व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक) COMMERCIAL TEST REPORT (INITIAL)

संख्या / No: IMP-407/1734

माह/Month: October, 2024

THIS TEST REPORT IS VALID UP TO 30.09.2031



SHANKAR AGRO INDUSTRY, SAI PUDDLER, PUDDLER WITH HALF CAGE WHEELS (Tractor Mounted)



भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय Ministry of Agriculture and Farmers Welfare कृषि एवं किसान कल्याण विभाग

Department of Agriculture and Farmers Welfare दक्षिणी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान Southern Region Farm Machinery Training and Testing Institute ट्रैक्टर नगर, गार्लदिन्ने-515 731, जिला: अनंतप्र (आं. प्र.)

Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)
[An ISO 9001:2015 CERTIFIED INSTITUTE]

Website: http://srfmtti.dacnet.nic.in/ E-mail: fmti-sr@nic.in

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SHANKAR AGRO INDUSTRIES, SAI PUDDLER, PUDDLER WITH HALF CAGE WHEELS

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COMMERCIAL (ICT)

Manufacturer

M/s. SHANKAR AGRO INDUSTRY

Ward No.19, CMC No.6-1-1735/1, Shiva Jyoti Nagar, Railway Station Road, Sindhnur, Raichur

Dist., Karanataka-584128.

Applicant

: The Manufacturer.

SHANKAR AGRO INDUSTRY, SAI PUDDLER, PUDDLER WITH HALF CAGE WHEELS

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Government of India
Ministry of Agriculture and Farmers Welfare
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SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE, ANANTAPUR (A.P.)

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COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

: September, 2024 to October, 2024

Test Report No.

: IMP-407/1734

Month / Year

: October, 2024

- i) The results reported in this report are observed values and no corrections have been applied for atmospheric and site conditions.
- ii) The data given in this report pertain to the particular machine randomly selected by testing authority.
- iii) The results presented in this report do not, in anyway, attribute to the durability of the machine.
- iv) This Test Report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training & Testing Institute, Garladinne, Anantapur (A.P.).
- v) This is a report on Commercial Test of Puddler with half cage wheels named "SHANKAR AGRO INDUSTRY, SAI PUDDLER, PUDDLER WITH HALF CAGE WHEELS". This report is valid up to 30.09.2031, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

SELECTED CONVERSIONS

S. No.	Units	Conversion Factor	
1	Force		
	1 kgf	9.80665 N	
		2.20462 lbf	
2	Power		
	1 hp	1.01387 metric hp (Ps)	
		745.7 W	
	1 Ps	735.5 W	
	1 kW	1.35962 Ps	
3	Pressure		
	1 psi	6.895 kPa	
	1 kgf/cm ²	98.067 kPa = 735.56 mm of Hg	
	1 bar	$100 \text{ kPa} = 10 \text{ N/cm}^2$	
	1 mm of Hg	1.3332 m-bar	

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11. EASE OF OPERATION & ADJUSTMENTS

No difficulty was observed during the operation and adjustment of Puddler with half cage wheels.

12. DEFECTS, BREAKDOWNS AND REPAIRS

No defect/breakdown was occurred during entire period of field & lab tests.

13. SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMMENDATION

- 13.1 The specification of disc puddler does not conform, in full, to the requirements of IS: 6635 1972. This should be looked into for corrective action.
- The specification of implement hitch does not conform fully to the IS: 4468 (Pt-I)-1997 (Reaffirmed 2001). It is recommended that the same should be provided conforming to the relevant Indian Standards.
- 13.3 The specification of plain spool does not conform, in full, to the requirements of IS: 7230-1974 (Reaffirmed 2004). This should be looked into for corrective action.
- 13.4 The specification for agricultural tillage disc does not conform, in full, to the requirements of IS: 4366 (Part-1)-1985 (Reaffirmed 2001). This should be looked into for corrective action.
- 13.5 The specification of Spool Bearing does not conform, in full, to the requirements of IS: 10225-1982 (Reaffirmed 1999). This should be looked into for corrective action.
- 13.6 Only manganese content of disc is not conforming to requirements as stipulated in IS: 9442-1980 (Reaffirmed 2001) & therefore it should be looked into for the corrective action.
- 13.7 The specification of Half cage wheel does not conform, in full, to the requirements of IS: 11081: 1993 (Reaffirmed 1997). It should be looked into for corrective action.

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13.8 Adequacy of literature:

Operation manual, Service manual, Maintenance manual and Spare parts catalogue of puddler with half cage wheels in English was provided in single booklet form for reference during the test. However, this may be brought out in Hindi and other regional/vernacular languages as per IS: 8132-1999 (Reaffirmed 2004) for the sake of user & technical personnel.

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER	Comming
Dr. B.M. NANDEDE DIRECTOR	The same of the sa