

# BROWN RICE PRODUCTION MADE EASY

## Implementing Agency:

Department of Science and Technology –  
Metals Industry Research and Development  
Center (DOST-MIRDC)

## R&D Partners:

Philippine Center for Post-Harvest  
Development & Mechanization (PHilMech)  
Project Management and Engineering  
Design Services Office (PMEDSO)

## Funding Agency:

Philippine Council for Agriculture, Aquatic  
and Natural Resources Research and  
Development (PCAARRD)

## Cooperator:

Catalanacan Multi-Purpose Cooperative  
(CAMPC)

## Industry Partners:

Mariñas Technologigies Inc.  
Sumang Rice Thresher and Welding Shop



for more information, please write, fax, call, or email:



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# Retrofitted Compact Rice Mill for Production of Both Well-milled and Brown Rice

Brown rice is said to offer several health benefits. Its production, instead of that of well-milled rice, can also increase milling recovery by up to 10%, resulting to a 10% additional supply of rice.

As per inventory of the Philippine Center for Postharvest Development and Mechanization (PHiMech) of milling machines, almost all (96.25%) rice mills used in the Philippines are compact type rice mill. Retrofitting these compact rice mills will allow rice mill owners to produce both well-milled and brown rice.

Project Title : Retrofitting of a Compact Rice Mill for Brown Rice Production  
 Objective : To enhance brown rice production by retrofitting a common type of compact rice mill in the Philippines  
 Priority Area : Rice Mechanization  
 Research Program : Enhancing Rice Product and Post Production Efficiencies through the Improvement and Use of Appropriate Technologies.



Retrofitted Compact Rice Mill System in PHiMech Science City of Muñoz, Nueva Ecija.



Retrofitted Compact Rice Mill System in CAMPC, Science City of Muñoz, Nueva Ecija.

## SPECIFICATION OF RETROFITTED COMPACT RICE MILL IN PHILMECH\*

Input Capacity 494.8 kg/hr (brown rice operation)  
 Milling Recovery 63 % (milled rice operation)  
 Hulling Recovery 69 % (brown rice operation)

## SPECIFICATION OF RETROFITTED COMPACT RICE MILL IN CAMPC\*

Input Capacity 437.8 kg/hr (brown rice operation)  
 Milling Recovery 66% (milled rice operation)  
 Hulling Recovery 71% (brown rice operation)

\*Using RC216 variety

## RETROFITTING PROCEDURE

- Assessment of Existing Equipment
- Rice Mill Modification
- Addition of a Single Layer Paddy Separator (as needed)
- Addition of Bucket Elevator Paddy Separator (as needed)
- Modification of equipment layout (as needed)
- Fabrication and installation of necessary paddy and rice ducts



Compact Rice Mill



Retrofitted Compact Rice Mill in PHiMech



Retrofitted Compact Rice Mill in CAMPC



Paddy Separator