

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

संख्या/No: Machine-395/1223  
माह:/Month: November, 2020  
Validity: 31.10.2025



**TEXAS TX1437B BRUSH CUTTER**



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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Tele./FAX: 08551-286441

<b>Machine-395/1223</b>	<b>TEXAS TX1437B BRUSH CUTTER</b>	<b>COMMERCIAL (ICT)</b>
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Manufacturer : M/s. Texas A/S,  
Knullen 22, DK – 5260, Odense S,  
**Denmark.**

Name of Applicant : M/s. Farm and Garden Technologies Pvt.  
Ltd. (Subsidiary unit of Texas A/S  
Denmark), 544 P Pace City II, Sector 37,  
Gurugram, Haryana – 122 011, India.

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**Ring end gap:**

Rings	Ring end gap, (mm)			Max. permissible end gap limit, (mm)
	Top	Middle	Bottom	
1 <sup>st</sup> comp. Ring	0.24	0.25	0.25	Not specified
2 <sup>nd</sup> comp. Ring	0.28	0.28	0.30	

**Ring side clearance:**

Rings	Ring side clearance, (mm)	Max. permissible clearance limit, (mm)
1 <sup>st</sup> Compression ring	0.07	0.40
2 <sup>nd</sup> Compression ring	0.07	

**Main bearings:**

Bearing No.	Type of bearings	Diametrical clearance, (mm)	Crankshaft end float, (mm)	Max. permissible clearance limit, (mm)	
				Diametrical clearance	Crankshaft end float
1.	Ball bearing	NA	0.32	NA	0.45
2.	Ball bearing	NA			

Remarks: Measurement of big end bearing clearance was not possible, as the piston along with connecting rod was not detachable

**15.2 Transmission system:**

All the gears of the transmission system were found in normal condition.

**16. COMMENTS & RECOMMENDATIONS**

- 16.1** The safety provisions, as mentioned at para 5.14, have been provided by the applicant for safety aspect of operator's.
- 16.2** Max. Noise at operator's ear level was observed as 96 dB (A), which is on higher side as per ILO. Therefore, suitable corrective action should be taken to reduce the noise level.
- 16.3** The equivalent mechanical vibration on engine cover was observed to the extent of 360 micron. This should be looked into for dampening the vibration.
- 16.4** It was observed that the capacity of fuel tank of this machine is only 1.00 liter.
- 16.5** A fuel on/off knob may be considered for providing in the fuel system of engine.

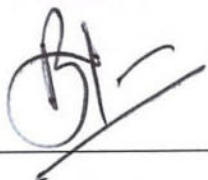

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TEXAS TX1437B BRUSH CUTTER

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- 16.6 The hardness of triangular and circular disc were recorded as 36.5 to 38.7 & 38.4 to 40.8 respectively, against the requirement of 48 to 58 HRC as per IS 6025:1982 (Reaffirmed 1999). This should be looked into for necessary improvements in the quality of material of blades.
- 16.7 The chemical composition of triangular blade and circular disc were not as per requirement of the relevant code IS 6025:1982 (Reaffirmed 1999) & therefore it should be looked into for the corrective action.
- 16.8 **Adequacy of literature supplied with the machine:**  
The Instruction manual and parts catalogue of brush cutter in English were supplied with the brush cutter for reference during the test. It is however, recommended that same may be revised and brought out 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	

**17. APPLICANT'S COMMENTS**

Para No.	Our reference	Applicant's comments
17.1	16.2	We will inform our R&D to reduce the noise level
17.2	16.3	Will discuss with our concerned department to provide vibration dampers to reduce the vibration
17.3	16.4	Generally, these types of brush cutters come up with one liter fuel tank only because to less weight on the operator, any way will inform our R&D to look into to increase fuel capacity
17.4	16.5	Will ask our design engineers to equip with the same
17.5	16.6	Obviously, will ask our QC to improve the quality of the same according to IS
17.6	16.7	Obviously, will ask our QC to improve the quality of the same according to IS.
17.7	16.8	Will take necessary action to supply the user's manual in regional language.