



**AMTEC**  
**Agricultural Machinery Testing and Evaluation Center**  
**1977**

**ACR 064:2024 CHECKLIST AND REMINDERS FOR THE AMTEC TEST CONDITIONS AND REQUIREMENTS FOR MICROMILL**

**■ Application for AMTEC Test**

The test applicant shall submit AMTEC-OP-F01 (Agricultural Machinery Test Application Form) together with the following requirements:

- AMTEC-OP-F16 (Waiver for Machine Specification)
- AMTEC-OP-F18 (Data Privacy Consent Form)

**■ Technical Specifications of the Machine**

The test applicant shall submit any document/s indicating the specifications and other relevant information of the machine upon application for testing.

- Operator's manual with complete machine specifications as indicated in Annex B of PAES 227:2005
- Machine specifications sheet (shall be filled out upon request and receipt of copy from AMTEC in case the manual or brochure is not available)
- Brochure

**■ Preparation and Operation of the Machine**

During performance test, the micromill shall be ready for operation by ensuring that it has been assembled and installed for normal operation. The officially designated representative and/or operator of the test applicant shall operate, demonstrate, adjust, repair, and decide on matters related to the operation of the machine. The operator shall be skilled in operating the micromill.

**■ Running-in of the Machine**

A test run shall be conducted prior to the official test to check its condition and make necessary adjustments to the machine according to the recommendation of the manufacturer. No other adjustments shall be permitted while the official test is on-going.

**■ Test Material**

Test materials to be used shall have the following characteristics:

- Locally grown paddy (as much as possible single variety);
- Should be dried with moisture content of  $14 \% \pm 1 \%$ ;
- The purity of the material is 98 % minimum;
- Type of grain should be long and slender (long grains – palay whose average length of the full brown rice grain is above 6.5 mm, slender grains – palay with whole milled rice grain having length/width ratio over 3.0; and
- The amount of test material that will be used in performing shall be sufficient for 1.5 hours or equivalent to three -30 minutes test trial of continuous milling operation.

**■ Other Test Necessities**

The following shall also be adequately supplied during the conduct of testing:

- Fuel sufficient for the entire duration of test trials and extra fuel for refilling after test trials (for engine-driven machines);
- Engine oil (for engine-driven machines);
- Uninterrupted power supply (for electric motor-driven machine);
- Tools for machine repair and adjustments;
- Sacks/Containers; and
- Extra weighing scales.

**■ Machine Operation**

- The micromill shall be operated at the test applicant's recommended settings.
- The recommended feeding rate shall be maintained during each test run with a duration of at least 30 minutes.
- After the test run, the micromill and the area shall be cleaned and prepared for the next test trial



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### ■ Standard Tools

Basic tools shall be provided for the micromill. These tools shall be suitable to the necessary adjustment operations during maintenance and operation.

### ■ Performance and Fabrication Requirements

AMTEC shall conduct various tests and verification on different parameters of the machine including the following requirements as per PAES 226:2005:

#### ■ Performance Requirements

Criteria	Requirement as per PAES 226:2005
Milling Recovery, %, minimum	62
Head Rice, %, minimum	50
Broken Grains, %, maximum	50
Bran, %, maximum	10
Noise Level, dB(A), maximum	92 (Allowable noise level for 6 hours of continuous exposure based on Occupation Safety and Health Standards, Ministry of Labor, Philippines, 1983)
Milling Degree	Well-milled

#### ■ Fabrication Requirements

Criteria	Requirement as per PAES 226:2005
General	<input type="checkbox"/> Steel, cast iron or any other suitable materials shall be generally used for the manufacture of the different components of the micromill. <input type="checkbox"/> The milling capacity should be specified by the manufacturer. <input type="checkbox"/> There shall be provisions for lubrication of non-sealed type bearings and belt tightening. <input type="checkbox"/> Provisions for safety of the operator from all moving components of the micromill such as belt guard or cover

#### ■ Workmanship and Finish

Criteria	Requirement as per PAES 226:2005
General	<input type="checkbox"/> Micromill shall be free from manufacturing defects that may be detrimental to its operation. <input type="checkbox"/> Any uncoated metallic surfaces shall be free from rust and shall be painted properly. <input type="checkbox"/> Micromill shall be free from sharp edges and surfaces that may injure the operator.

#### ■ Suspension and Termination of Test

If the test material does not conform with the recommended quantity and characteristics, AMTEC shall not proceed with the test. Should the test applicant request the conduct of the test despite the non-conformity to the test requirements identified, the applicant shall sign the AMTEC Waiver for Nonconformity to Test Requirements.

- AMTEC-OP-F24 (Waiver for Nonconformity to Test Requirements)

If the machine stops due to major component breakdown or malfunction during the test run affecting the machine's performance, the test may be suspended. If the machine cannot continue the operation, the test shall be consequently terminated.



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**■ Other Assistance During Test**

1. For field and laboratory tests outside the AMTEC premises, the applicant shall shoulder the transportation expenses (i.e. fuel, toll fees, vehicle rental, plane fare, sea fare, etc.) of the AMTEC Staff assigned for the testing activity.
2. The applicant is requested to assist the AMTEC Staff in looking and/or making arrangements for hotel accommodation and food near the test site.
3. The applicant shall provide drinking water to the AMTEC Staff during the testing activity.
4. The applicant shall provide any form of shed or sunshade (e.g. tent, umbrella, etc.) for the test equipment, samples (if applicable) and AMTEC Staff during the testing activity in the field.
5. The applicant is requested to assist the AMTEC Staff in finding any means to access a safe and convenient restroom near the test site during the testing activity.

**■ Testing Fee**

1. The testing fee for micromill is PhP 13,000.
2. To proceed through AMTEC test, the test applicant shall settle at least 50 % of the testing fee which is non-refundable but transferrable.
3. In cases of additional testing during the field, the test applicant shall immediately pass the required documents and settle at least 50% of the testing fee within 5 working days after the testing proper.  
 Additional testing, number of machines: \_\_\_\_\_
4. Payment/s shall be directed to the following:  
 Through UPLB Cashier's Office (8AM to 12PM): AMTEC Trust Fund Code No. 8271632-40A2040101000  
 Through Landbank (8:30AM to 3PM): UPLB Trust Fund Account No. 1892100507 or UPLB FI Account No. 1892-1003-29

**■ Other Reminders**

1. All manufacturers, fabricators, assemblers, and importers (MFAI) shall secure a Certificate of Conformity (CC) from the Bureau of Agricultural and Fisheries Engineering (BAFE) which guarantees that their agricultural and fisheries machinery conforms with PNS/BAFS PABES or other relevant standards identified by BAFE. More information about the application for CC can be found at <http://bafe.da.gov.ph/index.php/certificate-of-conformity-of-manufacturers-fabricators-assemblers-distributors-dealers-importers-and-exporters/>.
2. All MFAI shall employ an Agricultural and Biosystems Engineer (ABE), as mandated by RA 10915 (ABE Law), who shall facilitate all activities and concerns pertinent to AMTEC testing and BAFE requirements. Do you currently have an ABE in your roster of employees?  Yes  No