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

संख्या/No: Machine-598/1655

माह/Month: June, 2024

## THIS TEST REPORT IS VALID UP TO 31.05.2031



## ICS, ICS-SC1000D POWER WEEDER



#### 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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Tele.: 08551-286441

Machine-598/1655

### ICS, ICS-SC1000D POWER WEEDER

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COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s. ICS MERCHANDISE PVT. LTD.,

# 39/50, Aswathappa Layout, MPM Layout,

Lake road, Mallathahalli, Bangalore-560056,

India.

Applicant

: The manufacturer.

#### ICS, ICS-SC1000D POWER WEEDER

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

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### ICS, ICS-SC1000D POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.05.2031

COMMERCIAL (ICT)

Type of test

: COMMERCIAL

Period of test

: March, 2024 to June, 2024

Test Report No.

Machine-598/1655

Month / Year of release

June, 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 any way, 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 Power Weeder named "ICS, ICS-SC1000D POWER WEEDER". This report is valid up to 31.05.2031. 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

Machine-598/1655

#### ICS, ICS-SC1000D POWER WEEDER

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**COMMERCIAL** (ICT)

#### 18. COMMENTS & RECOMMENDATIONS

- 18.1 **Engine Performance:**
- 18.1.1 The maximum power was observed as 4.58 kW under natural ambient condition against the declared value of 4.0 kW.
- Specific fuel consumption of engine corresponding to maximum power 18.1.2 was recorded as 362 g/kWh against the declared value of 330 g/kWh.
- 18.1.3 Back up torque of engine was observed as 11.65 % against declared value of 10 %.
- Max. torque was observed as 13.60 Nm against the declared value of 18.1.4 12.00 Nm.
- 18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 530 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

- The labeling plate does not reveal all the required information. it is 18.3 therefore recommended that a suitable labeling plate covering all essential components, inter alia, the following must be provided:
  - i) Name of the machine
  - ii) Engine number
  - iii) Country of origin
  - iv) Specific fuel consumption (g/kWh)
- **Technical literature:** 18.4

User's manual cum parts catalogue provided but not in booklet form for reference during the test. It is recommended that same must be revised in booklet form and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel in booklet form.

**TESTING AUTHORITY** 

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

Mm

Er. P. KAMALABAI

SENIOR AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

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

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