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

संख्या/No: IMP-394/1620

माह/Month: May, 2024

### THIS TEST REPORT IS VALID UPTO 30.04.2031



SWARAJ, DURAVATOR SLX PLUS HD 1.7M 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

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IMP-394/1620

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COMMERCIAL (ICT)

# SWARAJ, DURAVATOR SLX PLUS HD 1.7M ROTAVATOR

Report No.: IMP-394/1620

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# 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.)

Page 2 of 30

IMP-394/1620

### SWARAJ, DURAVATOR SLX PLUS HD 1.7M ROTAVATOR

THIS TEST REPORT IS VALID UPTO 30.04.2031

COMMERCIAL (ICT)

Type of test

: INITIAL COMMERCIAL TEST

Period of test

: December, 2023 to February, 2024

Test Report No.

: IMP-394/1620

Month /Year of release

: May, 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 "Swaraj, Duravator SLX PLUS HD 1.7M Rotavator". This report is valid up to 30.04.2031, 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 <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-394/1620

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COMMERCIAL (ICT)

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# 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 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.

Er. PRAMOD YADAV
AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE
DIRECTOR

TESTING AUTHORITY

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

Page 26 of 30