
Awareness Seminar on ISO 9001:2015	
(8 hours)	
Discusses the eight (8) Management Principles and the	PhP 2,500.00
highlights of the ISO 9001:2015 standard.	



Root Cause Analysis	
(16 hours)	
Discusses the application of various Root Cause Analysis	PhP 5,000.00
techniques for continual improvement.	
Awareness on Risk Management	
(Based on ISO 31000:2018)	
(8 hours)	
Discusses the Risk Management Principles, Risk Management	PhP 2,500.00
Framework and Process, Risk Assessment and Risk Treatment	
Techniques.	
Effective Skills for Audit Reporting	
(8 hours)	
Discusses the Risk Management Principles, Risk Management	PhP 2,500.00
Framework and Process, Risk Assessment and Risk Treatment	1 111 2,500.00
Techniques.	
Developing and Implementing a Laboratory Quality	
Management System Based on ISO/IEC 17025	
(24 hours)	
Covers understanding the clauses of ISO/IEC 17025,	PhP 6,000.00
preparation of the required documentation, practical guidance to	
documentation, implementation and accreditation.	
(Prices may increase without prior notice)	

# MIRDC REGULAR SEMINAR/TRAINING FEES (Online)

ANALYSIS AND TESTING	
Title of Program /Duration/Course Description	Seminar Fee
Industrial Calibration (9 hours) Covers calibration principles and procedures on pressure, temperature, and mass.	PhP 3,000.00
(Prices may increase without prior notice)	



ENGINEERING, PRODUCTION AND PLANNING	
Title of Program /Duration/Course Description	Seminar Fee
Module 1: Overview of Production and Operations Management (6 hours) Discusses the Production and Operations Management, Service Operations, Manufacturing Operations and identify the differenct approaches for managing operations.	PhP 1,000.00
Module 2: The Extent and Opportunities of Production and Operations Management: Its Functions and Scope (18 hours)  Aims to understand the various functions in the Production and Operations Management and explains its scope.	PhP 2,500.00
(Prices may increase without prior notice)	
METALWORKING TECHNOLOGY	
Title of Program /Duration/Course Description	Seminar Fee
Geometric Imperfections in Metallic Materials for Fusion Welding (3 hours) Discusses imperfections, differentiate imperfection from defect, identify ISO Number System Classification of Imperfections and its designation.	PhP 400.00
(Prices may increase without prior notice)	



### **II. Technology Advisory and Business Development Services**

A. Technology Advisory and Business Development Services - Short-term Consultancy Services

Consultancy is requested by an individual, company or association designed to suit their specific requirements.

A Short-term Consultancy Service is a one (1) day or less engagement that is conducted on-the-spot or as scheduled and is free of charge or with fee required.

Office/Division:		Technology Diffusion Division – Technology Advisory and Business Development Section					
Classification:	Highly Technical						
Type of Transaction:	G2C - Governmen G2B - Governmen G2G - Governmen	t to Busines		•			
Who may avail:	All						
CHECKLI	ST OF REQUIREMEN	NTS		WHER	E TO SECURE		
1. Request Letter / c	one (1) copy			Requesti	ng Party		
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID		ROCESS IG TIME	PERSON RESPONSIBLE		
1. Inquire or request for technical assistance/ consultancy services through letter, phone, fax, email or personally	1. Evaluate client's inquiry/request and/or accomplish Technical Assistance Request Report (TARRF) Form,	None	10	minutes	Senior Science Research and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or Science Research Specialist and/ or Science Research Specialist II and/ or Supervising Science Research		



				Specialist of TABDS
2. Provide information based on required intervention	2.1 Provide on- the-spot expert advice thru on-line platform or face to face.  2.2 Recommend to client if further on- site consultancy visit is required and/or provide correspondence (i.e. letter, email)  2.3 Prepare TARRF	None	2 hours	Senior Science Research and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or Science Research Specialist II and/ or Supervising Science Research Specialist of TABDS
3. Fill-up Customer/ Client Satisfaction Survey Form	3.1 Collect and file the filled-up Customer/Client Satisfaction Survey Form	None	5 minutes	Senior Science Research and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist



	and/ or
	Senior Science
	Research
	Specialist
	and/ or
	Science
	Research
	Specialist II
	and/ or
	Supervising
	Science
	Research
	Specialist of
	TABDS
TOTAL	2 hours and 15 minutes

### B. Technology Advisory and Business Development Services - Longterm Consultancy Services

Consultancy is requested by an individual, company, or association designed to suit their specific requirements. A long-term consultancy service is more than one (1) day engagement classified as Free or Package.

A Package Consultancy Service is rendered with a specified duration and under a cost-sharing arrangement or fully paid, specified in the consultancy contract.

Office/Division:	Technology Diffusion Division – Technology Advisory and Business Development Section			
Classification:	Highly Technical			
Type of Transaction:	G2C - Government to Citizen G2B - Government to Business Entity G2G - Government to Government			
Who may avail:	All			
CHECKLIST (	IST OF REQUIREMENTS WHERE TO SECURE			
1. Request Lette	er / one (1) copy	Requesting Party		
Signed Consultancy Contract / one (1) copy		Requesting Party		
3. Billing Statement / one (1) original copy		TABDS, FAD-FMS		
4. Payment (cash	or check)	Requesting Party		



CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Inquire or request for technical assistance/ consultancy services through letter, phone, fax, email or personally	1. Evaluate client's inquiry/request and/or accomplish Technical Assistance Request Report (TARRF) Form,			Senior Science Research and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or
		None	10 minutes	Senior Science Research Specialist and/ or Science Research Specialist II and/ or Supervising Science Research Specialist of TABDS
2. Agree to onsite consultancy visit through phone, email or text/SMS.	2.1 Provide tentative schedule of visit.  2.2 Check availability of consultant and/or technical staff  2.3 Prepare a proposal, including costing if the consultant and/or technical expert is non-TABDS personnel.	None	45 minutes	Senior Science Research and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or Science Research Specialist and/ or Science Research Specialist Il and/ or



	2.4 Send a proposal to the client.			Supervising Science Research Specialist of TABDS
3. Confirm the conduct of onsite consultancy by sending back the signed proposal.	3.1 Finalize schedule of visit with the client.  3.2 Organize consultant and/or technical staff.  3.3 Request and approval of Authority to Travel, if required. Prepare Job Order.	None	2 hours and10 minutes	Senior Science Research and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or Science Research Specialist and/ or Science Research Specialist II and/ or Supervising Science Research Specialist of TABDS
	3.4 Consultant and/or technical staff travel to the site on the scheduled date	None	1 day	Consultant and/or Technical Staff
4. Attend onsite consultancy activities.	4.1 Provide on- the-spot expert advice. The visit can be in conjunction with a conduct of seminar/ training program. (*Duration may depend on the	Refer to Standard Rates on Consulta ncy and Other Fees or compute d based on applicabl	3 days*	Consultant and/or Technical Staff



	T	,		,
	agreed proposal)	e circulars		
	4.2 Consultant and/or technical staff reports back to office after on-site visit on schedule date	None	1 day	
	4.3 Prepare Consultancy Report	None	3 days	
	4.4 Request for billing based on agreement and forward to the client.			
5. Pay the billing statement	5.1 Receive billing statement.  5.2 Create Order of Payment (O.P.) manually.			Administrative Officer IV or Administrative Officer V, Financial Management Section
	5.3 Reflect SOA details if there are any.	None	5 minutes	
	5.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (O.R.).			
6. Give cash/check payment and receive Official Receipt.	6.1 Receive cash/check and O.P.	As stated in the order of payment	5 minutes	Administrative Officer V or Administrative Officer II Administrative and



	6.2 Prepare Official Receipt (O.R.) 6.3 Stamp "PAID" on all billing documents and release O.R.			General Services Section
7. Receive and verify recommended course of action per consultancy report or verbal recommendation .	7.1. Send consultancy report, if required, through fax, email or courier	None	15 minutes	Senior Science Research and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or Science Research Specialist Il and/ or Supervising Science Research Specialist of TABDS
8. Fill up the Customer/ Client Satisfaction Survey Form	8.1 Collect and file the filled-up Customer/Client Satisfaction Survey Form	None	5 minutes	Senior Science Research and/ or Senior Science Research Specialist and/ or Senior Science Research Specialist and/ or



		Senior Science
		Research
		Specialist
		and/ or
		Science
		Research
		Specialist II
		and/ or
		Supervising
		Science
		Research
		Specialist of
		TABDS
TOTAL	8 days, 3 hour	s and 35 minutes

### STANDARD RATES ON CONSULTANCY AND OTHER FEES

Rev. 3 / Effectivity Date: 06 November 2019

### **Establishment of Quality Management System Conforming to ISO 9001**

Activity	No. of Hours	Honoraria of External / Consultant	Consultancy Fee
Consultancy			
Assessment (Initial) on 5S Implementation	8 to 16	No. of hours x 0.023 x MSRmin	Php 500.00 / Mn- Hour
Gap Analysis on Existing QMS	4 to 16	No. of hours x 0.023 x MSRmin	Php 500.00 / Mn- Hour
Evaluation of New/Updated QMS Documents	8 to 24	No. of hours x 0.023 x MSRmin	Php 500.00/Mn- Hour
Implementation Audit and Monitoring	8 to 32	No. of hours x 0.023 x MSRmin	Php 500.00 / Mn- Hour
Corrective Action Planning on NC after Implementation Audit	8 to 16	No. of hours x 0.023 x MSRmin	Php 500.00 / Mn- Hour
Correction Action Planning on NC found during Certification Audit	4 to 8	No. of hours x 0.023 x MSRmin	Php 500.00 / Mn- Hour
Assessment and Planning prior to Surveillance Audit	8 to 24	No. of hours x 0.023 x MSRmin	Php 500.00 / Mn- Hour



Competency Development of Internal Auditors	8 to 18	No. of hours x 0.023 x MSRmin	Php 500.00 / Mn- Hour
Actions to Address Risks and Opportunities thourough Risk Management Process	8 to 16	No. of hours x 0.023 x MSRmin	Php 500.00 / Mn- Hour

Technologies and Process Improvements and related Concerns					
Activity	No. of Hours	Honoraria of External / Consultant	Consultancy Fee		
Consultancy					
Advisory on Metalworking, Metalcasting, Heat Treatment and Electroplating Technologies and Process Improvements and related Concerns	4 (minimum )	No. of hours x 0.023 x MSRmin	Php 500.00 / Mn- Hour		
Calibration Measurement Audit Report	n/a	n/a	Php 1,000.00 / report/ artefact		
Others					
Local Transportation Allowance (PUV, Venue to MIRDC, v.v.)	n/a	Php 800.00 / visit			

# C. Technology Advisory and Business Development Services - Conduct of Measurement Audit

Measurement Audit is the comparison of laboratory results to values established by a reference laboratory. It takes into account the measurement uncertainties assigned to the reference value and those reported by the participating laboratory. Performance is evaluated by the internationally accepted method of calculating  $E_n$  ratios and is reported in the Measurement Audit Report.

Office/Division:	Technology Diffusion Division – Technology Advisory and Business Development Section			
Classification:	Highly Technical			
Type of Transaction:	G2B - Government to Business Entity			
Who may avail:	All			
CHECKLIST O	OF REQUIREMENTS WHERE TO SECURE			
1. Endorsement/Req photocopy	ndorsement/Request Letter / one (1) Philippine Accreditation Bureau; sent in advance to MIRDC			



2. Signed Job C	Order Form / one (1)	original	TABDS			
copy	ortificato / ana (1) a	riginal	17.550			
	3. Calibration Certificate / one (1) original copy			Requesting company		
4. Calibration Cone (1) copy	ertificate of Referen	ce Lab /	MIRDC Laborato	ory		
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE		
1. Sign Job Order Form and submit client calibration certificate, if available.	1.1 Check availability of PAB endorsement /request letter in Calibration Lab and TSR Form generated by ATD for the art- fact 1.2 Print-out Job	None	10 minutes (may take additional depending on the quantity of the measurement audit reports requested)	Science Research Specialist and/ or Senior Science Research Specialist and/ or Supervising Science Research Specialist of TABDS		
2. Proceed to Cashier. Present JO form, pay the corresponding sees and receive the Official Receipt. The client has the option to pay the fees on a separate date but should be prior to the completion of the Measurement Audit Report.	Order Form 2.1 Direct client to the Cashier	P1,000 /artifact (refer to Standard Rates of Consulta ncy Fees)	1 minute	Science Research Specialist and/ or Senior Science Research Specialist and/ or Supervising Science Research Specialist of TABDS		
3. Pay the required fee stated in the J.O. form	<ul><li>3.1 Receive J.O. form;</li><li>3.2 Create Order of Payment (O.P.) manually.</li></ul>	None	5 minutes	Administrative Officer IV, or Administrative Officer V, Financial Management Section		



				<u> </u>
	3.3 Reflect SOA details if there are any.  3.4 Forward O.P. and other documents to Cashier for issuance of Official Receipt (O.R.).			
4. Give cash/check payment and receive Official Receipt	4.1 Receive cash/check and O.P.  4.2 Prepare Official Receipt (O.R.)  4.3 Stamp "PAID: on all billing documents and release O.R.	As stated in the order of payment	5 minutes	Administrative Officer V or Administrative Officer II Administrative and General Services Section
5. Confirm submission of Measurement Audit Report to PAB by MIRDC-TABDS	5.1 Claim Calibration Certificate from ATD. Refer to procedure on Analysis and Testing Services.  Note: Release of certificate is dependent on the agreed date between the client and the calibration lab which is reflected in the TSR.	Refer to ATD Services Fees	15 minutes	Science Research Specialist and/ or Senior Science Research Specialist or Supervising Science Research Specialist of TABDS



		TOTAL	2 days	and 51 minutes
6. Fill up the Customer/Client Satisfaction Survey Form.	6.1 Collect and file the filled-up Customer/ Client Satisfaction Survey Form	None	5 minutes	Science Research Specialist or Senior Science Research Specialist or Supervising Science Research Specialist of TABDS
0.5"	5.3 Release to CRO the original copies of the Measurement Audit Report for conveyance to PAB.		10 minutes	Administrative Aide III FAD-AGSS, CRO
	5.2 Typing/ Encode, checking and signing of Measurement Audit Report and cover letter.		2 days	Science Research Specialist or Senior Science Research Specialist or Supervising Science Research Specialist of TABDS

# D. Technology Advisory and Business Development Services - Technology Licensing

Technology Licensing pertains to activities involving transfer of knowledge for the manufacture, application or rendering of service of MIRDC-developed technologies and processes which involve the transfer, assignment or licensing of MIRDC intellectual property rights.

Office/Division:	Technology Diffusion Division – Technology Advisory and Business Development Section			
Classification:	Highly Technical			
Type of Transaction:	G2B – Government to Business Entity			
Who may avail:	All			
STAGE 1: REQI	STAGE 1: REQUEST FOR TRANSFER OF TECHNOLOGY			
CHECKLIST OF REQUIREMENTS WHERE TO SECURE				
Phase 1: Preparatory for the Tr	ransfer of Technolog	ly		
1. Letter of Intent/one (1) copy	,	TABDS or Requesting Party		
2. DTI or SEC Registration/one	Concerned government office			
3. Audited Financial Statement (1) photocopy	Requesting party			



greement / six (6) orig	TABDS		
on for Terms of Licens	ing and C	onfirmation of Lice	nsina Aareement
			<u> </u>
. ,	ement		
		TABDS	
		_	
	riginal		
.g / .g. c c c (c) c		TABDS	
AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1.1 Evaluate technology requirements and give information of MIRDC-developed technologies. Provi de technology demo, if requested.	None	2 hours	Science Research Specialist or Senior Science Research Specialist or Supervising Science Research Specialist of TABDS
2.1 Receive for processing Letter of Intent or Request client to submit Letter of Intent on a later date, if undecided.	None	5 minutes	Science Research Specialist or Senior Science Research Specialist or
3.1 If available, request the client to submit supporting documents as proof of business identity and capacity to support licensing requirements.	None	5 minutes	Supervising Science Research Specialist of TABDS
	e (1) c copy etion of Licensing Agree n Report nendation g Agreement/six (6) o  AGENCY ACTION  1.1 Evaluate technology requirements and give information of MIRDC-developed technologies. Provi de technology demo, if requested.  2.1 Receive for processing Letter of Intent or Request client to submit Letter of Intent on a later date, if undecided.  3.1 If available, request the client to submit supporting documents as proof of business identity and capacity to support licensing	ation of Licensing Agreement n Report nendation g Agreement/six (6) original  AGENCY ACTION  1.1 Evaluate technology requirements and give information of MIRDC-developed technologies. Provi de technology demo, if requested.  2.1 Receive for processing Letter of Intent or Request client to submit Letter of Intent on a later date, if undecided.  3.1 If available, request the client to submit supporting documents as proof of business identity and capacity to support licensing  None	on for Terms of Licensing and Confirmation of Licensing Agreement  In Report

Agreement (NDA)

PHASE 1: PREPARATORY FOR THE
TRANSFER OF TECHNOLOGY TIME

4.1 Prepare

Nondisclosure

4. Sign the

agreement

Nondisclosure

2 hours and 30 minutes

20 minutes

None



Activities are based on Republic Act No. 10055 (Technology Transfer Law), its IRR and DOST policies.

PHASE 2: NEGOTIATION FOR TERMS OF LICENSING AND CONFIRMATION OF LICENSING AGREEMENT					
CLIENT STEPS	AGENCY ACTION	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE	
5. Concur licensing terms by signing the term sheet or licensing agreement	5.1. Negotiate terms for licensing	None	2 days  Note: May require several negotiation meetings with client.	Science Research Specialist, or Senior Science Research Specialist or Supervising Science Research Specialist of TABDS	
	5.2 Prepare endorsement letter of transaction with supporting documents to FOB secretariat	None	2 hours	Science Research Specialist or Senior Science Research Specialist or Supervising Science Research Specialist of TABDS	
	5.3 Submit to Fairness Opinion Board Secretariat	None	Note: 40 days Processing of Fairness Opinion Report & Written Recommendation per RA 10055 IRR	FOB Secretariat	
PHASE 2: NEGOTIATION FOR TERMS OF LICENSING AND CONFIRMATION OF LICENSING AGREEMENT TIME  2 days, 2 hours and 30 minutes (excluding FOR processing)					

PHASE STAGE 3: CONFIRMATION OF LICENSING AGREEMENT						
6. Final confirmation to the licensing agreement	6.1 Inform client upon receipt of Fairness Opinion Report (FOR)	None	15 minutes	Science Research Specialist or		



	and Written Recommendation			Senior Science Research
	6.2 Send to the client copy of the final licensing agreement (only if the client concurred to the licensing terms in the term sheet; omit this step if the client has signed a licensing agreement)	None	15 minutes	Specialist or Supervising Science Research Specialist of TABDS
	6.3 Notarize Licensing Agreement	None	2 days	Administrative Aide III FAD-AGSS, CRO
	6.4 Send Client's copy of Licensing Agreement	None	2 days	Science Research Specialist or Senior Science Research Specialist or Supervising Science Research Specialist of TABDS
7. Pay licensing fee based on the licensing agreement	7.1 Issue Order of Payment  7.2 Accept and Process payment	Per agreement	10 minutes	Administrative Officer IV, or Administrative Officer V, Financial Administrative Officer V or Administrative Officer II Administrative and General Services Section



8. Implement	8.1 Implement	None	Per	Science Research
terms of	terms of licensing		agreement	Specialist
licensing				or
				Senior Science
9. Fill up the	9.1 Collect and	None		Research
Customer/	file the filled-up			Specialist
Client	Customer/Client		5 minutes	or
Satisfaction	Satisfaction			Supervising
Survey Form.	Survey Form			Science Research
				Specialist of
				TABDS
PHASE 3: CONFIRMATION OF LICENSING			A days a	nd 45 minutes
AGREEMENT TIME		4 uays a	iiu 45 iiiiiiules	
TOTAL			6 days, 3 hoι	irs and 15 minutes



# **TECHNOLOGY DIFFUSION DIVISION**

# **Internal Services**



### I. Assistance to Staff Development Unit (SDU) of MIRDC

The Assistance to Staff Development Unit (SDU) of MIRDC is an internal service where MIRDC employees can also avail the regular training/seminar program provided by ITS for strengthening the competency of MIRDC personnel.

Office/Division:		Technology Diffusion Division-Industrial Training Section (ITS)				
Classification:		Simple				
Type of Transact	ion:			ment to Governm	ent	
Who may avail:		MIRC	C Persoi	nnel		
CHECKLIST OF REQUIREMENTS				WHERE TO	SECURE	
<b>Authority to Atter</b>	nd	Admi	nistrative	and General Ser	vices Section, FAD	
CLIENT STEPS	AGEN ACTI		FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE	
1.Present/Submit Memorandum of Authority to Attend	1.1 Inclute the list of attended 2.2 Preptible mater and the logistics necessary hold the training	of es. pare erials	None	5 minutes 4 days and 40 minutes	Training Specialist I, Program Design and Promotion (PDP) Unit or Training Specialist II, Program Design and Promotion (PDP) Unit or Training Specialist III, Program Design and Promotion (PDP) Unit	
2. Attend training  (Trainee must take the postexamination and accomplish the evaluation before it can claim the Certificate).	2.1 Con the Train			Depends on the program	Resource Speaker	
				TOTAL	4 days, 45 minutes	



SITUATION	ACTION	LOCATION OF ACTION	REMARKS
If there is an available slot in the regular program, the ITS will inform the SDU to invite an internal participant (MIRDC Employee) to attend the program with corresponding Authority to Attend (ATA).	The ITS Training coordinator in-charge will give to SDU a Customer/Client Satisfaction Measurement Survey Form for Internal Services.	ITS Office or HR Office	Collect the accomplished CCSM form and forward it to Planning and Management Division (PMD).



FEEDBACK AND COMPLAINTS MECHANISMS		
How to Send a Feedback?	<ul> <li>Accomplish our Customer Satisfaction Survey         (CSS) Form provided by our front-liners and return         the accomplished form to said front-liner</li> <li>Send your feedback through electronic message         accessible at MIRDC website or email it at         http://www.mirdc.dost.gov.ph, or</li> <li>Personally talk to the Executive Director of the         Center</li> </ul>	
How are Feedbacks Processed?	<ul> <li>Our front-liners collect, check for completeness, compile and record all CSS Forms</li> <li>Customer Satisfaction Rating below 3 are reported to the immediate supervisor concerned for appropriate action; the recommended action are recorded by the respective Division Chiefs.</li> <li>All survey responses are consolidated and monitored, evaluated and analyze by the PMD in order to identify opportunities for improvement.</li> </ul>	
How to File a Complaint? (For Goods-Related	<ul> <li>Accomplish our Customer Feedback Form and send it to the Division/Section Chief concerned</li> <li>Provide details as much as possible</li> </ul>	
Complaints) How are complaints Processed?	<ul> <li>Return the product/s, if advised.</li> <li>A control number will be assigned on the CSF Form</li> <li>Your complaint will be reviewed by the Division/Section Chief concerned and you will be contacted to get more details, if necessary</li> <li>You will be advised to return product/s, whenever applicable</li> <li>Goods will be tested/inspected, if applicable, and you will be informed of the findings/recommendation</li> <li>Product will be rework/replace, whenever necessary</li> </ul>	
How to File a Complaint (For Service-Related Complaints)	<ul> <li>Accomplish our CSF Form which will be forwarded to the concerned Division</li> <li>Third party may file on behalf of the complainant provided the complainant is identified on the CSF form.</li> </ul>	



How are Complaints Processed?	<ul> <li>Customer's complaint will be acted upon within 15 working days from date of receipt</li> </ul>
	<ul> <li>Concerned Division Chief will discuss customer's complaint with concerned unit and approves the</li> </ul>

vision Chief will discuss customer's concerned unit and approves the action to be taken

Concerned unit will take the appropriate correction/corrective action

• Feedback will be relayed to the complainant

Contact Information:	
Anti-Red Tape Authority (ARTA)	ARTA: complaints@arta.gov.ph
	1-ARTA (2782)
Presidential Complaints Center	
(PCC)	PCC: pcc@malacanang.gov.ph
	888
	(02) 8736-8621
Contact Center ng Bayan CCB	
(CCB)	CCB: e-mail@contactcenterngbayan.gov.ph
	1-6565 (hotline)
	0908-881-6565 (SMS)
Legal and Public Assistance	,
office (LPAO)	LPAO: (02) 8929-9436; (02) 84262075;
	(02) 84262801; (02) 84262450;
	(02) 84262987; (02) 84262683



### OFFICE

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