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

संख्या/No: Machine-496/1506

माह/Month: May, 2023

Validity: 30.04.2028



SHB 95-Z 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,गार्लिदिन्ने-515 731,जिला: अनंतपुर (आं. प्र.)

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Machine-496/1506

# SHB 95-Z POWER WEEDER

COMMERCIAL (ICT)

Manufacturer

: M/s. Chongquing Senci Wugu Agriculture Machinery Import & Export Company Limited, No. 8, Longfei Road, Dongchen Street, Tongliang District, Congqing, China-402560.

**Applicant** 

: M/s. SHB Agro Power India Private Limited, Sukh Sadan, Nripendra Narayan Road, Cooch Behar, West Bengal-736101, India

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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.) [An ISO 9001:2015 CERTIFIED INSTITUTE]

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16.2	Clutch:		NIA	
	Any marked wear in clutch friction plate	•	NA	Spilling .
ii	Thickness of clutch plate, (mm)	:	NA	
	Condition of clutch release bearing.	:	NA	
•	Condition of pilot bearing	:	NA	
be held	Condition of pressure plate	:	NA	
15	Presence of oil and water in clutch housing	:	NA	
16.3	Transmission gears: All the gears of the transmission system were found in normal condition.			
16.4	Rotary drive unit:  The rotary drive unit was dismantled and all the components were found in normal condition.			

#### 17. COMMENTS & RECOMMENDATIONS

# 17.1 Engine Performance:

- 17.1.1 The maximum power and rated power were observed as 3.4 kW, under natural ambient condition against the declared value of 4.2 kW. This should be looked into corrective action
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 489 g/kWh against the declared value of 450 g/kWh.
- 17.1.3 Max. Torque was observed as 10.50 Nm against the declared value of 11.70 Nm.
- 17.1.4 Back up torque of engine was observed as 7.14 %, against the declared value of 10%.

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- 17.2 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed upto the maximum extent of 342 microns, which is on higher side therefore corrective action to read the vibration should be taken.
- 17.3 The hardness of rotary blades do not conform to the requirement of IS 6690:1981 (Reaffirmed 2017). This should be looked into for corrective action.
- 17.4 Chemical composition Silicon of rotary blade is not as per the requirement of IS 6690:1981 (Reaffirmed 2017). This should be looked into for corrective action.
- 17.5 The provided labeling plate should be as per the requirement of the IS.

#### 17.7 Technical literature:

Operators manual and parts catalogs of power weeder were supplied with 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 2019) for the sake of user & technical personnel in booklet form.

# **TESTING AUTHORITY**

D.C.MOULI AGRICULTURAL ENGINEER	
P. KAMALABAI SENIOR AGRICULTURAL ENGINEER/DIRECTOR(I/C)	P. L. Ro

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