

व्यावसायिक परीक्षण रिपोर्ट
COMMERCIAL TEST REPORT

संख्या/ No.: E- 129/3025/2023
माह/Month: May, 2023

THIS TEST REPORT VALID UP TO : 31st May, 2028



**ENGINE PERFORMANCE TEST
QUANCHAI-4C6-88M2**



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

उत्तरी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

Northern Region Farm Machinery Training and Testing Institute

ट्रैक्टर नगर, सिरसा रोड, हिसार, (हरियाणा) - 125 001

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[ISO 9001:2015 CERTIFIED]

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10. SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMENDATIONS

10.1 Engine performance test:

Brake Power, kW	Engine Speed, rpm	Fuel consumption			Specific energy, kWh/l
		l/h	kg/h	Specific, kg/ kWh	
i) Maximum power – Two-hour test:					
61.0	2200	16.34	13.66	0.224	3.73
ii) Power at rated engine speed: (2400 rpm)					
56.9	2401	16.11	13.46	0.237	3.53

Table5- : ENGINE TEST (HIGH AMBIENT)

Brake power, kW	Engine speed, rpm	Fuel consumption			Specific energy, kWh/l
		l/h	kg/h	Specific, kg/ kWh	
a) Maximum power-					
58.9	2200	15.79	13.34	0.224	3.73
b) Power at rated engine speed: (2400 rpm)					
55.5	2399	15.70	13.13	0.237	3.53

10.2 The wear of engine components i.e., cylinder liners, piston, piston rings, valves, valve guides, springs, big-end bearings were observed within the permissible limit, after 11.78 hours of operation at this institute

10.3 Maintenance and service problems:

No noticeable maintenance/Service problem was observed during the course of entire engine test

10.4 No break down occurred during the entire engine test





12. LITERATURE SUPPLIED WITH THE ENGINE

The following literatures were provided by the applicant during the test.

- i) Operator, Service and Maintenance manual
- ii) Parts catalogue

However, the manual needs to be updated as per IS: 8132-1999.

TESTING AUTHORITY

Er. SANJAY KUMAR AGRICULTURAL ENGINEER	
Dr. MUKESH JAIN DIRECTOR	 22.05.2023

Draft test report is compiled by Sh. C. Veeranjanyulu, Sr. Technician

13. APPLICANT'S COMMENTS

No specific comments received from the applicant.

