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

संख्या /No: Machine-399/1227 माह:/Month: November, 2020 Validity: 31.10.2025



## **JAY INDUSTRIES JD-924 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
ट्रैक्टर नगर, गार्लदिन्ने-515 731, जिला: अनंतपुर (आं. प्र.)

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

[An ISO 9001:2015 CERTIFIED INSTITUTE]

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**Machine-** 399/1227

## **JAY INDUSTRIES JD-924 POWER WEEDER**

COMMERCIAL (ICT)

Manufacturer : M/s. Jay Industries,

B-54, M.I.D.C., Gokul Shirgaon, Kolhapur - 416 234, Maharashtra,

India.

Applicant : The Manufacturer

#### JAY INDUSTRIES JD-924 POWER WEEDER

Report No.: Machine-399/1227 Month: November Year: 2020



#### **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.)

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Telephone: 08551-286441 Fax: 08551-286441 Website: <a href="http://srfmtti.dacnet.nic.in/">http://srfmtti.dacnet.nic.in/</a> E-mail: <a href="mailto:fmti-sr@nic.in">fmti-sr@nic.in</a>

## 17.1 Engine Performance:

- 17.1.1 The maximum power and rated power were observed 6.2 & 6.0 kW under natural ambient condition against the declared value of 6.25 kW.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 335 g/kWh against the declared value of 290 g/kWh.
- 17.1.3 Max. Torque was observed as 20.16 Nm against the declared value of 24.0 Nm.
- 17.1.4 Back up torque of engine was observed as 3.65 %, against the declared value of 12 %. This should be looked into for corrective action.
- 17.2 Max. Noise at operator's ear level was observed as 93 dB (A).
- 17.3 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed up to the maximum extent of 377 microns, which is on higher side. Therefore necessary corrective action to dampen the vibration should be taken.
- 17.4 The hardness of rotary blades conforms to the requirement of IS 6690:1981 (Reaffirmed 2012).
- 17.5 Chemical composition of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2012). This should be looked into for corrective action.
- 17.6 The provided labeling plate should be as per the requirement IS.

Machine-
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# JAY INDUSTRIES JD-924 POWER WEEDER

COMMERCIAL (ICT)

#### 17.7 Technical literature:

Operation manual & parts catalogue of power weeder and engine in a single booklet was supplied with the test sample for reference during the test. It is however, recommended that same may be revised and brought 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	De
Dr. P.P. RAO DIRECTOR	PPRas

#### 18. APPLICANT'S COMMENTS

Para No.	Our reference	Applicant's comments	
18.1	17.1.4	Same will be taken care in further production as per Engine	
	Un munus 3	Manufacturer as per his declaration to Jay Industries.	
18.2	17.3	We will ensure further dampening by use of necessary dampen	
		for operator comfort.	
18.3	17.5	Rotor blade chemical composition will be ensure as per la requirement in further production	
18.4	17.6	Name Plate and rating labels will be updated as per la requirement	
18.5	17.7	Technical literature will be made in accordance with In requirement	