

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

संख्याNo: Machine-443/1411
माहMonth: August, 2022
Validity: 31.07.2027



**RAJAN & RAJAN INDUSTRIES EAW50 POST HOLE DIGGER
(ENGINE POWERED MANUALLY OPERATED)**



सत्यमेव जयते
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.)

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Machine-443/1411	RAJAN & RAJAN INDUSTRIES EAW50 POST HOLE DIGGER (ENGINE POWERED MANUALLY OPERATED)	Draft
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Manufacturer : M/s. Rajan and Rajan Industries, No.40,
SIDCO Industrial Estate, Kanchipuram-
631501, Tamilnadu State.

Name of Applicant : The Manufacturer

RAJAN & RAJAN INDUSTRIES EAW50 POST HOLE DIGGER
(ENGINE POWERED MANUALLY OPERATED)

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- 16.7 The carbon, Silicon & manganese content of augur blade, carbon, silicon, content of augur and silicon, content of removable impact bit were not conforming as per requirement of the relevant code (IS: 6090-1981 (Reaffirmed 2002)) & therefore it should be looked into for the corrective action.
- 16.8 The safety gadgets as mentioned in Para 4.0, was provided by the applicant during the test.
- 16.9 Transmission drive safety provision in the Post hole digger is not provided, whereas it is essential from the safety point of view. Therefore, it must be provided in the future product.
- 16.10 **Adequacy of literature supplied with the machine:**
A printed manual containing operation, maintenance, troubleshooting instructions and spare parts description in English, is provided by the applicant, which is not sufficient and it needs to be develop as per IS: 8132-1999 and also in some other regional languages for sake of users & technical personnel.

TESTING AUTHORITY



B.N. DIXIT
AGRICULTURAL ENGINEER



P.KAMALABAI
SENIOR AGRICULTURAL ENGINEER



K.K.NAGLE
DIRECTOR

17. Applicant Comments

Para No.	Our Ref. No.	Applicants comments
1	14.1 & 14.2	The respective engine issues of oil seal getting displaced and crack in outer extension of the crankcase will be taken up with the engine supplier for corrective measures as applicable.

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3	16.2	For the high amplitude of vibration at stated machine locations and especially at the engine cover, will be analyzed and effective countermeasures will be taken.	
4	16.3	As of now the augur bit is of a welded installation, however considering the for ease of repair and replacement we will find the feasibility for a detachable type and introduce the same	
5	16.4 & 16.5	. For the Fuel tank capacity enhancement, that is increasing the capacity from the present level of 0.6 lit and a fuel ON/OFF knob introduction to the Fuel-line will be taken-up with the engine supplier for the possibilities of introduction of the above stated requirements.	
6	16.6	The higher hardness levels of the Augur blade, Auger Tip and the impact bit as observed as stated higher will be analyzed to control the hardness levels (HRC) of the respective components as 56±3 HRC as per the requirements of 6690 – 1981(Reaffirmed 2012).	
7	16.7	The chemical compositions with regard to the lower Carbon, Silicon and manganese (% of wt.) non-conformance of in the either of the stated parts augur blade, augur tip and the impact bit will be analyzed and we will implement required countermeasures to ensure the chemical composition as per IS 6690:1981 (Reaffirmed 2012).	
8	16.9	Transmission drive safety provision points will be studied and shall be incorporated as per the requirements.	
9	16.10	The product literature, the operator manual, parts catalogue and service manual will be revised and updated as per IS 8132:1999 requirements and will be brought out in Hindi & in other regional languages.	

ANNEXURE-I

FIELD PERFORMANCE RESULTS

Place of test : Institute farm, SRFMT&TI,
Anantapur

Size of augur used, (mm) : 100,150,200,250 & 300