

THIS TEST REPORT IS VALID UP TO 31/07/2031



BENSON, MT-1000P 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

ट्रैक्टर नगर, गार्लदिन्ने-515 731, जिला: अनंतपुर (आं. प्र.)

Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

[An ISO 9001:2015 CERTIFIED INSTITUTE]

Machine- 630/1690	BENSON, MT-1000P POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Chongqing Senci Wugu
Agricultural Machinery Import & Export
Co. Ltd. Chongqing, China.

Applicant : M/s. Benson Agro Engineering,
C-8/2, Nice Area 'A' road, MIDC
Satpur, Nashik, Maharashtra-422007.

BENSON, MT-1000P POWER WEEDER

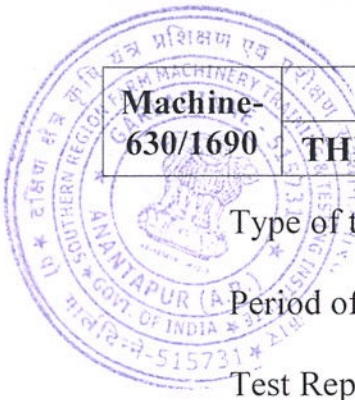
Report no.: Machine-630/1690 Month: August Year: 2024



Government of India
Ministry of Agriculture and Farmers Welfare
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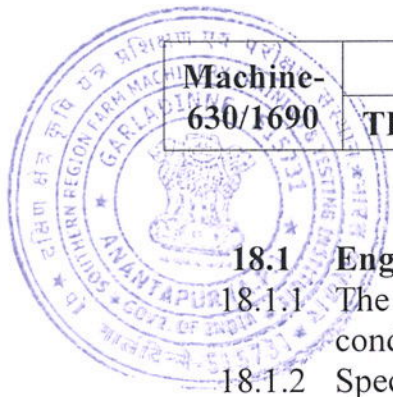
Machine-630/1690	BENSON, MT-1000P POWER WEEDER	COMMERCIAL (ICT)
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Type of test : COMMERCIAL (ICT)
 Period of test : May, 2024 to August, 2024
 Test Report No. : **Machine-630/1690**
 Month / Year of release : August, 2024

- 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 **“BENSON, MT-1000P POWER WEEDER”**. This report is valid up to **31/07/2031**, 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 kPa = 10 N/cm ²
	1 mm of Hg	1.3332 m-bar



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18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 6.70 kW under natural ambient condition against the declared value of 6.3 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 517 g/kWh against the declared value of 480 g/kWh.
- 18.1.3 Back up torque of engine was observed as 19.74% against declared value of 10%.
- 18.1.4 Max. torque was observed as 21.23 Nm against the declared value of 18 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 476 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 Hardness:

The hardness of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2022). This should be looked into for corrective action.

18.4 Chemical analysis:

The chemical analysis of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2022) does not conform. This should be looked into corrective action.

18.5 Marking/labeling:

The labeling plate does not reveal all the required information. It is therefore recommended that a suitable labeling plate covering all essential components, inter alia, the following must be provided:

- i) Name of the machine
- ii) Country of origin
- iii) Engine no.
- iv) Specific fuel consumption (g/kWh).

18.6 Technical literature:

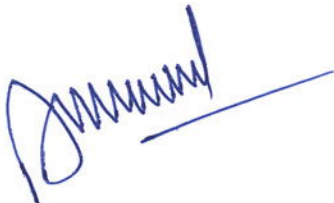


User's manual is provided during the test. However, the same must be brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the guidance of users.

The following literature should be provided.

- i) Service manual
- ii) Parts catalogue

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TESTING AUTHORITY

<p align="center">Er. PRAMOD YADAV AGRICULTURAL ENGINEER</p>	
<p align="center">Dr. B.M. NANDEDE DIRECTOR</p>	 

19. APPLICANT COMMENTS

All the measures which does not confirm will be full filled and corrected.