व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक) COMMERCIAL TEST REPORT (INITIAL)

संख्या/No. : T-1677/2208/2022 माह/Month : September, 2022

[ONLINE TESTING]

(यह परीक्षण रिपोर्ट 30/09/2025 तक वैध है / THIS TEST REPORT IS VALID UPTO 30/09/2025)



KUBOTA, MU5502-T 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 (An ISO 9001:2015 Certified Institute)

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	KUBOTA, M	U5502-T	TRACTOR - COMMERCIAL (INITIAL)	
T-1677/2208/2022	THIS TE	EST REPO	ORT IS VALID UPTO: 30/09/2025	
Manufacturer	·	:	M/s. KUBOTA Corporation, Escorts Kubota India Private Limited, 18/4, Mathura Road, Faridabad 121 007, Haryana, India.	
Test requested by (applicant)		:	M/s. Kubota Agricultural Machinery India Pvt. Ltd., Block No. 94, Tower-1, 8 th Floor, TVH Beliciaa Towers, MRC Nagar, Chennai-600 028, Tamil Nadu, INDIA.	
Test requested	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		:	50.0	
- Transmission		:	Not recommended	
Method of Sele	ction	:	Initially this tractor model was submitted by the applicant for CMVR test at this Institute. Further, the applicant vide letter no. KAI/BUD/MU5502-4WD/04 dated 18.11.2021 has requested to allow to use the tractor submitted during CMVR test for	

the tractor submitted during CMVR test for ICT test also. The Ministry vide letter dated 24.04.2020, has granted exemption for random selection and accordingly the request of applicant was allowed.

1. SPECIFICATIONS

1.1	Tractor:		
	Make	:	Kubota
	Model	:	MU5502-T
	Brand name, if any	:	None
	Туре	:	Rear Wheel Drive, Standard Agricultural Tractor.
	Month & year of manufacture	:	03/20
	Chassis number	:	KBTM64SFELECPC008
	Country of origin	:	India
1.2	Engine:		
	Manufacturer's address	:	KUBOTA ENGINE (Thailand) Co., Ltd. 360, Moo3, Khao Hin Son, Phanom Sarakham, Chachoengsao 24 120, Thailand
	Make	:	Kubota Engine (Thailand) Co., Ltd.
	Model	:	V2403-M-DI-TE3
	Туре	:	Four strokes, liquid cooled, turbo charged, direct injection, diesel engine.
	Serial number	:	BLA3760
	Country of origin	:	Thailand

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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.	Ch	aracteristic	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:	-			-	1
a)	Maxir under (kW) ambie	num power 2 h test, (Natural nt 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.	31.7	31.1	Yes
b)	Power at rated engine speed, (kW)		Non Evaluative	-do-	31.7 (D)	31.1	Yes
с)	Specific fuel consumption corresponding to maximum power,		Evaluative	+ 10% max.	235 (D)	245	Yes
d)	Maximum equivalent crankshaft torque, (Nm)		Non Evaluative	± 8%	181.4 (D)	182.0	Yes
e)	Back- perce	up torque, nt	Evaluative	12 percent	35 (D) 12 (R)	34.6	Yes
f)	Maxir	num operating te	emperature, (^o	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)	115	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.	119 (D)	108	Yes
g)	Engine oil consumption, (g/kWh)		Evaluative	Not exceeding 1% of SFC at max. Power under High ambient conditions.	2.35 Maximum (R)	0.61	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 Maximum (R)	0.10	Yes
17.1.2	Draw	bar performanc	:e:				
a)	Max.	drawbar pull		Minimum 70% of static mass	25.5 (D)		
	with corres perce (kN)	ballast sponding to 15 nt wheel slip,	Non Evaluative	of tractor with ballast.	22.12 Minimum (R)	25.75	Yes

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1		2	3	4		5	6	7
h)	May	drawbar pull	5	Minimum 70% of	static mass	20.8	0	'
5)	with	. urawbar puri out ballast		of tractor withou	t ballast or	20.8 (D)		
	corr	esponding to	Evaluative	with standard ba	llast, as the	16.08	20.66	Yes
	15	percent wheel	Liadativo	case may be.		(R)	20.00	
	slip,	(kN)			Minimum			
C)	Max	imum drawbar		Minimum 80 % of F	TO power as			
_	pow	er without	Evaluative	referred in SI No.	i) a) of PTO	27.6		
	balla	ast, (kW).		having total static m	se of tractors ass $> 1500 \text{ kg}$	(D)		
				Minimum 75 % of F	TO power as	24.9	29.8	Yes
				referred in SI No.	i) a) of PTO	(R)		
				performance in c	ase of light	Minimum		
				total static mass	of tractor			
				Minimum 75 % o	f the engine			
				power as referred in	SI No. i) a) of			
				tractors which do no	t have a PTO			
				shaft.				
	Max	imum		The declared va	alue should			
d)	trans		Evaluative	not exceed the		120 (D)	86	Yes
-	tem	berature, (C)		value specified				
1713	Pow	er lift and hydra	ulic pump pe	rformance:				
a)	Maximum lifting capacity throughout the range of lift (kN):							
- /	1)	At hitch points	Evaluative	Tolerance of	+ 10%	16 60 (D)	17 05	Yes
	1)		Evaluativo	The lift capacity should at least		10.00 (D)	11.00	100
		With the		be 24 kg/PTO kW and it should		14 00 (D)		
	2)	standard	Evaluative	be 21.5 kg/engine kW where the		7 32 (R)	14.72	Yes
		frame		tractor is not pro	vided with a	Minimum		
b)	Max	imum drop in						
~,	the	height of the						
	poin	t of application						
	of t	he force after	Non	The observed va	alue should	50 (D)	30	Yes
	each	n 5 minutes	Evaluative	not exceed 50 mm		Maximum	00	100
	Inter	val for a total						
	Min	utes (mm)						
17.1.4	Bra	ake performance	at 25 kmph:					
a)	Ма	ximum stopping	distance at a f	orce, equal to or I	ess than 600	N on brake	pedal wit	h road
	bal	last, (m):		· •				
	1)	Cold brake	Evaluative	10		10 (R)	7.84	Yes
	2)	Hot brake	Evaluative	10		10 (R)	7.91	Yes
b)	Ma	ximum force ex	erted on the	Evoluativo	600	600 (R)	343 to	Voc
	bra	ke pedal to	achieve a		000	Maximum	420	165
c)	Wh	othor parking	hrako is					
0)	effe	ective at a force	of 600 N at	Evoluativo Voc / No		Vaa	Vaa	Vaa
	foo	t pedal (s) or 40	0 N at hand			res	res	res
	lev	er						
17.1.5	No	ise measuremer	nt:					
a)	Ма	ximum ambient	noise emitted	Evoluctivo	As per	٥٥ /٦)	70	Vee
	by	the tractor, dB(A)			CMVR	00 (K)	19	res
b)	Ma	ximum noise at o	operator's ear	Evelueting	As per		00	Ver
-	lev	el, dB(A)		Evaluative	CMVR	90 (R)	90	res

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4		•	•		-	0	7
17.1.6	Amp	∠ litude of mechanic	ہ al vibrations:	at:	5	Ø	1
	1)	Left foot rest				66	Yes
	2)	Right foot rest				86	Yes
	2)	Soot (with driver	Non	100 microns	100	50 51	Voo
	3)	Seat (with unver	Evaluative	(max.)	(R)	51	res
		seated)					
	4)	Steering wheel				98	Yes
17.1.7	Air c	leaner:					
	Maximum air cleaner		Evaluative	0.25	Duritures	in alson an fitted	Not
	oil pu	ill over, (%)		(Max.)	Dry type a	air cleaner fitted	appii- cable
18.1.8	Haul	age requirements:					
a)	Gros	s mass of the trailer	s, (tonne):	1	1		
	Two	wheel	Non	As appaified by	5.0 (D)	5.0	Yes
	Four	wheel	Non	the manufacturer			
			Evaluative		8.0 (D)	8.0	Yes
b)	Dista	ance travelled / lite	r of fuel cons	umption, (km/l):			
	Two	wheel	Non	As appaified by	5.0 ± 1 (D)	4.93 to 4.95	Yes
	Four	wheel	Non	the manufacturer		4.55 to 4.60	
			Evaluative		3.9 ± 1 (D)		Yes
C)	Fuel	consumption, (ml	/km/tonne):	Γ	(-)		
	Iwo	wheel	Non Evaluative	As specified by	40±5 (D)	40.38 to 40.62	Yes
	Four wheel		Non	the manufacturer	32 ± 5	27.20 to 27.50	V
			Evaluative		(D)		Yes
17.1.9	Wetl	and cultivation :				ſ	
	Seali	ng for the	Evaluative	assemblies should			
	1)	Clutch	-do-	essentially meet the	There		
	,	assembly		11082. No water	should be	No ingress of	
	2)	Brake housings	-do-	ingress in the identified assembly	of water	water and/or	
	3)	Front axle hubs	-do-	given in column-2. If	and/or mud	mud was	Yes
	4) 5)	Transmission	-00- -do-	tractor does not meet the	(R)	000011100	
	0)	Oil	40	requirements of			
				it may be			
				recommended for			
				only.			
17.1.10	Safe	ty features :			ve eileneer		
a)	and h	os against moving not parts	ainst moving rts Evaluative Belt drives, pulleys, silencer, hydraulic pipes [As per IS 12239 (Part2)]		requirement	Yes	
b)	Lighting arrangement Evaluative As per CMVR		IVR	Meets the requirement	Yes		
c)	Seati	ing requirements		Should meet the red	quirements of	Does not	No
	(Trac	tors having more	Non Evaluative	time to time)	nended from	meet the	
	track	width)		/		requirement	
d)	Tech	nical		Should meet the red	quirements of	Meets the	Yes
	requi	rements for PTO	Evaluative	IS: 4931 (As amend	led from time	requirement	
e)	Snaft	ensions of three	N	Should meet the rec	uirements of	Meets the	Yes
-,	point	linkage	Non Evaluative	IS: 4468 (Part-I) (A	As amended	requirement	
	Ľ	-		from time to time)		•	

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4		2	2	4	-	^	7
1	~	<u> </u>	3	4	5	Ö	1
т)	Spe linka	cifications of age drawbar	Evaluative	Should meet the require IS: 12953 (As amended to time)	from time	Meets the requirement	Yes
g)	Swii (who	nging drawbar erever fitted)	Evaluative	Should meet the requir IS: 12362 (Part 3) (As from time to time)	Not provided	Not appli- cable	
h)	1)	Maximum travelling speed at rated engine speed in reverse gears, kmph	Evaluative	Should not exceed 20 km	13.85 (Meets the requirement)	Yes	
	2)	Audible warning signal on tractor	Evaluative	As soon as the travelling reverse gear reaches to an audible warning s tractor shall be actival safety aspects about the of shuttle technology brought in operation manufacturer /dealer sha the training on this a operator before the de tractor.	Not fitted	Not appli- cable	
17.1.11	Lab	elling of tractors (P	rovision of l	abelling plate):			
	1)	Make	Evaluative	Should conform 1	to the	KUBOTA	Yes
	2)	Model	Evaluative	requirements of CMVR a	long with	MU5502 T	Vec
	2)	Month 8	Evaluative	maximum PTO Power in	kW and	02/20	165
	3)	Year of manufacture	Evaluative	year of manufacture in i	numerical	03/20	Yes
	4)	Engine number	Evaluative	MM YY		BLA3760	Yes
	5)	Chassis number	Evaluative	Digit 01 – 12 in box No will represent the months	KBTM64SFELE CPC008	Yes	
	6)	Maximum PTO power, (kW)	Evaluative	two digits in box No.2 for will represent the Manufacturing.	31.7	Yes	
17.1.12	Dise	card limit for:					
(a)	Cyli dian	nder bore neter, (mm)	Evaluative	To be specified by the	87.17	86.997 to 87.039	Yes
(b)	Clea pisto at sl	arance between on & cylinder liner kirt, (mm)	Non Evaluative	manufacturer and supported by the printed literature	0.30	0.072 to 0.090	Yes
(C)	Pist skirt	on diameter at :, (mm)	Non Evaluative		86.85	86.945 to 86.949	Yes
d)	Rin	g end gap (mm):				· · · · · · · · · · · · · · · · · · ·	
	-	Top comp. ring.		To be specified by the	1.25	0.25 to 0.30	Yes
	-	2 ^{^{rru} comp. ring.}	Evaluative	manufacturer and	1.25	0.45 to 0.50	Yes
	-	Oil ring.		supported by the printed literature	1.25	0.25	Yes
(e)	Rin	g groove clearance	(mm):				
	-	l op comp. ring.		I to be specified by the	0.20	0.063 to 0.065	Yes
	-	2 nd comp. ring.	Evaluative	manufacturer and	0.20	0.072 to 0.080	Yes
(0)	-	Oil ring.		supported by the printed literature	0.15	0.034 to 0.048	Yes
(†)	Clea	arance of main bear	rings (mm):				
	-	Diametrical clearance	Evaluative	To be specified by the manufacturer and	0.40	0.059 to 0.103	Yes
	-	Crankshaft end float	Evaluative	supported by the printed literature	0.50	0.21	Yes

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1		2	3	4	5	6	7
(g)	Cle	arance of big end	bearings, (mn	ו):			
	-	Diametrical	Evaluative	-do-	0.20	0.056 to 0.064	Yes
	-	Axial	Evaluative	-do-	0.75	0.45	Yes
(h)	Cle king (mr	Clearance between Non king pin and bush, Evaluative -do- 0.35		0.104 to 0.124	Yes		
(i)	Cle cer (mr	arance between itre pin and bush, n)	Non Evaluative	-do- 0.35		0.152 to 0.233	Yes
17.1.13	Lite	erature (Submissio	n to test agen	icy)			
(a)	Ор	erator manual	Evaluative	Provided / Not Provided	Provided	Provided	Yes
(b)	Par	ts Catalogue	Evaluative	Provided / Not Provided	Provided	Provided	Yes
(c)	Wo Ser	rkshop/ vice manual	Evaluative	Provided / Not Provided	Provided	Provided	Yes
17.1.14	Fit	nent of Roll Over F	Protective Stru	uctures (ROPS):			
	For mo rea	tractor having re than 1150 mm r track width	Evaluative	ROPS should requirement of I OECD code or International Standar	Not fitted	Not applic -able	
17.1.15	Sta	ndard Accessories	Evaluative	Trailer hitch, front linkage drawbar provided with tractor	Provided	Yes	
17.1.16	Aco	cessories (optional)	Non Evaluative	Ballast weight, if fil meet the requirement	tted, should nt of CMVR	Provided	Yes

17.2	CATEGORY OF BREAKDOWNS / DEFECTS (As per clause 5.0 of IS:12207-2019):					
S. No.	Category of break-downs	Category (Evaluative / Non Evaluative)	Requirements as per IS: 12207-2019	As observed	Whether meets the Require- ments (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)	Guidelines for declaration of power and specific fuel consumption and labeling of agricultural tractors (First revision) [IS10273:1987 (Reaffirmed in January 2010)]	:	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) [IS4468(Part- I):1997/ ISO730-1:1994 (Reaffirmed in 2017)]	:	Conforms
iv)	Drawbar for agricultural tractors – Link type [IS 12953:1990 (Reaffirmed October, 2017)]	:	Conforms
v)	Agricultural tractors- Operator's seat technical requirement [IS12343–2021]	:	Does not conform

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vi)	Guide for safety & comfort of operator of agricultural tractors:Part 1 General requirements (first revision):[IS 12239 (PT-1)-2018 / ISO4254-1:2018]	:	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 onagricultural tractors and machinery [IS: 8133-2021]	:	Does not conform

- ix) Tractors and machinery for agriculture and forestry, powered : Does not lawn and garden equipment Symbols for operator controls and other displays Part2 Symbols for agricultural tractors and machinery [IS: 6283(Part-1)- 2006 and IS: 6283 (Part-2)-2007(Reaffirmed in January,2019)]
- Agricultural Tractors and Machinery-Lighting device for travel on : Conforms public roads (IS:14683-1999) (ReaffirmedinJanuary,2019)]

17.4 Salient Observations:

17.4.1 Laboratory tests:

17.4.1.1 Hydraulic performance test

Angle of rotation of mast over the full range of lift, during lift capacity test at coupled frame, was observed as 9.3 degrees against the minimum requirement of 10 degrees as per IS: 12224-1987 (Reaffirmed 2019). This should be looked into for necessary corrective action.

17.4.1.2 Specifications of Power Take-off Shaft:

In addition to clockwise rotation of PTO shaft, anticlockwise rotation has also been provided in contrast of "clockwise rotation" recommended in Clause No.4 of IS: 4931-1995. The provision of anticlockwise rotation has the potential of rendering the tractor not conforming to IS: 4931- 1995. In this case, it may lead to non-inclusion of tractor in the subsidy list. This should be looked into for necessary corrective action.

In response thereto, the applicant vide letter No. KAI/BUD/MU5502-T/06 dated 08.09.2022 has submitted that "We may prefer to replace reverse PTO by second PTO speed of 751 rpm against rated engine rpm. This will have clockwise rotation with removal and addition following parts: "

S. No.	Part No.	Part Name	Qty.
1	TE122-7916-0	Shaft Gear (11-20, R-PTO)	1
2	TC750-7918-0	Shaft Gear (23-13, R-PTO)	1
3	08181-06206	Brng, Ball	2
4	TC750-8036-3	Gear (45, R-PTO)	1

For removal of reverse PTO, the following parts are to be removed:

For Secondary PTO speed of 751 rpm (clockwise), the following parts are to be added:

S. No.	Part No.	Part Name	Qty.
1	TE122-7913-0	Shaft Gear (11-14, PTO)	1
2	TC750-8033-3	Gear (41, PTO)	1

Thereby, there would be only one direction of rotation i.e. clockwise for both the PTO speeds viz. 550 rpm and 751 rpm at rated engine speed, which conforms to IS: 4931-1995. Thus, tractor now became IS: 4931-1995 conformant.

17.4.1.3 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 SIP to centre of accelerator pedal has been measured as 470 mm against the requirement of 230 to 460 mm.
- iii) Vertical distance from SIP to centre of differential lock pedal has been measured as 470 mm against the requirement of 230 to 460 mm.
- iv) Longitudinal distance from SIP to centre of steering control wheel has been measured as 580 mm against the requirement of 425 to 525 mm.
- v) Vertical distance from SIP to centre of steering control wheel has been measured as160 mm against the requirement of 265 to 385 mm.

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

17.4.1.4 Operator's work place:

- i) Vertical retainer is not provided on inner sides 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.

17.4.1.5 PTO master shield:

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

17.5 Recommendation with regard to safety on tractor:

- i) The PTO shaft master shield has not been provided.
- ii) The working clearance between draft control lever and RHS fender has been measured as 60 mm against the minimum requirement of 70 mm.
- iii) The working clearance between main gear lever and RHS fender has been measured as 50 mm against the minimum requirement of 70 mm.
- iv) The working clearance between PTO clutch lever and LHS fender has been measured as 55 mm against the minimum requirement of 70 mm.
- v) The working clearance between Range selection lever and LHS fender has been measured as 50 mm against the minimum requirement of 70 mm.
- vi) Identification of hand controls by colour has not been provided as per the requirement as laid down in Table 5 of IS: 8133-2021.
- vii) The hand accelerator lever, when moved away from the operator (i.e. forward) decreases the engine speed, which does not meet the requirement as laid down in Table 1 of IS: 8133-2021.

Above parameters should be looked into for necessary corrective action.

17.6 Maintenance / Service Problems:

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

17.7 Adequacy of Literature supplied with machine:

- **17.7.1** The following literatures were supplied with the test tractor for reference during the test: -
 - a) Operator's Manual for "KUBOTA MU5502, MU5502-4WD & MU5502-T" tractor models.
 - b) Illustrated Parts List for "KUBOTA MU5502, MU5502-4WD & MU5502-T" tractor models.
 - c) Workshop Manual for "KUBOTA MU5502, MU5502-4WD & MU5502-T" tractor models.

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- **17.7.2** 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) Safe hitch height
 - ii) Recommended haulage capacity for single axle and double axle trailers.
 - iii) Recommended matching implement for different field operations

TESTING AUTHORITY:

C.V. CHIMOTE TEST ENGINEER	Ra to los i pluses edu generals to score of bit to hereacte of the Ritic score of the Ritic score of the side contacted as	Allune content
P. K. PANDEY DIRECTOR	the locate sense and a day of the sense of t	USn-most

Draft test report compiled by: Partha Lodh, Senior Technical Assistant

Para no.	Our reference	Applicant's comments			
18.1	17.4.1.2	We may prefer to replace reverse PTO by second PTO speed of 751 rpm against rated engine rpm. This will have clockwise rotation with removal and addition following parts: " For removal of reverse PTO, the following parts are to be removed:			
		S. No.	Part No.	Part Name	Qty.
	1305-021	1	TE122-7916-0	Shaft Gear (11-20, R-PTO)	1
	מיתרטא אייי בעסופים	2	TC750-7918-0	Shaft Gear (23-13, R-PTO)	1
	rippi all inem to	3	08181-06206	Brng, Ball	2
	17	4	TC750-8036-3	Gear (45, R-PTO)	1
		For a the fo	ddition of second	ary PTO speed of 751 rpm (cl o be added:	ockwise),
		S. No.	Part No.	Part Name	Qty.
	an de ténetar	1	TE122-7913-0	Shaft Gear (11-14, PTO)	1

18. APPLICANT'S COMMENTS

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ANNEXURE- I

BRIEF SPECIFICATION OF MATCHING IMPLEMENTS AS DECLARED BY APPLICANT

S. No.	Parameters	Disc Plough	Rotavator
1	Make	Vasundhara krishi	Kubota
		yantra	
2	Туре	Mounted	Mounted
3	No. of Discs / Blades	Three	42 in 8 flanges
4	Type of Discs / Blades	Plain, concave	L shape
5	Size of Discs / Blades, (mm)	660	230 x 75 x 7
6	Spacing of Discs /Flanges, (mm)	510	255
7	Lower hitch point span, (mm)	850	825
8	Mast height, (mm)	390	525
9	Overall Dimensions, (mm):		
	Length	1900	1050
	Width	1090	2065
	Height	1150	1070
10	Gross Mass, (kg)	280	510
11	Working width (cm)	100	180

ANNEXURE-II

BRIEF SPECIFICATION OF MATCHING CAGE WHEEL AS DECLARED BY APPLICANT

S. No.	Parameters	Specification
1	Туре	Full cage wheel
2	Outer dia. (mm)	1330
3	Width (mm)	1000
4	No. & Type of Lugs	28, straight lugs made of MS angle section welded to angle iron frame
5	Size of angle section, (mm)	49 x 49 x 5
6	Length of lug, (mm)	490
7	Spacing of lug, (mm)	290
8	Weight of each cage wheel (kg)	160

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,	Not specified	Not specified	
	Tons (Kg)			
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	

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ANNEXURE-IV

TRACTOR RUN HOURS DURING TEST

Α.	LABORATORY AND TRACK TESTS:	HOURS
1.	Running-in	50.0
2.	PTO performance test	13.5
3.	Power lift and hydraulic pump performance test	1.5
4.	Drawbar performance test	20.5
5.	Turning ability& Location of centre of gravity	0.8
6.	Operator's field of vision	
7.	Brake test	1.5
8.	Noise measurement	1.9
9.	Mechanical vibration test	0.8
10.	Nominal speed test	0.9
В.	FIELD TEST:	
1.	Disc ploughing	10.3
2.	Rotavation	11.3
3.	Puddling (including 5.0 hours water proof test)	15.6
C.	HAULAGE TEST:	6.0
D.	Miscellaneous test and other run hours including idle run,	12.5
	transportation, trials and preparation for test	
	TOTAL:	147.1

ANNEXURE-V



Fig. : Front axle fitted as standard fitment



Fig. : Front axle fitted as optional fitment