व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक) संख्या/No. : T-1661/2192/2022

COMMERCIAL TEST REPORT (Initial) माह/Month : June, 2022

[ONLINE TESTING]

(यह परीक्षण रिपोर्ट 30/06/2025 तक वैध है/THIS TEST REPORT IS VALID UPTO 30/06/2025)



MAHINDRA, JIVO 305 DI 4WD TRACTOR



भारत सरकार

कृषि एवं किसान कल्याण मंत्रालय (कृषि एवं किसान कल्याण विभाग)

GOVERNMENT OF INDIA

MINISTRY OF AGRICULTURE AND FARMERS WELFARE (DEPARTMENT OF AGRICULTURE & FARMERS WELFARE)

केन्द्रीय कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान ट्रैक्टर नगर, बुदनी (म.प्र.) 466 445

CENTRAL FARM MACHINERY TRAINING & TESTING INSTITUTE TRACTOR NAGAR, BUDNI (M.P.) 466 445

(An ISO 9001: 2015 Certified Institute)

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MAHINDRA, JIVO 305 DI 4WD TRACTOR -COMMERCIAL (Initial)

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Manufacturer : M/s

: M/s. Mahindra & Mahindra Limited

(Farm Equipment Sector)

Deepak Diesel Pvt. Ltd. Survey No. 287/1, Shapar Village, Main Road and Shapar (Veraval), Dist.: Rajkot – 360024 (M/s DPP Ltd. Is contract

manufacturer of M&M Ltd.)

Test requested by (applicant) : The manufacturer

Selected for test by : The testing authority
Place of running-in : At testing institute

Duration of said running-in, (h):

- Engine : 30.0 -Transmission : 30.0

Method of Selection : The test sample was selected randomly out

of five tractors from the production line by the representative of testing authority through

online mode.

Details of tractors made available for random selection						
Sr. No. Chassis serial Number						
1	MBNZKGDBFMGF00553					
2	MBNZKGDBFMGF00554					
3	MBNZKGDBFMGF00555					
4	MBNZKGDBFMGF00556					
5	MBNZKGDBFMGF00557					

1. SPECIFICATIONS

1.1 Tractor:

Make : Mahindra

Model : JIVO 305 DI 4WD

Type : Four-wheel driven (4WD), Standard

Agricultural Tractor.

Month & year of manufacture : 09/21

Chassis number : MBNZKGDBFMGF00556

Country of origin : India

1.2 Engine:

Manufacturer's address : M/s. Mahindra & Mahindra Limited

(Farm Equipment Sector)

Deepak Diesel Pvt. Ltd. Survey No. 287/1, Shapar Village, Main Road and Shapar (Veraval), Dist.: Rajkot – 360024 (M/s DPP Ltd. Is contract manufacturer of M&M Ltd.)

Make : Mahindra

Model : MTYNP15NA027B3A

Type : Four stroke, naturally aspirated, liquid cooled,

direct injection, diesel engine

Serial number : GMF7JAB 0558

Country of origin : India

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17. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

17.1 On the basis of test conducted the performance results have been summarized as evaluative (mandatory) / non-evaluative (non-mandatory) parameters applicable for qualifying Minimum Performance criteria as per Clause-4 (Table-1) of IS: 12207-2019 for acceptance of the tractor for the purpose of subsidies/NABARD financing are summarized as under:

SI. No.	С	haracteristic	Category (Evaluative/ Non Evaluative)	Requirements as per IS: 12207-2019	Values declared by the applicant/ (D) Requirement (R)	As observed	Whether meets the require- ments (Yes/No)
1		2	3	4	5	6	7
17.1.1	PTO	Performance:					
a)	unde (kW)	mum power er 2 h test, (Natural ent condition)	Evaluative	Declared value to be achieved with a tolerance of: ±5% for PTO power and or engine power >26 kW. ±10% for PTO power and or engine ≤ 26 kW.	18.3 (D)	17.7	Yes
b)		er at rated ne speed, (kW)	Non- Evaluative	-do-	18.3 (D)	17.2	Yes
c)	Specific fuel consumption corresponding to maximum power, (g/kWh)		Evaluative	+ 10% max.	288.3 (D)	249	Yes
d)	Maximum equivalent crankshaft torque, (Nm)		Non- Evaluative	± 8%	80 (D)	82.2	Yes
e)	perce		Evaluative	12 percent	13 (D) 12 (R)	24.9	Yes
f)		mum operating te					
	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.	130 (D)	126	Yes
	2)	Coolant	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.	110 (D)	104	Yes
g)	Engine oil consumption, (g/kWh)		Evaluative	Not exceeding 1% of SFC at max. Power under High ambient conditions.	2.49 Maximum (R)	0.67	Yes
h)	Smo	ke level, m ⁻¹	Evaluative	Maximum light absorption coefficient of 3.25 per meter or equivalent BOSCH No. 5.2 or 75 Hatridge value (As per CMVR).	3.25 Maximum (R)	0.18	Yes

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1		2	3	4	5	6	7
17.1.2	Draw	bar Performan	ce:				
a)	with corre	drawbar pull ballasted sponding to 15 ent wheel slip,	Non- Evaluative	Minimum 70% of static mass of tractor with ballast.	Ballasting not recommended by the manufacturer	Not appli- cable	Not appli- cable
b)	Max. witho	drawbar pull ut ballast sponding to 15 ent wheel slip,	Evaluative	Minimum 70% of static mass of tractor without ballast or with standard ballast, as the case may be.	7.4 (D) 7.48 (R) Minimum	8.22	Yes
c)	powe ballas	st, (kW).		i) a) of PTO performance in case of tractors having total static mass > 1500 kg Minimum 75 % of PTO power as referred in SI No. i) a) of PTO performance in case of light weight tractors having ≤1500 kg total static mass of tractor Minimum 75 % of the engine power as referred in SI No. i) a) of engine performance in case of tractors which do not have a PTO shaft.	14.6 (D) 13.3 (R) Minimum	14.4	Yes
d)		num mission oil erature, (°C)	Evaluative	The declared value should not exceed the maximum value specified by oil company	120 (D)	83	Yes
17.1.3	Powe	er lift and hydra	ulic pump	performance:			
a)		mum lifting capa	city through	out the range of lift, (kN):			
	1) Д	t hitch points	Evaluative	Tolerance of ± 10%	7.35 (D)	7.48	Yes
	s	Vith the tandard frame	Evaluative	The lift capacity should at least be 24 kg/PTO kW. and it should be 21.5 kg/engine kW where the tractor is not provided with a PTO shaft.	4.41 (D) 4.17 (R) Minimum	6.30	Yes
b)	the point of the each intervolunat	al for a total	Non- Evaluative	The observed value should not exceed 50 mm	50 (D) Maximum	06	Yes

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1	2	3	4	5	6	7		
17.1.4	Brake performance a							
a)	Maximum stopping dis road ballast, (m):	stance at a for	ce, equal to or less th	an 600 N or	n brake ped	lal with		
	Cold brake	Evaluative	10	10 (R)	5.66	Yes		
	2) Hot brake	Evaluative	10	10 (R)	5.98	Yes		
b)	Maximum force	Evaluative	600	600 (Ŕ)	294	Yes		
,	exerted on the brake			Maximum	to			
	pedal to achieve a				321			
	deceleration of 2.5							
	m/s ² , (N)							
c)	Whether parking	Evaluative	Yes / No	Yes	Yes	Yes		
	brake is effective at a							
	force of 600 N at foot							
	pedal (s) or 400 N at							
47.4.5	hand lever							
17.1.5	Noise measurement:		A = == CM\/D	0E (D)	70	Vaa		
a)	Maximum ambient noise emitted by the	Evaluative	As per CMVR	85 (R)	78	Yes		
	tractor, dB(A)							
b)	Maximum noise at	Evaluative	As per CMVR	96 (R)	93	Yes		
, D,	operator's ear level,	Lvalaalivo	7 to por om viv	00 (11)		100		
	dB(A)							
17.1.6	Amplitude of mechar	nical vibration	ns at:		l .			
	Left foot rest				145	No		
	2) Right foot rest	Non-			205	No		
	3) Seat (with driver	Evaluative	100 microns (max.)	100(R)	158	No		
	seated)							
	4) Steering wheel				182	No		
17.1.7	Air cleaner oil pull ov	er:						
	Maximum air cleaner	Evaluative	0.25		air cleaner	Not		
	oil pull over, (%)		(Max.)	fitt	ed	appli-		
4= 4.0						cable		
17.1.8	Haulage requirement							
a)	Gross mass of the trai	iers, (tones):	A a a a a sifi a al la cotta a	0.F.(D)	0.5	V		
	1) Two wheel 2) Four wheel	Non-	As specified by the manufacturer	2.5 (D) Not	2.5	Yes		
	2) Four wheel	Evaluative	manuracturer	recommen	NA			
				ded	1471			
b)	Distance travelled / li	ter of fuel co	nsumption, (km/l):		•	-		
	1) Two wheel	Non- Evaluative	As specified by the manufacturer	7.79 (D)	6.78 to 7.13	Yes		
	2) Four wheel			Not				
				recomme- nded	NA			
c)	Fuel consumption, (r	nl/km/tonne)	:	Hucu		1		
_	1) Two wheel	Non-	As specified by the	42.8 (D)	56.1 to	No		
		Evaluative	manufacturer		59.0			
	2) Four wheel			Not				
				recomme-	NA			
	<u> </u>			nded				

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1	2	3	4	5	6	7
17.1.9	Wetland cultivation:	. •	<u> </u>			
171110	Sealing for the following	Evaluative	The identified assemblies should essentially meet	There should be	No ingress of water	Yes
	assemblies:	al a	the requirement of	no ingress	and/or mud	
	1) Clutch assembly	-do-	IS: 11082. No	of water and/or mud	was observed	
	2) Brake housings 3) Front axle hubs	-do-	water ingress in	(R)	observed	
	3) Front axle hubs 4) Engine Oil	-do-	the identified assembly given in	(14)		
	5) Transmission Oil	-do-	column-2. If tractor			
	J) Halisillission Oil	-40-	does not meet the requirements of wetland cultivation, it may be recommended for dry land operation only.			
17.1.10	Safety features:	•	, ,	•	1	
a)	Guards against moving and hot parts	Evaluative	Belt drives, pulley hydraulic pipes (12239 (Part2)		Meets the requirement	Yes
b)	Lighting arrangement	Evaluative	As per CM	IVR	Meets the requirement	Yes
c)	Seating requirements (Tractors having	Non- Evaluative	Should meet the re of IS: 12343 (A from time to time)		Not applicable as the track	
	more than 1150 mm rear track width)		,	width is less than 1150 mm		
d)	Technical requirements for PTO shaft	Evaluative	Should meet the roof IS: 4931 (As an time to time)		Meets the requirement	Yes
e)	Dimensions of three- point linkage	Non- Evaluative	Should meet the roof IS: 4468 (amended from time	Part-I) (As	Does not meet the requirement	No
f)	Specifications of linkage drawbar	Evaluative	Should meet the re of IS: 12953 (A from time to time)	equirements	Meets the requirement	Yes
g)	Swinging drawbar (wherever fitted)	Evaluative	Should meet the of IS: 12362 (P amended from time	art 3) (As	Not provided	Not appli- cable
h)	1) Maximum travelling speed at rated engine speed in reverse gears, kmph	Evaluative	Should not exceed 20 kmph		5.58 kmph (Meets the requirement)	Yes
	2) Audible warning signal on tractor	Evaluative	As soon as the traver reverse gear reaches an audible warning tractor shall be as safety aspects operation of shuttle shall be brought in comanufacturer /dealer the training on this operator before the tractor.	s to 20 kmph, g signal on ctivated. The about the e technology operation and shall ensure is aspect to	Not applicable	Not appli- cable

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1		2	3	4	5	6	7
17.1.11	Lab	pelling of tractors	(Provision o	f labelling plate	e):	-	
	1)	Make	Evaluative	Should confe	orm to the	Mahindra	Yes
	2)	Model	Evaluative	requirements of CMVR		JIVO 305 DI	Yes
					aximum PTO	4WD	
	3)	Month &	Evaluative		and year of		
		Year of			in numerical	09 /21	Yes
		manufacture		form.	 1		
	4)	Engine number	Evaluative	MM	YY	GMF7JAB058	Yes
	5)	Chassis	Evaluative	Digit 01 – 12 i		MBNZKGDBF	Yes
		number		for MM will		MGF00556	
	6)	Maximum PTO	Evaluative	months and n		18.3 (24.5)	Yes
		power, (kW)		in box No.2 for			
				will represent t			
47 4 42	Dia	aard limit far		Manufacturing			
17.1.12		card limit for: inder bore	Evaluative		89.13	88.900	Yes
(a)	-	meter, (mm)	⊏valuative	_	09.13	88.900 to	168
	ulai	neter, (mm)		To be		88.921	
(b)	Cle	arance between	Non-	specified by the	0.20	0.117	Yes
(5)	pist		Evaluative	manufacturer	0.20	to	100
		r at skirt, (mm)		and supported		0.108	
(c)		ton diameter at	Non-	by the printed	88.15	88.801	Yes
(-)		t, (mm)	Evaluative	literature		to	
		-, ()				88.813	
d)	Rin	g end gap (mm):					
	-	Top comp. ring.		To be	2.5	0.20 to 0.30	Yes
	-	2 nd comp. ring.		specified by the	2.5	0.50 to 0.55	Yes
		Oil ring.	Evaluative	manufacturer	2.0	0.30 to 0.35	Yes
			Evaluative	and supported			
				by the printed			
				literature			
(e)	Rin	g groove clearan	ce (mm):	To be	0.20	Tannarad	
	-	Top comp. ring.		specified by	0.30	Tappered	
	_	2 nd comp. ring.	-	the	0.30	ring 0.055 to	Yes
	-	Z comp. mg.	Evaluative	manufacturer	0.30	0.056	165
	_	Oil ring.		and supported	0.20	0.026 to	Yes
		On ring.		by the printed	0.20	0.031	100
(f)	Cle	arance of main be	arings (mm)	literature	1	2.00.	<u> </u>
('')	-	Diametrical	Evaluative	To be specified	0.20	0.065 to	Yes
		clearance	Lvaldative	by the	0.20	0.145	. 55
	-	Crankshaft end	Evaluative	manufacturer	0.60	0.10	Yes
		float		and supported			
				by the printed literature			
(a)	Cla	arance of big end	hearings (n	•	1	1	
(g)	-	Diametrical	Evaluative	-do-	0.20	0.047 to	Yes
	_	שמחוכנווכמו	Lvaluative	-40-	0.20	0.047 to	162
	_	Axial	Evaluative	-do-	0.75	0.20	Yes
(h)	Cle	arance between	Non-	-do-		earings	Not
(11)		g pin and bush,	Evaluative	-40-		rovided	Appli-
	(mr		Lvaldativo			.071404	cable
	_,	··,	ı	l	L		

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1	2	3	4	5	6	7
(i)	Clearance between centre pin and bush, (mm)	Non- Evaluative	-do-	0.30	0.083 to 0.141	Yes
17.1.13	Literature (Submiss	ion to test aç	gency):			
(a)	Operator manual	Evaluative	Provided / Not Provided	Provided	Provided	Yes
(b)	Parts Catalogue	Evaluative	Provided / Not Provided	Provided	Provided	Yes
(c)	Workshop/ Service manual	Evaluative	Provided / Not Provided	Provided	Provided	Yes
17.1.14	Fitment of Roll Over	Protective S	Structures (ROPS):			
	For tractor having more than 1150 mm rear track width	Evaluative		meet the IS:1182 or equivalent ard	Not fitted	Not appli- cable
17.1.15	Standard Accessories	Evaluative	Trailer hitch, front linkage drawbar provided with tractor	should be	Provided	Yes
17.1.16	Accessories (optional)	Non Evaluative	Ballast weight, if fi meet the requi CMVR	tted, should rement of	Not Provided	Not appli- cable

17.2	CATEGORY OF BREAKDOWNS / DEFECTS (As per clause 5.0 of IS:12207-2019):					
S. No.	Category of break-	Category	Requirements	As	Whether	
	downs	(Evaluative	as per IS: 12207-2019	observed		
		/ Non-	-		Requirements (Yes/No)	
		Evaluative)			(103/110)	
1.	Critical	Evaluative	No critical breakdown	None	Yes	
2.	Major	Evaluative	Not more than two and neither of them should be repetitive in nature	None	Yes	
3.	Minor	Evaluative	Not more than five and frequency of each should 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 breakdowns.	None	Yes	

17.3 Salient Observations:

17.3.1 Laboratory tests:

17.3.1.1 PTO performance test:

During the PTO performance test, maximum PTO power was observed as 16.0 kW during two hours maximum power test under natural ambient condition against the declaration of 18.3 kW and which does not meet the evaluative requirement of IS: 12207-2019 with regard to tolerance limit. Also, the governor fluctuation was observed on following engine speed: -

- (i) From 2560 rpm to 2588 rpm.
- (ii) From 2535 rpm to 2560 rpm.
- (iii) From 2490 rpm to 2515 rpm.
- (iv) From 2517 rpm to 2535 rpm.
- (v) Power fluctuation was observed from 14.9 to 16.9 kW at maximum power.

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Upon this, the applicant, vide letter No. FD/BVH/ICT/JIVO3054WD/21-22/08, dated 07.12.2021, has admitted that "there is 3.4 mm³/stroke fueling difference and PTO power fluctuation issue" and the following adjustments/checking was allowed.

- (i) Starting spring position was checked and found correct.
- (ii) Injector pressure setting was checked and found 250 bar against the declaration of 250+8 bar.
- (iii) Fuel line knob at filter on/off position checked and found correct.
- (iv) Fan belt tension was checked and adjusted to 12 mm as against the observation of 18. mm.
- (v) Fuel line was checked and found correct.
- (vi) Radiator & radiator sealing was checked and found correct.
- (vii) Engine & transmission oil level was checked and found correct.
- (viii) Clutch pedal free play was checked and adjusted to 35 mm as against the observation of 25. mm.

The applicant has also requested to conduct the "**repeat test**" **of PTO performance** which was allowed as per the provisions contained in clause 3.2.3 & clause 4.1 of IS: 12207-2019.

- (ii) The governor fluctuation was observed during the natural ambient condition on following engine speed: -
 - (i) From 2560 rpm to 2590 rpm
 - (ii) From 2544 rpm to 2555 rpm
 - (iii) From 2490 rpm to 2510 rpm
 - (iv) From 2440 rpm to 2460 rpm
 - (v) From 2385 rpm to 2410 rpm

The governor fluctuation was observed during the high ambient condition on following engine speed: -

- (i) From 2535 rpm to 2565 rpm
- (ii) From 2475 rpm to 2522 rpm
- (iii) From 2432 rpm to 2462 rpm
- (iv) From 2388 rpm to 2411 rpm
- (v) From 2341 rpm to 2364 rpm

This should be looked into for necessary corrective action.

17.3.1.2 Mechanical Vibration:

The amplitude of mechanical vibration on various assemblies marked as (*) in Chapter – 9 of this test report is on higher side. This calls for dampening down of vibrations especially on foot rests (LHS & RHS), steering control wheel and operator's seat to improve the operational comfort and service life of components.

17.3.1.3 Three-point linkage:

Dia of hitch pin hole of upper hitch point, distance from end of power take-off to centre of lower hitch point (lower links in horizontal position) and power range (without force) does not meet the requirement of IS: 4468 (Part I) – 1997 (Reaffirmed in 2019). This is recommended to look into for necessary corrective action.

17.3.1.4 PTO shaft master shield:

The dimensions of PTO shaft master shield such as "K", "m" & "p" does not meet in full the requirements of IS: 4931 – 1995 (Reaffirmed in 2019). This is recommended to look into for necessary corrective action.

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17.3.1.5 Steered wheel rims:

- i) The sizes of Steered Wheel Rims were found to be "5Jx14", against the declaration of "5JA" vide specification sheet submitted by you. It MUST be looked into for necessary corrective action.
- ii) As per Rule 95 A (2) of CMVR, 1989 read in conjunction with IS: 13154- 2015 provides for "The Agricultural Tractor manufacturer shall select ONLY THAT RIM SIZE AS RECOMMENDED BY THE TYRE MANUFACTURER." In this case, the rim size RECOMMENDED by IS: 13154-2015, by ITTAC manual, or even in your specification sheet, is "5JA". An immediate corrective action is required to be taken even in stand point of view with compliance to CMVR, 1989.

17.3.2 Haulage Test:

The fuel consumption was observed as 56.1 to 59.0 ml/km/tonne with two-wheel trailer against the declaration 42.8 ml/km/tone and which does not meet the non-evaluative requirement of IS:12207-2019 with regard to tolerance limit. This should look into for necessary corrective action.

17.3.3 Operator's Manual:

- Ballasting is not recommended as per the technical specifications submitted by applicant, whereas in Page No. 12-8 of Operator's Manual, water ballasting is recommended.
- **ii)** Specifications of recommended matching implements and trailer are given on page No. 3-7. However, the specifications of matching implements and trailer are not same as submitted by the applicant during test.
- iii) The applicant has declared the coolant water ratio as 1: 9 vide specification sheet. Whereas, the same has been recommended as 1: 4 on Page No. 12-10 of Operator's Manual.

The above points should be corrected in the Operator's Manual.

17.3.4 Specification of Tractor:

The coolant water ratio in the radiator has been specified as "10:90" vide specification sheet and this seems to be incorrect & confusing. This should look into for necessary corrective action.

17.4 Maintenance / Service Problems:

No noticeable maintenance or service problem was observed during the test.

17.5 Recommendation with regard to safety on tractor:

The following requirements, inter alia, may be considered for incorporation on the tractor:

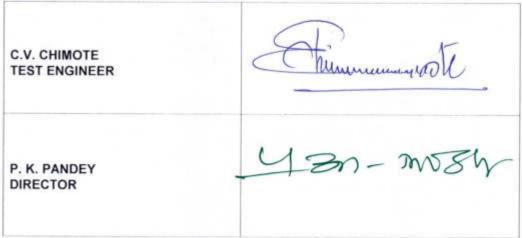
- Spark arrester should be provided in the exhaust system as per the requirement of IS: 12239 (Part-1)-2018.
- ii) A retainer on inner side of clutch pedal should be provided as per the requirement of IS: 12239 (Part-1)-2018.
- iii) The working clearance between position and draft control lever of hydraulic system was measured as 30 mm against the minimum requirement 70 mm as per IS: 12239 (Part-2)-1999 (Re-affirmed in January, 2019).
- **iv)** Fuel shut-off knob does not remain in "STOP" position as per requirement of IS: 8133-1983 (Re-affirmed in 2019).

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- 17.6 Adequacy of Literature supplied with machine:
- 17.6.1 The following literatures were supplied with the test tractor for reference during the test:
 - a) Operator Manual of Mahindra JIVO 305 DI 4WD tractor model.
 - Parts Catalogue of Mahindra JIVO 305 DI 4WD tractor model.
 - c) Service Manual of Mahindra JIVO 305 DI 4WD tractor model.
- 17.6.2 The operator manual may be brought out for the guidance of users and service personnel as per IS:8132-1999 incorporating, inter alia, the following:
 - Safe hitch height while using trailer.
 - ii) Coolant recommended.
- 17.6.3 Delay of 7 days occur during PTO performance test due to non meeting of evaluative parameter as per IS: 12207 – 2019 and manufacturer's response for conducting Repeat Test.

TESTING AUTHORITY:



Draft test report is compiled by C. K. Tijare, Agricultural Engineer.

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18. APPLICANT'S COMMENTS

Para no.	Our reference	Comments	
18.1	1.13.2	As per our specification, three-point linkage are	
		design to meet combined Cat-1 & Cat-1 N	
		requirement as per field usage practices.	
18.2	17.3.1.5 (i)	Observation/Parameter will be studied with Q	
		team and necessary checking process will be	
		introduced to avoid error in specification for future.	
18.3	17.3.4	We would like to clarify that the specified coolant	
		water ratio as10:90 in the specification sheet, which	
		seems 10% of coolant & 90% of water of total	
		coolant capacity.	
18.4	17.3.1.3,17.3.1.4,17.3.2,17.3.3	Observation/Parameter will be studied & necessary	
	& 17.6.2	action will be initiated.	

ANNEXURE- I BRIEF SPECIFICATION OF MATCHING IMPLEMENTS AS DECLARED BY APPLICANT

S. No.	Parameters	M. B.	Rotavator	Rotavator
		Plough	(Dryland)	(Wetland)
1	Make	Mahindra	Mahindra	Mahindra
2	Туре	Mounted	Mounted	Mounted
3	No. of Discs / Blades	Two	20 in 5	16 in 4
			flanges	flanges
4	Type of Bottom / Blades	General	Hatchet	Hatchet
		purpose		
5	Size of Bottom / Blades, (mm)	255	220 x 68 x 7.7	220 x 68 x 7.7
6	Spacing of Bottoms /Flanges, (mm)	170	195	190
7	Lower hitch point span, (mm)	490	535	515
8	Mast height, (mm)	371	470	365
9	Overall Dimensions, (mm):			
	Length	1035	970	745
	Width	760	1160	1010
	Height	840	900	790
10	Gross Mass, (kg)	95	140	100

ANNEXURE-II

BRIEF SPECIFICATION OF MATCHING CAGE WHEEL AS DECLARED BY APPLICANT

S. No.	Items	Specifications
1	Type	Half cage wheel
2	Diameter, (mm)	885
3	Width, (mm)	315
4	No. and types of lugs	9, straight lugs made up of MS-angle section welded to angle iron frame.
5	Size of angle section, (mm)	40 x 40 x 5
6	Length of lugs, (mm)	300
7	Spacing of lugs, (mm)	245
8	Weight of each cage wheels (kg)	45

MAHINDRA, JIVO 305 DI 4WD TRACTOR -COMMERCIAL (Initial) THIS TEST REPORT IS VALID UPTO: 30/06/2025

ANNEXURE-III

BRIEF SPECIFICATION OF TRAILER DECLARED AS MATCHING TRAILER BY APPLICANT

S.No.	Item	Specifications		
1	Type of trailer	Semi - Trailer		
2	Number of axles	Single		
3	Un laden Weight of Trailer, kg	550		
4	Overall dimensions of Trailer, (mm):			
	Overall Width	2300		
	Overall Length	1630		
	Overall, Height	1070		
	Wheel Base	Not applicable		
	Wheel Track	1515		
5	Dimension of fitted Platform, (mm):			
	Length	2210		
	Width	1110		
	Height from ground	520		
6	Brakes of Trailer	Not provided		

ANNEXURE-IV

TRACTOR RUN HOURS DURING TEST

A.	LABORATORY AND TRACK TESTS:	HOURS	
1	Running-in	60.0	
2	PTO performance test	16.4	
3	Power lift and hydraulic pump performance test	4.5	
4	Drawbar performance test	15.4	
5	Turning ability	0.5	
6	Location of centre of gravity	0.2	
7	Operator's field of vision	Nil	
8	Brake test	1.0	
9	Noise measurement	1.0	
10	Mechanical vibration test	1.0	
11	Nominal speed test	2.0	
B.	B. FIELD TEST:		
1	Mould board ploughing	10.5	
2	Rotavation	10.4	
3	Puddling (including 5.0 hours water proof test)	15.6	
C.	HAULAGE TEST:	7.8	
D.	Miscellaneous test and other run hours including idle run, transportation,	5.8	
	trials and preparation for test		
	TOTAL:	152.1	