

## AMTEC Agricultural Machinery Testing and Evaluation Center 1977

# ACR 030:2023 CHECKLIST AND REMINDERS FOR THE AMTEC TEST CONDITIONS AND REQUIREMENTS FOR FIBER DECORTICATOR

### 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 specifications as indicated in Annex B of PAES 229:2005

□ Brochure

□ Machine specifications sheet (shall be filled out upon request and receipt of copy from AMTEC in case the manual or brochure is not available)

# Preparation and Operation of the Machine

During field performance test, the fiber decorticator shall be ready for 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 a fiber decorticator.

# 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. During performance test, no other adjustments shall be permitted while the official test is on-going.

# Test Condition

The fiber decorticator shall be installed on a stable level ground on as site with sufficient working space.

Test Material

Test material to be used:

□ Shall be commonly or locally grown and newly harvested fiber plants such as abaca, maguey, pineapple, banana, ramie and sisal

□ Amount of test material to be supplied shall be at least 75% of input capacity (kg/h) of decorticator

### Other Test Necessities

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

□ Fuel sufficient for the entire duration of test trials (for engine-driven machines);

□ Engine oil (for engine-driven machines);

□ Uninterrupted power supply (for electric motor-driven machine);

□ Extension plugs (if needed for electric motor-driven machine); and

 $\Box$  Extra weighing scales (at least 50 kg).

# Machine Setting

□ Fiber decorticator shall be operated at the recommended setting of manufacturer

□ The same recommended feeding rate setting shall be maintained during the test run

□ A minimum of two test trials, with duration of at least 15 minutes, shall be performed.

□ After the test run, the area and the fiber decorticator shall be cleaned and then prepared for the next trial



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Construction and Performance Requirements							
AMTEC shall conduct various tests and verification on different performance parameters of the							
machine including the following requirements as per PAES 228:2005:							
Construction Requirements							
Criteria	Requirement as per PAES 228:2005						
Materials of Construction	Mild steel and metal sheet shall be generally used for the manufacture of the different components of the decorticating machine.						
General provisions	<ul> <li>Sealed type bearings should be used as protection against dust. There shall be provision for lubrication of non-sealed type bearings and bushings.</li> <li>Provision of belt cover or guard and belt tightening.</li> <li>Provision for the safety of the operators in the feeding port and other moving parts.</li> <li>Provision of mechanism for clearance adjustment between rotating cylinder and breaker/scraper block.</li> <li>Provision of mechanism for easy disengagement of power transmission.</li> </ul>						
Height of the feeding	$\Box$ Shall be accessible to an ordinary Filipino without the use of stools,						
port/table		adders, etc.					
Performance Requiremen Criteria	TS		Pequiremen				
Fiber recovery, %, minimum			Requiremen	nt as per PAES 228:2005			
a. Abaca	<u> </u>			3.37			
b. Banana							
	0.59						
c. Maguey	3.75						
d. Pineapple	1.42						
e. Ramie	5.00						
f. Sisal	3.52						
Noise Level, dB(A), maximum	95						
Minimum fiber quality		Fibers	Quality	Description			
extracted		Abaca	AD-1-ABACA DECORTICATED SUPERIOR	Fiber of this grade is of good cleaning and its color ranges from ivory white to light ochre. This grade shall be free from any shade of purple, red and greenish streaks.			
		Banana	-	-			
		Maguey	MR-1-MAGUEY ONE	In all fiber of this grade the cleaning process has been properly and carefully carried out. There are practically no scales in the fiber. The cleaning is good and the color is dull white			
		Pineapple	PID-1-PIÑA DECORTICATED ONE	Produced when the fiber is properly decorticated and dried. The fiber is almost free from scales, epidermal layers and pulps. The cleaning is good and the color varies from ivory white to almost white.			
		Ramie	rd-a-ramie Special	Fiber washed simultaneously or immediately after decortications with fresh water. It's completely free from bark, sticks (broken stems) or foreign matters. The color ranges from light straw or light greenish to light yellowish ivory or creamy and the cleaning is good.			
		Sisal	SR-1-SISAL ONE	In all fiber of this grade the cleaning has been properly carried out. There are practically no scales in the fiber. The cleaning is good and the color is dull white.			



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		Standard	Tools
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Each decorticator unit shall be provided with a set of manufacturer's standard tools required for maintenance.

# Workmanship and Finish

□ The decorticator shall be free from manufacturing defects that may be detrimental to its operation.

□ Metallic surfaces shall be free from rust and shall be painted properly. Cutting section shall be coated with anti-corrosive varnish.

□ The decorticator shall be free from unnecessary sharp edges and surfaces.

# 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 by AMTEC, 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 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.

# 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 fiber decorticator is PhP 9,000.
- 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:
- 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

- 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-assemblersdistributors-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