

प्रारंभिक व्यावसायिक परीक्षण रिपोर्ट
INITIAL COMMERCIAL TEST REPORT

संख्या/No. CSIR/CMERI/FMTTC/2024/072

माह/Month: DECEMBER, 2024

THIS TEST REPORT VALID UP TO

:

30TH NOVEMBER, 2031



SONALIKA AGRO INDUSTRIES CORPORATION
TRACTOR OPERATED MULTICROP THRESHER
(MCT-4900)



सत्यमेव जयते

Government Of India



कृषि मशीनरी प्रशिक्षण और परीक्षण केंद्र
Farm Machinery Training and Testing Centre
सीएसआईआर- केन्द्रीय यांत्रिक अभियांत्रिकी अनुसंधान संस्थान
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CSIR/CMERI/FMTTC/2024/072

**TRACTOR OPERATED MULTICROP THRESHER
MCT-4900 (TRAILED TYPE)
(COMMERCIAL TEST)**

Name of Machine : Multicrop Thresher
Type : Tractor Operated Conveyor Feed Type Multicrop Thresher
Make : SONALIKA
Model : MCT- 4900
Name and address of Manufacturer : M/s Sonalika Agro Industries Corporation
Jalandhar Road, Hoshiarpur
Punjab- 146001
Name and address of Applicant : M/s Sonalika Agro Industries Corporation
Jalandhar Road, Hoshiarpur
Punjab- 146001
Test Conducted at : Farm Machinery Training and Testing Centre,
CSIR – Central Mechanical Engineering Research
Institute, M.G. Avenue, Durgapur- 713209, West
Bengal, INDIA & CMERI- Centre of Excellence
for Farm Machinery, Near GNE College, Gill
Road, Ludhiana - 141006, Punjab, INDIA



THIS TEST REPORT VALID UP TO: 30TH NOVEMBER 2031
[vide DAC&FW OM No. 13-22/2020- M&T (I&P) dated 12.12.2023]

Report No.: CSIR/CMERI/FMTTC/2024/072 Month: December Year: 2024

**CSIR - Central Mechanical Engineering Research Institute,
Durgapur - 713209
(W.B.), INDIA**

**Farm Machinery Training and Testing Centre
CSIR-Central Mechanical Engineering Research Institute, Durgapur - 713209
THIS REPORT IS VALID UPTO: 30TH NOVEMBER 2031**

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3. TEST PROCEDURE / TEST CODE

There is no Indian standard/test code available for testing of tractor trailer as such. The guidelines, however, have been taken from the following:

IS: 6284:1985	:	Test code for power thresher for cereals
IS: 11234:1985 (Reaffirmed 2001)	:	Test code for power thresher for groundnut
IS: 9020:2002 (Reaffirmed 2012)	:	Power threshers-Safety requirements
IS 4333 (Part 1) 1996	:	Method of Analysis for food grains
IS 7897: 1975	:	Test code for chaff cutter
IS 4931:1995	:	Agricultural tractors - Rear mounted power take off Types 1, 2 and 3

4. SPECIFICATIONS**4.1 General**

Name and Address of Applicant	:	M/s Sonalika Agro Industries Corporation, Industrial Estate, Jalandhar Road, Hoshiarpur, Punjab
Name of Implement	:	Multi-crop Thresher
Type	:	Tractor Operated Conveyor Feed Type (Multi crop Thresher)
Make	:	SONALIKA
Model	:	MCT-4900
Serial No.	:	SAIC-111
Year of manufacture	:	2024
Size of thresher (mm)	:	860 × 1240
Recommended Power (hp /apa)	:	35 HP and above tractor
Suitable Crops	:	Gram, Wheat, Mustard, Moong, Urad, Soyabean, Jawar, Millet, Peas, etc.

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4.5 Constructional details

Main Frame	
Vertical braces size mm	: Angle-90x90x6
Horizontal braces size, mm	: Angle-65x65x6
Support braces size, mm	: Angle-65x65x6
Foundation C-Channel	: Heavy
Number	: 2
Size, mm	: Channel- 150x76x6.5

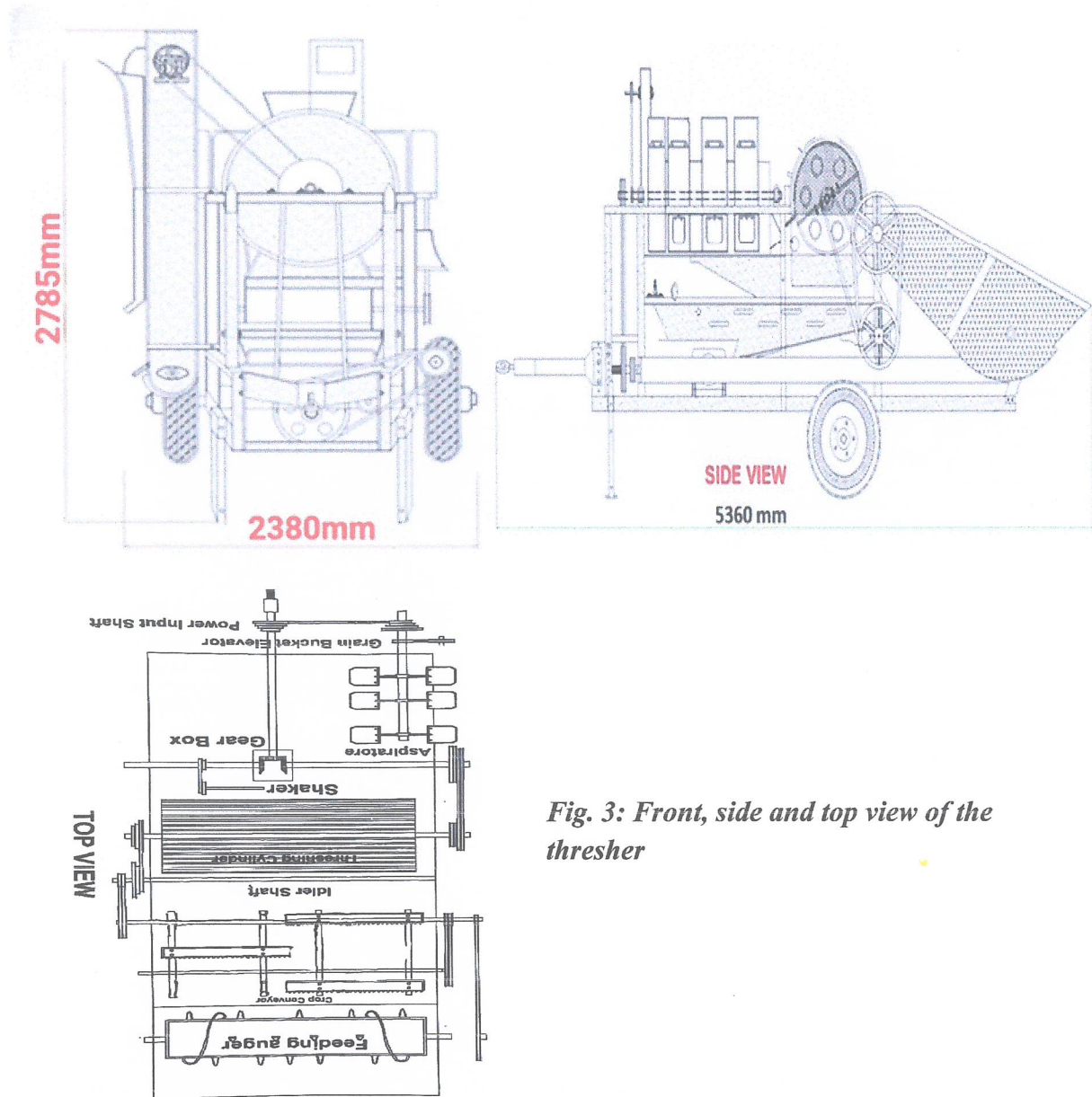


Fig. 3: Front, side and top view of the thresher

with chart of crop wise recommended revolutions per minute of the threshing drum with its direction of rotation and setting of rotation and setting of various systems.

10.9 The machine is provided with minimum cautionary as per IS 9020-2002 and as recommended at Para 9.2 of chapter 7 of this report in English. The same may also be provided in regional languages for guidance as well as ensure safety of feeder and the labours. This should be looked into.

10.10 The thresher should be provided with reflectors of suitable size and slow moving emblem at rear side.

10.11 An etched plated with following information's should be provided on the machine.

10.11.1 Recommended lubricants and lubricating schedule

10.11.2 Crop wise recommended speed and settings of various systems.

10.11.3 Suitability of different types of crops and its capacity

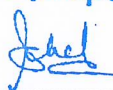
10.11.4 However, each thresher shall be marked with Model number, Batch of code number or S. Ni. If any; Power rating (kw) and revolutions per minute of the threshing drum and its direction of rotation.

10.12 Adequacy of literature: -

The Manufacturer did not submit the literature/operator's manual, parts catalog with the machine. The same should be brought out in English and other regional languages. The operator manual must contain the information as per IS 8132-1936 including the information on following points: -

- The optimum range of recommended cylinder speeds for each crop.
- Illustration of safety norms to be followed by operators during work.
- Installation and operation of the machine.
- Preventive and periodic maintenance of machines.
- List of recommended lubricants and its schedule.
- List of standard fitments and accessories with the machine.

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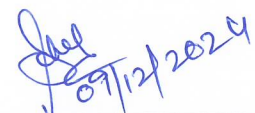
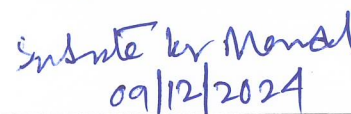
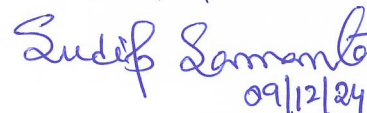


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Subrata Kr Mandal

11. APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's Comments
11	10.8 to 10.12	We will look into it and Corrective action will be taken.

TESTING AUTHORITY

Report Prepared by	Sr. Technical Officer, CSIR-CMERI Farm Machinery Testing Centre	 09/12/2024
Report Approved by	In-Charge, CSIR-CMERI Farm Machinery Testing Centre	 09/12/2024
Report Approved for release by	Head, Business Development Group, CSIR-CMERI, Durgapur	 09/12/24

