REGULATIONS FOR TESTING OF AGRICULTURAL MACHINERY

Two categories of tests viz. (1) COMMERCIAL & (2) CONFIDENTIAL will be carried out at Farm Machinery Training and Testing Institutes (FMTTIs) and other twenty seven (27) Testing Centres identified by Department of Agriculture and Cooperation, New Delhi vide their notification no. 8(1)/2004-M&T(I&P) dated 14.09.2010 and subsequent revisions. The list of identified centres are given in Annexure I. The equipment which can be tested by these identified centres are given in Annexure II. The detailed regulations with regards to these tests are given below;

COMMERCIAL TESTS are for establishing performance characteristics of machines that are in or ready for commercial production. The following types of commercial tests will be undertaken :

- Initial Commercial Tests on indigenous or imported prototype machines ready for commercial production.
- Batch Test on machines which have already undergone Initial Commercial Test and or are being manufactured commercially in the country.
- Test in accordance with OECD Standard Test Code shall be undertaken on the machines in commercial production on the specific request of the manufacturer/ applicant exclusively for export purposes by FMTTIS.

CONFIDENTIAL TESTS are for providing confidential information on the performance of machines, whether ready for commercial production or not or to provide any special data that may be required by the manufacturer/applicant.

GENERAL REGULATIONS GOVERNING ALL TESTS

- Machines may be tested at the request in writing of the manufacturer/accredited importers referred to as "Applicant" hereinafter.
- Tests will be carried out at the discretion of the Director/Vice-Chancellor/ Designated official of the institutes, herein-after referred to as "Testing Authority" to whom application on prescribed form may be addressed. For testing of tractors, only Director, CFMT&TI, Budni will be recognized as "Testing Authority" for the whole country.
- All the tests will be conducted as per relevant BIS Test Code. If for any machine/ component the BIS test code is not available, the test procedure shall be framed by the Testing Authority in consultation with manufacturer/applicant and decision of competent authority shall be final.

- The lumpsum amount of test fee wherever applicable or the estimated expenditure will be intimated to the applicant who will deposit it in advance through a Bank Draft drawn on the Bank mentioned in the <u>application form</u> in favour of the CIAE- ICAR Unit, Bhopal Payable at State Bank of India, Bhopal. The test fee advance deposited in respect of the machine for which lump sum testing charges have not been fixed will be adjusted at the end of test. The applicant shall deposit the balance charges, if any, in the manner indicated above, before test report is released.
- For the machines, where lumpsum testing charges have not been fixed, the testing charges shall constitute the following :
 - All charges on account of test fee, stores, fuel, oils, lubricants, spare parts, general stores, workshop charges, other items as laid down by the Ministry of Agriculture, labour over-heads incurred during the test shall be borne by the Applicant.
 - If the tests are carried out at a place other than the premises of Designated Test Centre(CIAE) or its Regional Station, all transportation charges to and from the place of test, travelling allowance/daily allowance of the staff, etc. shall be born by the Applicant.
 - The machinery will be delivered by the applicant at the testing Institute. However, if the machinery has to be collected by the Testing Authority either from the Railway Station or from any other place, all charges incurred in transport upto the Institute shall be payable by the Applicant.
 - If the machine is withdrawn from test, written permission of the Testing Authority will have to be obtained. In such case test fee plus all other expenditure as indicated above for test conducted shall be charged. For the machines where lumpsum testing charges have been fixed, entire test fee advance shall be forfeited in the event of their withdrawal from test.
 - The lumpsum test charges as and when revised by the Government/designated authority shall have to be paid by the Applicant from the date of their applicability, even if after completion of the test.
 - Parts of assemblies of machines worn out or damaged during test shall be replaced/ repaired by the Applicant free

of cost within the time specified by the Testing Authority.

- In case some parts are required by the Testing Authority for destructive tests, these shall be arranged free of cost by the Applicant.
- In case, any services are provided by the Testing Authority, these will be charged for.
- The cost of fixtures etc. which are not normally available at the Institute and which are found necessary for working of the machine under test and all special stores items shall be borne by the Applicant.
- Parts and assemblies of machines worn out or damaged during the test may be handed over at the discretion of the Testing Authority only after the test report has been released.
- The applicant will make his own arrangements to collect the machine within one month of intimation by the Testing Authority. If the applicant fails to remove the machine in this period, the applicant will be liable for payment of ground rent as fixed by the Testing Authority for a period not exceeding four months. After the expiry of 3 months, one month notice will be served on the applicant by the Testing Authority. If the applicant fails to remove the machine within this period, the machine will become the property of the Institute and may be disposed off by auction at the discretion of the Testing Authority.
- If any un-patented machine or a machine in respect of which a proper application for patent has not been duly made, is submitted for test, it will not be published or disclosed to the public by the Central Institute of Agricultural Engineering, or Regional Institutes and the matter will be treated as confidential so that the right of the inventor or a person claiming through him to get a patent for a machine is not prejudiced.
- If in the course of testing a machine/component, any invention and/or developments originate from the officers of the **Central Institute of Agricultural Engineering**, the Government may at the discretion take out separate patents to protect the subject matter invented and/or developed.
- If the test on a machine submitted for confidential test have been conducted as per relevant commercial test procedure in all respects, then on the request in writing of the applicant, the Testing Authority, after satisfying himself may permit conversion of nature of test from

"Confidential" to "Commercial".

ADDITIONAL REGULATIONS GOVERNING COMMERCIAL TESTS

- If a machine is already in commercial production in India, the sample for batch test shall be new and be selected by the Testing Authority or his accredited representative at random from series production. No alteration/modification that would alter its practical performance shall be allowed thereafter.
- If the test is related to some branch of development work on which the Testing Institute is engaged, the whole or any part of the test fee may be remitted with the approval of the Ministry of Agriculture. No test fee or other charges will be levied for commercial testing of machines developed by research units for ICAR or other Semi-Government Organisations, Universities or State Government Departments.
- The Commercial Test Report may be used commercially by the applicant and may be published in full without any alteration or omission. No extract or abbreviated version shall be published without the written approval of Testing Authority.
- The applicant may mention in advertisement that the machine/component has been tested at the **Central Institute of Agricultural Engineering** or Regional Institutes (as the case may be) and shall invariably quote the number of the Test Report in advertisement. All the pamphlets or advertisements meant for public should indicate only performance values observed by the Testing Authority.
- The Government of India reserves the right to publish or communicate to any person or body the results either wholly or in part together with such comments and additional information as they think desirable.
- In case of machines which are marketed and are not tested for the benefit of the farmer, the Institute on the direction of the Government, reserves the right to carry out commercial test on any such machine sold in the country and to publish the result thereof.
- In case of damage to or breakdown of any particular component during the course of testing, the applicant may replace the part with a new one having the same specifications, Testing Authority

may at its discretion permit replacement of any component which the applicant has learnt is defective on account of material or workmanship. However, replacement of complete assemblies shall not be permitted. If major breakdown occurs, necessitating replacement of major assemblies, the applicant may be allowed to withdraw the machine.

- In case the machine is withdrawn from test because of reasons stated above, the applicant shall have to submit another machine after incorporation of required changes or replacements. The test report of the first machine containing the results of tests conducted and clearly stating the reasons for non-completion of tests, shall be released immediately after withdrawal of the machine from test. The test report of second machine shall contain a reference to the testing of the earlier machine.
- On the machines for which Minimum Performance Standards (MPS) have been prescribed by the Government, the applicant may opt for supplementary test for such parameter which do not meet the requirement of MPS.

REGULATIONS GOVERNING CONFIDENTIAL TESTS

- Results obtained will be the property of the applicant and will not be communicated to any person or body without the applicant's consent. The applicant shall neither publish the report nor any extract from it nor divulge test results to any other person or body without prior written approval of the Testing Authority. The report shall not be used for commercial purpose.
- In case of confidential test, adjustment, modification or alteration in the machine may be permitted at the discretion of Testing Authority.

Annexure I

Ministry of Agriculture Department of Agriculture & Cooperation (Mechanization & Technology Division)

(Revised March, 2012)

List of Institution approved by the Department of Agriculture & Corporation, Ministry of Agriculture, Government of India for Testing and Certifying Agricultural Machineries and Equipment as per Schedule-B of Annexure-II of DAC letter No. 8-1/2004M&T (I&P), dated 14.09.2010.

SI. No.	Name of Institution
1.	Acharya NG Ranga Agricultural University (ANGRAU), Rajendra Nagar,
	HYDERABAD(A.P.)
2.	Faculty of Agricultural Engineering, Rajendra Agriculture University, PUSA
	(BIHAR)
3.	Collage of Agricultural Engineering & Technology, Junagarh Agriculture
	University, JUNAGARH (GUJARAT)
4.	Sher-e-Kashmir, University of Agriculture Science & Technology
	SRINAGAR REGION (J&K) and JAMMU REGION (J&K)
5.	College of Agricultural Engineering & Technology, Choudhary Charan Singh
	Agriculture University, HISSAR (HARYANA)
6.	Birsa, Agriculture University, Kanke, RANCHI (JHARKHAND)
7.	University of Agricultural Science, Gandhi Krishi Vigyan Kendra, BANGLORE
	(KARNATKA)
8.	College of Agricultural Engineering, University of Agriculture Sciences,
	RAICHUR, (KARNATKA)
9.	College of Agricultural Engineering, Kerala Agriculture University
	Directorate of Research K.A.U.(P.O.) Vellanikkara, THRISSUR (KERALA)
10.	Central Institute of Agricultural Engineering, BHOPAL (M.P.)
11.	College of Agricultural Engineering and Technology, Dr. Balasaheb Sawant
	Konkan Krishi Vidhypeeth, DAPOLI (MAHARASTRA)
12.	College of Agricultural Engineering and Technology, Marathwada Agricultural
	University, PARBHANI (MAHARASTRA)
13.	Division of Agricultural Engineering, Indian Agricultural Research Institute,
	PUSA, NEW DELHI-12
14.	College of Agricultural Engineering and Technology, Orissa University of
	Agriculture and Technology, BHUBNESHWAR (ODISHA)
15.	College of Agricultural Engineering and Technology, Punjab Agricultural
	University, LUDHIANA (PUNJAB)
16.	College of Technology and Agricultural Engineering, Maharana Pratap
	University of Agriculture and Technology, UDAIPUR (RAJASTHAN)
17.	College of Agricultural and Engineering Post Harvest Technology,
	RANIPOOL, GANGTOK (SIKKIM)
18.	Tamil Nadu Agricultural University, COIMBATORE (TAMILNADU)
19.	Sam Hagginbottom Institute of Agriculture, Technology & Science (AAI)

	Deemed University ALLAHABAD (UTTAR PRADESH)
20.	College of Technology, Govind Ballabh Pant University of Agricultural and
	Technology, PANTNAGAR (UTTARANCHAL)
21.	Department of Agriculture & Food Engineering
	Indian Institute of Technology, KHARAGPUR (WEST BENGAL)
22.	State level Agriculture implements Testing Centre,
	Directorate (Agricultural Engineering) Agriculture Department, Govt. of
	Chhattisgarh, Telibandha, Gaurav Path, Raipur, CHATTISGARH
23.	Jharkhand Agriculture Machinery Testing and Training Centre (JAM-TTC)
	Department of Agriculture and Cane Development, (Directorate of Soil
	Conservation) Jharkhand Agriculture Engineering, Section at Extension training
	Campus, Govt. of Jharkhand, Ranchi (JHARKHAND)
24.	State Farm Machinery Training cum Testing Institute, Faculty of Agricultural
	Engineering, Bidhan Chandra Krishi Viswavidhyalaya (BCKVV), Mohanpur Distt.
	NADIA (WEST BENGAL)
25.	State Level Farm Machinery Training and Testing Institute, Govt. of UP,
	Rehmankhera, LUCKNOW (UTTAR PRADESH)
26.	State Level Farm Machinery Training & Testing Centre, Agriculture Department,
	Government of Odisha, BHUBANEAWAR (ODISHA)
27.	Farm Machinery Testing, Training and Production Centre under Department of
	Farm Power and Machinery, Dr. PDKV, AKOLA (MAHARASTRA)

<u>Ministry of Agriculture</u> Department of Agriculture and Cooperation

<u>Mechanization and Technology Division</u> LIST OF AGRICULTURAL MACHINERY AND EQUIPMENTS TO BE TESTED EITHER AT **FMTTIs OR APPROVED AGRICULTURAL INSTITUTIONS**

S.No.	Name of Equipment / Machine
Α.	Land Development, tillage and Seedbed preparation Equipment's
1.	Hydraulically Reversible MB Plough
2.	Combined Tillage Tool (Tractor drawn) /Integrated tool bar
3.	Rotavator
4.	Cultivator
5.	Disk / MB Plough
6.	All type of Harrows
В.	Sowing & Planting Equipment
7.	Tractor Driven Potato Planter
8.	Tractor Driven Ridger Seeder
9.	Tractor Driven Groundnut Planter
10.	Raised – bed Planter
11.	Tractor Drawn Sugarcane Cutter Planter
С.	Inter-cultivation Equipment
12.	Self-Propelled Reaper / Weeder and other Self Propelled machines up to 3.5
	kw
D.	Plant Protection Equipment
13.	Self-Propelled light weight boom sprayer
Ε.	Harvesting & Threshing Equipment's
14.	Tractor mounted potato digger elevator
15.	Tractor mounted groundnut digger shaker
16.	Powered Sunflower thresher
17.	Powered maize Sheller
18.	Multi-crop thresher
19.	Axial flow paddy thresher
20.	Powered Groundnut thresher / decorticator
21.	Powered maize Dehusker-cum-sheller
F.	Equipment for Residue Management
22.	Fall type straw chopper cum spreader
G	Post-Harvest & Agro Processing Equipment
23(I)	Semi – automatic mini dal mill
23(li)	All Non – Self-propelled farm Equipment including Rice Transplanter and
	Reapers Tractor Front Mounted Crop Reaper
Н.	Other Miscellaneous Machinery
24.	All types of non $-$ self Propelled Agricultural equipment's developed by ICAR , and other R&D Institutions in India