O.E.C.D. No.: 535
Printed: September, 1976

Report on test in accordance with
O.E.C.D. STANDARD CODE for the Official Testing
of Agricultural Tractors



Agricultural Tractor FENDT Farmer 200 S

Manufactured by: X. FENDT UND CO, Maschinen- u.Schlepperfabrik
D-8952 Marktoberdorf

Date of Tests: January till May 1976

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: 30th August, 1976

Serial No.: 535

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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PRÜFUNGS-ABTEILUNG
FENDT FARMER 200 S

Test No. 75-238

Tractor manufacturer:	X. FENDT UND CO D-8952 Marktoberdorf
Submitted for test by:	Manufacturer
Selected by:	Manufacturer with agreement by DLG
Place of running-in:	Marktoberdorf and Groß-Umstadt
Duration of running-in:	Engine and tractor appr. 100 hours

SPECIFICATION OF TRACTOR

Tractor

Make:	X. FENDT UND CO
Model:	FARMER 200 S (FW 144)
Type:	Wheeled tractor, unit construction, rear wheel driven
Serial No:	144/03/0788

Engine

Make:	KLÖCKNER-HUMBOLDT-DEUTZ AG
Model:	F 3 L 912
Type:	4-stroke DIESEL engine, with direct injection, air-cooled
Serial No:	262 954
Cylinders:	3, in-line, bore 100 mm, stroke 120 mm; displacement 2826 cm³; compression ratio 17:1 replaceable ribbed cylinder liners
Valves:	Overhead
Fuel system:	PIERBURG fuel feed pump PE 15252; BOSCH in-line injection pump: PES 3 A 75 D 410/3 RS 1185; manufacturer's production setting 47,5 cm³/stroke at rated engine speed; injection timing 28° before TDC; BOSCH multihole injection nozzles DLLA 149 S 394; injection pressure 175 bar; BOSCH fuel filter with replaceable cartridge; capacity of fuel tank 37 l
Governor:	BOSCH mechanically acting centrifugal variable speed governor; EP/RSV 325-1150 A 8 B 474 DL; governed speed range from 700 to 2125 rev/min; rated engine speed 2000 rev/min

Air cleaner:	MANN UND HUMMEL dry paper element filter with precleaner; replaceable cartridge; service indicator
Exhaust silencer:	Own make multi-chamber-reflection type silencer; 125 mm Ø, 420 mm long; at tractor's left hand side; mouth showing rearward under 45° to the left; (an EBERSPÄCHER silencer with mouth showing upward is optionally available)
Lubrication system:	Forced feed from gear type pump; strainer in sump; MANN oil filter in full flow with by-pass; replaceable paper cartridge; oil capacity 7,5 l; oil changing interval 200 hours or twice the year; recommended oil quality: MIL-L-46152 or MIL-L-2104 C; recommended oil viscosities: winter SAE 10W summer SAE 20W/20 tropics SAE 30
Cooling system:	Air cooling with axial blower; V-belt driven
Starting system:	Electrically; BOSCH starter motor 1,84 kW; heating coil in intake pipe
Electrical equipment:	12 Volt, negative earth; BOSCH 3 phase alternator 0 120 101 013; 1 lead acid battery 88 Ah at 20 hours rating

Transmission

Clutch:	FICHTEL UND SACHS AG independent double disc type clutch; DUT 250 L; travel drive pedal operated; p.t.o. drive hand lever operated
Gear box:	Own make; synchromesh speed change gear with 6 forward and 2 reverse speeds; group gear collar shifted with 1 fast and 1 slow group; 1 high speed gear independent from group gear; totally 13 forward and 4 reverse speeds
Rear axle and final drive:	Bevel gear drive with crown wheel and pinion; bevel gear type differential with lock; pedal operated, self disengaging; spur gear final drives
Oil capacity:	Speed change gear, group gear and rear axle totally 23 l final drives each 1,25 l
Recommended oil qualities:	Speed change gear, group gear and rear axle MIL-L-2105 A SAE 80 final drives MIL-L-2105 B SAE 90
Oil changing interval:	1000 hours or once the year

Power take-off

Main p.t.o.:	Independent p.t.o. driven through the hand lever operated disc of the double disc clutch, operated by hand lever; at rear of tractor 580 mm above ground in tractor's median plane; 29 x 34,9 x 8,7 mm = 1 3/8", 6 splines; DIN 9611 Form 1; BS 1495; ASAE S 203.7; 2 speeds are selectable: 540 rev/min p.t.o. 573 rev/min at rated engine speed 540 rev/min at 1885 rev/min engine speed

PRÜFUNGS-ABTEILUNG
FENDT FARMER 200 S

Test No. 75-238

Total ratios and speeds

Group	Gear	Total ratio engine : driving wheel	Nominal travelling speed *) at rated engine speed km/h	Nominal travelling speed *) at p.t.o. standard speed 540 rev/min km/h
Forward speeds				
Slow group	1	360,29	1,28	1,21
	2	217,92	2,12	2,00
	3	124,21	3,71	3,50
	4	87,17	5,29	4,99
	5	52,72	8,75	8,25
	6	30,05	15,35	14,48
Fast group	1	286,45	1,61	1,52
	2	173,26	2,66	2,51
	3	98,76	4,67	4,40
	4	69,30	6,65	6,26
	5	41,92	11,00	10,36
	6	23,89	19,30	18,20
Independent high speed gear		19,40	23,77	22,40
Reverse speeds				
Slow group	1	209,20	2,20	2,07
	2	50,61	9,11	8,58
Fast group	1	166,33	2,77	2,61
	2	40,24	11,46	10,80

*) calculated with the rolling radius 612 mm WdK 154

Power take-off
(Continuation)

1000 rev/min p.t.o.
1056 rev/min at rated engine speed
1000 rev/min at 1894 rev/min engine speed

P.t.o. speeds may be set by aid of tractormeter;
direction of rotation clockwise
(viewed from tractor rear)

Proportional ground speed p.t.o.:	Main p.t.o. can be shifted to proportional ground speed p.t.o.; 18 revolutions of p.t.o. for 1 revolution of driving wheel; 0,219 m travelling distance for 1 revolution of p.t.o.; direction of rotation clockwise when tractor is travelling forward, viewed from tractor rear
Power lift	Own make; hydraulic power lift, disintegrated construction; power control, position control, both stepless mixable, floating position; BOSCH gear type pump directly driven; 14 cm^3/rev or 28 l/min delivery; (with hydrostatic steering a pump with 16 cm^3/rev delivery is installed); 1 single acting ram; 70 mm bore, 165 mm stroke; BOSCH control valve; maximum pressure 175 bar; no overpressure relief valve in ram; 1 single acting and 1 double acting additional control valve for oil tappings available; hydraulic oil tank with 12 l capacity; 5,5 l may be taken off if tractor is working driving, 10 l if stationary; sink throttle for hydraulical lock for transport; recommended oil quality: engine oil HD SAE 20W/20 MIL-L-2104C or MIL-L-46152; oil changing interval 1000 hours
Implement linkage	Three point linkage, category I DIN 9674; operated by power lift; lift rods length adjustable from 520 to 622 mm; lifting range above ground with short lift rods from 277 to 860 mm long lift rods from 70 to 700 mm

Holed bar

Fitted on the clevis of the lower links;
length between the ball joints 700 mm;
thickness of the bar 25 mm;
centre hole and 3 holes on either side
with 80 mm distance each;
all holes 22 mm diameter;
height above ground adjustable by power
lift within the range from 83 to 873 mm,
depending on lift rods length, measured
at the surface of the bar;
within the range from 265 to 514 in all
positions mechanically lockable;
distance of centre hole with lower links
in horizontal position
to rear axle centre 909 mm
to p.t.o. shaft end 582 mm

Pull attachments

Trailer hitch:

Own make;
not automatically acting;
height above ground 393, 710 or 740 mm
adjustable by turning and shifting hitch;
diameter of clevis hole 32 mm;
distance of centre of clevis hole to rear
axle centre 446 mm;
permissible vertical load 1000 kg

Towing hitch:

Height above ground 600 mm

Steering

ZAHNRADFABRIK FRIEDRICHSHAFEN AG
ZF Gemmer steering 7328;
operated by hand wheel;
(an hydrostatic ZF-steering with BOSCH
flow dividing valve is optionally available;
connected to the hydraulic system of the
power lift)

Brakes

Parking brake:	Mechanically acting band brake; acting on 2 brake drums with 205 mm diameter on the differential half shafts; operated by hand lever with ratchet
Service brake:	Mechanically acting shoe type brake; acting on 2 brake drums with 180 mm diameter on the differential half shafts; pedal operated Both brakes do not interact mutually
Steering brake:	Divided pedal of service brake; for normal use locked together

Wheels

Steering wheels:	Two pneumatics at front 7,5 L-15 6 ply; maximum permissible load per tyre 720 kg at 2,75 bar inflation pressure and 30 km/h; track width 1276, 1396 and 1516 mm; adjustable by extending telescopic half axles; rims 5,50 E x 16
Driving wheels:	Two pneumatics at rear 13,6-28 6 ply; maximum permissible load per tyre 1430 kg at 1,6 bar inflation pressure and 30 km/h; normal track width 1360 mm; track width 1250 and 1502 mm by turning wheels in combination with distance parts; (track width adjustment wheels are optionally available for track widths 1280 to 1480 mm in steps of 100 mm; adjustable by turning wheels and offset lug type rims) rims W 10 x 28
Wheel base:	1968 mm

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Weights

Ready for use, as tested, with frame

		without driver	with driver
Without ballast:	front	600 kg	610 kg
	rear	1275 kg	1345 kg
	total	1875 kg	1955 kg
Front ballast:	1 ground weight		95 kg
	4 front weights	33 kg each	132 kg
Rear ballast:	8 weights per wheel	31,5 kg each	504 kg
	water in the tyres		294 kg
With ballast:	front	865 kg	880 kg
	rear	2035 kg	2100 kg
	total	2900 kg	2980 kg

Seat

GRAMMER
DS 44;
upholstered seat with back rest;
adjustable spring with shock absorber;
parallelogram suspension;
height of platform above ground 630 mm;
height of seat above platform 560 mm with seat not compressed in downmost position;
150 mm adjustable fore and aft;
not adjustable up and down

Dimensions

Total length: 3360 mm with 3 point linkage without ballast
3465 mm with 3 point linkage with ballast

Total width: 1706 mm at smallest track width
1847 mm at largest track width

Total height: 2200 mm to top of frame
2210 mm to top of exhaust pipe
1400 mm to top of steering wheel

Ground clearance: 385 mm below trailer hitch if this is fitted in downmost position

PRÜFUNGS-ABTEILUNG
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Test No. 75-238

Number of grease points 21

Safety frame — Own make;
O.E.C.D. tested
approval no. CS 1015
from 20th November 1974

Lighting equipment — Electrical
12 Volt
in accordance with German legislation

	Dimensions mm	Height above ground to centre mm	Distance from outside edge of tractor to centre *) mm
Head lights	135 x 115	790	690
Side lights	50 x 50	1260	150
Rear lights	80 x 60	1280	200
Reflectors			
1st pair	125 x 35	1210	200
2nd pair	80 ø	610	490

*) at smallest track width

Permissible total weights and axle loads

for all available wheel equipment

Tyres front	Tyres rear	Permissible total weight kg	Permissible front axle load kg	Permissible rear axle load kg
	9,5-32	3000		2275
	9,5-36	3000		2300
5,50-16*)	11,2-28	3000	970	2300
6,00-16	12,4-28	3000	1100	2300
7,5L-15	12,4-32	3000	1100	2300
	13,6-28	3000		2300

All front wheels can be put together with all rear wheels

*) 4 ply, all other tyres in front and in the rear 6 ply

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 0,831 kg/l
	during drawbar tests 0,828 kg/l
Engine oil:	HD SAE 20W/20 MIL-L-46152
Transmission oil:	Speed change gear, group gear and rear axle:
	Transmission oil SAE 80 MIL-L-2105 (A)
	final drives:
	MOBILUBE HD 90 MIL-L-2105 (B)
Power lift:	Engine oil HD SAE 20W/20

PRÜFUNGS-ABTEILUNG

FENDT FARMER 200 S

Test No. 75-238

COMPULSORY TESTS

(1) MAIN POWER TAKE-OFF PERFORMANCE

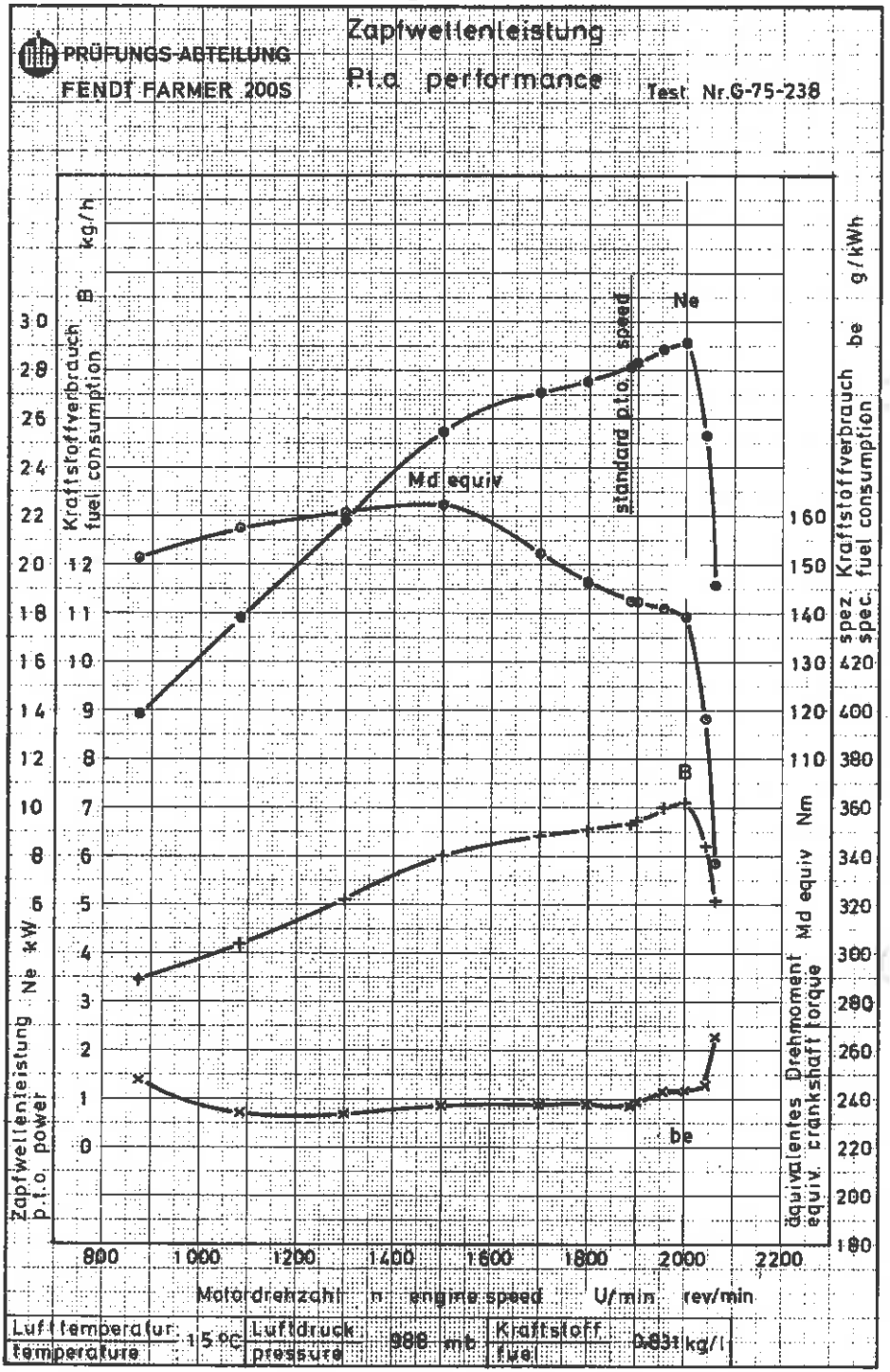
Date of tests: 16th March 1976
Type of dynamometer: SCHENCK hydraulic dynamometer U1-40

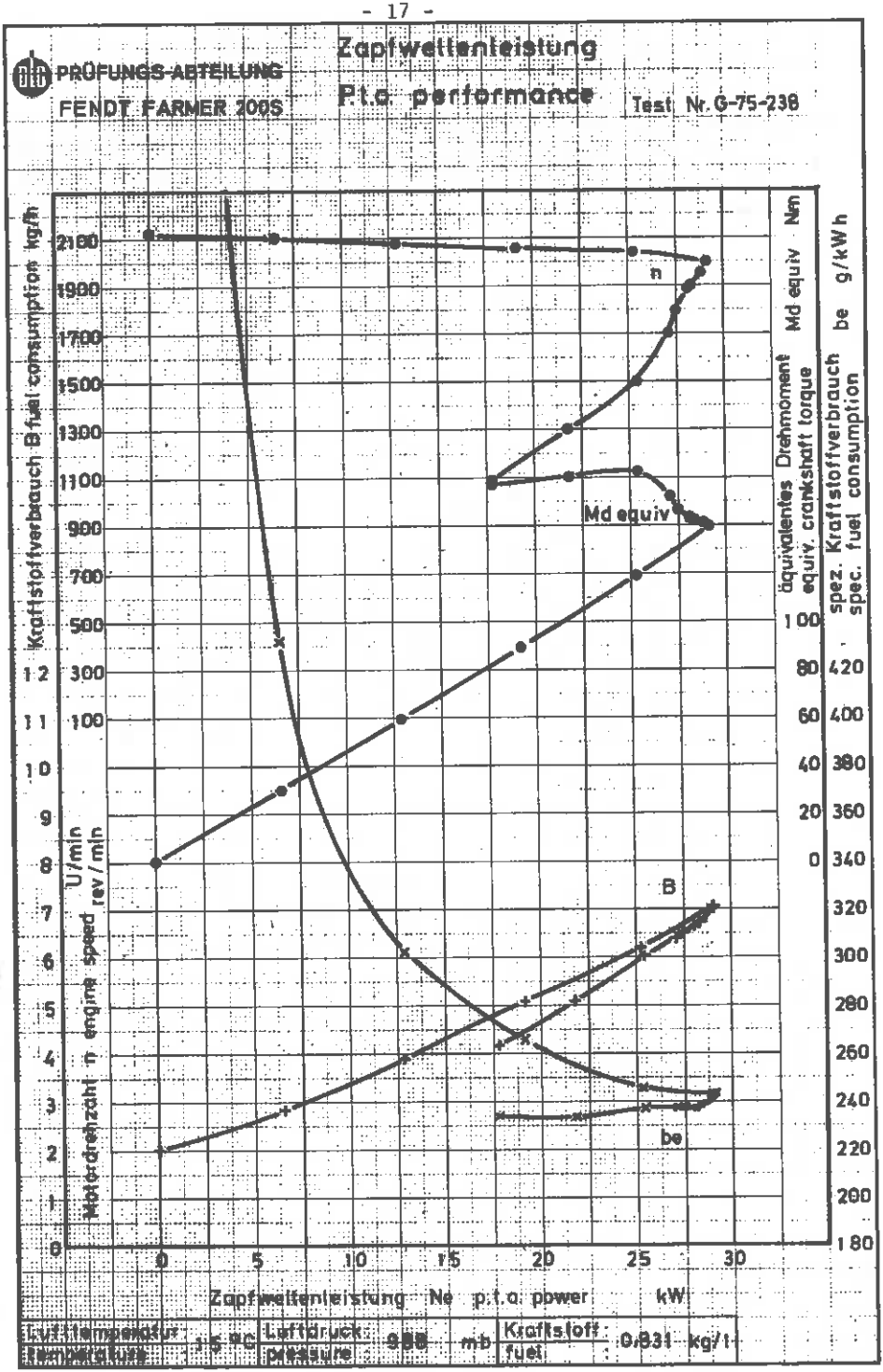
Maximum power

Power kW	Speed engine rev/min	Speed p.t.o. 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						
29.1	2000	573	8.49	7.06	243	3.42
At standard p.t.o. speed (540 rev/min)						
28.1	1885	540	7.99	6.64	236	3.51
At the speed recommended for drawbar work						
29.1	2000	573	8.49	7.06	243	3.42
Part loads						
(i) 85% of the torque at maximum power						
25.2	2040	585	7.44	6.19	245	3.39
(ii) unloaded						
-	2123	608	2.39	1.99	-	-
(iii) 50% of the load defined in (i)						
12.8	2079	596	4.66	3.88	302	2.75
(iv) maximum power						
29.1	2000	573	8.49	7.06	243	3.42
(v) 25% of the load defined in (i)						
6.5	2101	602	3.38	2.81	432	1.93
(vi) 75% of the load defined in (i)						
19.1	2060	590	6.10	5.07	265	3.13

No load maximum engine speed: 2123 rev/min
Equivalent crankshaft torque at maximum power: 139 Nm
Maximum equivalent crankshaft torque: 162 Nm at 1498 rev/min of the engine

Mean atmospheric conditions:	temperature	15 °C
	pressure	988 mbar
	relative humidity	70 %
Maximum temperatures:	coolant	not recorded
	engine oil	98 °C
	fuel	20 °C


PRÜFUNGS-ABTEILUNG
FENDT FARMER 200S
Zapfwellenleistung
P.t.o. performance
Test Nr.G-75-238
Kraftstoffverbrauch fuel consumption kg/h
Zapfwellenleistung Ne p.t.o. power kW
Ne
Md equiv
B
be
standard p.t.o. speed
spez. Kraftstoffverbrauch spec. fuel consumption be g/kWh
äquivalentes Drehmoment equiv. crankshaft torque Md equiv Nm
Motordrehzahl n engine speed U/min rev/min
Lufttemperatur temperature 15 °C
Luftdruck pressure 988 mb
Kraftstoff fuel 0.831 kg/l


PRÜFUNGS-ABTEILUNG
FENDT FARMER 200S
Zapfwellenleistung
P.t.o. performance
Test Nr. G-75-238
Kraftstoffverbrauch B fuel consumption kg/h
Motordrehzahl n engine speed U/min rev/min
äquivalentes Drehmoment Md equiv Nm
equiv. crankshaft torque
spez. Kraftstoffverbrauch be g/kWh
spec. fuel consumption
n
Md equiv
B
be
Zapfwellenleistung Ne p.t.o. power kW
Lufttemperatur
Luftdruck
Kraftstoff
fuel
0,831 kg/l

PRÜFUNGS-ABTEILUNG
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(2) DRAWBAR PERFORMANCE

Date of tests: 20th April till 10th May 1976
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 480 mm						
1 slow	1,16	8,8	27280	2105	15,1	1,92
1 fast	1,45	10,9	27080	2096	15,0	2,11
2 slow	1,90	14,2	27020	2085	15,0	2,33
2 fast	2,37	17,8	27000	2073	15,0	2,45
3 slow	3,24	22,9	25460	2000	14,0	2,66
3 fast	4,23	23,9	20300	2000	10,7	2,78
4 slow	4,85	24,7	18360	2000	9,5	2,87
4 fast	6,21	25,1	14540	2000	7,4	2,93
5 slow	8,32	25,6	11060	2000	5,5	2,98
5 fast	10,61	25,4	8610	2000	4,4	2,96
6 slow	15,00	24,7	5930	2000	2,8	2,89
(ii) FIVE-HOUR-TEST at 75% of pull at maximum power in 4th gear of fast group						
4 fast	6,52	19,8	10910	2063	5,8	2,76
(iii) FIVE-HOUR-TEST at pull corresponding to 15% wheel slip in test (i)						
2 fast	-	-	27280	-	-	-
(v) MAXIMUM POWER without ballast height of drawbar above ground 480 mm						
3 slow	3,32	17,8	19300	2069	15,0	2,49
3 fast	4,14	22,2	19300	2051	14,9	2,62
4 slow	4,64	23,4	18160	2000	13,8	2,73
4 fast	6,02	24,2	14440	2000	10,8	2,83
5 slow	8,21	24,4	10700	2000	7,3	2,87
5 fast	10,51	25,0	8560	2003	5,9	2,94
6 slow	14,88	24,9	6020	2000	4,2	2,92

Total oil consumption during ten hours duration of tests (ii) and (iii): 32 g/h

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Tyres make and size — front: VEITH-PIRELLI 7,5L-15 6 ply
rear: VEITH-PIRELLI 13,6-28 6 ply

Specific fuel consumpt. g/kWh	Temperatures: Fuel °C	Coolant °C	Engine-oil °C	Atmospheric conditions: Temperature °C	Relative humidity %	Pressure mbar
tyre inflation pressure 1,6 bar rolling radius of tyres under static load 622 mm						
429	25	-	75	24	48	1010
388	25	-	72	24	50	1010
353	25	-	71	24	53	1010
337	23	-	79	22	57	1010
310	24	-	79	20	53	1009
296	23	-	78	20	54	1009
288	21	-	76	20	52	1009
282	20	-	76	20	58	1008
278	20	-	72	15	74	1008
280	20	-	78	16	70	1008
286	20	-	75	17	65	1008
297	28	-	74	24	45	1010
-	23	-	72	22	55	1010
tyre inflation pressure 1,2 bar rolling radius of tyres under static load 624 mm						
332	23	-	70	22	45	1009
316	23	-	75	22	45	1009
303	23	-	74	22	48	1009
293	20	-	74	20	50	1009
289	18	-	72	18	55	1009
283	18	-	72	18	55	1009
285	18	-	72	19	53	1009

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

(3) TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 7,5L-15 AS Front 6 ply
rear: 13,6-28 AS 6 ply

Track of wheels front: 1396 mm
rear: 1360 mm

	With brakes		Without brakes	
	left-hand m	right-hand m	left-hand m	right-hand m
Radius of turning space	3,26	2,91	3,85	3,26
Radius of turning circle	3,06	2,72	3,66	3,07

(4) LOCATION OF CENTRE OF GRAVITY

Height above ground	787 mm
Distance forward from the vertical plane containing the axis of the rear wheels	614 mm
Distance of the median plane of the tractor to the left	2 mm

(5) BRAKING PERFORMANCE

A) SERVICE BRAKE

Date of tests: 4th May 1976
Type of track: Concrete
Type of decelerometer: MOTO METER-Bremsverzögerungs- und Pedalkraftschreiber

Weight of ballasted tractor: 2980 kg with driver

Cold brakes

		With ballast	Without ballast
Travelling speed	km/h	25,0	25,0
Deceleration	m/s^2	5,0	5,0
Stopping distance	m	6,6	6,2
Force on pedal	N	490	320
Force on pedal to achieve a deceleration of 2,5 m/s^2	N	320	165

Brake fade characteristics (hot tests)

Deceleration	hot/cold %	100	100
Stopping distance	cold/hot %	100	94
Force on pedal	cold/hot %	73	73

B) PARKING BRAKE

Tractor facing up slope:
Pull on hand brake 245 N, tractor does not roll

Tractor facing down slope:
Pull on hand brake 245 N, tractor does not roll

(6) AMBIENT NOISE EMITTED BY THE TRACTOR

Date of test: 21st April 1976
Type of track: Concrete
Type of sound level meter: BRÜEL AND KJAER model 2203

Results of test

Gear: Independent high speed gear
Travelling speed before acceleration: 19,3 km/h
Sound level: 88 dB(A)

(7) NOISE AT THE DRIVER'S EAR LEVEL

Date of tests: 21st April 1976
Type of track: Concrete
Type of sound level meter: BRÜEL AND KJAER model 2607
Type of frequency analyser: BRÜEL AND KJAER model 1614
(fitted with octave filter)

A safety frame was fitted on tractor
Approval no. CS 1015 from 20th November 1974

Results of tests

Gear	Drawbar pull at which the tractor develops the maximum sound level	Travelling speed nominal	Travelling speed effective	Sound level
	N	km/h	km/h	dB(A)
1 slow	19250	1,28	1,14	92
1 fast	18900	1,61	1,46	92,5
2 slow	19050	2,12	1,91	93,5
2 fast	19250	2,66	2,40	93,5
3 slow	19070	3,71	3,27	94
3 fast	19100	4,67	4,07	94,5
4 slow	18000	5,29	4,65	94
4 fast*)	14380	6,65	6,12	94,5
5 slow	10520	8,75	8,35	94
5 fast	8540	11,00	10,58	94
6 slow	5950	15,35	15,06	94,5
6 fast	4460	19,30	19,12	94
S	light load	23,77	25,71	92,5

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

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(8) POWER LIFT AND HYDRAULIC PUMP PERFORMANCE

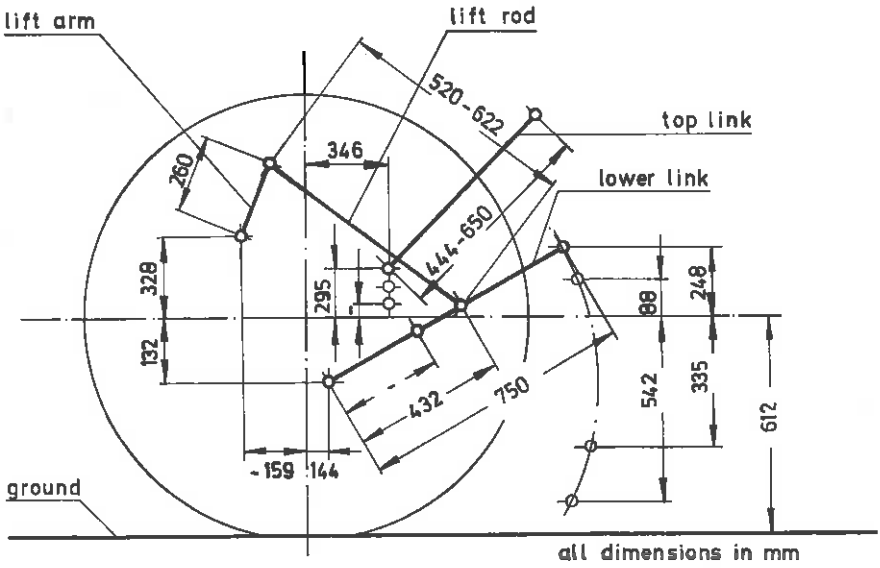
Date of tests: 8th till 12th January 1976

HYDRAULIC PUMP

(1) Opening pressure of relief valve in remote circuit	180 bar
Sustained pressure by open relief valve	176 bar
(2) Pump delivery rate at minimum pressure and maximum engine speed	30,15 l/min
(3) Pump delivery rate	29,13 l/min
Delivery pressure	156 bar
Hydraulic power	7,57 kW

POWER LIFT

Dimensions of linkage geometry for the table on page 26



PRÜFUNGS-ABTEILUNG
FENDT FARMER 200 S

LIFTING FORCES

Lifting heights relative to horizontal lower links

mm	-410	-400	-382	-300	-207	-203	-200	-100
at hitch points maximum mechanical advantage								
N						13080	13120	14270
minimum mechanical advantage								
N	12900	13560		13610			13790	14260

Max. force exerted throughout the whole range 13080 N
Front of tractor does not lift with all allowable front ballast

at test frame maximum mechanical advantage								
N			16840	15160			14190	13740
minimum mechanical advantage								
N					12680		12810	12970

Max. force exerted throughout the whole range 11300 N
Force at which front of tractor lifts with maximum allowable front ballast 11200 N

PRÜFUNGS-ABTEILUNG

Test No. 75-238

0	+100	+200	+220	+235	+300	+380	+400	+453

lift rods 520 mm long

14910	15190	15850			16180	15740		

lift rods 622 mm long

14740	14970	14740	14540					

lift rods 622 mm long

13520	12860	11790		11300				

lift rods 520 mm long

12750	12410	12100			11440		10460	9980

All values of forces for pressure at max. hydraulic power 156 bar, see page 23; calculated from measurements at max. oil pressure 176 bar

LINKAGE GEOMETRY when connected to the standard frame	Maximum mechanical advantage	Minimum mechanical advantage
Projected length in side view:		
Lower links	750 mm	750 mm
Lift arms	260 mm	260 mm
Lift rods	622 mm	520 mm
Top link	572 mm	570 mm
Distance of lift rod connection point from pivot point of lower link	432 mm	432 mm
The following dimensions are given relative to rear axle centre line 612 mm above ground		
Lower link pivot point	144 mm behind, 132 mm below	144 mm behind, 132 mm below
Top link pivot point	202 mm behind, 295 mm above	202 mm behind, 295 mm above
Lift arm pivot point	159 mm behind, 328 mm above	159 mm behind, 328 mm above
Maximum and minimum height of lower link hitch points	88 mm above, 542 mm below	248 mm above, 335 mm below
Height of lower link hitch points above ground when locked in highest transport position	700 mm	860 mm

PRÜFUNGS-ABTEILUNG
FENDT FARMER 200 S

Test No. 75-238

OPTIONAL TESTS

(1) ENGINE PERFORMANCE

Date of tests: 3rd March 1976
Type of dynamometer: SCHENCK eddy-current dynamometer W 150

Maximum Power

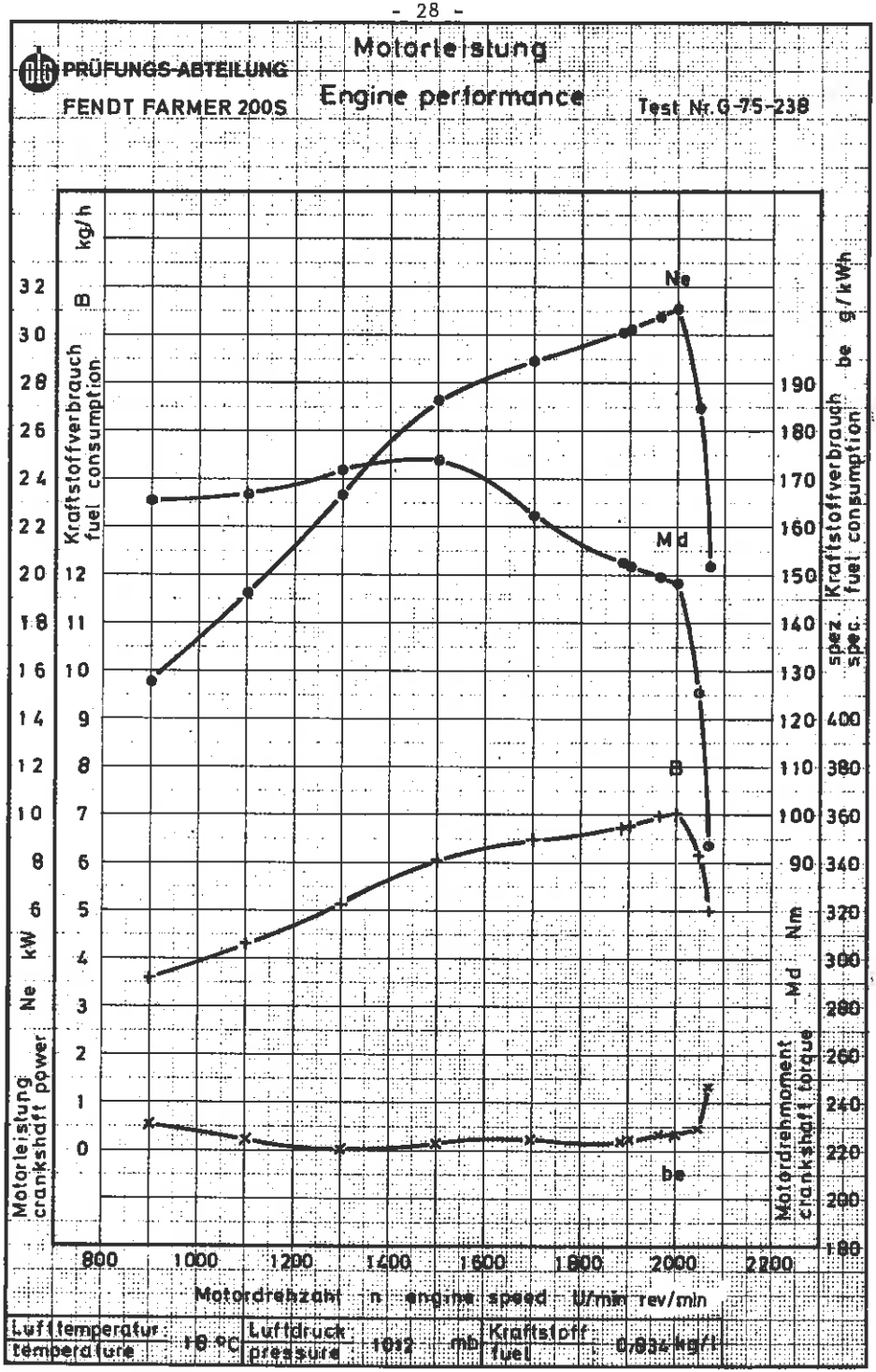
Power kW	Engine speed rev/min	Fuel consumption total 1/h	Fuel consumption total kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
At maximum power 2-hour-test					
31.0	2000	8.46	7.06	227	3.67
At standard p.t.o. speed (540 rev/min)					
30.1	1885	8.09	6.75	224	3.72
At the speed recommended for drawbar work					
31.0	2000	8.46	7.06	227	3.67

Fuel consumption at part loads

(i) 85% of torque at maximum power					
26.9	2045	7.43	6.20	230	3.62
(ii) unloaded					
-	2127	2.21	1.84	-	-
(iii) 50% of the load defined in (i)					
13.7	2085	4.64	3.87	282	2.96
(iv) maximum power					
31.0	2000	8.46	7.06	227	3.67
(v) 25% of the load defined in (i)					
7.0	2108	3.33	2.78	399	2.09
(vi) 75% of the load defined in (i)					
20.4	2067	6.05	5.04	247	3.37

Optimum fuel consumption: 219 g/kWh at 25.1 kW and 1500 rev/min
Standard fuel consumption 1/2 (DIN 9606): 3.60/7.00 l/h
No load maximum engine speed: 2127 rev/min
Torque at maximum power: 148 Nm
Maximum torque: 173 Nm at 1500 rev/min of the engine

Mean atmospheric conditions:	temperature	18 °C
	pressure	1012 mbar
	relative humidity	50 %
Maximum temperatures:	coolant	not recorded
	engine oil	80 °C
	fuel	20 °C

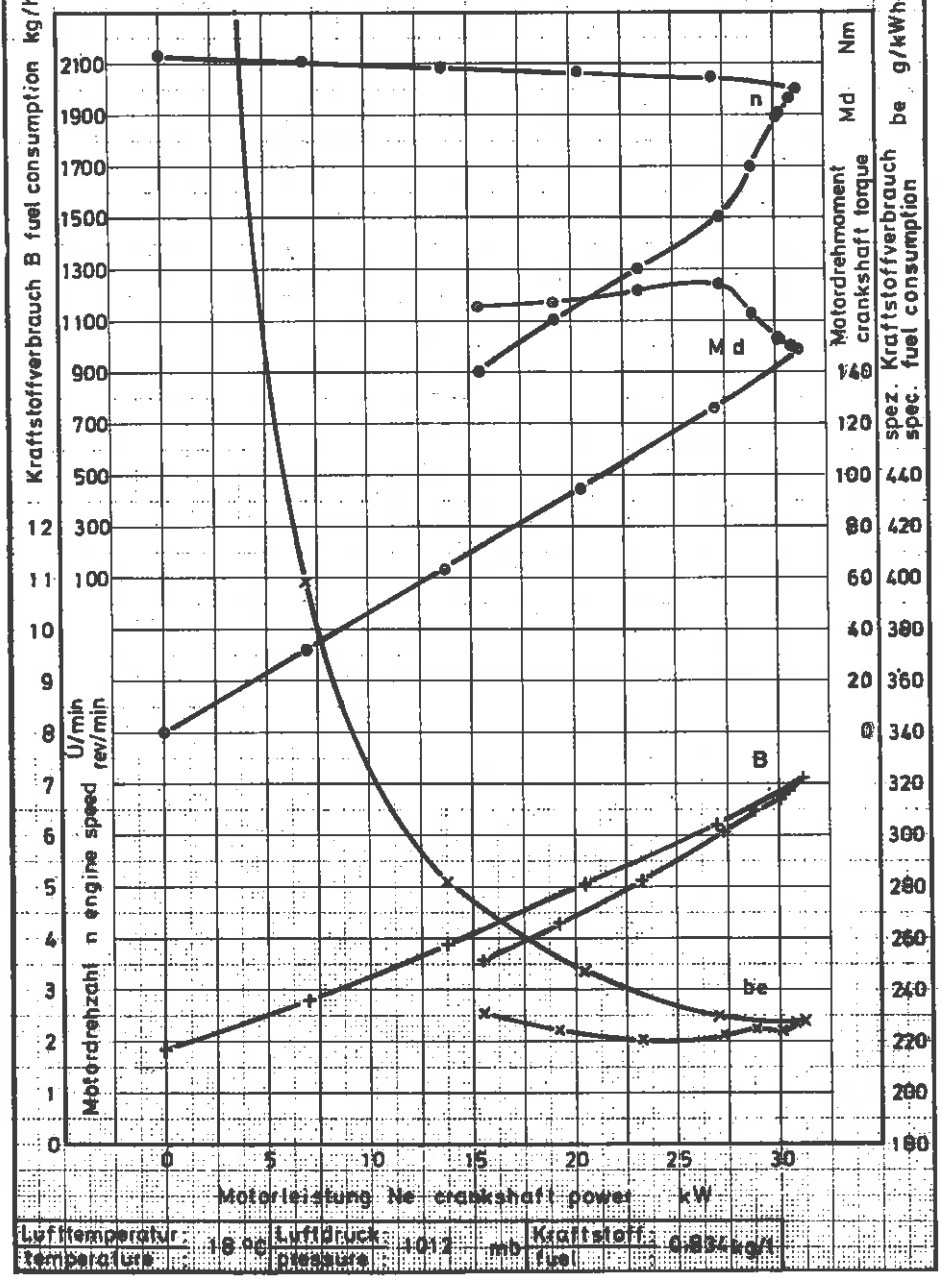

PRÜFUNGS-ABTEILUNG
FENDT FARMER 200S
Motorleistung
Engine performance
Test Nr. G-75-238
Ne
Md
B
be
Motorleistung crankshaft power Ne kW
Kraftstoffverbrauch fuel consumption B kg/h
Motordrehmoment crankshaft torque Md Nm
spez. Kraftstoffverbrauch spec. fuel consumption be g/kWh
Motordrehzahl n engine speed U/min rev/min
800 1000 1200 1400 1600 1800 2000 2200
Lufttemperatur temperature 19 °C
Luftdruck pressure 1013 mb
Kraftstoff fuel 0,834 kg/l

Motorleistung
Engine performance

PRÜFUNGS-ABTEILUNG

FENDT FARMER 200S

Test Nr. G-75-238



Lufttemperatur / Temperature	18 °C	Luftdruck / pressure	1012 mb	Kraftstoff / fuel	0,83 kg/l

PRÜFUNGS-ABTEILUNG
FENDT FARMER 200S

Motorleistung
Engine performance

Test Nr. G-75-238

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

Last in % of torque at rated engine speed

Belastung n % des Drehmomentes bei Nenndrehzahl

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

Lufttemperatur / temperature	19 °C	Luftdruck / pressure	1012 mb	Kraftstoff / fuel	0,834 kg/l

PRÜFUNGS-ABTEILUNG
FENDT FARMER 200 S

Test No. 75-238

ADDITIONAL TEST

out of the O.E.C.D. CODE under the responsibility of the DLG Testing Station

(1) MAIN POWER TAKE-OFF PERFORMANCE

at engine speed corresponding to standard p.t.o. speed (540 rev/min)

Date of tests: 16th March 1976
Type of dynamometer: SCHENCK hydraulic dynamometer U1-40

Power kW	Speed engine rev/min	Speed p.t.o. rev/min	Fuel consumption total l/h	Fuel consumption total kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
Maximum power at standard p.t.o. speed						
28.1	1885	540	8.18	6.80	242	3.44
Part loads at standard p.t.o. speed						
(i) 85% of the torque at maximum power						
24.3	1918	550	7.09	5.89	242	3.43
(ii) unloaded						
-	2003	574	2.09	1.73	-	-
(iii) 50% of the load defined in (i)						
12.4	1954	560	4.45	3.70	298	2.78
(iv) maximum power						
28.1	1885	540	8.18	6.80	242	3.44
(v) 25% of the load defined in (i)						
6.3	1977	567	3.29	2.74	435	1.91
(vi) 75% of the load defined in (i)						
18.4	1936	555	5.81	4.83	262	3.17

Equivalent crankshaft torque at standard p.t.o. speed 142 Nm

Mean atmospheric conditions:
- temperature 16 °C
- pressure 988 mbar
- relative humidity 70 %

Maximum temperatures:
- coolant -
- engine oil 95 °C
- fuel 19 °C