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

संख्या/No: IMP-390/1574

माह/Month: November, 2023

#### THIS TEST REPORT IS VALID UPTO 31.10.2030



# DHARTI AGRO ENGINEERING, DRT-7MS (210) ROTAVATOR (Tractor Mounted, PTO Operated)



### 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

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COMMERCIAL

Manufacturer

M/S. Dharti Agro Engineering & Dharti

Agro Gate, New Survey No. 709/2&739,

Rajkot-Gondal Highway, Shapar (Veraval)

Dist-Rajkot

Applicant

: The Manufacturer

# DHARTI AGRO ENGINEERING DRT-7MS (210) ROTAVATOR (Tractor Mounted, PTO Operated)

Report No.: IMP-390/1574 Month: November Year: 2023



#### Government of India

Ministry of Agriculture and Farmers Welfare
Department of Agriculture and Farmers Welfare
Southern Region Farm Machinery Training and Testing Institute
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SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE, ANANTAPUR, (A.P.)

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# DHARTI AGRO ENGINEERING, DRT-7MS (210) ROTAVATOR (Tractor Mounted, PTO Operated)

THIS TEST REPORT IS VALID UPTO 31.10.2030

COMMERCIAL (ICT)

Type of test

: INITIAL COMMERCIAL TEST

Period of test

: 10.10.2023 to 17.11.2023

Test Report No.

: IMP-390/1574

Month /Year of release

: November, 2023

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 **DHARTI AGRO ENGINEERING, DRT-7MS (210)** ROTAVATOR (Tractor Mounted, PTO Operated)". **Validity of this report is up to 31.10.2030.** 

### **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 <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

IMP-390/1574 DHARTI AGRO ENGINEERING, DRT-7MS (210) ROTAVATOR (Tractor Mounted, PTO Operated)

COMMERCIAL (ICT)

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### 13. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

- No ingress of dust and water/mud in primary reduction gear box secondary reduction gear box, and rotary axle bearing cap was observed.
- 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.

**TESTING AUTHORITY** 

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

MANNA

Er. D.C.MOULI AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

#### 14. APPLICANT'S COMMENTS

We have found all the details and will be ok and there is no further remark. We appreciated the process and the methodology of the testing.