



Trade Facilitation through International Standards and Mutual Recognition of Agricultural Machinery Testing

1-3 April 2024

Samarkand, Uzbekistan

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PRESENTATION OUTLINE

- ❖ **The Philippine Standards Bodies**
- ❖ **DTI Standardization and Accreditation Process**
- ❖ **Overview of BAFE**
- ❖ **Standards Development and Regulations for AF Machinery**
- ❖ **Standards Adoption and Regulations Challenges**
- ❖ **Way Forward**

PHILIPPINE STANDARDS BODIES



other consumer products



products related to
agriculture and fishery



food, drugs, cosmetics,
devices and substances

Republic Act No. 7394

THE CONSUMER ACT OF THE PHILIPPINES



Standardization Process



- ❖ Bureau of Philippine Standards (BPS) – the national standards body
- ❖ Technical Committee (TC) Method – representatives from relevant stakeholders
- ❖ Fast Track Method – *en toto* adoption from international standards

Accreditation Process



- ❖ Philippine Accreditation Bureau (PAB) – the national accreditation body
- ❖ Mandated to accredit testing and calibration labs, certification and inspection bodies
- ❖ Signatory-member in international accreditation organizations

MRA



Mutual Recognition Arrangement (MRA) Certificate

In accordance with ISO/IEC 17011:2017 and the procedures of the Asia Pacific Accreditation Cooperation Incorporated (APAC), APAC hereby confirms the following APAC Member is a signatory to the APAC MRA:

*Philippine Accreditation Bureau
(PAB)*

for the scopes and sub-scopes of

		Date
Scope	Calibration – ISO/IEC 17025	16 Nov 2005
Scope	Certification – Management systems - ISO/IEC 17021-1	07 Aug 2002
Sub-scope	Environmental management systems EMS (ISO 14001)	12 Jul 2007
Sub-scope	Food safety management systems FSMS (ISO TS 22003 / ISO 22000)	21 Feb 2019
Sub-scope	Quality management systems QMS (ISO 9001)	07 Aug 2002
Scope	Certification – Product - ISO/IEC 17065	01 Oct 2021
Scope	Inspection – ISO/IEC 17020	27 Feb 2019
Scope	Medical testing – ISO 15189	27 Feb 2019
Scope	Testing – ISO/IEC 17025	16 Nov 2005

Signed on behalf of APAC by:

Ms. Chang Kwei Fern
APAC Chair

Date: 1 October 2021

APAC Secretariat
PO Box 5154, South Turramurra, NSW 2074, Australia
Tel: +61 466 262 372, Email: secretariat@apac-accreditation.org
Web: <http://www.apac-accreditation.org/>

New Zealand Society Number: 1877392

Australian Business Number (ABN): 32 287 148 894

Significance of Standards



Photo courtesy of pexels.com

- ❖ Standards in Product Certification and Testing
- ❖ Standards in International Accreditation
- ❖ MRA in Facilitating Global Trade

OVERVIEW of DA-BAFE

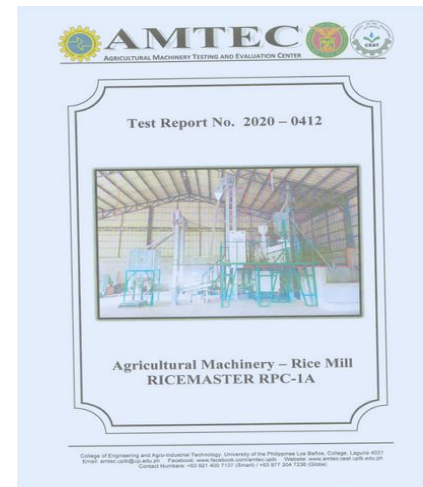
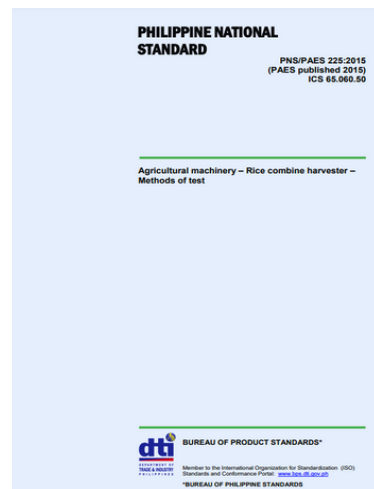
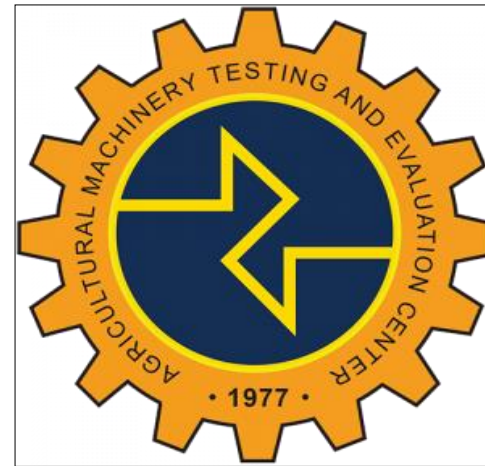
BAFE was created pursuant to Section 24 of the Republic Act No. 10601 also known as “Agricultural and Fisheries Mechanization (AFMech) Law”

- Monitor the implementation of the National Agricultural and Fisheries Modernization Program (NAFMP).
- Plan, implement, and evaluate the development of mechanization and infrastructure in the agri-fishery sector
- Functions and responsibilities related to standards;
 - (f) Coordinate and monitor the **enforcement of standards and other regulatory policies on agricultural and fishery engineering**;
 - (g) Implement **accreditation and registration scheme for agriculture and fishery machinery, tools and equipment**, in coordination with technology generators;
 - (i) Promulgate and implement **accreditation guidelines for testing centers**.

BAFE website: <https://bafe.da.gov.ph/>



AF STANDARDS DEVELOPMENT & REGULATIONS

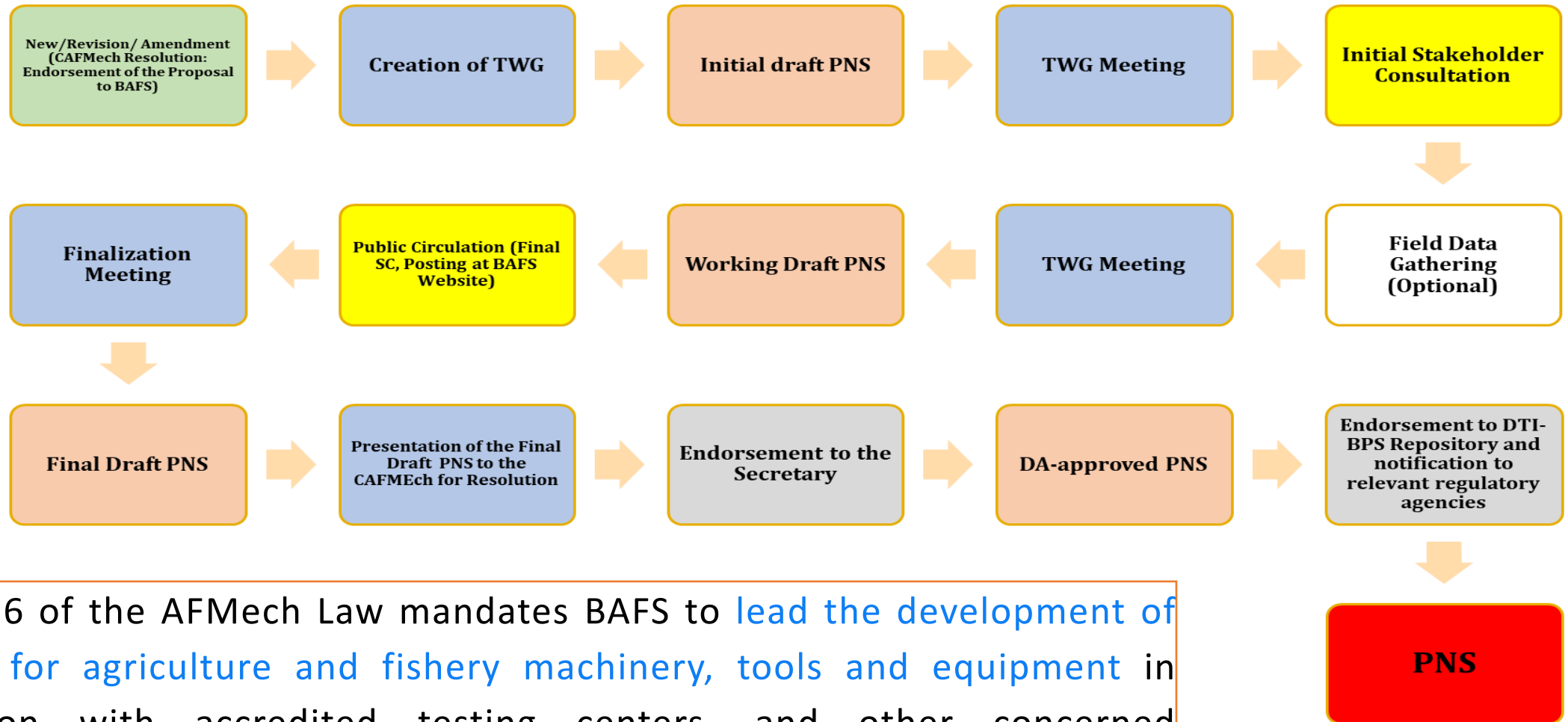


<https://bafs.da.gov.ph/>

<https://amtec.uplb.edu.ph/>



STANDARDS DEVELOPMENT PROCESS



SECTION 26 of the AFMEch Law mandates BAFS to lead the development of standards for agriculture and fishery machinery, tools and equipment in coordination with accredited testing centers, and other concerned government and private entities

AGRICULTURAL MACHINERY TESTING

PHILIPPINE NATIONAL STANDARD

PNS/PAES 225:2015
(PAES published 2015)
ICS 65.060.50

Agricultural machinery – Rice combine harvester –
Methods of test

dti BUREAU OF PRODUCT STANDARDS*

Member to the International Organization for Standardization (ISO)
Standards and Conformance Portal: www.iso.org/iso/philippines
*BUREAU OF PHILIPPINE STANDARDS



PURPOSE AND SCOPE OF TEST

Purpose	Performance Testing / Commercial
Date of Test	September 19, 2020
Location of Test	Brgy. San Miguel, Natividad, Pangasinan 16°1'44.6" N, 120°48'16.3" E
Items Tested	Input Capacity, Milling Capacity, Hulling Efficiency, Milling Recovery, Milling Recovery Index, Head Rice Recovery, Head Rice Recovery Index, Percent Broken Rice, Percent Brewer's Rice, Milling Degree, Whiteness Index, Speed of Components, Noise Level, Number of Operators, and Power Consumption

SUMMARY

Performance Criteria	Requirement as per PNS/PAES 206:2015	AMTEC Test
Hulling Efficiency, %, minimum	75	76.8
Milling Recovery Index, minimum	0.98	0.986
Percent Head Rice Index, minimum	0.90	0.907
Milling Degree	Well-milled	Well-milled
Number of Paddy per Kilogram Milled Rice, maximum	15	0
Noise Level, dB(A), maximum	92 ^a	83.6

^a Allowable noise level for six (6) hours of continuous exposure based on Occupational Safety and Health Standards, Department of Labor and Employment, Philippines, 2013.

SECTION 18 of the AFMech Law provides that agricultural and fisheries machinery and equipment to be sold in the market shall pass through testing and evaluation by the Agricultural Machinery Testing and Evaluation Center (AMTEC) in accordance with the national policies and guidelines to be promulgated by the Secretary.



STANDARD REGULATIONS

Certificate of Conformity



Performance Criteria



Operator's Manual



Fabrication and Safety

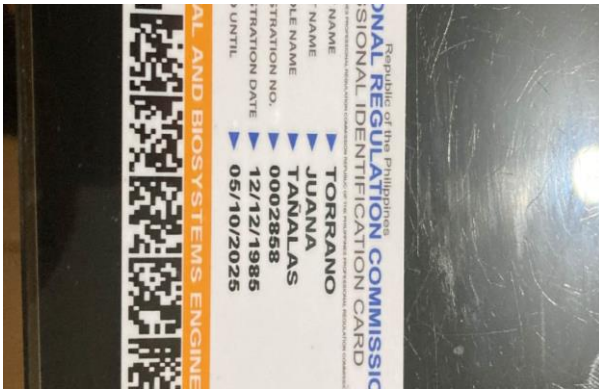


After-Sales Service

Certificate of Conformity is being issued by the BAFE which **guarantees that the agricultural and fisheries machinery conforms with PNS/PAES or other relevant standards** identified by BAFE and the PNS/PAES for the Guidelines on After-Sales Service.

STANDARD REGULATIONS

Certified Test Engineer



RA 10915 Section 5
 f. Testing, evaluation, and inspection of agricultural and biosystems machinery, and other related agricultural and biosystems engineering facilities, equipment and projects.

Coverage	Percentage		
I. Theoretical	60%	II. Practical	40%
A. PABES Specifications	25%	A. Machine specifications	10%
1. Machine specifications		1. Inspection	
2. Fabrication requirements		2. Measurements	
3. Performance requirements		3. Basic testing instruments	
4. Other relevant		B. Machine testing	20%
B. PABES Methods of Test	30%	1. Tests and measurements	
1. Test requirements (test plots and test materials)		2. Collection of test samples	
2. Procedures (tests, measurements, laboratory analysis for postharvest machineries)		C. Report Preparation	10%
3. Use of test equipment		1. Data analysis and computations	
C. Other related PABES (Safety, Operator's Manual, etc.), and laws and issuances related to testing and evaluation	5%		
		Total	100%

JUNIOR CERTIFIED TEST ENGINEER (JCTE)
 CTE with an examination score is at least 50% but not more than 60%

SENIOR CERTIFIED TEST ENGINEER (SCTE)
 CTE with an examination score of more than 60%.

STANDARD REGULATIONS

ACCREDITATION OF TESTING CENTERS

CRITERIA

- ❖ HEI, private or government entities
- ❖ At least one (1) organic/regular employee that is a Certified Test Engineer specific for the category applied
- ❖ Must satisfy the minimum requirement for the office space, testing facility, and testing equipment
- ❖ Must have a quality assurance system

VALIDITY

CoA is valid for a period of three (3) years unless suspended or revoked.



University of Southeastern Philippines
CoA Valid Until 2025



University of Southern Mindanao
Operational by 2024

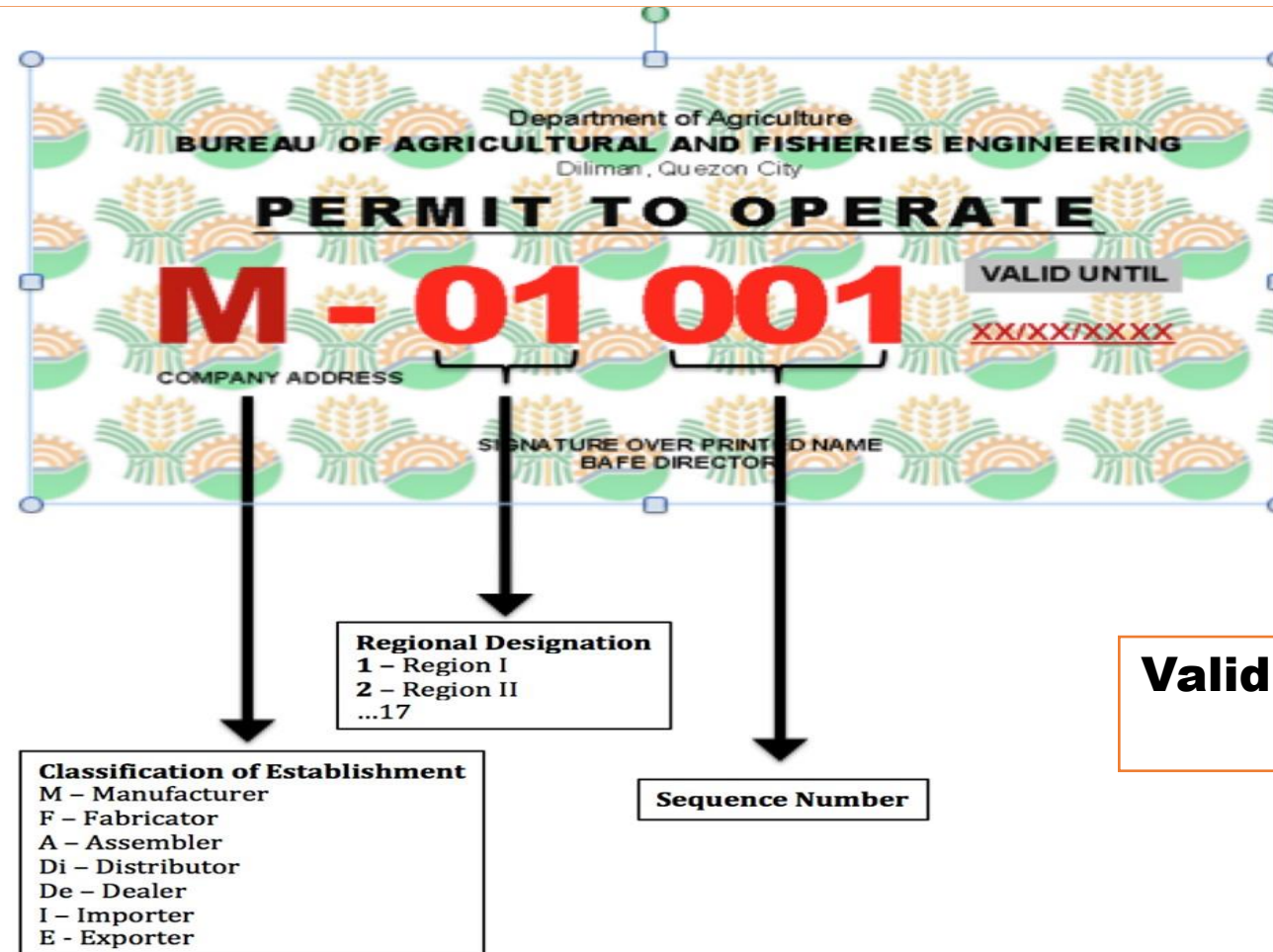
Any private, government entities and HEIs which has the capacity to measure, examine, test, calibrate or otherwise determine the characteristics and performance of agricultural and fisheries machinery and has undergone accreditation by BAFE.



STANDARD REGULATIONS

PERMIT TO OPERATE-MFADDIE

All manufacturers, fabricators, assemblers, distributors,, dealers,, importers,, exporters and other suppliers of agricultural and fisheries machinery shall register with DA-BAFE and apply for the registration and issuance of PTO..



Validity: 5 years



STANDARDS ADOPTION & REGULATIONS CHALLENGES

Slow development and updating of national technical and testing standards

Inadequate testing infrastructure to include appropriate facilities/instruments

Lack of competent full complement testing engineers/personnel

Weak market surveillance and market monitoring activities

Proliferation of sub-standard machinery and equipment



STANDARDS ADOPTION & REGULATIONS CHALLENGES

Weak implementation by Regulatory bodies due to no police power to confiscate

Misaligned/ defective technical standards due to lifting of data in any available international standards

Technical and testing standards resulted in high cost of agri-fishery machinery

WAYS FORWARD

Participate in international technical and testing standards development so as to understand the trends and directions for domestic initiatives.

Develop and update national technical and testing standards of agri-fishery machinery aligned with international standards.

Strengthen technical infrastructure with full complement of technical/test engineers/personnel to facilitate compliance and conformance with international membership obligations.

WAYS FORWARD

Upgrade competencies for regulatory agencies to build up the necessary capability to confirm imported product is compliant with standards.

Intensify market surveillance and market monitoring activities.

Raise public awareness on the importance of technical standards and testing on agri-fishery machinery quality and safety and quality.

Identify and implement capacity-building programs for technical/test engineers and support personnel.



**THANK YOU
VERY MUCH!**

Contact Us



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