

व्यावसायिक परीक्षण रिपोर्ट  
COMMERCIAL TEST REPORT

संख्या/ No.: E- 130/3026/2023  
माह/ Month: May, 2023

**THIS TEST REPORT VALID UP TO : 31<sup>st</sup> May, 2028**



**ENGINE PERFORMANCE TEST  
QUANCHAI-4C6-100M2**



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

**Tractor Nagar, Sirsa Road, HISAR (Haryana)-125 001**

**[ISO 9001:2015 CERTIFIED]**

Website: <http://nrfmtti.gov.in/>

E-mail: [fmti-nr@nic.in](mailto:fmti-nr@nic.in)

Tele./FAX: 01662-276984

**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	
<b>i) Maximum power – Two-hour test:</b>					
68.0	2400	18.72	15.65	0.230	3.63
<b>ii) Power at rated engine speed: (2400 rpm)</b>					
68.0	2400	18.72	15.65	0.230	3.63

**Table5- : ENGINE TEST (HIGH AMBIENT)**

Brake power, kW	Engine speed, rpm	Fuel consumption			Specific energy, kWh/l
		l/h	kg/h	Specific, kg/ kWh	
<b>a) Maximum power-</b>					
66.5	2350	18.15	15.17	0.228	3.67
<b>b) Power at rated engine speed: (2400 rpm)</b>					
66.1	2399	18.20	15.22	0.230	3.63

**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 11.25 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



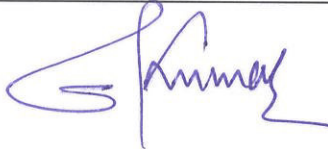
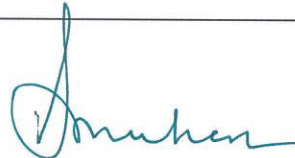
**12. LITERATURE SUPPLIED WITH THE ENGINE**

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**

<b>Er. SANJAY KUMAR AGRICULTURAL ENGINEER</b>	
<b>Dr. MUKESH JAIN DIRECTOR</b>	 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.

