

व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)

संख्या/No. : T-1691/2222/2022

COMMERCIAL TEST REPORT (INITIAL)

माह/Month : December, 2022

Application Reference No. 28/2021-22/106

(यह परीक्षण रिपोर्ट 31/12/2027 तक वैध है / THIS TEST REPORT IS VALID UPTO 31/12/2027)



MAHINDRA, YUVO 585 DI MAT 4WD TRACTOR



भारत सरकार

कृषि एवं किसान कल्याण मंत्रालय

(कृषि, सहकारिता एवं किसान कल्याण विभाग)

GOVERNMENT OF INDIA

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

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1. SPECIFICATIONS

- 1.1 Tractor:**
- Make : Mahindra
 Model : YUVO 585 DI MAT 4WD
 Brand name, if any : None
 Type : Four-wheel Driven, Standard Agricultural Tractor.
 Month & year of manufacture : 01/22
 Chassis number : MBNSFANAFNZK00299
 Country of origin : India
- 1.2 Engine:**
- Manufacturer's address : Mahindra & Mahindra Limited
 (Farm Equipment Sector)
 i) Akurli Road, Kandivli (E), MUMBAI - 400 101
 ii) MIDC, Hingna Road, Nagpur - 440 028
 iii) Khatima Panipat Highway, Udham Singh Nagar, Rudrapur - 263 153
 iv) Jaipur Ajmer Road, Jaipur - 303 007
 v) Near Bidar "T" Junction , Mahindra Nagar, Zaheerabad- 502 220
 vi) Mahindra Research Valley, Mahindra World City, Plot no. 41/1, Anjur P.O., District Chengalpattu - 603004.
- Make : Mahindra
 Model : MTDHI30NA049B3A
 Type : Four stroke, naturally aspirated, liquid cooled, direct injection, diesel engine.
 Serial number : ZMJ6CPF2667
 Country of origin : India
- 1.2.1 Engine speed (rpm), (Manufacturer's recommended production settings):**
- Maximum speed at no load : 2225 to 2425
 - Low idle speed : 750 to 850
 - Speed at maximum torque : 1200 to 1500
- Rated speed, (rpm):**
- For PTO use : 2100
 - For drawbar use : 2100
- 1.3 Cylinder & Cylinder Head:**
- Number : Four
 Disposition : Vertical, Inline
 Bore/stroke, (mm) : 88.9/120 (apa)
 Capacity as specified by the applicant, (cc) : 2979
 Compression ratio : 20 (±1) : 1
 Type of cylinder head : Monoblock
 Type of cylinder liners : Wet, replaceable
 Type of combustion chamber : Re-entrant cavity on piston head
 Arrangement of valves : Overhead, inline
- | Valve clearance: | <u>Cold</u> | <u>Hot</u> |
|-------------------------|-------------|------------|
| - Inlet valve, (mm) | 0.4 | 0.3 |
| - Exhaust valve, (mm) | 0.5 | 0.4 |
- 1.4 Fuel System:**
- Type of fuel feed system : Gravity and force feed
- 1.4.1 Fuel tank:**
- Capacity, (l) : 61.5
 Location : Above clutch housing
 Provision for draining of sediments/ water : Provided
 Material of fuel tank : Plastic

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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:

Sl. No.	Characteristic	Category (Evaluative / Non Evaluative)	Requirements as per IS: 12207-2019	Values declared by the applicant/ (D) Requirement (R)	As observed	Whether meets the requirements (Yes/No)
1	2	3	4	5	6	7
17.1.1	PTO Performance:					
a)	Maximum power under 2 h test, (kW) (Natural ambient condition)	Evaluative	Declared value to be achieved with a tolerance of: $\pm 5\%$ for PTO power and or engine power >26 kW. $\pm 10\%$ for PTO power and or engine ≤ 26 kW.	33.4 (D)	33.4	Yes
b)	Power at rated engine speed, (kW)	Non Evaluative	-do-	33.4 (D)	33.1	Yes
c)	Specific fuel consumption corresponding to maximum power, (g/kWh)	Evaluative	+ 10% max.	242.7 (D)	243	Yes
d)	Maximum equivalent crankshaft torque, (Nm)	Non Evaluative	$\pm 8\%$	178.6 (D)	180.9	Yes
e)	Back-up torque, percent	Evaluative	12 percent	12 (D) 12 (R) Minimum	20.4	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.	130 (D)	119	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.	118 (D)	103	Yes
g)	Engine oil consumption, (g/kWh)	Evaluative	Not exceeding 1% of SFC at max. Power under High ambient conditions.	2.40 (R) Maximum	0.20	Yes
h)	Smoke 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 per meter (R) Maximum	0.26	Yes

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1	2	3	4	5	6	7	
17.1.2	Drawbar performance:						
a)	Max. drawbar pull with ballasted corresponding to 15 percent wheel slip, (kN)	Non Evaluative	Minimum 70% of static mass of tractor with ballast.	21.46 (D) 25.56 (R) Minimum	28.30	Yes	
b)	Max. drawbar pull without ballast corresponding to 15 percent wheel slip, (kN)	Evaluative	Minimum 70% of static mass of tractor without ballast or with standard ballast, as the case may be.	15.75 (D) 15.84 (R) Minimum	18.07	Yes	
c)	Maximum drawbar power without ballast, (kW).	Evaluative	Minimum 80 % of PTO power as referred in SI No. 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.	26.7 (D) 26.7 (R) Minimum	27.8	Yes	
d)	Maximum transmission oil temperature, (°C)	Evaluative	The declared value should not exceed the maximum value specified by oil company	120 (D)	86	Yes	
17.1.3	Power lift and hydraulic pump performance:						
a)	Maximum lifting capacity throughout the range of lift, (kN):						
	1)	At hitch points	Evaluative	Tolerance of ± 10%	16.67 (D)	15.80	Yes
	2)	With the standard 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.	11.77 (D) 7.86 (R) Minimum	10.87	Yes
b)	Maximum drop in the height of the point of application of the force after each 5 minutes interval for a total duration of 30 Minutes, (mm)	Non Evaluative	The observed value should not exceed 50 mm	50 (D) Maximum	05	Yes	
17.1.4	Brake performance at 25 kmph:						
a)	Maximum stopping distance at a force, equal to or less than 600 N on brake pedal with road ballast, (m):						
	1)	Cold brake	Evaluative	10	10 (R)	7.40	Yes
	2)	Hot brake	Evaluative	10	10 (R)	7.46	Yes
b)	Maximum force exerted on the brake pedal to achieve a deceleration of 2.5 m/s ² , (N)		Evaluative	600	600 (R) Maximum	165 to 184	Yes
c)	Whether parking brake is effective at a force of 600 N at foot pedal (s) or 400 N at hand lever		Evaluative	Yes / No	Yes	Yes	Yes

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1	2	3	4	5	6	7
17.1.5	Noise measurement:					
a)	Maximum ambient noise emitted by the tractor, dB(A)	Evaluative	88 dB (A) for >1.5 tonne GVW and 85 db (A) for <1.5 tonne GVW (as per CMVR)	88 (R)	82	Yes
b)	Maximum noise at operator's ear level, dB(A)	Evaluative	96 (as per CMVR)	96 (R)	94	Yes
17.1.6	Amplitude of mechanical vibrations at:					
	1) Left foot rest	Non Evaluative	100 microns (max.)	100 (R)	150	No
	2) Right foot rest				166	No
	3) Seat (with driver seated)				143	No
	4) Steering wheel				145	No
17.1.7	Haulage requirements:					
a)	Gross mass of the trailers, (tonne):					
	Two wheel	Non Evaluative	As specified by the manufacturer	5.0 (D)	5.0	Yes
	Four wheel	Non Evaluative		6.0 (D)	6.0	Yes
b)	Distance travelled / liter of fuel consumption, (km/l):					
	Two wheel	Non Evaluative	As specified by the manufacturer	4.0 to 5.0 (D)	5.17 to 5.30	No
	Four wheel	Non Evaluative		4.0 to 5.0 (D)	4.87 to 4.98	Yes
c)	Fuel consumption, (ml/km/tonne):					
	Two wheel	Non Evaluative	As specified by the manufacturer	25 to 35 (D)	37.72 to 38.68	No
	Four wheel	Non Evaluative		25 to 35 (D)	33.45 to 34.25	Yes
17.1.8	Wetland cultivation:					
	Sealing for the following assemblies:	Evaluative	The identified assemblies should essentially meet the requirement of IS: 11082. No water ingress in the identified assembly given in column-2. If tractor does not meet the requirements of wetland cultivation, it may be recommended for dry land operation only.	There should be no ingress of water and/or mud (R)	No ingress of water and/or mud was observed	Yes
	1) Clutch assembly	-do-				
	2) Brake housings	-do-				
	3) Front axle housing & front final drive	-do-				
	4) Engine Oil	-do-				
	5) Transmission Oil	-do-				
17.1.9	Safety features					
a)	Guards against moving and hot parts	Evaluative	Belt drives, pulleys, silencer, hydraulic pipes (As per IS 12239 (Part2))	Meets the requirement		Yes
b)	Lighting arrangement	Evaluative	As per CMVR	Meets the requirement		Yes
c)	Seating requirements (Tractors having more than 1150 mm rear track width)	Non Evaluative	Should meet the requirements of IS: 12343 (As amended from time to time)	Does not meet the requirement		No

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1	2	3	4	5	6	7
d)	Technical requirements for PTO shaft	Evaluative	Should meet the requirements of IS: 4931 (As amended from time to time)	Meets the requirement		Yes
e)	Dimensions of three point linkage	Non Evaluative	Should meet the requirements of IS: 4468 (Part-I) (As amended from time to time)	Does not meet the requirement		No
f)	Specifications of linkage drawbar	Evaluative	Should meet the requirements of IS: 12953 (As amended from time to time)	Meets the requirement		Yes
g)	Swinging drawbar (wherever fitted)	Evaluative	Should meet the requirement of IS: 12362 (Part 3) (As amended from time to time)	Not provided		Not applicable
h)	1) Maximum travelling speed at rated engine speed in reverse gears, Kmph	Evaluative	Should not exceed 20 Kmph	12.31 (Meets the requirement)		Yes
	2) Audible warning signal on tractor	Evaluative	As soon as the travelling speed in reverse gear reaches to 20 kmph, an audible warning signal on tractor shall be activated. The safety aspects about the operation of shuttle technology shall be brought in operation and manufacturer /dealer shall ensure the training on this aspect to operator before the delivery of tractor.	Not fitted		Not applicable
17.1.10	Labelling of tractors (Provision of labelling plate):					
	1) Make	Evaluative	Should conform to the requirements of CMVR along with maximum PTO Power in kW and year of manufacture in numerical form. MM YY Digit 01 – 12 in box No.1 for MM will represent the months and next two digits in box No.2 for YY will represent the year of Manufacturing.	Mahindra		Yes
	2) Model	Evaluative		YUVO 585 DI MAT 4WD		Yes
	3) Month & Year of manufacture	Evaluative		01/22		Yes
	4) Engine number	Evaluative		ZMJ6CPF2667		Yes
	5) Chassis number	Evaluative		MM YY MBNSFANAFNZK 00299		Yes
	6) Maximum PTO power, (kW)	Evaluative		33.4		Yes
	7) Specific fuel consumption (g/kWh)	Evaluative		242.7		Yes

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1	2	3	4	5	6	7
17.1.11	Discard limit for:					
(a)	Cylinder bore diameter, (mm)	Evaluative	To be specified by the manufacturer and supported by the printed literature	89.13	88.866 to 88.913	Yes
(b)	Clearance between piston & cylinder liner at skirt, (mm)	Non Evaluative		0.20	0.124 to 0.140	Yes
(c)	Piston diameter at skirt, (mm)	Non Evaluative		88.15	88.768 to 88.789	Yes
d)	Ring end gap (mm):					
	- Top comp. ring.	Evaluative	To be specified by the manufacturer and supported by the printed literature	2.5	0.30	Yes
	- 2 nd comp. ring.			2.5	0.50 to 0.55	Yes
	- Oil ring.			2.0	0.35 to 0.40	Yes
(e)	Ring groove clearance (mm):					
	- Top comp. ring.	Evaluative	To be specified by the manufacturer and supported by the printed literature	0.30	-Tappered-	--
	- 2 nd comp. ring.			0.30	0.054 to 0.060	Yes
	- Oil ring.			0.20	0.041 to 0.045	Yes
(f)	Diametrical clearance of main bearing	Evaluative	To be specified by the manufacturer and supported by the printed literature	0.20	0.050 to 0.082	Yes
(g)	Clearance of big end bearings, (mm):					
	- Diametrical	Evaluative	-do-	0.20	0.080 to 0.103	Yes
	- Axial	Evaluative	-do-	0.75	0.25	Yes
(h)	Crankshaft end float	Evaluative	-do-	0.60	0.12	Yes
(i)	Clearance between king pin and bush, (mm)	Non Evaluative	-do-	0.30	Tappered roller bearings is provided	Not applicable
(j)	Clearance between centre pin and bush, (mm)	Non Evaluative	-do-	0.30	0.19 to 0.27	Yes
17.1.12	Literature (Submission to test agency)					
(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
17.1.13	Fitment of Roll Over Protective Structures (ROPS):					
	For tractor having more than 1150 mm rear track width	Evaluative	ROPS should meet the requirement of IS:1182 or OECD code or equivalent International Standard		Not fitted	Not applicable
17.1.14	Standard Accessories	Evaluative	Trailer hitch, front tow hook, linkage drawbar should be provided with tractor		Provided	Yes
17.1.15	Accessories (optional)	Non Evaluative	Ballast weight, if fitted, should meet the requirement of CMVR		Not fitted	Not applicable

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17.2 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	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 Conformity with following IS:

- i) Guide lines for declaration of power and specific fuel consumption and labeling of agricultural tractors (First revision) [IS10273: 1987 (Reaffirmed in January, 2019)] : **Conforms**
- ii) Agricultural tractors - Rear mounted power take-off - Types 1, 2 and 3 (third revision) [IS:4931-1995 (Reaffirmed in January, 2019)] : **Conforms**
- iii) Agricultural wheeled tractors - Rear mounted three-point linkage: Part 1 Categories 1, 2, 3 & 4 (fourth revision) [IS 4468 (Part-I):1997 (Reaffirmed in 2022)] : **Does not conform**
- iv) Drawbar for agricultural tractors – Link type [IS 12953:1990 (Reaffirmed October, 2017)] : **Conforms**
- v) Agricultural tractors - Operator's seat technical requirement [IS 12343 –2021] : **Does not conform**
- vi) Guide for safety & comfort of operator of agricultural tractors: Part 1 General requirements (first revision): [IS 12239 (PT-1)-2018. : **Does not conform**
- vii) Tractors and machinery for agriculture and forestry – Technical means for ensuring safety Part 2: Tractors (first revision) (IS 12239 (PT-2) 1999) (Reaffirmed in January, 2019)] : **Does not conform**
- viii) Guide lines for location and operation of operator controls on agricultural tractors and machinery (first revision) IS: 8133- 2021. : **Does not conform**
- ix) Tractors and machinery for agriculture and forestry, powered lawn and garden equipment - Symbols for operator controls and other displays Part 2 Symbols for agricultural tractors and machinery [IS:6283 (Part-1)- 2006 and IS: 6283 (Part-2)- 2007 (Reaffirmed in January, 2019)] : **Conforms**
- x) Agricultural Tractors and Machinery - Lighting device for travel on public roads (IS: 14683-1999) (Reaffirmed in January, 2019)] : **Conforms**

17.4 Salient Observations:

17.4.1 Laboratory tests:

17.4.1.2 Mechanical Vibration

The amplitude of mechanical vibration on various assemblies marked as (*) in Chapter – 09 of this test report is on higher side. This calls for dampening down of vibrations especially on left foot rests, right foot rest, steering wheel and operator's seat to improve the operational comfort and service life of components.

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17.4.1.3 Haulage test:

- i) Distance travelled / litre of fuel consumption with two wheel trailer has been recorded as **5.17 to 5.30 km/l** against the declaration of **4.0 to 5.0 km/l** which does not meet the requirement of IS: 12207-2019. This should be looked into for necessary corrective action at production level.
- ii) Specific fuel consumption with two wheel trailer has been recorded as **37.72 to 38.68 ml/km/tonne** against the declaration of **25 to 35 ml/km/tonne** which does not meet the requirement of IS: 12207-2019. This should be looked into for necessary corrective action at production level.

17.4.1.4 Wheel Rims:

- i) **The size of the steered wheel rims was found to be “W7”.**
- ii) **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 ITTAC manual is “W8”. An immediate corrective action is required to be taken even in stand point of view with compliance to CMVR,1989.**

17.4.1.5 Three point linkage:

The dimension viz. diameter & width of ball of lower hitch points, lateral distance from lower hitch point to centre line of tractor & distance from end of power take-off to centre of lower hitch point (lower links in horizontal position) does not meet the requirements of IS:4468 (Part-I) – 1997. This should be looked into for corrective action.

17.4.1.6 Operator’s seat:

- i) Provision for adjustment of driver’s mass has been specified as 50 to 120 kg against the requirement of 40 to 100 kg.
- ii) Vertical distance from Seat Index Point to the centre of steering control wheel was measured 225 mm which is not within the required range of 265 to 385 mm.
- iii) Longitudinal distance from Seat Index Point to centre of steering control wheel was measured 550 mm which is not within the required range of 425 to 525 mm.
- iv) Vertical distance from Seat Index Point to foot rest was measured 535 mm which is not within the required range of 450 to 520 mm.

Above parameters does not meet the requirement of IS: 12343-2021. This should be looked into for necessary corrective action at production level.

17.4.1.7 Operator’s work place:

- i) Vertical retainer has not been provided on inner side of clutch pedal.
 - ii) Spark arresting device has not been provided in the exhaust system.
- Above parameters does not meet the requirement of IS: 12239 (Part-I) 2018. This should be looked into for necessary corrective action at production level.

17.4.1.8 PTO master shield:

PTO master shield has not been provided on tractor. This should be looked into for necessary corrective action.

17.5 Specification

- i) Matching implement for tractor of disc plough was specified as three bottom in the specification sheet, the same was also recommended by the manufacturer for field test. However, it was mentioned as 2 bottom for disc plough in operator’s manual.
- ii) Recommended gross mass of double axle trailer was specified as 6.0 tones in the specification sheet, the same was also recommended by the manufacturer for haulage test. However, it was mentioned as 8.0 tones in operator’s manual.
- iii) Inflation tyre pressure of front wheel for field work and road work was specified as 1.63 & 1.94 kgf/cm² and rear wheel for field work and road work was specified as 1.33 & 1.73 kgf/cm² respectively in the specification sheet. However, it was specified as 1.68 & 1.96 kgf/cm² in front wheel for field work and road work, also 1.19 & 1.40 kgf/cm² in rear wheel for field work and road work in operator’s manual.

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17.6 Maintenance / Service Problems:

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

17.7 Recommendation with regard to safety on tractor:

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

- i) The working clearance around draft control lever and RHS fender has been measured as 40 mm, it should be provided as per the requirement of IS: 12239 (Part-2) - 1999, (Reaffirmed in January, 2019).
- ii) Fuel shut off knob should remain in stop as per the requirement of position IS: 8133-2021.
- iii) Direction of motion of hand operated accelerator lever for increasing the engine speed should be in accordance with IS: 8133-2021.
- iv) Colour of the engine speed control, transmission control, fuel shut off knob, differential lock pedal and PTO engaging lever should be provided in accordance with IS: 8133-2021.

17.8 Adequacy of Literature supplied with machine:

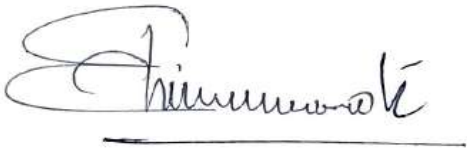

17.8.1 The following literature was supplied with test sample for reference during the test.

- a) Service manual for Mahindra Yuvo 585 DI MAT 4WD tractor model.
- b) Operator's manual for Mahindra Yuvo tractor models.
- c) Parts catalogue Part-I & II for Mahindra Yuvo 585 DI MAT 4WD tractor model.

17.8.2 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:

- i) Detail specifications of tractors model in service manual.
- ii) Safe hitch height while using double axle trailer.
- iii) Recommended gross mass of double axle trailer for haulage operation.
- iv) Matching implements for tractor
- v) Coolant and water ratio.
- vi) Inflation tyre pressure of front wheel & rear wheel for field work and road work.

TESTING AUTHORITY:

C.V. CHIMOTE TEST ENGINEER	
P.K. PANDEY DIRECTOR	

Draft Test Report is compiled by: **Vithato Keyho**, Senior Technical Assistant

18. APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's comments
18.1	17.4.1.4	Action will be initiated as per ITTAC recommendations.
18.2	1.20.3, 1.20.4, 17.5, 17.7 & 17.8.2	Parameters will be studied and necessary action will be initiated.

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ANNEXURE- I

BRIEF SPECIFICATION OF MATCHING IMPLEMENTS AS DECLARED BY APPLICANT

S. No.	Parameters	Disc Plough	Rotavator	Puddler
1	Make	Mahindra	Mahindra	Not available
2	Type	Mounted	Mounted	Mounted
3	No. of Discs / Blades	Three	36 in 7 flanges	12 (6 in 2 gangs)
4	Type of Discs / Blades	Plain concave	Hatchet	Notched
5	Size of Discs / Blades, (mm)	610	265 x 85 x 8	460
6	Spacing of Discs /Flanges, (mm)	520	325	165
7	Lower hitch point span, (mm)	855	785	680
8	Mast height, (mm)	440	595	500
9	Overall Dimensions, (mm):			
	Length	1890	970	1190
	Width	1080	1690	1810
	Height	1070	1105	1330
10	Gross Mass, (kg)	365	450	240
11	Working width (cm)	3 x 30	145	210

ANNEXURE-II

BRIEF SPECIFICATION OF MATCHING CAGE WHEEL AS DECLARED BY APPLICANT

S. No.	Items	Specification
1	Type	Half cage wheel
2	Outer dia. (mm)	1200
3	Width (mm)	360
4	No. & Type of Lugs	14, straight lugs made of MS angle section welded to angle iron frame
5	Size of angle section, (mm)	50 x 50 x 5
6	Length of lug, (mm)	360
7	Spacing of lug, (mm)	260
8	Weight of each cage wheel, (kg)	100

ANNEXURE-III

BRIEF SPECIFICATION OF TRAILER DECLARED AS MATCHING TRAILER BY APPLICANT

S. No.	Item	Trailer	Trailer
1.	Type of trailer	Semi - Trailer	Semi - Trailer
2.	Number of axles	Single	Double
3.	Un laden Weight of Trailer, kg	1670	2800
4.	Fully laden Weight of Trailer, Tons (Kg)	5000	6000
5.	Overall dimensions of Trailer, (mm):		
	Overall Width	1870	2140
	Overall Length	4180	5785
	Overall Height	2175	2110
	Wheel Base	Not applicable	2835
	Wheel Track	1600	1740(Front) &1765(Rear)
6.	Dimension of fitted Platform, (mm):		
	Length	3040	4225
	Width	1830	2135
	Height from ground	1190	1305
7.	Brakes of Trailer	Not Provided	Not Provided

T-1691/2222/2022	MAHINDRA, YUVO 585 DI MAT 4WD TRACTOR – COMMERCIAL (INITIAL)
	THIS TEST REPORT IS VALID UPTO: 31/12/2027

ANNEXURE-IV

TRACTOR RUN HOURS DURING TEST

A.	LABORATORY AND TRACK TESTS:	HOURS
1.	Running-in	66.03
2.	PTO performance test	14.2
3.	Power lift and hydraulic pump performance test	0.7
4.	Drawbar performance test	19.4
5.	Turning ability	0.8
6.	Location of centre of gravity	0.3
7.	Operator's field of vision	--
8.	Brake test	2.1
9.	Noise measurement	2.0
10.	Mechanical vibration test	1.0
11.	Nominal speed test	1.3
B.	FIELD TEST:	
1.	Disc ploughing	10.6
2.	Rotavation	11.1
3.	Puddling (including 5.0 hours water proof test)	15.3
C.	HAULAGE TEST:	5.4
D.	Miscellaneous test and other run hours including idle run, transportation, trials and preparation for test	12.5
TOTAL:		162.7