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

संख्या / No: Machine-285/1030

Validity: 31.05.2024

माह / Month: June, 2019



#### AUTOPRINT TERRAVATE PWV55G POWER WEEDER



#### भारत सरकार

Government of India कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare कृषि, सहकारिता एवं किसान कल्याण विभाग

Department of Agriculture, Cooperation and Farmers Welfare दक्षिणी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

Southern Region Farm Machinery Training and Testing Institute द्रैक्टर नगर, गार्लदिन्ने-515 731, जिला: अनंतपुर (आं. प्र.)

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[An ISO 9001:2015 CERTIFIED INSTITUTE]

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Machine-285/1030

# AUTOPRINT TERRAVATE PWV55G POWER WEEDER

COMMERCIAL (ICT)

Name and address assembler/applicant

: M/s. Autoprint Machinery Manufacturers Pvt. Limited, "Kaanchan" # 9, North Huzur Road, Coimbatore – 641 018, Tamil Nadu, India.

### **AUTOPRINT TERRAVATE PWV55G POWER WEEDER**

Report No.: Machine-285/1030 Month: June Year: 2019



# Government of India Ministry of Agriculture and Farmers Welfare Department of Agriculture, Cooperation and Farmers Welfare Southern Region Farm Machinery Training and Testing Institute Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.) [An ISO 9001:2015 CERTIFIED INSTITUTE]

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COMMERCIAL (ICT)

#### 17. COMMENTS & RECOMMENDATIONS

# 17.1 Engine Performance:

- 17.1.1 The maximum & rated power were observed as 3.6 kW under natural ambient condition against the declared value of 3.4 kW & 3.3 kW as maximum & rated power respectively.
- 17.1.2 Back up torque of engine was observed as 14.62 %.
- 17.1.3 Specific fuel consumption of engine corresponding to maximum power and at rated engine speed was recorded as 349 g/kWh against the declared value of 430 g/kWh & 440 g/kWh at max. power & rated power respectively.
- 17.1.4 Maximum torque was observed as 10.74 Nm against the declared value of 10 Nm.
- 17.2 Maximum Noise at operator's ear level was observed as 89 dB (A).
- 17.3 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed as higher side and to the maximum extent of 313 microns, Which is directly concerned with Operator's Health, Safety and Comfort. Besides, it also adversely affect the useful life of the components. In view of the above, this should be taken care for corrective action.
- 17.4 The hardness of rotor blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2012). This should be looked into for corrective action.
- 17.5 Chemical composition of rotor blade are not conforming the requirement of IS 6690:1981 (Reaffirmed 2012). This should be looked into for corrective action.
- 17.6 Most of the parameters of the labeling are provided as per IS requirement.

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# AUTOPRINT TERRAVATE PWV55G POWER WEEDER

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## 17.7 Technical literature:

The operator manual, service manual & spare parts manual for weeder & engine in three different booklets were supplied in English along with the test sample for reference during the test. It is however, recommended that same may be revised and bought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel.

# **TESTING AUTHORITY:**

B.N. DIXIT AGRICULTURAL ENGINEER	BL
Dr. P.P. RAO DIRECTOR	P-P. Rag

#### 18. APPLICANT'S COMMENTS

Para No.	Our reference	Applicant's Comments
18.1	17.3	For the high amplitude of vibration at most of the machine assemblies will be analyzed and effective counter measures will be taken
18.2	17.5	The rotor blades chemical composition, with regard to carbon, silicon and manganese non-conformance we will implement counter measures to ensure the respective elements % by weight confirms to limits.
18.3	17.7	Regarding the technical literatures, they will be revised and brought-out in Hindi and in other regional languages as per IS 8132:1999 (Reaffirmed 2004)
18.4	17.4	Required corrective actions will be taken to ensure hardness of rotor blades.