

व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)

संख्या/No: Machine-585/1642

COMMERCIAL TEST REPORT (INITIAL)

माह/Month: June, 2024

THIS TEST REPORT IS VALID UP TO 31.05.2031



INDOXEN, 105P 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.)

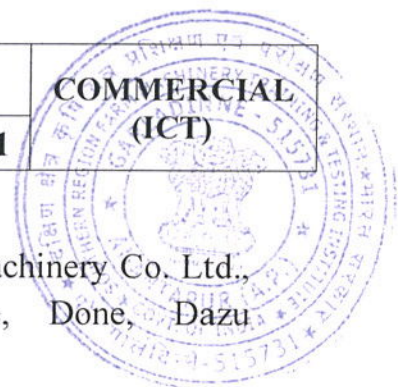
[An ISO 9001:2015 CERTIFIED INSTITUTE]

Website: <http://srfmmtti.dacnet.nic.in/>

E-mail: fmti-sr@nic.in

Tele.: 08551-286441

Machine- 585/1642	INDOXEN, 105P POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Chongqing Guanteng Machinery Co. Ltd.,
High-Tech Industrial Zone, Done, Dazu
District, Chongqing, **China.**

Applicant : M/s. A.R. Agro Equipments, Door No:
45/1149, Near Cheruvannur High School
Kolathara P.O, Kozhikode, Kerala, Pin-673655,
India.

INDOXEN, 105P POWER WEEDER

Report no.: **Machine-585/1642**

Month: **June**

Year: **2024**



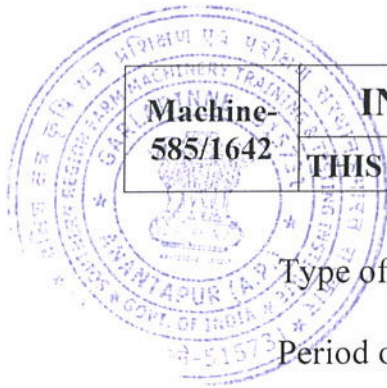
सत्यमेव जयते

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Machine-585/1642	INDOXEN, 105P POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31.05.2031	

Type of test : COMMERCIAL (ICT)

Period of test : March, 2024 to April, 2024

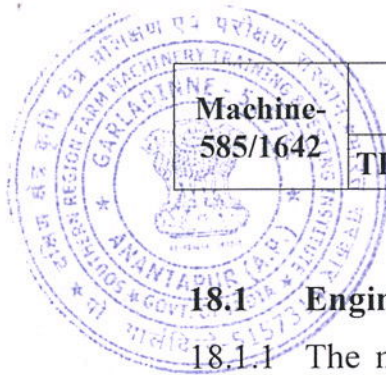
Test Report No. : **Machine-585/1642**

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 through virtual mode.
- 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 **"INDOXEN, 105P 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	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 4.55 kW under natural ambient condition against the declared value of 4.5 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 441 g/kWh against the declared value of 420 g/kWh.
- 18.1.3 Back up torque of engine was observed as 5.64 % against declared value of 10 %.
- 18.1.4 Max. torque was observed as 13.12 Nm against the declared value of 12 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 590 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 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) Country of origin
- ii) Engine RPM
- iii) Specific fuel consumption (g/kWh)

18.4 Technical literature:

User's manual is provided during the test. It is recommended that 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.

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TESTING AUTHORITY

 Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 Er. P. KAMALABAI SENIOR AGRICULTURAL ENGINEER
 Dr. B.M. NANDEDE DIRECTOR	



19. APPLICANTS COMMENTS

Sl. No	Para No	Particular
1	18.1.1	We will take corrective action in engine production to meet rated power.
2	18.1.2	We will take corrective action in engine production to meet specific fuel consumption.
3	18.1.3	We will take corrective action in engine production.
4	18.1.4	We will take corrective action in engine production.
5	18.2	We will take corrective action in production to reduce vibration.
6	18.3	We will make corrective action in production time for labelling plates.
7	18.4	We will take corrective action to meet IS 8132:1999.