O.E.C.D. No.: 474
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Report on test in accordance with
O.E.C.D. STANDARD CODE for the Official Testing
of Agricultural Tractors



SCHILTER UNIVERSAL TRACTOR UT 5000

Manufactured by: Maschinenfabrik SCHILTER UND CO
CH-6370 Stans (Switzerland)

Date of Tests: June till November 1974

DLG-Testing Station for Agricultural Machinery
D-6114 Groß-Umstadt

DEUTSCHE LANDWIRTSCHAFTS-GESELLSCHAFT e.V.
Prüfungsabteilung für Landmaschinen
D-6000 Frankfurt/Main 1, Zimmerweg 16

This bulletin is based on engineering tests in accordance with the O.E.C.D. STANDARD CODE for the Official Testing of Agricultural Tractors. It does not contain an evaluation of the performance of the tractor on practical work.

This report has been approved by the O.E.C.D. Coordinating Center (C.N.E.E.M.A., France) as being in accordance with the O.E.C.D. STANDARD CODE.

Date of Approval: 25th April 1975

Serial No.: 474

In this report all performance characteristics are given according to the International System of Units.

The relation with the former used Technical System of Units is given by the following formulas:

Forces:	1 N	=	0,102 kp	or	1 kp	=	9,81 N
Powers:	1 kW	=	1,36 PS	or	1 PS	=	0,736 kW
Pressures:	1 bar	=	1,02 kp/cm²	or	1 kp/cm²	=	0,981 bar
	1000 mbar = 750,1 mm Hg						

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Printed in Germany

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PRÜFUNGS-ABTEILUNG
Schilter UT 5000

Test No. 74-99

Tractor manufacturer:	SCHILTER UND CO, Maschinenfabrik CH-6370 Stans (Switzerland)
Submitted for test by:	Manufacturer
Selected by:	Manufacturer with agreement by DLG
Place of running-in:	Stans and Groß-Umstadt
Duration of running-in:	appr. 75 hours

SPECIFICATION OF TRACTOR

Tractor

Make:	SCHILTER UND CO., Maschinenfabrik
Model:	UT 5000
Type:	Wheel type tractor, unit construction, all wheel driven, with disengageable all wheel steering
Serial No.:	50109

Engine

Make:	PERKINS Ltd
Model:	D3.152
Type:	4 stroke Diesel engine, direct injection water cooled
Serial No.:	63597 D
Cylinders:	3 in line; bore 91,4 mm, stroke 127 mm; displacement 2499 cm^3; compression ratio 18,5 : 1
Valves:	Overhead
Fuel system:	AC-fuel feed pump; CAV distributor type injection pump DPA 3233260; manufacturer's production setting 48 mm^3/stroke at rated engine speed and full load; injection timing 18° before TDC; CAV-multihole injection nozzles; injection pressure 170 bar; CAV-fuel filter with replaceable cartridge; capacity of fuel tank 50 l
Governor:	Mechanically operating variable speed type governor incorporated in injection pump; governed range of engine speed 600 to 2700 rev/min rated engine speed 2500 rev/min

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Air cleaner:	MANN dry filter with replaceable cartridge; 39 020 38 980; with maintenance indicator
Exhaust silencer:	SALKA, Sempach 2-chamber reflexion type silencer; 85 x 150 mm oval, 480 mm long; on the left hand side of the engine; mouth showing to the rear
Lubrication system:	Forced feed from rolling piston type pump; strainer in sump; AC oil filter with by-pass valve; replaceable cartridge; oil capacity 6,5 l oil changing period 100 hours or 3 months; recommended oil viscosities: winter below 0°C SAE 10W summer from 0°C to 27°C SAE 20W/20 tropics above 27°C SAE 30
Cooling system:	Water cooling with overpressure relief valve; adjusted to 0,4 bar overpressure; impeller assisted; thermostat with by-pass; fan with 6 blades, 380 mm Ø; water capacity 9 l
Starting system:	Electrically; CAV-LUCAS screw push starter motor; M 45 G; CAV-thermostart heating tube 357-5 in intake pipe
Electrical equipment:	12 Volt negative earth; CAV-LUCAS direct current generator C 40 T; 1 lead acid battery 105/119 Ah at 20 hours rating

Transmission

Clutch:	FICHTEL UND SACHS AG dry dual disc type clutch; D u T 280-280/280; driving part operated by pedal; p.t.o.-part operated by hand lever
Gear box:	Own make; speed change gear with 4 forward speeds; collar shifted; group gear with 2 forward and 1 reverse group, sliding gear shifted; total 8 forward and 4 reverse speeds
Rear axle and final drive:	Own make; steered driving axle, portal construction; crown wheel and pinion; bevel gear type differential; differential lock fitted; operated by hand lever, self-disengaging; spur gear final drives in portals
Driven front axle and final drive:	Own make; steered driving axle, portal construction; driven by universal joint shaft on the right hand side of tractor; front axle drive not disengageable; crown wheel and pinion; bevel gear type differential; differential lock fitted; operated by hand lever, self-disengaging; spur gear final drives in portals
Oil capacity:	Speed change gear, group gear and rear axle total 18 l front axle 5 l final drives each 0,75 l
Recommended oil viscosities:	Speed change gear, group gear, front and rear axle SAE 90 final drives SAE 140
Oil changing period:	500 hours

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Total ratios and speeds

Group	Gear	Number of engine revolutions for one revolution of the driving wheel	Nominal travelling speed at rated engine speed *)	
			km/h	m/s
Slow group	1	309,46	1,45	0,40
	2	182,92	2,45	0,68
	3	105,14	4,25	1,18
	4	61,69	7,25	2,01
Fast group	1	86,15	5,19	1,44
	2	50,92	8,78	2,44
	3	29,27	15,28	4,24
	4	17,17	26,05	7,24
Reverse group	1	257,86	1,73	0,48
	2	152,42	2,93	0,82
	3	87,61	5,10	1,42
	4	51,40	8,70	2,42

*) calculated with the rolling radius 475 mm (DIN 7793)

Power take-off

Main p.t.o.

Independent p.t.o.;
at tractor rear in median plane;
driven through the second disc of the dry dual disc type clutch;
510 mm above ground;
29 x 34,9 x 8,7 mm = 1 3/8", 6 splines
(DIN 9611 Form A; BS 1495; ASAE S. 203.7)
engaged by hand lever;
2 speeds are preselectable:
540 and 1000 rev/min

Main p.t.o. (Continuation)	540 rev/min p.t.o.: 633 rev/min at rated engine speed; standard p.t.o. speed 540 rev/min at 2133 rev/min engine speed 1000 rev/min p.t.o.: 1037 rev/min at rated engine speed; standard p.t.o. speed 1000 rev/min at 2410 rev/min engine speed Both p.t.o. standard speeds may be set by aid of tractormeter; direction of rotation clockwise (viewed from tractor rear)
Front p.t.o.	Independent p.t.o. driven through the second disc of the dry dual disc type clutch; 570 mm above ground; in tractor median plane; dimensions as main p.t.o.; only 1 speed is engageable: 784 rev/min at rated engine speed; standard p.t.o. speed 540 rev/min at 1721 rev/min engine speed; standard p.t.o. speed may be set by aid of tractormeter; direction of rotation clockwise (viewed from tractor front)

Power lift

at rear:	Own make; model 4.30.198; unit construction with power and position control, both mixable, floating position; single acting ram; bore 80 mm, stroke 160 mm; no overpressure relief valve in ram; PLESSY gear type pump A 33 MR; directly driven by engine; BOSCH control valve 0 521 704 054; maximum oil pressure 175 bar; sink throttle for linkage lock for transport; hydraulic oil tank with 18 l capacity

Power lift
(Continuation)

at front:	Own make; disintegrated construction; only floating position; connected to the hydraulic system of the power lift at tractor rear; 2 single acting rams; own make 4.50.357; bore 55 mm, stroke 290 mm; BUCHER control valve LB 08

Implement linkage

at rear:	Three point linkage, category I (DIN 9674); lifting rods length adjustable from 470 to 595 mm; lifting range above ground with lifting rods short from 355 to 950 mm lifting rods long from 35 to 765 mm
at front:	Quick acting hitch system of own construction; rams directly acting on a lateral stabilized linkage frame; lifting range above ground from 300 to 2230 mm; maximum distance of clevis to front axle centre 1045 mm
Oil tappings	Optional 1 oil tapping in front and/or at rear with single or double acting additional control valve available; 5 l hydraulic oil may be taken off through oil tapping for remote cylinders
Holed drawbar	Fitted on the clevis of the lower links; length between the joint balls 830 mm; thickness of the bar 30 mm, width 90 mm; centre hole and 4 holes on either side; 80 mm distance each; all holes 33 mm diameter

Holed drawbar (Continuation)	Height above ground from 50 to 965 mm adjustable depending on lifting rods length, measured at the surface of the bar; in all heights stepless hydraulically lockable; with lower links in horizontal position distance of centre hole: from rear axle centre 800 mm from p.t.o. shaft end 550 mm
Pull attachment	
Trailer hitch:	Own make; 4.30.092; not automatical; height above ground 680 or 750 mm; adjustable by shifting hitch; permissible supporting force 1000 kg; permissible pull 30000 N
Towing hitch:	None
Steering	Axle pivot steering at front and rear axle; rear axle steering disengageable with automatically acting lock; hydrostatic column steering; ZAHNRADFABRIK FRIEDRICHSHAFEN; model 7409; joined to the hydraulic system of power lift; WESTINGHOUSE flow dividing valve; acting mechanically on the wheels
Brakes	
Parking brake:	Mechanically acting external band brake; 1 drum on a gear shaft 150 mm diameter; operated by hand lever with ratchet
Foot brake:	Mechanically acting internal shoe type brake; 2 drums 200 mm diameter on the rear axle half shafts; pedal operated

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Wheels

Steering wheels:	In front and rear (see chapter steering)
Driving wheels:	In front and rear; 4 pneumatics 12,5-20 MPT 4 ply (DIN 7793) maximum permissible load on each tyre 1675 kg at 1,75 bar inflation pressure; track width 1500 mm rims W 10 x 20 in front and rear
Wheel base:	2001 mm

Weights

Ready for use, as tested

			without driver	with driver
Without ballast:	front		1227 kg	1282 kg
	rear		1148 kg	1168 kg
	total		2375 kg	2450 kg
Front ballast:	2 clamps	7 kg each		14 kg
	6 weights	36,5 kg each		219 kg
Rear ballast:	None			
	Water in the tyres at front and rear			295 kg
With ballast:	front		1556 kg	1570 kg
	rear		1347 kg	1408 kg
	total		2903 kg	2978 kg

Seat

BOSTROM
upholstered seat with back rest;
adjustable spring with shock absorber;
parallelogram guidance;
height above ground appr. 1100 mm;
150 mm replaceable to and fro;
in median plane of tractor

Number of grease points (whole tractor): 55

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Safety frame: Own make
see O.E.C.D.-test report CS 1040 dated from 7th June 1975

Dimensions

Total length:	3750 mm with implement linkage in front and rear
Total width:	1840 mm without ballast weights
Total height:	2130 mm to top of safety frame
Maximum ground clearence:	375 mm in tractor median plane

Lighting equipment: Electrical; 12 Volt
acc. to German governmental regulations

	Dimensions of area mm	Height above ground to centre mm	Distance from outside edge of tractor to centre mm
Head lights	110 x 130	870	750
Side lights	80 Ø	1200	120
Rear light	110 x 110	1055	170
Reflectors	80 Ø	835	430

FUELS AND LUBRICANTS USED IN TESTS

Fuel:	ARAL Diesel fuel (DIN 51601) specific gravity at 15°C: during engine-tests 0,834 kg/l during p.t.o.-tests 0,837 kg/l during drawbar-tests 0,834 kg/l
Engine oil:	SHELL Rotella SX 20W/20
Transmission oil: speed change gear, group gear, rear and front axle	SAE 90
final drives:	SAE 140
Hydraulic fluid:	COREX SAE 10W-30

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Test No. 74-99

COMPULSORY TESTS

(1) MAIN POWER TAKE-OFF PERFORMANCE

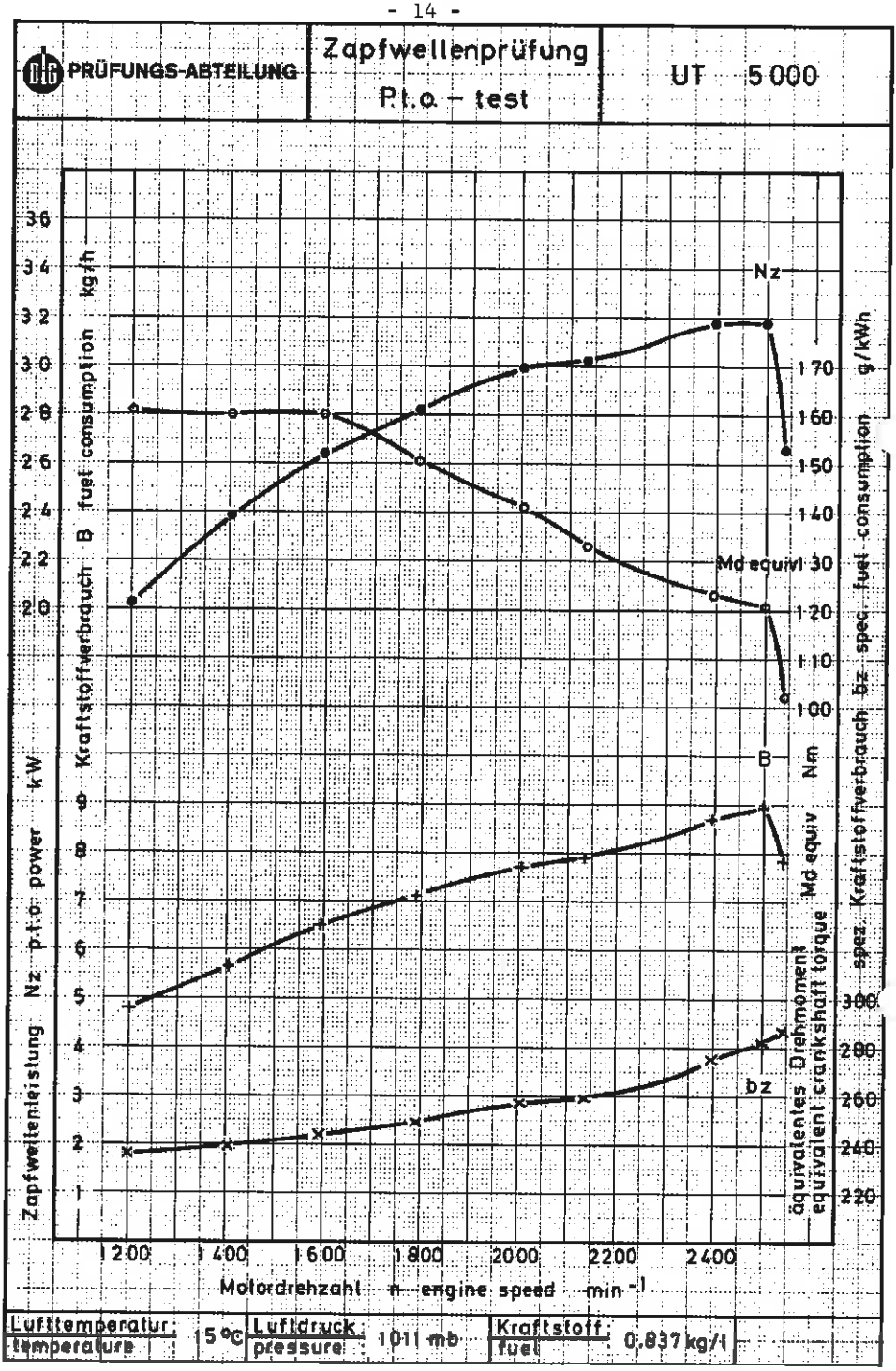
Date of tests: 7th November 1974
Type of dynamometer: Schenck hydraulic dynamometer U1-40

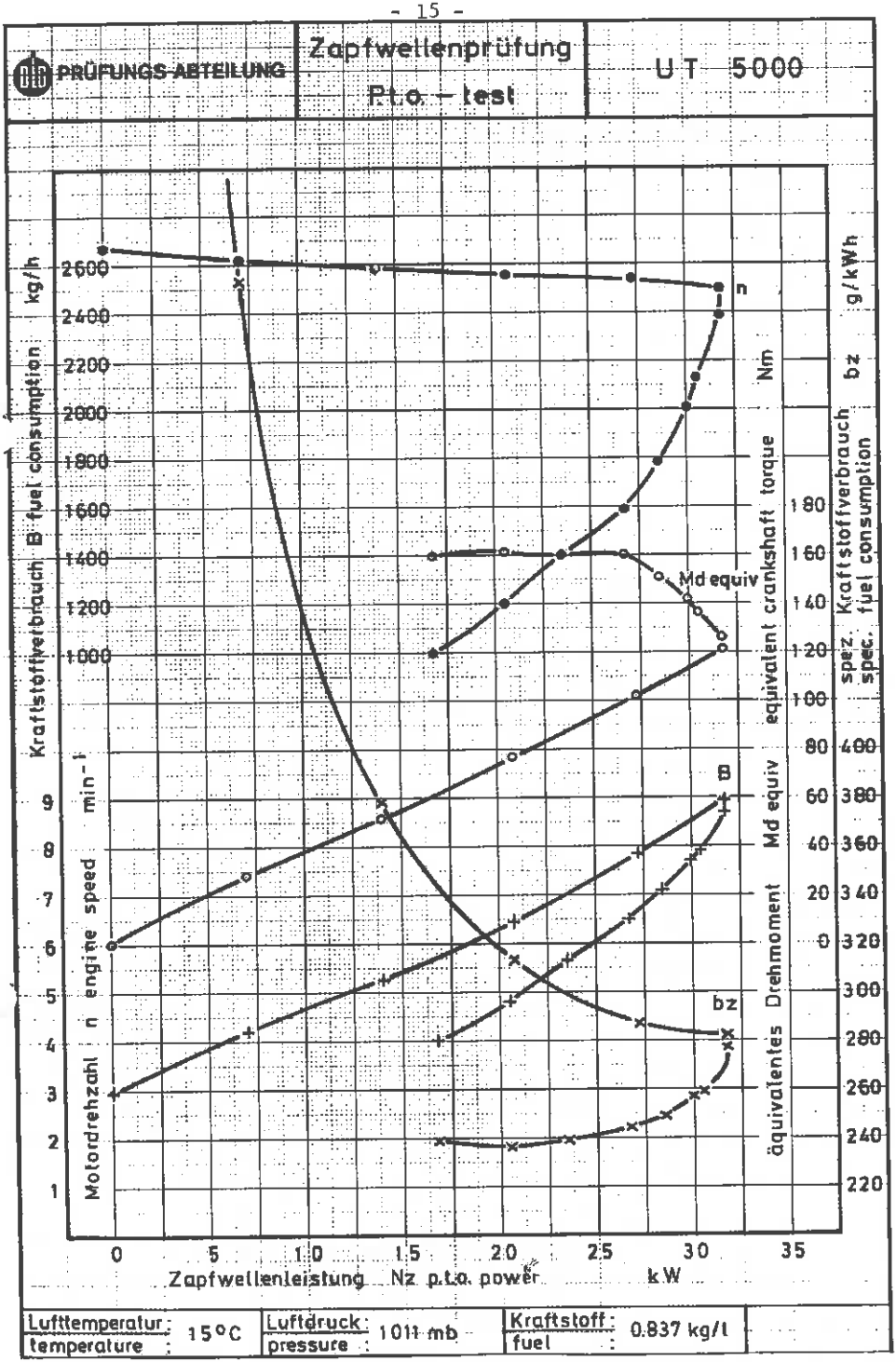
Maximum power

Power	Speed		Fuel consumption			Specific energy
	engine	p.t.o.	total		specific	
kW	rev/min	rev/min	l/h	kg/h	g/kWh	kWh/l
At maximum power 2-hour test						
31,7	2500	633	10,68	8,94	282	2,97
At standard p.t.o. speed (540 rev/min)						
30,4	2133	540	9,43	7,89	259	3,22
At the speed recommended for drawbar work						
31,7	2500	633	10,68	8,94	282	2,97
Part loads						
(i) 85% of the torque at maximum power						
27,3	2538	643	9,35	7,83	287	2,92
(ii) unloaded						
-	2665	649	3,54	2,96	-	-
(iii) 50% of the load defined in (i)						
13,9	2589	656	6,28	5,26	378	2,21
(iv) maximum power						
31,7	2500	633	10,68	8,94	282	2,97
(v) 25% of the load defined in (i)						
7,1	2617	662	4,99	4,18	593	1,41
(vi) 75% of the load defined in (i)						
20,7	2564	649	7,23	6,47	313	2,86

No load maximum engine speed: 2665 rev/min
Equivalent crankshaft torque at maximum power: 121 Nm
Maximum equivalent crankshaft torque: 162 Nm at 1200 rev/min of the engine

Mean atmospheric conditions:	temperature	15°C
	pressure	1011 mbar
	relative humidity	65%
Maximum temperatures:	coolant	80°C
	engine oil	107°C
	fuel	18°C


PRÜFUNGS-ABTEILUNG
Zapfwellenprüfung
P.t.o. – test
UT 5 000
Zapfwellenleistung Nz p.t.o. power kW
Kraftstoffverbrauch B fuel consumption kg/h
Nz
Md equiv
B
bz
äquivalentes Drehmoment equivalent crankshaft torque Md equiv Nm
spez. Kraftstoffverbrauch bz spec. fuel consumption g/kWh
Motordrehzahl n engine speed min⁻¹
1200
1400
1600
1800
2000
2200
2400
Lufttemperatur temperature 15 °C
Luftdruck pressure 1011 mb
Kraftstoff fuel 0,837 kg/l


PRÜFUNGS-ABTEILUNG
Zapfwellenprüfung
P.t.o. – test
UT 5000
Kraftstoffverbrauch B fuel consumption kg/h
Motordrehzahl n engine speed min⁻¹
äquivalentes Drehmoment Md equiv equivalent crankshaft torque Nm
spez. Kraftstoffverbrauch bz spec. fuel consumption g/kWh
n
Md equiv
B
bz
Zapfwellenleistung Nz p.t.o. power kW
Lufttemperatur / temperature : 15°C
Luftdruck / pressure : 1011 mb
Kraftstoff / fuel : 0.837 kg/l

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(2) DRAWBAR PERFORMANCE

Date of test: 23rd September and 18th till 20th November 1974
Type of track: Concrete

Gear No. and group	Speed km/h	Power kW	Drawbar pull N	Engine speed rev/min	Slip of wheels %	Specific energy kWh/l
(i) MAXIMUM POWER with ballast height of drawbar above ground 440 mm						
1 slow	1,34	10,1	27200	2583	15,1	1,65
2 slow	2,23	16,9	27200	2552	15,0	2,10
3 slow	3,96	25,0	22700	2500	11,1	2,31
1 fast	4,95	26,4	19210	2500	8,9	2,46
4 slow	7,14	26,6	13400	2501	5,8	2,50
2 fast	8,75	26,4	10860	2499	4,3	2,45
3 fast	15,51	25,4	5900	2500	2,3	2,37
(ii) FIVE-HOUR-TEST at 75% of pull at maximum power in 4th gear of slow group						
4 slow	7,38	20,8	10170	2542	4,1	2,43
(iii) FIVE-HOUR-TEST at pull corresponding to 15% wheel slip in test (i)						
2 slow	-	-	27200	2552	-	-
(v) MAXIMUM POWER without ballast height of drawbar above ground 440 mm						
1 slow	1,33	8,8	23700	2591	15,0	1,51
2 slow	2,19	14,6	24000	2562	15,0	1,95
3 slow	3,75	24,0	23000	2499	14,0	2,23
1 fast	4,74	25,4	19280	2499	10,9	2,35
4 slow	6,92	25,7	13370	2500	6,9	2,38
2 fast	8,50	26,2	11110	2499	5,5	2,43
3 fast	15,19	25,0	5910	2499	2,6	2,32

Total oil consumption during ten hours duration of tests (ii) and (iii): 20 g/h

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Tyres make and size — front: FIRESTONE 12,5-20 MPT 4 ply
rear: FIRESTONE 12,5-20 MPT 4 ply

Specific fuel consumpt. g/kWh	Temperatures Fuel °C	Coolant °C	Engine-oil °C	Atmospheric conditions Tempe-reture °C	Relative humidity %	Pressure mbar
tyre inflation pressure 1,75 bar active tyre radius under static load 496 mm						
504	16	80	96	16	77	999
398	17	80	93	16	77	999
362	15	80	94	15	76	999
340	15	80	96	14	84	999
333	16	80	95	13	86	999
340	16	80	95	13	80	999
352	15	80	96	13	82	999
344	16	80	93	12	88	998
-	16	80	94	12	90	998
tyre inflation pressure 1,75 bar active tyre radius under static load 497 mm						
551	19	80	93	17	67	1002
427	19	80	100	18	68	1002
374	18	80	96	17	70	1002
356	18	80	98	17	72	1002
351	18	80	94	16	75	1002
344	17	80	101	15	75	1002
361	17	80	100	16	75	1002

Test (iii) was carried out with additional ballast,
the figures not quoted are therefore irrelevant

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(3) TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 12,5-20 MPT 4 ply
rear: 12,5-20 MPT 4 ply

Track of wheels front: 1500 mm
rear: 1500 mm

	With all wheel steering		With front wheel steering	
	left-hand m	right-hand m	left-hand m	right-hand m
Radius of turning space	3,76	3,57	6,27	6,06
Radius of turning circle	3,65	3,46	6,16	5,95

(4) LOCATION OF CENTRE OF GRAVITY

Height above ground	726 mm
Distance forward from the vertical plane containing the axis of the rear wheels	943 mm
Distance of the median plane of the tractor	0 mm

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(5) BRAKING PERFORMANCE

A) FOOT BRAKE

Date of tests: 29th and 30th October 1974
Type of track: Concrete
Type of decelerometer: MOTO METER-Bremsverzögerungs- und Pedalkraftschreiber

Weight of ballasted tractor: 2978 kg with driver

Cold brakes

		With ballast	without ballast
Travelling speed	km/h	25,0	25,0
Deceleration	m/s^2	7,15	8,35
Stopping distance	m	4,2	3,6
Force on pedal	N	735	540
Force on pedal to achieve a deceleration of 2,5 m/s^2	N	176	128

Brake fade characteristics (hot tests)

Deceleration	hot/cold	%	100	98
Stopping distance	cold/hot	%	110	106
Force on pedal	cold/hot	%	98	94

B) PARK BRAKE

Tractor facing up slope:
Pull on hand brake 78 N, tractor does not roll

Tractor facing down slope:
Pull on hand brake 78 N, tractor does not roll

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(6) AMBIENT NOISE EMITTED BY THE TRACTOR

Date of test: 25th September 1974
Type of track: Concrete
Type of sound level meter: Brüel and Kjaer type 2203

Results of test

Gear: 4th fast
Travelling speed before acceleration: 21 km/h
Sound level: 90 dB(A)

(7) NOISE AT THE DRIVER'S EAR LEVEL

Date of tests: 25th September 1974
Type of track: Concrete
Type of sound level meter: Brüel and Kjaer type 2607
Type of frequency analyser: Brüel and Kjaer type 1614
(fitted with octave filter)

The tractor was fitted out with a safety frame

Results of tests

Gear	Drawbar pull at which the tractor develops the maximum sound level N	Travelling speed nominal km/h	Travelling speed effective km/h	Sound level dB(A)
1 slow	23700	1,45	1,34	96,5
2 slow	23430	2,45	2,21	97,5
3 slow	22250	4,25	3,68	99
1 fast	19400	5,19	4,81	98,5
4 slow*)	13390	7,25	7,06	98,5
2 fast	11230	8,78	8,65	98,5
3 fast	5800	15,28	15,25	99,5
4 fast	light load	26,05	28,20	98

*) the 4th slow gear corresponds to the travelling speed nearest to 7,5 km/h

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(8) POWER LIFT AND HYDRAULIC PUMP-PERFORMANCE

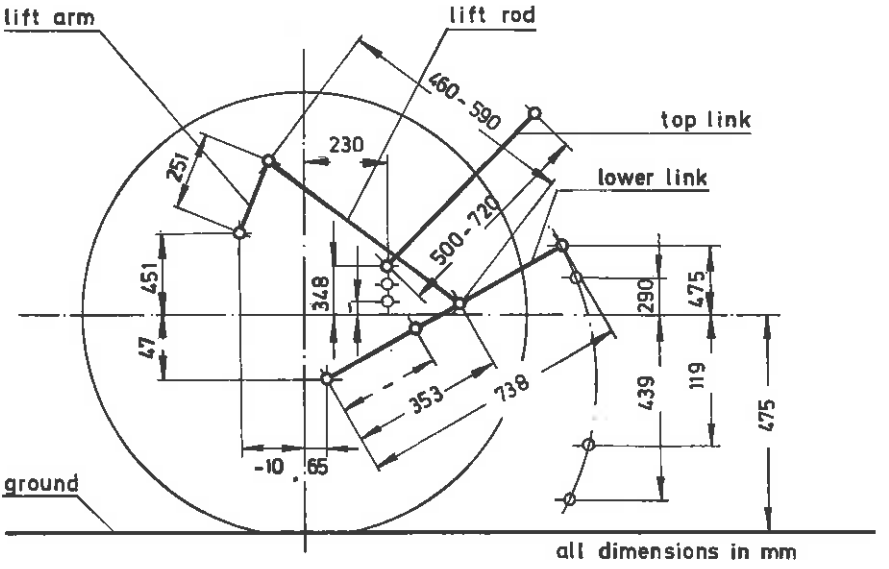
Date of tests: 25th October 1974

HYDRAULIC PUMP

(1) Opening pressure of relief valve in remote circuit	180 bar
Sustained pressure by open relief valve	175 bar
(2) Pump delivery rate at minimum pressure and maximum engine speed	31,6 l/min
(3) Pump delivery rate	29,0 l/min
Delivery pressure	135 bar
Hydraulic Power	6,53 kW

POWER LIFT

Dimensions of linkage geometry for the table on page 24



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LIFTING FORCES (on the power lift at tractor rear)

Lifting heights relative to horizontal lower links

mm	-392	-383	-300	-200	-100	-92	-72	0	+100
at hitch points maximum mechanical advantage									
N							15430	15630	15520
minimum mechanical advantage									
N	13450		13720	13900	13980			13980	13980

Max. force exerted throughout the whole range 14880 N

Force at which front of tractor lifts with maximum allowable front ballast - N

at test frame maximum mechanical advantage									
N		15500	14200	13050	12880			12400	12020
minimum mechanical advantage									
N						13810		13680	13050

Max. force exerted throughout the whole range 9850 N

Force at which front of tractor lifts with maximum allowable front ballast - N

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+200	+300	+338	+388	+400	+500	+523	+600	+673
lift rods 470 mm long								
15430	15140			15060	14930	14880		
lift rods 595 mm long								
13980	13980	13930						

lift rods 595 mm long

11430	10790		9850					
lift rods 470 mm long								
12300	11560			10600	9660		8340	6810

All values of forces for pressure at max. hydraulic power 135 bar, see page 21; calculated from measurements at max. oil pressure 175 bar

LINKAGE GEOMETRY when connected to the standard frame	Maximum mechanical advantage	Minimum mechanical advantage
Projected length in side view:		
Lower links	738 mm	738 mm
Lift arms	250 mm	250 mm
Lift rods	470 mm	595 mm
Top link	575 mm	575 mm
Distance of lift rod connection point from pivot point of lower link	353 mm	353 mm
The following dimensions are given relative to rear axle centre line 475 mm above ground		
Lower link pivot point	65 mm behind, 47 mm below	65 mm behind, 47 mm below
Top link pivot point	230 mm behind, 348 mm above	230 mm behind, 348 mm above
Lift arm pivot point	10 mm behind, 451 mm above	10 mm behind, 451 mm above
Maximum and minimum height of lower link hitch points	475 mm above, 119 mm below	290 mm above, 439 mm below
Height of lower link hitch points when locked in the highest transport position	950 mm above ground	765 mm above ground

LIFTING FORCES (on the power lift at tractor front)

Lifting heights above ground

mm	300	400	600	800	1000	1200	1400	1600	1800	2000	2200	2230
Lifting forces on the implement hitch points												
N	12910	11600	10190	9500	8930	8540	8030	7580	7080	6400	5750	5600

Maximum force exerted throughout the whole range 5600 N
Lifting force at which rear axle of tractor lifts with maximum allowable rear ballast - N

All values of forces for pressure at maximum hydraulic power 135 bar, see page 21; calculated from measurements at maximum oil pressure 175 bar

PRÜFUNGS-ABTEILUNG
Schilter UT 5000

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OPTIONAL TESTS

(9) ENGINE PERFORMANCE

Date of tests: 27th and 28th August 1974
Type of dynamometer: Schenck eddy current dynamometer W 150

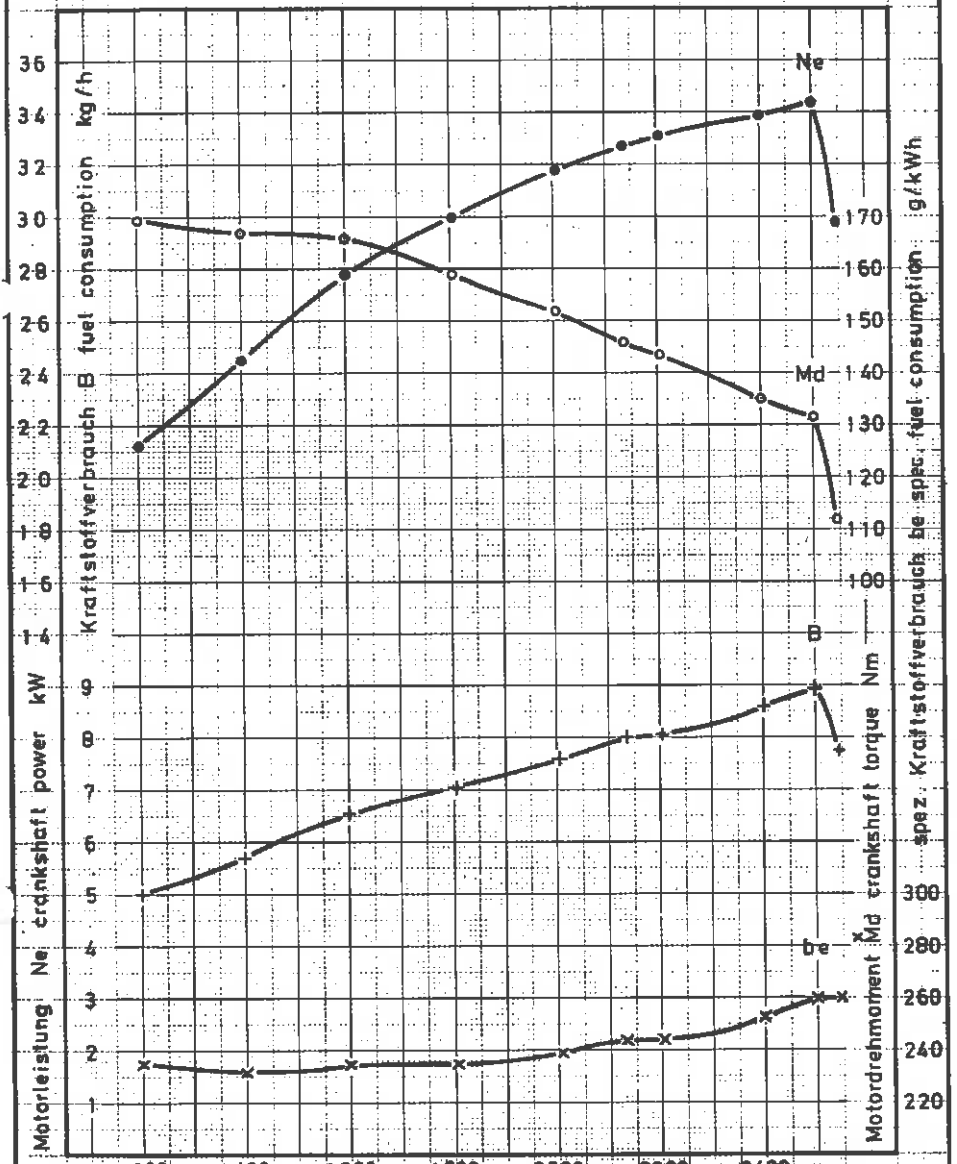
Maximum power

Power kW	Engine speed rev/min	Fuel consumption total l/h	Fuel consumption total kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
At maximum power 2-hour test					
34,4	2500	10,74	8,96	260	3,20
At standard p.t.o. speed (540 rev/min)					
32,7	2133	9,58	7,99	244	3,41
At the speed recommended for drawbar work					
34,4	2500	10,74	8,96	260	3,20
Fuel consumption at part loads					
(i) 85% of torque at maximum power					
29,8	2547	9,29	7,75	260	3,21
(ii) unloaded					
-	2681	3,35	2,79	-	-
(iii) 50% of the load defined in (i)					
15,3	2604	6,21	5,18	339	2,64
(iv) maximum power					
34,4	2500	10,74	8,96	260	3,20
(v) 25% of the load defined in (i)					
7,8	2644	4,75	3,96	507	1,64
(vi) 75% of the load defined in (i)					
22,8	2579	7,75	6,46	283	2,94

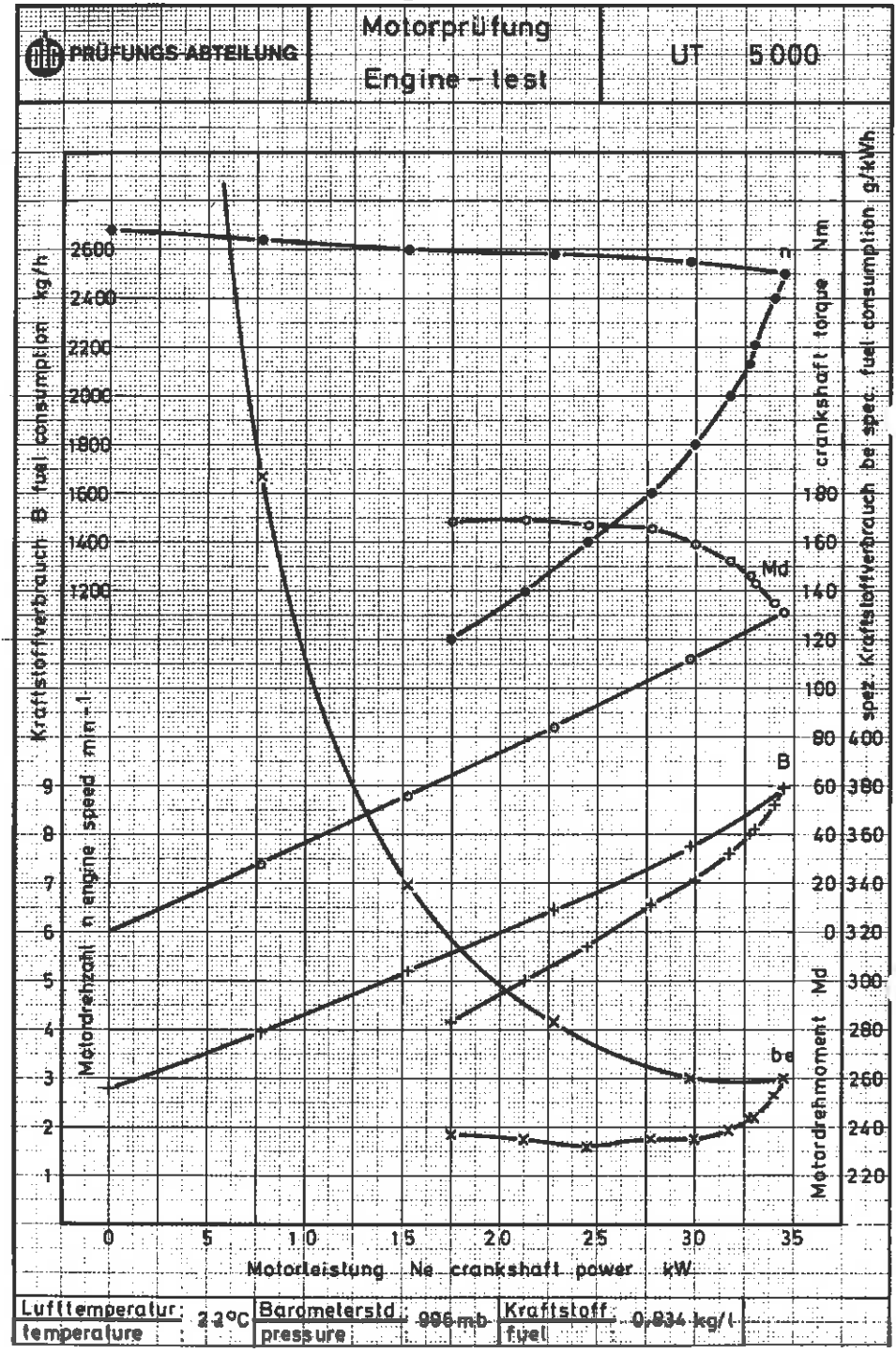
Optimum fuel consumption: 224 g/kWh at 21,5 kW and 1406 rev/min
Standard fuel consumption 1/2 (DIN 9606): 4,46/9,11 l/h
No load maximum engine speed: 2681 rev/min
Torque at maximum power: 131 Nm
Maximum torque: 169 Nm at 1200 rev/min of the engine

Mean atmospheric conditions:	temperature	22°C
	pressure	996 mbar
	relative humidity	75%
Maximum temperatures:	coolant	76°C
	engine oil	109°C
	fuel	22°C

PRÜFUNGS-ABTEILUNG	Motorprüfung Engine-test	UT 5000



Lufttemperatur: temperature : 22°C	Barometerstd. pressure 996 mb	Kraftstoff: fuel 0,834 kg/l


PRÜFUNGS-ABTEILUNG
Motorprüfung
Engine – test
UT 5000
Kraftstoffverbrauch B fuel consumption kg/h
Motordrehzahl n engine speed min-1
Motordrehmoment Md crankshaft torque Nm
spez. Kraftstoffverbrauch be spec. fuel consumption g/kWh
n
Md
B
be
Motorleistung Ne crankshaft power kW
Lufttemperatur / temperature : 22°C
Barometerstd / pressure : 996 mb
Kraftstoff / fuel : 0,834 kg/l

PRÜFUNGS-ABTEILUNG

Motorprüfung
Engine — test

UT 5 000

Motorleistung in % der Leistung bei Nenndrehzahl
engine power in % of power at rated engine speed

Belastung in % des Drehmomentes bei Nenndrehzahl
load in % of torque at rated engine speed

Motordrehzahl in % der Nenndrehzahl
engine speed in % of rated engine speed

g/kWh

Lufttemperatur / temperature	: 22 °C	Barometerstd. / pressure	: 996 mb	Kraftstoff: / fuel	0,834 kg/l