



Compact Rice Mill for Heirloom Rice

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WHAT IS A COMPACT RICE MILL?

A compact rice mill is a two-stage mill which has separate processes for hulling and polishing. The commonly available compact rice mills in the market use rubber rollers but there are a few models that use polyurethane for the huller. Both rubber rollers and polyurethane remove the husk. The brown rice is then polished with a steel friction whitener. Two-stage mills reduce overheating of the grain and allows the operator to set individual settings for each step of milling. This feature ensures higher milling and head rice recoveries. The milling recovery of compact rice mills is normally above 60% which is way higher than that of a single-pass mill like the micro mill.

WHAT ARE THE FEATURES?

- Dockage sorter – Dockage refers to materials other than paddy and includes chaff, stone, weed seeds, soil, rice straw, stalks, etc.
- Rice husk/hull and bran separator – most commonly available two-stage mills have this feature in just one outlet.
- Adjustable polisher grade – the compact rice mill has settings for semi-polished to polished rice.
- Upgraded durability of wear and tear parts, leading to lower maintenance cost.
- Low temperature polishing, leading to higher head rice recovery.

HOW IS ITS PERFORMANCE?*

Milling Capacity: 300 kg/h
 Milling Recovery: 68%
 Head Rice Recovery: 77%
 Input Tank Capacity: 40 kg
 Energy Consumption: 4 kW/h

*Values are based from the manufacturer's manual



HOW IS A COMPACT RICE MILL USED?

1. Prepare the rice mill and make sure that all moving parts are well guarded and buckets are placed under all outlets.
2. Prepare the paddy to be milled. It should be clean from dockage and moisture content should be at least 14%. After making sure that the bin outlet at the bottom is closed, put the paddy in the bin tank.
3. Set the polishing degree knob (5) to the desired degree from 0-14, zero for brown rice and 14 for white rice.
4. Turn on the power switch button (1) and the rock screen/vibrator switch button (2).
5. Open the bin lever (3) slowly to start the milling process.
6. Pull the polishing lever (4) to open the hopper where the brown rice is conveyed.
7. When milling is done, pull the vibrator lever (6) to empty the screen from the remaining polished rice.
8. Turn off the vibrator switch (2) and then the power switch (1).

For the complete procedure and information on operation and maintenance, refer to the user's manual.

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 For more information, visit the Rice Knowledge Bank online at rkb.org.org or contact the MPH Cluster at postharvest@irri.org

