



TEXAS TX 610 TG 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

ट्रेक्टर 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- 369/1193	TEXAS TX 610 TG POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer : 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), 544 P, Pace City 2,
Sector 37, Gurgaon,
Haryana - 122 001, **India.**

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Report No. : Machine-369/1193

Month: August

Year: 2020



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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 & 2.9 kW respectively under natural ambient condition against the declared value of 4.5 kW.

17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 378 g/kWh against the declared value of ≤ 374 g/kWh. This should be looked into for corrective action.

17.1.3 Max. Torque was observed as 10.5 Nm against the declared value of 12 Nm. This should be looked into for corrective action.

17.1.4 Back up torque of engine was observed as 4.58 % against the declared value of 10 %. This should be looked into for corrective action.

17.1.5 **During varying speed test of engine at both natural & high ambient conditions after attaining max. torque at 10.5 Nm & 9.6 Nm respectively, while further loading, sudden drop of engine rpm was observed**

17.2 Max. Noise at operator's ear level was observed as 90 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 332 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 rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2012). This should be looked into for corrective action.

17.5 All constituents except Silicon content of chemical composition of blade are conforming to IS 6690:1981. Therefore this should be looked into for corrective action



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17.6 The provided labeling plate should be as per the requirement IS.

17.7 Technical literature:

User's manual/instruction manual and parts catalogue of power weeder and engine in separate booklets were supplied with the test sample reference during the test. It is however, recommended that same June 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	
Dr. P.P. RAO DIRECTOR	

18. APPLICANT'S COMMENTS

Para No.	Our reference	Applicant's comments
18.1	17.1.1	We will inform our R & D team to look into this and corrective action to be taken.
18.2	17.1.2	Noted, will inform our R & D team to correct the fuel consumption according to the declared value.
18.3	17.1.3	The same will be informed to our test engineers for the corrective action.
18.4	17.1.4	Will inform to our R & D team for corrective action.
18.5	17.1.5	Will inform the same to our R & D for remedial of sudden drop in engine rpm.
18.6	17.2	Will suggest our R & D to decrease further
18.7	17.3	Will suggest design engineers to provide necessary anti vibration rubbers to decrease the vibration level & increase the components
18.8	17.4	Will inform our R & D team to maintain the IS standards.
18.9	17.5	Noted, will take necessary steps to maintain the Silicon as per IS 6690:1981.
18.10	17.6	Will provide as per the IS
18.11	17.7	Will provide in Hindi & regional language