



NEW HOLLAND 7500 TURBO SUPER 12+3 UG TRACTOR



सत्यमेव जयते

भारत सरकार

कृषि एवं किसान कल्याण मंत्रालय
कृषि, सहकारिता एवं किसान कल्याण विभाग
मशीनीकरण एवं प्रौद्योगिकी प्रभाग

GOVERNMENT OF INDIA

MINISTRY OF AGRICULTURE AND FARMERS WELFARE

(Department of Agriculture, Cooperation & Farmers Welfare, Mechanization & Technology Division)

केन्द्रीय कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

ट्रैक्टर नगर, बुदनी (म.प्र.) ४६६ ४४५

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6. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

6.1 On the basis of test conducted the performance results have been summarized as evaluative (mandatory) and non - evaluative (not mandatory) parameters applicable for qualifying Minimum Performance Criteria as per clause-4 table-1 of Indian Standard 12207: 2019 for acceptance of tractor for the purpose of subsidies/NABARD financing for the applicable features for this tractor model.

Sl. No.	Characteristic	Category (Evaluative / Non Evaluative)	Requirements as per IS: 12207-2019	Values declared by the applicant/requirement	As observed	Whether model meets the requirements (Yes/No)
1	2	3	4	5	6	7
6.1.1	PTO Performance :					
a)	Max. power under 2 h test, (kW) (Natural ambient condition)	Evaluative	Declared value to be achieved with a tolerance of: $\pm 5\%$ for PTO power or engine power > 26 kW, $\pm 10\%$ for PTO power or Engine power ≤ 26 kW.	50.0 (D)	49.7	Yes
b)	Power at rated engine speed, (kW)	Non Evaluative	-do-	50.0 (D)	47.7	Yes
c)	Specific fuel consumption corresponding to maximum power, (g/kWh)	Evaluative	+ 10% Max.	265 (D)	274	Yes
d)	Maximum equivalent crankshaft torque, (Nm)	Non Evaluative	1.8%	267 (D)	301.5	No
e)	Back-up torque, percent	Evaluative	12 percent, min.	12 (min) (D)	52.2	Yes
f)	Maximum operating temperature ($^{\circ}$C)					
	1) Engine oil	Evaluative	The declared value should not exceed the max. value specified by the oil company and the observed value under high ambient condition should not exceed the declaration.	134 (D)	132	Yes
	2) Coolant (liquid)	Evaluative	The declared value should not exceed the boiling temperature of coolant under the pressurized or otherwise and the observed value under high ambient condition should not exceed the declaration.	124 (D)	121	Yes
g)	Engine oil consumption, (g/kWh)	Evaluative	Not exceeding 1% of SFC at max. power under High ambient conditions	2.74 (Max)	0.27	Yes
h)	Smoke level, (m^{-1})	Evaluative	Maximum light absorption coefficient of 3.25 per metre or equivalent DOSSI No. 5.2 or 75 Haidroge value (As per CMVR)	3.25 (Max)	0.81	Yes



1	2	3	4	5	6	7
(d)	Filament of Roll Over Protective Structures (ROPS) for tractor having more than 1150 mm rear track width	Evaluative	ROPS should meet the requirement of IS 11821 or OECD code or equivalent International standard	Not filled	Not Applicable	Not Applicable
(e)	Standard Accessories	Evaluative	Trailer hitch, front tow hook, linkage drawbar should be provided with the tractor.	Provided	Provided	Yes
(f)	Accessories (optional)	Non Evaluative	Ballast weights, if fitted, should meet the requirement of CMVR.	Provided	Provided	Yes

6.2 CATEGORY OF BREAKDOWNS / DEFECTS (As per Clause 5.0 of IS:12207-2019) :

S. No.	Category of breakdowns	Category (Evaluative / Non Evaluative)	Requirements as per IS: 12207-2019	As observed	Whether meets the Requirements (Yes/No.)
1.	Critical	Evaluative	There is no 'critical breakdown' during the course of testing.	None	Yes
2.	Major	Evaluative	There are not more than 2 major breakdowns and neither of them is of repetitive nature.	None	Yes
3.	Minor	Evaluative	There are not more than 5 minor defects during the test and the frequency of each is not be more than two.	None	Yes
4.	Total breakdowns	Evaluative	In no case, the total number of breakdowns should exceed five that is, (2 major + 3 minor) or (1 major + 4 minor) or 5 minor breakdown.	None	Yes

6.3 Salient Observations:

6.3.1 Laboratory tests:

6.3.1.1 PTO Performance Test:

- i) The maximum PTO power was recorded as 49.7 kW against the declaration of 50.0 kW, which meets the requirement of IS: 12207-2019 with regard to tolerance limit.
- ii) The specific fuel consumption corresponding to maximum power was recorded as 274 g/kWh against the declaration of 265 g/kWh, which is within the tolerance limit of IS: 12207-2019.
- iii) The maximum equivalent crankshaft torque was recorded as 301.5 N-m against the declaration of 287 N-m, which is within the permissible limit as specified in IS: 12207-2019.
- iv) The backup torque is 52.2%.

6.4 This tractor model meets the evaluative requirements of IS: 12207-2019.



7. CITIZEN CHARTER

Time frame for Testing & Evaluation as per Citizen Charter	Duration of Test	Whether the Test Report is released within the time frame given in Citizen Charter	Remarks
10 Months	10 Months (January, 2020 to, October, 2020)	Yes	--None--

TESTING AUTHORITY:

NITESH KUMAR VERMA
AGRICULTURAL ENGINEER

C.V. CHIMOTE
TEST ENGINEER

J.J.R. NARWARE
DIRECTOR

The report compiled by: Shri **Pratyush Satya**, Senior Technical Assistant.

8. Applicant's comments

Para no.	Our reference	Comments received from the applicant
8.1	6.3.1.1 (iii)	Valuable comments and suggestions for improvements are well taken. Under our policy of continuous product improvement these aspects are further being looked into and will take appropriate actions to eliminate these deviations soon wherever necessary.

ANNEXURE-I

TRACTOR RUN HOURS DURING TEST

A. LABORATORY AND TRACK TESTS		HOURS
1.	Running-in	--
2.	Nominal speed test	0.86
3.	PTO Performance Test	16.18
B.	Miscellaneous test and other run hours, including idle run transportation, trial and preparation for test.	3.23
Total		20.27