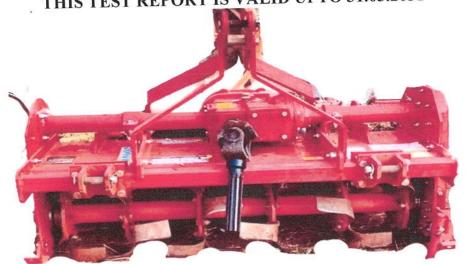
व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक) COMMERCIAL TEST REPORT (INITIAL) संख्या/No: IMP-391/1605

माह/Month: 31.03.2031

THIS TEST REPORT IS VALID UPTO 31.03.2031



# MAHINDRA, MAHAVATOR HD 1.2 M ROTAVATOR



# 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: अनंतपुर (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

Tele. 08551-286441

# MAHINDRA, MAHAVATOR HD 1.2 M ROTAVATOR

THIS TEST REPORT IS VALID UPTO 31.03.2031

COMMERCIAL (ICT)

# MAHINDRA, MAHAVATOR HD 1.2 M ROTAVATOR

Report No.: IMP-391/1605

Month: April

Year: 2024



Government of India
Ministry of Agriculture and Farmers Welfare
Department of Agriculture and Farmers Welfare
Southern Region Farm Machinery Training and Testing Institute
Tractor Nagar, Garladinne- 515 731, District: Anantapur (A.P.)
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SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE, ANANTAPUR, (A.P.)

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# MAHINDRA, MAHAVATOR HD 1.2 M ROTAVATOR

THIS TEST REPORT IS VALID UPTO 31.03.2031

COMMERCIAL (ICT)

Manufacturer, (apa)

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### Manufacturer Address 1

M/S. Mahindra & Mahindra Limited, Farm Equipment Sector, Tractor Division, Akurli Road, Kandivali (East) Mumbai - 400 101. (Maharashtra)

#### Manufacturer Address 2

M/S. Mahindra & Mahindra Limited, FES (Farm Division) Near Bidar T Junction, Mahindra Nagar, Zaheerabad - 502220 Medak Dist. (Telangana)

#### Manufacturer Address 3

M/S. Mahindra & Mahindra Limited, Swaraj Division, Plant 2, PO Landran, SAS Nagar, Mohali – 140307 (Punjab)

## Manufacturer Address 4

M/S. Mahindra & Mahindra Limited, Farm Machinery Division, C/o SAL Automotive Ltd. Kakrala Road, Nabha – 147201, District Patiala, Punjab (India)

## Manufacturer Address 5

M/S. Mahindra & Mahindra Limited, Farm Machinery Division. C/o M/S. Mungi Engineers Pvt. Ltd. S.N. 191, Mogdumpally Road, Zaheerabad – 502220, Dist. - Medak, Telangana (India)

#### Manufacturer Address 6

M/S. Mahindra & Mahindra Limited, Farm Machinery C/o SAL Automotive Ltd. 188/I KIADB belur industrial area, Near Roti Ghar hotel, Belur Dharwad-580011

## Manufacturer Address 7

M/S. Mahindra & Mahindra Limited, Farm Machinery Division, C/o JBM Industries Ltd. Plot no. 268 & 269, Sector-24, Faridabad, 121005

## Manufacturer Address 8

M/S. Mahindra & Mahindra Limited. Farm Machinery Division, M.I.T.R.A Agro Equipment's Private, Plot D-43 MIDC, Ambed, Nashik, Maharashtra -422010.

Name of the applicant

The manufacturer

:

# MAHINDRA, MAHAVATOR HD 1.2 M ROTAVATOR

## THIS TEST REPORT IS VALID UPTO 31.03.2031

COMMERCIAI (ICT)

THIS TEST REPORT IS VALID OF TO:

Type of test

: INITIAL COMMERCIAL TEST

Period of test

: 11.12.2023 to 05.01.2024

Test Report No.

: IMP-391/1605

Month /Year of release

April, 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 for test by the testing authority by virtual mode.

iii) The results presented in this report do not, in any way, attribute to the durability of the machine.

iv) This report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training and Testing Institute, Garladinne, Anantapur (A.P.).

V) This is a report on Commercial Test of rotavator named "MAHINDRA, MAHAVATOR HD 1.2 M ROTAVATOR". This report is valid up to 31.03.2031, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

# SELECTED CONVERSIONS

S. No	Units	<b>Conversion Factor</b>	
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 <sup>2</sup>	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	

## MAHINDRA, MAHAVATOR HD 1.2 M ROTAVATOR

THIS TEST REPORT IS VALID UPTO 31.03.2031

COMMERCIAL (ICT)

13. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

- 13.1 No ingress of dust and water/mud in primary reduction gear box, secondary reduction gear box, and rotary axle bearing cap was observed.
- 13.2 Provisions for breather cap, oil level dipstick in primary and secondary gearbox are provided.
- 13.3 The chemical composition of rotor blades does not meet, in full, the requirement of IS: 6690-1981. This should be looked into for corrective action.
- 13.4 It is recommended to provide a device for changing the rotor speed to suit wider range of soil and soil moisture conditions.
- 13.5 Safety device is provided in rotavator propeller shaft.
- 13.6 Provision for parking stand is provided in rotavator.

# 13.7 Adequacy of literature:

Operator's manual, service manual and parts catalogue of the rotavator in English were provided in single booklet form for reference during the test. However, this should be brought out in Hindi and other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel.

# MAHINDRA, MAHAVATOR HD 1.2 M ROTAVATOR

THIS TEST REPORT IS VALID UPTO 31.03.2031

COMMERCIAL (ICT)

## 14. APPLICANT'S COMMENTS

SNo.	Clouse No.	Parameter	SRFMTTI Observation	Mahindra and Mahindra Comments.
1.	6.2 and 13.3	Chemical composition of blade material.	Some parameter dose not conform as per IS 6690.	Our Blade material is" Boron." And IS-6690 for only carbon steel and Silicon Manganese Steel not for Boron. "As per ministry communication No.13- 9/2019 M&T (I&P) Dated 26.04.2019." The manufacturer will use the Boron (28 MnCrB5) for Rotavator Blade material.  We are using the
2	13.7	Adequacy of literature:	_	same material.  Will take care in production machines

# TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER Er. P.KAMALABAI SENIOR AGRICULTURAL

P. K. be

ENGINEER

Dr. B.M. NANDEDE DIRECTOR

SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE, ANANTAPUR, (A.P.)

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