

व्यावसायिक परीक्षण रिपोर्ट (प्रथम बैच)

संख्या /No: Machine- 544/1588

COMMERCIAL TEST REPORT (1st Batch)

माह /Month: February, 2024

THIS TEST REPORT IS VALID UPTO 31.01.2033



TEXAS, ALLIGATOR 9 DPE 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

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

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Machine- 544/1588	TEXAS, ALLIGATOR 9 DPE POWER WEEDER COMMERCIAL(1st Batch Test)	
	THIS TEST REPORT IS VALID UPTO 31.01.2033	

Manufacturer : M/S Texas A/S,
Knullen 22, DK - 5260,
Odense S, **Denmark.**

Applicant : M/S. Farm and Garden Technologies Pvt.
Ltd., (Subsidiary unit of TEXAS A/S
Denmark), #210,II floor ,Vipul Agora, MG
Road, Sector-28 , Gurugram -
122001(Haryana)

TEXAS, ALLIGATOR 9 DPE POWER WEEDER

Report No. : **Machine- 544/1588** Month: **February** Year: **2024**




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Machine-544/1588	TEXAS, ALLIGATOR 9 DPE POWER WEEDER	
	COMMERCIAL(1st Batch Test)	
THIS TEST REPORT IS VALID UPTO 31.01.2033		

Type of test : COMMERCIAL (1st Batch Test)
 Period of test : 03.10.2023 to 15.01.2024
 Test Report No. : **Machine- 544/1588**
 Month / Year of release : February, 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 report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training and Testing Institute, Garladinne, Anantapur (A.P.).
- v) This is the first batch test report and therefore, should be read in conjunction with the test report model i.e “**TEXAS, ALLIGATOR 9 DPE POWER WEEDER**” which was test under Initial commercial testing vide test report no.Machine-248/901 released in September, 2018. **This report is valid up to 31.01.2033” 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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17. COMMENTS & RECOMMENDATIONS

17.1 Engine Performance:

- 17.1.1 The maximum & rated power was observed as 6.48 kW under natural ambient condition against the declared value of 6.5 kW.
- 17.1.2 Back up torque of engine was observed as 5.01 % against the declared value of 10%. This should be looked into for corrective action.
- 17.1.3 Specific fuel consumption of engine corresponding to maximum power and at rated engine speed was recorded as 260 g/kWh against the declared value of 240 g/kWh.
- 17.1.4 Maximum torque was observed as 19.69 Nm against the declared value of 12 Nm.
- 17.2 Maximum Noise at operator's ear level was observed as 97 dB (A), which is higher as per ILO. Therefore corrective action to reduce the noise should be taken up.
- 17.3 The amplitude of mechanical vibration on most of the assemblies of the Power weeder was observed as higher side and to the extent of maximum 302 microns, which is directly concerned with Operator's Health, Safety and Comfort. Besides, it also adversely affects the useful life of the components. In view of the above, this should be taken care for corrective action.
- 17.4 All constituents except carbon and manganese of chemical composition of rotor blade are conforming the requirement of IS 6690:1981 (Reaffirmed 2012).
- 17.5 Most of the parameters mentioned on labeling plate are provided as per IS requirement.
- 17.6 **Technical literature:**
The instruction manual & parts catalogue of engine and user of power weeder were supplied along 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.

Machine- 544/1588	TEXAS, ALLIGATOR 9 DPE POWER WEEDER COMMERCIAL(1 st Batch Test)
	THIS TEST REPORT IS VALID UPTO 31.01.2033

TESTING AUTHORITY

 Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 Er. D.C.MOULI AGRICULTURAL ENGINEER
 Dr. B.M NANDEDE DIRECTOR	



18. APPLICANTS COMMENTS.

Reference No.	Comments
17.1.2	We take corrective action.
17.2	We take corrective action to reduce the noise level.
17.3	We take corrective action to reduce the mechanical vibration.
17.6	We bring the instruction manuals in the Hindi and regional languages also.