metals industry
TRENDS & EVENTS
MIRDC
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MIRDC's AGT System Gets Thumbs Up After Test Run

Department of Science and Technology (DOST) Secretary Mario G. Montejo and UP President Alfredo Pascual were on board the Automated Guideway Transit (AGT) during its maiden test run done last 14 December 2012 at the UP Diliman campus in Quezon City. The AGT, being the first-ever Filipino designed train, is a product of the collaboration between DOST engineers and UP experts.

The train's main mechanical frameworks or rolling stocks are constructed by the Metals Industry Research and Development Center, the project's lead implementing agency. With the Project Management Engineering and Design Services Office (PMEDSO) providing the designs and specifications, Miescor Builders and Fil-Asia Automotive are local companies that were subcontracted to construct the guideway and the coaches, respectively.

As an immediate action after the original prototype and its successful preliminary tests conducted in the DOST Complex, the DOST ventured into its pilot project for an elevated test track and initiated the AGT System Light Version, a mass transit that is best-suited for thickly-populated narrow streets.

The AGT Project started with thorough research on train systems and their various components and aspects. Based on research, and coupled with the design improvements and control tuning requirements gathered from the first prototype, the AGT Light Version makes use of a track that is able to provide a mechanism that carries power rails, communication equipment and all other electromechanical components.

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Outstanding Accounting Office Award: Another Winning Move by MIRDC

The Finance Management Section (FMS) of the Metals Industry Research and Development Center (MIRDC) bagged the award as one of the most outstanding accounting offices among the national government agencies.

The MIRDC received the award from the Association of Government Accountants of the Philippines, Inc. (AGAP), through the recommendation of the Commission on Audit (COA)-MIRDC Auditor Team led by Ms. Bonafe B. Español and Mr. Antonio Nicandro D. Saba Jr. The award was given based on the 2011 Audit Performance Summary Report which shows the Center's proficiency in performing accounting, controlling, budgeting, auditing, cashiering, and other financial functions.

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In this issue

From the Officer-In-Charge.....

Agustin M. Fudolig, Dr. Eng.
Officer-In-Charge, MIRDC

The months of September to December capped an eventful and fulfilling 2012 for the Metals Industry Research and Development Center. The MIRDC continues to help the metals and engineering industries carve a niche for itself in the country's pitch for economic growth and advancement. The Center remains true to its Philippine Quality Award recognition – a world-class organization that lives by the rules of performance excellence.

The Center stands proud with other relevant accomplishments as it bids 2012 farewell. Emerging victorious in all its endeavors, the MIRDC takes the M&E industries to better grounds. The MIRDC is always an active participant in the annual National Science and Technology Week. For the last leg of 2012, the Center took its technologies to Tacloban City Convention Center for the Visayas Cluster last 24-28 September 2012; to KCC Mall in General Santos City for the Mindanao Cluster last 10-14 October 2012; and lastly to Waltermart in San Fernando, Pampanga for the Southern Luzon Cluster last 22-24 November 2012. The NSTW regional exhibitions was an opportunity for the Center to showcase the Sweet Sorghum Juicer/Sugarcane Crusher, Hydroseeder, and the Pandanus Leaves Slitter-Presser, the newest technologies of the Center that aim to liven up the business spirits of our fellow Filipinos in the regions.

We also took part in the Paliwanagan sa UP Diliman (UPD), the Colloquium and Fair 2012 under the Office of the Vice Chancellor for Research and Development last 5 September 2012. Being one of the R&D partners of the UPD, we were able to put in the spotlight the Center's products and services as well as its matured and newest technologies.

Furthermore, the launching in November of the Micro Cupola Furnace was another activity that highlighted the strong linkage of MIRDC with its R&D partners. The MIRDC, in collaboration with the Bataan Peninsula State University and the Philippine Council for Industry, Energy and Emerging Technology Research and Development, is successful in coming up with the Micro Cupola Furnace which is designed for foundries with low-volume requirements for cast iron. It is specially suited for both the business-inclined entrepreneurs and the professionals along with the professionals-to-be in the world of the academe. Local fabrication of the Micro Cupola Furnace will strengthen the competitive edge of the industry for it is seen to boost income generation in the countryside, and give a more reliable hands-on experience for future engineers and technicians when used as a laboratory teaching aid.

The country has been facing the "brain drain" issue with regard to the number of available skilled CNC machinists. It is along this line that the MIRDC initiated a project entitled "Development and Implementation of Appropriate Training Curriculum Design for CNC Machine Tool Programming and Operation as Human Resource Intervention for the Sustainable Growth, Productivity and Competitiveness of the Metals and Engineering Sector." As the project came full swing, the first batch of qualified participants had their orientation last December 5, and officially had day 1 of the fifty two-day training program last December 6, 2012. The program consists of three parts: Basic and Common Competencies; Core Competency; and Industry Immersion. The implementation of the initial Training Curriculum Design is presently done at the MIRDC. The next batches will use either the facilities of MIRDC or of Partner Support Organizations. Through the program, the critical need for CNC machinists will soon be addressed.

Two of the Center's technologies included in the High Impact Technology Solutions (HITS) are the Automated Guideway Transit (AGT) System and the High-Capacity Water Hyacinth Harvester. As the year nears its end, exciting things from these two projects took place. The Harvester was transported and deployed at the Laguna Lake last 05 December, where a series of tests and performance evaluations is set to be conducted. At the moment, validation of test results is on-going.

The AGT, on the other hand, underwent its maiden test run last 14 December 2012 at the UP Diliman campus. Created to reduce traffic and air pollution in Metro Manila, the DOST-UP AGT will soon be launched to the public. Engineers and technicians from the project team are soon to work on Phase 3, whose track is to be built along the Bicutan area.

The MIRDC unwaveringly makes its presence felt by metalworking shops across the country. Through the project entitled "Formulating the R&D Programs and HRD Plan of MIRDC Technology Roadmaps of the M&E Sector through Technology and Training Needs Assessment," personnel from the Technology Diffusion Division conducted 2TNA survey in various regions. As the project nears completion, results validation and output dissemination were held in several selected regions. This initiative will be used as a springboard in drafting proposals for the next projects that will put into focus the technology and training requirements that will pave the way for a more vibrant and competitive M&E industries.

Amid all the activities going on inside and outside the Center, the MIRDC family set aside time for a fun and very warm celebration of the Christmas season. Held last 18 December, the Christmas party was well-attended by MIRDC personnel. There were the traditional division musical presentation, song numbers, games, awards, raffles and food. It was indeed one of the best bonding moments among the MIRDC family members.

The last four months of 2012 has been busy, pressure-laden, even. Nevertheless, it has been a fruitful year for the MIRDC. Facing the year-long challenges together brought forth positive results. We will stand united to serve the M&E industries; we will aim to continuously make a mark as a Center of Excellence and make the country proud.

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Contributors

Concesa T. Cortez
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Vilma A. Sia
Teresita C. Villoso

Layout/Graphics

Ronald L. Agustin

Printing

Ronald L. Agustin
Reynaldo M. Loreto, Jr.

Circulation

Josephine R. Esguerra
Eugenio R. Mercado
Dolly Marie T. Talaron

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Editorial Office:

MIRDC Compound, General Santos Ave.
Bicutan, Taguig City, Philippines
P.O.Box 2449 MCPO, Makati
1299 M.M., Philippines

Tel. Nos.:
(MIRDC Trunklines) (632) 837-0431 to 38
(DOST Trunklines) (632) 837-2071 to 90
locs. 2401 & 2407

Fax No.: (632) 837-0430/837-0764

Website: http://www.mirdc.dost.gov.ph

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MIRDC's AGT System...from cover

The track is also designed to keep the train safely positioned since it serves as guide to the guide wheel assembly, which in turn serves as the most critical component for the safe steering of the rolling stock.

The rolling stock assembly consists of the chassis and two bogies. The chassis serves as the skeleton of the car while the bogies carry the weight of the chassis. Together, the assembly further improves the safety, efficiency and comfort features of the train.

Another impressive component of the AGT is the coach. Design simplicity and aesthetics were prioritized in the conceptualization and fabrication of the coach which is made up of two cars, each with a standing room capacity for a maximum of thirty persons. Seats are provided for elderly and disabled passengers.

Metropolitan commuters would see features in the AGT that they have grown used to: smooth and sleek-designed coach which is spacious and fully air-conditioned. The AGT, however, uses rubber tires on a concrete track, and runs on electricity but does not come with the usual overhead cables.

The power required for the electrification of the rolling stock and the coach peripherals is provided by a 650V DC 250kW system. The electrical system involves the power room, housing the 3-phase transformer coupled with a six-pulse rectifier set-up, where power rail electrification is produced; the power rail that transports the 650V DC from the power room to the coach; and the current collector assembly which provides power to the motor drivers and the auxiliary inverters in the coach after it receives DC electricity from the power rails.

Heavy vehicular traffic in Metro Manila and other areas in the country will soon be answered through the DOST's AGT System. Upon completion of the test runs, the train's speed and capacity will be established; its controls, power and stress system mechanisms will be polished; and its trouble-shooting procedures will be fine-tuned.

When asked about the goals of the AGT System project, DOST Secretary Mario Montejo said it is "to train local engineers to operate their own designed transport system and enhance their competency in the area of transportation technology" more than just creating a Filipino train version. He also said that the AGT System train is one vehicle that will best exemplify cost-effectiveness and sustainable technology.

UP President Alfredo Pascual added more positive feedback about the AGT System. He said that with the AGT, pollution in the campus can be reduced, and effects of climate change can be mitigated since the AGT is a transport system that runs on electricity. When asked about the economic benefits of the AGT, he was quoted as saying "one practically stimulates the economy by reducing costs, speeding up the movement of people, or developing an industry."

The test stage is scheduled to be completed by June this year according to Engr. Jonathan Q. Puerto, MIRDC's Deputy Executive Director for R&D and the AGT Project Leader. Recommendations from the DOST-UP AGT will be used as basis for the design of the 120-passenger capacity train that is to be built in Taguig City.

Outstanding Accounting Office...from cover

Other agencies of the Department of Science and Technology (DOST) which were also granted the Outstanding Accounting Office award are the Food and Nutrition Research Institute, the National Academy of Science and Technology, and the Philippine Council for Health Research and Development.

In addition, awardees from national government agencies include the Office of the Vice-President, the Film Development Council of the Philippines, the Tariff Commission, the Philippine National Volunteer Service Coordinating Agency, the National Council for Children's Television, and the National Book Development Board. For local government units, awardees were (City Level): City of San Carlos, Negros Occidental; and (Municipal Level): Villasis, Pangasinan; Aurora, Isabela; Orion, Bataan; Binalbagan, Negros Occidental; and Monkayo, Compostela Valley.

Such awards are given out annually during AGAP conventions. This year's awarding was held during the AGAP Convention-Seminar on 24 October 2012 at the Water Front Casino, Lahug, Cebu City. The MIRDC was represented by its outstanding accounting staff, namely: Mesdames Blesilda P. Cabaña, Marcela R. Cagalingan, Jonifer Rose D. Bernaldez, Myrna M. de Guzman, and Zenaida L. Jumilla together with Deputy Executive Director for Technical Services, Dr. Agustin M. Fudolig.

Update for GIA Project: "Formulating the R&D Program and HR Development Plan of MIRDC Technology Roadmaps of the Metals and Engineering Sectors Through Technology and Training Needs Assessment"


Ms. Lina B. Afable and Engr. Eldina B. Pinca (below) presents the output of the project in Region VII and Region V, respectively.

The industry associations were grateful for this project implemented because the Center was able to reach out, gather information, disseminate the results, and exchange ideas with the industry players to come up with the better plans and program to uplift the industry's condition.

The Center recognizes the significant contribution of the M & E industry in the development and growth of the country's economy. The MIRDC conceived this project aimed at enhancing the global competitiveness of the industry. This covers the determination of the technology & training requirements specifically for Machining & Fabrication, Tool & Die and Metal casting Sectors.

The objectives of the project are as follows: to identify priority needs of the industry in terms of technology & training requirements; to assess the current technology, existing competencies and skills of the local M & E industries; and to fill-in the gap for the local industry to be competitive locally and globally.

The project identified the local M & E firms in the selected regions, profiled and prioritized their technology and training requirements, consolidated the results of the survey. The team has been preparing and developing the R & D program and HRD plan that will be disseminated to industry associations and regional offices. Industry Profiling and 2TNA Surveys were conducted by the Technology Diffusion Division staff in Regions 1, 2, 3, 4A, 4B, 5, 6, 7, 8, 9, 10, 11, & 12, CAR, CARAGA and NCR with a total of 983 & 414 respondents, respectively.

The results of the survey were presented and validated through Industry Dialogues by MIRDC TDD-TIPS in Region 1 (Pangasinan), NCR (Pasay City), Region 7 (Cebu & Tagbilaran Cities), Region XI (Davao City) & Region V (Naga City) in cooperation with the Metalworking Industries Association of the Philippines and the respective offices of the Provincial Science and Technology Centers, and the Regional Officers of the Department of Science and Technology. Moreover, in cooperation with the Philippine Welding Society and Department of Science and Technology-Regional Offices, output dissemination were simultaneously conducted by TDD staff in the cities of Taguig, Iloilo & General Santos on 20 December 2012.

Generally, the participants of the validation session confirmed that the presented results of the survey are the ideal technology and training needs of their regions. Members of the M & E industries have high hopes now that they are working hand in hand with government offices such as DOST-MIRDC in addressing their performance.

MIRDC Develops High-Capacity Water Hyacinth Harvester

Disaster Mitigation is one of the country's serious problems that vital sectors of the government could contribute to its alleviation or solution. Recurrent floods in some places of the country had been the cause of death of dozens of people and destruction of properties. One of the reasons of recurrent floods is the clogging of rivers, lakes and other inland bodies of water posed by excessive growth of water hyacinth. This aquatic plant gives rise to risks to safety and health, interferes with irrigation and stock watering, degrades water quality and hinders water transportation and recreation.

The MIRDC spearheads the project to develop the High-capacity Water Hyacinth Harvester. This unit is the second prototype being developed by MIRDC. Its design, features and expected performance are modifications/improvements of the first prototype. Its specific objectives are: (1) to design a hyacinth harvester that suits the requirements of Pasig River and Rio Grande de Mindanao river; and (2) to promote the technology to other Local Government Units (LGUs) experiencing water hyacinth-related problem in their waterways and river systems.

Gear couplings for the iron and steel industry

In the iron and steel industry, drive components are exposed to a rough environment. Drive components are subjected to dust, dirt, water, vibrations, high temperatures and alternating loads. KTR designs all-steel gear couplings for such applications ensuring that a rolled product of continuous quality can be produced. Coupling specialist KTR has now extended its series of GEARex® gear couplings for higher performance range.

GEARex® couplings are mainly used on the drive train of reversing rolling mills or driven machines to produce seamless tubes. For such demanding conditions and high temperatures, the extended series of GEARex crown-shaped gear couplings is the optimum design. The torsionally rigid double-cardanic shaft connection allows compensation of axial, radial and angular shaft displacement while being of compact dimensions.

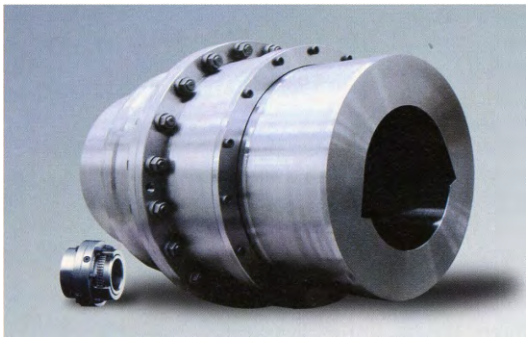
The torque range has been extended from 930 Nm to previously 510,000 Nm, up to a rated torque of 1,050,000 Nm. Long lasting lubrication by grease ensures a long service life. Radially arranged on each coupling sleeve there are two opposite hydraulic connections to ensure regular and well-controlled lubrication while being assembled. A fully assembled GEARex® coupling has four lubrication connections which are offset from each other by 90º. Gaskets made of NBR elastomer effectively seal the internal space of the coupling.

KTR designs the flange dimensions in the GEARex® coupling according to the AGMA standard (American Gear Manufacturer Association) combining the benefits of small dimensions and low natural weight with a low mass moment of inertia. The GEARex® couplings are certified and assessed according to ATEX 95 and DNV. They are suitable for power transmission in drives intended for the use in explosive areas. The couplings are suitable for horizontal assembly and, as special solution, also for vertical assembly.

Products features include double-cardanic all-steel gear coupling, high torques with small dimensions and an application range from -20º C to +80º C in general engineering, pump drives, compressors and steel mills.

The GEARex® series represents the continuation at the designing principles of KTR's BoWex® curved-tooth gear coupling for the higher performance range. The crowned gear principle avoids edge pressure in the spline in case of angular and radial displacements. Thus, the crowned shape of the teeth ensures a long service life.

Source: MPT International 5/2012, p.88



Functional field testing, evaluation and debugging are currently ongoing to meet the expected performance of the harvester. The equipment's transit speed, harvesting rate and payload capacity are the performance parameters that are currently being evaluated. Its formal launching is set on the first quarter of 2013 after all the desired parameters are successfully achieved.

Engr. Gharry M. Bathan leads the project team, with Engr. Lemuel N. Apusaga as the assistant project leader. The project is being implemented by MIRDC and the Project Management and Engineering Design Services Office (PMEDSO) of DOST with the assistance of various government agencies such as Metro Manila Development Authority (MMDA), Laguna Lake Development Authority (LLDA) and the Local Government of Muntinlupa City. This project was initiated by the DOST as part of its strong commitment and response to address calamity problems related to floodings.

"Paskong Pilipino dito sa Sentro"

MIRDC Band performs a special number led by Engr. Joel B. Bañares

The Metals Industry Research and Development Center had another fruitful Christmas celebration which was held last 18 December 2012 at the MIRDC Auditorium. The program started off with a prayer led by Ms. Jaysay L. Bactad. This was followed by the warm Opening Remarks from the Center's Officer-in-Charge, Dr. Agustin M. Fudolig. A musical number rendered by trainees under the CNC Training Project together with the MIRDC Band heated things up and set the party mood. The annual division presentations came next. The activity was graced by the presence of the Center's former Executive Director Arthur Lucas D. Cruz, who dropped by

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Development award for magnesium rolling mill

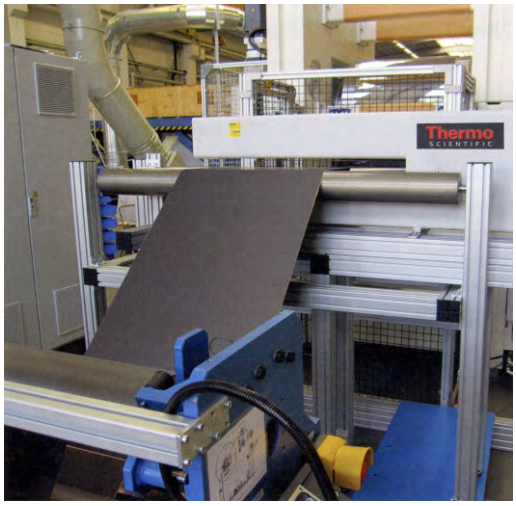
Every year, R & D magazine recognizes companies for the development of outstanding sophisticated products. Among this year's top 100 award winners is FATA Hunter, which was recognized for its contribution to the development of an asymmetric rolling mill for magnesium. This novel route for processing sheet and plate was jointly developed and submitted by **FATA Hunter** and Magnesium Elecktron North America.

Magnesium is a lightweight material that has practical applications in goods such as personal electronics and automobile production. Commercial use of magnesium had previously been limited because of the high cost associated with its multi step production process. This production process could be short-cut by twin roll casting, but significant challenges remained in the area of texture and formability of the rolled sheet. The asymmetric rolling mill provides a way to efficiently process magnesium strip produced by both the conventional and twin roll cast routes. The mill modifies the texture and improves the formability of the rolled sheet. This development will accelerate the production and availability of low-cost magnesium sheet, thereby allowing the replacement of aluminum with magnesium in many commercial goods. The widespread use of magnesium instead of aluminum in cars would reduce vehicle weight and lead to improvements in fuel economy. Funding for the project was provided by U.S. Department of Energy's Office of Energy Efficiency Renewable Energy with cost sharing from Magnesium Elektron North America.

Source: MPT International 5/2012, p.83

Laser-based optical thickness gauge

A new laser-based gauge which reduces costs by eliminating radiation compliance requirements while ensuring alloy insensitivity for flat sheet process line applications in the steel and aluminum industries has been launched by Thermo Fisher Scientific. The Laser TX gauge is the latest addition to the company's established line of online, non-contact thickness measurement and coating weight gauges. The gauge uses laser triangulation measurement

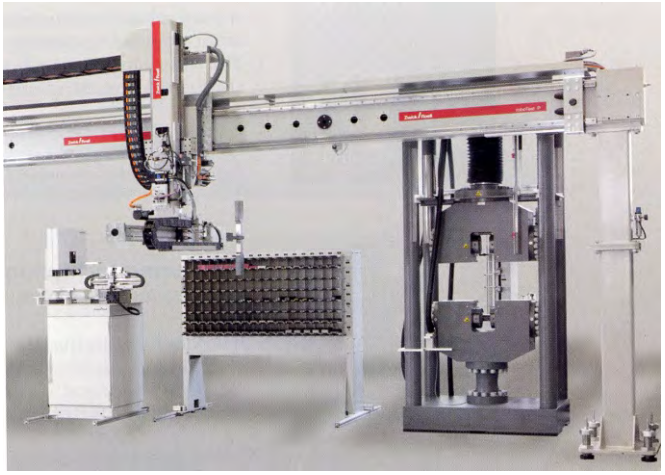


and coating weigh gauges. The gauge uses laser triangulation measurement to provide alloy insensitivity and the sensors automatically to background lighting conditions. The flexible mill interface is compatible with a wide range of mill computers and communication protocols. The device features logical operator screens that allow process engineers and OEM project planners to view all relevant data on one screen.

Source: MPT International 5/2012, p.90

Robotic tensile testing system

Baosteel of Shanghai, China, has ordered a robotic testing system from Zwick for fully automatic tensile tests on metal specimens. The roboTest P (Portal) is equipped with a Z1600E testing machine, enabling tensile tests on heavy plate, coils and hot-rolled steels with a maximum force of 1,600kN. Specimens are removed from the magazine (maximum capacity 400 specimens) completely automatically and fed into the testing machine. After the test is finished, the specimen remains are automatically removed ready for the next specimen to be tested.



The advantages of these fully automatic systems lie primarily in the error-free performance of standard-compliant tests, as the elimination of operator influence delivers highly reproducible test results. The entire test sequence is reported via the software and the test results are stored error-free. Zwick's hydraulic grips guarantee secure gripping of specimens with original lengths of 200 mm.

Source: MPT International 4/2012, p.93

MIRDC Launches Training Program on CNC Machine Tool Programming and Operation

To address the "brain drain" of CNC machinists that has negatively impacted the metals and engineering industries, the Metals Industry Research and Development Center (MIRDC) recently launched a project entitled "Development and Implementation of Appropriate Training Curriculum Design for CNC Machine Tool Programming and Operation as Human Resource Intervention for the Sustainable Growth, Productivity and Competitiveness of the Metals & Engineering Sector." The training program for the first batch of 20 trainees was opened on 5 December 2012 at the JICA seminar room in the MIRDC compound. The opening ceremonies was witnessed by representatives from DOST and industry associations.

The 52-day training covers Basic and Common Competencies (Part I), Core Competency (Part II), and Industry Immersion (Part III). More slots are available for applicants as the project aims to annually accommodate 400 participants who will then have to secure a 3-year service commitment to work in the Philippines after the training. Applicants must either be a VocTech graduate - preferably Mechanical Technology or related course or college level (at least second year level). Preferably, an applicant must have basic knowledge and skills in conventional machining (turning or milling) and basic computer operation. The training is free for unemployed participants with a provision of P300 daily allowance to defray their cost of living while undergoing training under the project. A minimal fee of P10,000.00 will be charged for employed participants. Training venue is at the MIRDC or at the facilities of Partner Support Organizations (PSOs). Interested applicants may contact MIRDC through tel. nos. 837-0764, 837-0431 to 38 locals 465 & 467 or email: mirdc_training1@yahoo.com.

MIRDC Joins Newly-Formed Aerospace Group

The Metals Industry Research and Development Center (MIRDC) recently added the Aerospace Industries Association of the Philippines (AIAP) to its network of industry partners in the metals and engineering industries and earned the distinction of becoming the first honorary member of the newly-formed group.

The AIAP is a non-stock, non-profit organization which registered with the Securities and Exchange Commission (SEC) in August 2012. The association consists of manufacturers and suppliers committed to developing a globally competitive and viable aerospace and aviation industry in the country. The AIAP seeks to promote the Philippines as an aircraft parts and components production hub by: (1) working to increase the sector's value added in manufacturing and services; (2) raising the competency and capability of its members; and (3) expanding its members' local and export markets. AIAP members, majority of whom are located inside the economic zones, are engaged in machining, special processes (e.g. surface machining), interior-fit out and maintenance, repair, and overhaul (MRO) of services. Some members supply industrial parts, equipment and other requirements of aerospace companies. The association's set of officers are: President - John Lee (Nito Seiki Manufacturing Corporation and Applied Machining Corporation); Vice President - Mr. Dennis Chan (Famous Secret Precision Machining, Inc.); Secretary – Mr. Vicente Co (Manly Plastics); Treasurer – Mr. Cesario Chua (Calco Industries, Inc.); and Auditor – Mr. Willie Estoque (Moog Controls Corporation).

MIRDC is officially represented in the association by Dr. Agustin M. Fudolig, Office-in-Charge, Office of the Executive Director, and Ms. Mercedita G. Abutal, Chief of the Planning and Management Division.

The Center looks forward to building a strong partnership with stakeholders in the aerospace industry. The global aerospace industry is considered to be a very lucrative market for Philippine companies. The industry likewise provides MIRDC with an opportunity to develop its expertise in more advanced manufacturing technologies.

Pressure on to Meet Exports Goal, Officials Say
PH Unlikely to Meet 2012 Trade Goals

With exports expected to fall below target this year, the pressure is on for a turnaround starting next year to meet the country's medium-term goals, officials said.

"We just have to work harder since our growth target next year will be higher than what we initially targeted. There is a plan for improving processes, developing new markets, and such. The key factor is if the markets will absorb more," Philippine Exporters Confederation president Sergio Ortiz-Luis Jr. said in a phone interview.

Exports will probably end the year with 5 percent to 6 percent growth as electronics, which make up the bulk of shipments, "could be negative," Luis added.

Exporters are aiming for an 11 percent annual growth in exports starting in 2013 to hit $120 billion in 2016.

In 2010, exports were valued at $51.498 billion.

The goal was based on the assumption of a 10-percent growth in outbound shipments this year from last year's $47.967 billion. But even Trade Secretary Gregory Domingo said that, "more realistically," exports revenue may grow between 5 to 7 percent.

And with this year's result likely to be lower than expected, the country's exports will have to grow at rates faster than initially targeted starting next year in order to meet the $120-billion target of 2016, the Export Development Council (EDC) said.

"We can still double up [exports] by 2016, [but in the years ahead] growth should be about 14 or 15 percent [a year]," EDC Executive Director Senen Perlada told reporters last week.

Semiconductors and Electronics Industry of the Philippines Inc. (Seipi) President Ernesto Santiago said earlier they expected exports of electronic products to be "flat" this year given the continuing drop in outbound shipments.

Seipi initially set a 10 to 15 percent growth target for exports of electronic products this year, but it reset its projection to between 5 and 7 percent in July, citing a weak global recovery affecting demand for shipments.

Ortiz-Luis said that while electronic exports are still down from a year ago, the Philippine Exporters Confederation is optimistic that next year will be better.

Economic woes in the US and the EU may not fester for long, Luis said. "Electronics is on the rebound."

From January to August, outbound shipments of electronic products declined by 8.13 percent to $15.59 billion from last year.

Aggregate merchandise exports as of end-August, meanwhile, reached $35.283 billion—up 5.4 percent from last year.

The Philippines is aiming for an average 7 to 8 percent growth in domestic output a year from 2010 to 2016 to curb poverty, based on the Philippine Development Plan.

Source: Philippine Daily Inquirer
November 5, 2012

Shipping containers of Philippine products for export sit stacked along the docks of the international container port in Manila on September 11, 2012. Exporters are aiming for an 11 percent annual growth in exports starting in 2013 to hit $120 billion in 2016. AFP PHOTO/JAY DIRECTO

TESDA, MEITI Deal Gives Welders Training Big Push

The Technical Education and Skills Development Authority (TESDA) has unveiled a partnership with a Middle East-based training institute to upgrade the skills of Filipinos welders.

The Middle East Industrial Training Institute (MEITI) would provide the training equipment worth P20 million in addition to sharing its curriculum and trainers. It would also assist in the job deployment of graduates.

MEITI would likewise help in the assessment and certification of graduates using the standard of the American Welding Society (AWS), a requirement for a welder to work in the Middle East.

"International training institutes are betting big on the Filipino skilled workers," Secretary Joel Villanueva, TESDA Director General, said after signing the memorandum of agreement with MEITI last 19 October 2012.

TESDA's Regional Training Center in Buhisan, Tibungco in Davao

City will serve as the venue for the training.

Villanueva said Filipinos, who plan to work abroad, and returning overseas Filipino workers (OFWs), who wish to upgrade their skills with AWS credentials, would be granted training scholarship and employment by the MEITI on project basis.

The scholars may undergo training courses in welding, pipefitting and industrial application.

"The partnership with MEITI opens up avenue to achieve the AWS training, assessment and certification for the world labor market in the fields of metal and engineering," Villanueva said.

"This gives our graduates an almost sure entry to the companies they want to work for," he added.

According to its website, MEITI is a multifaceted establishment with business address at P.O. Box 33229, Abu Dhabi, UAE. It was founded in 2002 to excel knowledgeable Training and Certification of local and international students primarily in Nondestructive Testing and Welding Sector in various industries throughout the Middle East.

Before end of 2006, the Institute has been audited by American Welding Society and eventually acquired the Accreditation as one of the Authorize Facility for Testing and Certification of Welders, Inspectors, Supervisors and Engineers.

Source: www.tesda.gov.ph
22 October 2012

Gov't Urged to Level Playing Field in Steel

MANILA, Philippines - The Philippine Iron and Steel Institute (PISI) is appealing to Finance Secretary Cesar Purisima and Customs Commissioner Ruffy Biazon to level the playing field in the steel products industry.

The group has complained to the Department of Finance and the Bureau of Customs that Joyland Industries Corp., a Cebu-based company is engaged in technical smuggling as it is able to import finished steel products at below the prevailing prices of scrap metal.

Industry players are complaining that the Bureau of Customs Cebu is favoring Joyland, a claim that Cebu Customs Collector Ronnie Silvestre denied.

"There is no smuggling going on. There is no violation," Silvestre told The STAR.

He said that Cebu Customs is looking into the matter and has asked the industry players to formally submit a rejoinder, which they have not submitted yet.

Joyland a company based in Mandaue, Cebu is engaged in the importation of finished steel products, mainly smaller sized steel wire rods that is rolled and passed off as reinforcing steel bars. The products are distributed through hardware stores and used for small construction projects.

However, PISI said Joyland is able to import finished products at prices below prevailing industry rates.

In a statement, PISI claimed that on 9 May 2012, Joyland brought in a shipment of 7,904.17 metric tons of finished steel wire rods.

The declared value of the imports was $279 per metric ton, below the import price of $640 to $700 during the April to May 2012 period.

Furthermore, PISI said that in January 2011 when prices were at $480 to $495 per metric ton, Joyland was declaring its imported finished products even lower than scrap prices.

Aside from PISI, the Steel Institute and the Galvanized Iron Wire Manufacturing Association is also appealing to Biazon and Purisima to look into the matter.

The groups said that the Bureau of Customs is allowing the Cebu steel company to use the "transaction value method" for determining taxes and duties due imported products.

"Under this method, the importer simply presents documents indicating the value of the shipment, provided these are notarized by accredited lawyers form the source," PISI said.

According to PISI, the group has already sent several letters to Biazon, seeking the investigation of some import shipments passing through the Port of Cebu.

The last was dated 10 May 2012 wherein the group asked Biazon to look into the undervaluation of imported steel products for shipments that came in last March.

Source: The Philippine Star, September 12, 2012

Paskong Pilipino...from p5

to join his MIRDC family in this celebration.

Unanimously chosen to be the Masters of Ceremony were Ms. Melanie V. Espression and Engr. Remartin S. Maglantay. Their cheerful and spontaneous personalities made the happy gathering even more fun.

The program consisted of fun "Pinoy" games such as pukpok palayok, eggplant-matchbox race, and kainang saging (banana eating contest), and a special song number from Engr. Joel B. Bañares. 55 grocery packs, 46 home appliances/necessities, and PhP 16,000.00 worth of cash and gift certificates were given for the raffle draws. The three lucky winners of the major prizes are: Mr. Myro M. Baroña, who won an electric pot (2nd Prize); Mr. Celso L. Aguisanda, who took home the 3D Industrial Fan (1st Prize); and Mr. Ronilo C. Sanchez, who happily welcomed Christmas with his brand new Samsung 32" LED TV as grand prize. The program was formally closed by Deputy Executive Director for R&D, Engr. Jonathan Q. Puerto.

MIRDC Launches Micro Cupola Furnace

The Metals Industry Research and Development Center's (MIRDC) project entitled, "Development of a Micro Cupola for Foundry Research, Instruction and Small Novelty Item Casting Production" was launched last 13 November 2012. The project, in cooperation with the Department of Science and Technology (DOST), the Bataan Peninsula State University (BPSU) and the Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD), aims to develop and optimize an iron melting cupola or micro-cupola with small a size and a lower melting rate than standard-sized cupolas, and to promote its use to local foundries, universities and other interested groups through technology demonstration.

Engr. Rodnel O. Tamayo gave the welcome message, and delivered the opening message on behalf of Dr. Agustin M. Fudolig, the Deputy Executive Director for Technical Services of the Center.

Engr. Lemuel N. Apusaga, the project leader presented the outcome of the project. He discussed the functions and most desired features of the Micro Cupola. Likewise, he mentioned the project's objectives, one of which is to promote the cupola to potential technology adopters, the industry and the academe, which is one way of realizing the Center's mandate. He showed the test results and discussed the status performance of the micro cupola. Likewise, he revealed that phase 2 of the Micro Cupola Project is targeted to be implemented in 2014.

On the other hand, Engr. Rodrigo C. Muñoz of Bataan Peninsula State University(BPSU) expressed his gratitude to MIRDC for making BPSU as co-implementor of the project. As co-implementor, BPSU is responsible for promoting the use of micro cupola to academe, thus strengthening foundry technology. He emphasized that foundry technology is incorporated in the programs of mechanical engineering, electrical engineering, electronics engineering, and civil engineering under the materials science course. He also mentioned the foundry products they produce and clients who have demands for some foundry products. He also revealed that BPSU has a plan to come up with a manufacturing and materials science laboratory in three to five years time.

After the presentations, actual demonstration was witnessed by the participants at the MIRDC foundry shop. The closing remarks was given by Engr. Jonathan Q. Puerto, Officer-In-Charge, Office of the Deputy Executive Director for Research and Development. He emphasized that MIRDC is into Public-Private Partnership, thus, the Center welcomes interested collaborators.

The realization of the micro cupola is a great accomplishment of the DOST and beneficial to the academe especially for students taking up foundry technology and engineering courses as foundry practices will eventually be part of their academic curriculum. As to the industry, this micro-cupola will find application in foundries with low iron melt requirements such as those for jobbing and decorative items manufacturing particularly in the provinces.

Equipment Manufacturing Cluster-II Establishes Its Foothold in Region 2

Aligning all its activities with the National Science and Technology Plan 2002-2020, the Metals Industry Research and Development Center (MIRDC) has taken steps in order to develop the local metals and engineering industries. One of the major endeavours of the Center is its initiative in industry clustering, with the major objective of pushing the industry toward global competitiveness.

With an industry cluster in place, the MIRDC aims to liven up the firms who are into supply, fabrication, design and development of agricultural/industrial equipment, spare parts and other commodities related to the manufacture of such finished products. At the same time, the Machinery, Parts and Engineered Products (MPEP) cluster for the M&E industries was recommended by the Export Development Council for its enhanced global competitiveness by means of optimizing comparative and competitive advantages, having broader specialization, stronger business partnership, more rigid R&D, and a deeper focus on innovation.

Guided by these noble vision, the MIRDC has successfully coordinated with the DOST Region 2 upon learning that the region, being agricultural, is very open to the idea of implementing the cluster. Thus, following a series of industry dialogues headed by the Executive Director himself, Engr. Arthur Lucas D. Cruz, the Equipment Manufacturing Cluster for Region 2 (EMC-II) was organized and was later formally established on 20 May 2009.

The EMC-II includes in its list of activities the undertaking of research and development projects and economic and feasibility studies; dissemination of technical and statistical information; and the conduct of training and consultancy to promote the development of the industry in region 2.

The Center has been very supportive of the metalworking firms in the region making its presence strongly felt through extending technical assistance and consultancy services. Cagayan Region is consistently a participant to technology transfers/demonstrations regarding coconut fiber processing machines. The MIRDC-developed pineapple fiber decorticating machine also helped promote to the rest of the country the different products that come from this valuable raw material.

With the advent of the EMC-II, the MIRDC became more determined to boost the capability of the M&E industries of Region 2. Trainings such as Machine Shop Operation and Metal Classification, and Production Planning and Control were conducted in the months of August and October 2011, respectively. EMC-II member companies have been able to fabricate and deliver several units of equipment to various clients. Moreover, the Bioengineering seminar conducted in the region, in collaboration with DOST-II, was meant to enhance the capability of coconut growers/farmers and to develop the region's coconut industry as a whole. The EMC-II found a perfect opportunity to provide intervention with regard to fabrication of high impact coco equipment required in the production of geotextiles and biologs.

A meeting between the MIRDC and the EMC-II was held in September 2012. It has been a productive meeting that led to the establishment of the cluster's plans and programs for 2012-2017. The EMC-II is gearing up for international partnership in 2017, and is determined to achieve this goal through resource sharing and complementation, capability building, Technology Business Incubation, establishment of Common Service Facility, and broadening of network and linkages.

The MIRDC conducted verification and assessment of machine tools through the initiative of Executive Director Cruz as an expression of the Center's support to the achievement of the cluster's plans and programs. After which, it has been decided upon by the Center to turn these machine tools over to the EMC-II. The machine tools, utilized in a project of the Department of Trade and Industry in Region III, have long been left unused after the said DTI project was completed. Transfer from the MIRDC to region 2 was done on 28 June 2012. Rehabilitation of these machine tools was conducted by EMC-II personnel. Aside from fulfilling the purpose of assisting the EMC-II in their various business ventures, the MIRDC lent the equipment to the cluster with the aim of developing capability in terms of machine repair and rehabilitation.

Lathe machine before (left) and after (right) rehabilitation.

Pedestal grinder before (left) and after (right) rehabilitation.

Shaper machine before (left) and after (right) rehabilitation.

Upon completion of the testing stage, the rehabilitated machine tools are already being utilized by the cluster for fabrication. The cluster is also continuously engaged in different projects, which are focused on the use of the following equipment: organic fertilizer mixer; organic fertilizer shredder; oil extractor; boiler; and dryer. At the moment, these projects are implemented within the region.

During the early years of its establishment, the EMC-II was able to rake in an income of about P10,000 to P40,000 per month. Not bad for a starter. With the rehabilitated machine tools, the cluster has started to venture into more fabrication jobs with high-volume outputs and is currently generating an income of P200,000 to P300,000 monthly.

Having the necessary equipment and the desired capability for rehabilitation, the cluster can accommodate more clients and confidently faces stiff competition.

The MIRDC and the EMC-II's partnership does not end here. The Center will assist the cluster in identifying other pertinent machine tools that will be needed in the future for better operations. In fact, the development and fabrication of a Pipe and Tube Bending Machine, including other farm implements, has already been recommended by the MIRDC with the commitment to provide training on the said machine's operation and maintenance.

Editorial Office:

MIRDC Compound
Gen. Santos Avenue
Bicutan, Taguig City
Philippines
P.O. Box 2449 MCPO
Makati 1299, M.M.,
Philippines

metals industry MIRDC
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