Report on test in accordance with OECD STANDARD CODE

OECD No. **1207**



Agricultural Tractor FENDT FARMER 270 V (4WD)

Type denomination 207/2

Manufacturer

X. Fendt & Co., Maschinen- und Schlepperfabrik
D-8952 Marktoberdorf

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This is a report on a tractor test in accordance with OECD STANDARD CODE for the Official Testing of Agricultural Tractor Performance (C(87)53(Final), Code I). It does not contain an evaluation of the tractor on practical work.

Duration of tests: July 1988 till March 1989

DLG-Testing Station for Agricultural Machinery, Max-Eyth-Weg 1,
D-6114 Groß-Umstadt

This report has been approved by the OECD Co-Ordinating Centre (CEMAGREF, France) as being in accordance with the OECD STANDARD CODE.

Date of approval: 21st June 1989 OECD No. 1207

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

The reference to the former used Technical System of Units is given by the following relations:

Forces	1 kN	=	1000 N	=	102 kp
Powers			1 kW	=	1,36 PS
Pressures	1 MPa	=	10 bar	=	10,2 kp/cm²
	100 kPa	=	1000 mbar	=	750,10 mm Hg

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Printed in the Federal Republic of Germany
July 1989; DLG-No. 247

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FENDT FARMER 270 V

Test No. 88-146

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Tractor manufacturer:	X. Fendt & Co., D-8952 Marktoberdorf
Location of tractor assembly:	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. 55 hours
Location of test:	D-6114 Groß-Umstadt

SPECIFICATION OF TRACTOR

Tractor

Make:	FENDT
Trade name:	FARMER 270 V
Type denomination:	207/2
Type:	Four wheel-drive tractor, unit construction for use in vine- and hop-culture
Serial No.:	207/21/0058 1st serial no. 207/21/0026

Engine

Make:	DEUTZ
Model:	F4L 912
Type:	Aircooled 4-stroke diesel engine, direct injection, naturally-aspirated
Serial No.:	753 0236
Cylinders:	4, in-line, bore/stroke 100/120 mm, capacity 3770 cm³, compression ratio 17,0±0,3:1, replaceable ribbed cylinder liners
Valves:	Overhead
Fuel system:	PIERBURG fuel supply pump; replaceable BOSCH fuel filter, capacity of fuel tank 60 dm³; BOSCH in-line injection pump PES 4A 80D410/3 RS 1300, serial no. 84110962, manufacturer's production setting of injection pump: Flow rate (rated engine speed and full load) 52±1,0 mm³/stroke, timing 24±1° before TDC; BOSCH multihole injection nozzles DLLA 149 S 774, injection pressure 17,5±0,8 MPa

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Governor:	BOSCH, centrifugal variable speed governor RSV 325-1150 A8C 705L, governed range of engine speed from 650 to 2405 rev/min, rated engine speed 2300 rev/min
Air cleaner:	KNECHT dry paper element filter with pre-cleaner, replaceable cartridge; air intake below bonnet, electrical maintenance indicator
Lubrication system:	Forced-feed lubrication with gear pump, MANN replaceable oil filter in full flow with by-pass valve; oil cooler to the right of engine within cooling stream of engine
Cooling system:	Air cooling with axial blower with 11 blades, 230 mm dia, driven by V-belt
Starting system:	Electrical; BOSCH solenoid pre-engaged-drive starting motor 2,7 kW; BERU-flame plug in air intake manifold; safety device: depressed pedal of travel clutch
Electrical system:	12 V, BOSCH 3-phase alternator K1 14V 55A 770W; 1 lead acid battery, 88 Ah at 20 hours rating
Exhaust system:	EBERSPÄCHER 2 multi-chamber reflection-absorption-type silencers, to the left, below engine, pre-silencer 100 mm dia, 264 mm long, main silencer 119 x 164 mm oval, 525 mm long; mouth showing laterally rearwards down, 365 mm above ground; optionally available long exhaust pipe with mouth showing upwards

Transmission to wheels

Clutch:	F & S dry dual disc clutch DUT 295 L; travel drive pedal operated disc 295 mm dia, p.t.o. drive hand lever operated disc 280 mm dia
Gear box:	FENDT, R 20/6 synchromesh gear box with 3 forward gears and 1 reverse gear; 1 close stepped synchromesh range gear with 3 ranges FL, FM and FS; 1 range gear with road range S (collar shifted) and field range A (sliding gear shifted); 2 independent synchronized overdrive speeds; total 20 forward and 6 reverse speeds, 3 shift levers;
Rear axle and final drives:	FENDT bevel gear drive; bevel gear differential with pedal operated lock, not self disengaging, with pilot lamp; spur gear final drives
Front axle and final drives:	SIGE, type 209 F50, driven by universal joint shaft in median plane of tractor; wet multiplate clutch, electro-magnetically disengaged, 2 modes can be preselected by electric switch: a) front wheel drive disengages automatically when steering angle exceeds 35 degrees b) front wheel drive engaged, independent of steering angle; if electric current is interrupted, front axle drive is automatically engaged; bevel gear drive, bevel gear differential with lock (electro-magnetically engageable); depending on the position of an electric switch the front differential lock is actuated or not by operating the pedal of the rear differential lock; planetary final drives

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Total ratios and travelling speeds

Range	Close stepped range	Gear	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed *) at rated engine speed of 2300 rev/min km/h
A	FL	1	329,47	1,42
		2	205,92	2,27
		3	130,42	3,59
	FM	1	270,00	1,73
		2	168,75	2,77
		3	106,87	4,38
	FS	1	228,98	2,04
		2	143,11	3,27
		3	90,64	5,17
S	FL	1	82,37	5,68
		2	51,48	9,10
		3	32,60	14,36
	FM	1	67,50	6,94
		2	42,19	11,10
		3	26,72	17,52
	FS	1	57,24	8,18
		2	35.78	13,09
		3	22,66	20,66
1st overdrive			17,72	26,43
2nd overdrive			14,07	33,28
A	FL	R	227,59	2,06
	FM	R	186,51	2,51
	FS	R	158,18	2,96
S	FL	R	56,90	8,23
	FM	R	46,63	10,04
	FS	R	39,54	11,84

*) calculated with a tyre dynamic radius of 540 mm (ISO 4251/1-1984)

Number of revolutions of front wheels for one revolution of rear wheels: 1,4731

Power take-off

Main p.t.o.: Independent,
driven by 2nd disc of dual disc clutch,
1 p.t.o. shaft at rear of tractor;
2 (optional 3) p.t.o. speeds are
preselectable by hand lever;
35 mm dia, 6 splines, in conformity
with ISO 500-1979, type 1;

height above ground	557 mm
distance from tractor's median plane	0 mm
distance from rear wheel axis	393 mm

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P.t.o.	P.t.o. speed rev/min	Engine speed rev/min	Ratio of rotation speeds (engine speed/ p.t.o. speed)	Power restriction kW
540	540	2104	3,8970	-
	590	2300		
750	540	1594	2,9519	-
	779	2300		
1000*)	1000	2111	2,1111	-
	1089	2300		

*) not fitted

Optional p.t.o.: Front p.t.o. is available for 540 or 1000 rev/min;

Power lift

FENDT and BOSCH, EHR
Electronic-hydraulic power lift, disintegrated construction;
draft and position control, steplessly mixable, floating position, adjustable limitation of lifting height, lower link sensing, lowering throttle;
FENDT swinging power lift:
Three-point mounted implement can be positioned mechanically (on request hydraulically) sideways, up or down slope and in tilt;
infinitely side stabilization by crank handle

Hydraulic system:

Open centre with 2 independent circuits;
BOSCH tandem gear type pump HY/ZFFS 11/11+8L, gear driven by engine;
1st circuit:
1st pump with 27 l/min delivery at rated engine speed; supplies steering via priority valve, power lift and up to 4 additional valves;

2nd circuit:
2nd pump with 20 l/min delivery at rated engine speed;
oil flow may be fed into circuit 1 by a change-over valve - "fast action" -;
on request 1 single acting flow controlled additional valve with priority (not fitted on tested tractor);

oil filter in return line

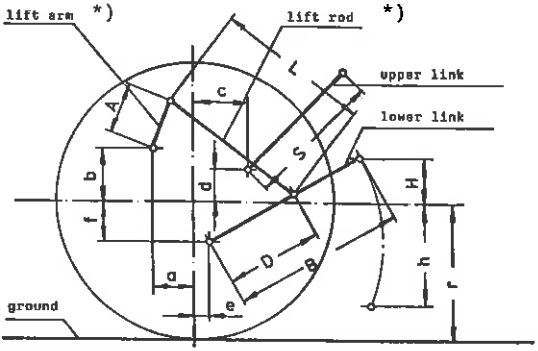
BOSCH control valve, additional remote control at the left rear mudguard, max. working pressure 18,0+0,1 MPa
2 single acting cylinders, 45 mm bore, 190 mm stroke, piston rod 20 mm dia, no safety valve

1 single acting additional valve;
1 oil tapping each at rear and and at the right side in tractor's middle, additional return line in tractor's middle;

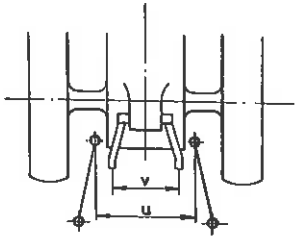
separate oil reservoir with 14 dm³ capacity, 12 dm³ can be taken off stationary or travelling

Three point linkage at rear:

FENDT quick couplers, category 1 or 1N, in conformity with ISO 730/1-1977 resp. ISO 730/2-1979



*) see remark on page 10 (at the bottom)



Three-point linkage at front:

Optionally available, category 1, not fitted on tested tractor

Dimensions of rear implement linkage (Cat.1, projected lengths in mm, underlined dimensions are valid for power lift measurements p.21)

Rear tyres Front tyres	radius index static radius	(r) (r')	540 353
Length of lift arms		(A)	- *)
Length of lower links		(B)	714
Distance of lift cylinders pivot points from rear wheel centre	horizontal vertical	(a) (b)	176 *) 356 *)
Horizontal distance between lower link pivot points		(u)	370
Horizontal distance between lift cylinders pivot points		(v)	300
Length of upper link		(S)	511 to 791, 570
Distance of upper link pivot point from rear wheel centre	horizontal vertical	(c) (d)	281, 298 or 315 298, 345 or 392
Distance of lower link pivot point from rear wheel centre	horizontal vertical	(e) (f)	169 92
Distance of lower link pivot points from lift rod pivot points on lower links		(D)	177
Length of lift cylinders		(L)	400 to 555 *)

Height of lower link hitch points relative to rear wheels' centre line (situated 540 mm above ground), these data are valid for unloaded power lift:

Length of lift rods	(L)	400 to 555
Linkage distance of lift rods	(D)	177
Lowest position	(h)	365
Highest position	(H)	305
Transport position	(H')	305

Transport lock: Hydraulical, control-valve switch locked

*) Remark:
The power lift has no lift arms;
lift arms are replaced by lift cylinders which directly actuate on lower links

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Pull attachments

Swinging drawbar:	Optionally available, not fitted	
Trailer hitch:	FENDT, AK-004, non automatical, height above ground adjustable by one-hand quick adjustment ;	
	hitch hole	dia 33 mm
	hitch point	
	above ground	335, 377, 627, 669, 711, 763 mm
	behind rear wheel axis, horizontally	557 mm
	above p.t.o. shaft end, vertically	70, 112, 154, 206 mm
	below p.t.o. shaft end vertically	222, 180 mm
	behind p.t.o. shaft end, horizontally	164 mm
	maximum permissible vertical load	1000 kg
Holed drawbar:	Short bar,	
	length between hitch points	683 mm
	thickness/width	30/80 mm
	7 holes between hitch points	
	distance between the holes each	80 mm
	hole dia	33 mm
	height above ground	
	minimum	175 mm
	maximum	845 mm
	horizontal distance of holes' centre line to p.t.o. shaft end (lower links in horizontal position)	490 mm
Towing hitch:	Height above ground	570 mm

Steering

DANFOSS, OSPC 70 LSR/OL SA 40
hydrostatic,
oil in common with power lift;
oil supply by power lift pump and priority valve;
max. working pressure 15,0 MPa;
1 FENDT steering cylinder, symmetrical design,
directly acting on steering levers;
bore/stroke 63/145 mm, piston rod 36 mm dia

Brakes

Service brake:

KNOTT and FENDT,
pedal operated muscle power brake with mechanical transmission, acting on rear axle and indirectly acting on front axle by automatic engagement of front axle drive;
2 brake drums on the differential half shafts of rear axle, 180 mm dia, 60 mm width

Steering brake:	Divided pedal of service brake, locked together for normal use
Trailer brake:	Optionally available, not fitted
Parking brake:	Lever operated muscle power brake with mechanical transmission, acting on 2 brake drums on the differential half shaft of rear axle; drum 180 mm dia, 30 mm width

Wheels

Steered wheels:	At front, 2 pneumatics 10.0/75-15.3, rims 9.00x15.3
Driving wheels:	At front and at rear, at rear: 2 pneumatics 12.4 R 24, rims W9x24
Wheel base:	2099 mm
Track adjustment:	At front 844 or 964 mm, by reversing the wheels; at rear: 793 mm, or after reversing the wheels from 853 to 1253 mm, in steps of 100 mm each, by adjustable gauge bowl wheels

Available tyres:

Tyre size	
Front	Rear
10.0/75 - 15.3 8 ply	9.5 R 28 109 A8
7.5 L - 15 6 ply	11.2 - 24 6 ply
7.50 R 16 6 ply	11.2 - 28 6 ply
280/60 - 15.5 6 ply	12.4 R 24 6 ply
11L R 16 122 A8	405/70 R 20 136 G
	380/70 R 24 125 A8
	375/75 R 20 132 G
	13.6 R 24 8 ply

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Protective structure

Cab:	FENDT, model 205.500; OECD-tested, approval no. CSS 067/1/NM 0064 not tiltable, mounted by 4 silent blocks on tractor; 2 doors; driver's platform 625 mm above ground; front- and rear-windows tiltable, roof hatch; separate heating and ventilation systems in the roof; EBERSPÄCHER diesel-fuel heater with blower (1-stage), additional fresh air blower (3-stages), air intake with filter above windscreen, air outlet jets in the roof, heating possible by recirculating air	

Noise reduction materials:

roof and roof hatch	foam with textile, molded	3-10 mm
front wall - in the middle, down	plastic molded part (sealed with silicone-caoutchouc at the clutch housing and at the cab - front wall)	10-30 mm
rear wall - middle - down	foam with textile foam with PU-hide	3-10 mm 20 mm
mudguards	foam with PU-hide	20 mm
side walls, doors, middle posts	foam with textile	3-10 mm
floor	nopped mat (PUR) with Polyethylen-foam (PE) appr.	4-5 mm 9 mm
gear box cover	multi-layer laminated fabric	6-12 mm
instrument and steering support		
- upper part	plastic and foam	3-30 mm
- lower part	PUR-sealing up to	20 mm
- between steering support and clutch housing	soft damping fleece	25 mm
engine hood		
- rear part	foam, surface flame resistant	20-30 mm

Running-time meter — Electronic, digital displays for travel speed and engine or p.t.o. speeds, operating hours are really counted

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Driver's seat: GRAMMER, DS 44/1HS, upholstered seat with back rest, adjustable suspension, hydraulic shock absorber; height of unloaded seat above platform steplessly adjustable from 495 mm to 555 mm; longitudinal adjustment range 150 mm

Lighting: Electrical, 12 Volt, corresponding to German legislation

	Size mm	Height above ground of centre mm	Distance from outside edge of lights to median plane of tractor mm
Headlights	140 x 75	775	225
Sidelights	65 x 15	918	345
Rearlights	85 x 25	1075	413
Reflectors	90 x 40	1030	415

TEST CONDITIONS

Overall dimensions

	Without ballast	With ballast
Length	3520 mm	4050 mm
Width	1155 mm	1330 mm
Height	2200 mm to top of cab	
Ground clearance	250 mm below front axle differential	

Tractor mass (with cab)

	Ballasted		Unballasted	
	Without driver kg	With driver kg	Without driver kg	With driver kg
Front	1710	1725	910	925
Rear	1700	1775	1345	1420
Total	3410	3500	2255	2345

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Ballast

	Number of weights	Total mass kg	Water kg
Front	frame and weights	715	-
Rear	6	276	164

Tyres and track widths specifications

	Front *)	Rear
Tyres:	CONTINENTAL	MICHELIN BIB'X
dimensions	10.0/75-15.3 Impl.	12.4 R 24
ply rating/load and speed index	8 ply /-	-/119 A8
type	diagonal	radial
maximum load	865 kg	1360 kg
at inflation pressure	300 kPa	160 kPa
at travelling speed	35 km/h	40 km/h
radius index	353 mm (static)	540 mm
Chosen track width	844 mm	853 mm
Technically permissible axle load	1800 kg	2700 kg

Technically permissible total weight 3500 kg

*) For braking were used at front:

Tyres:	MICHELIN XM 27
dimensions	11L R 16
ply rating/load and speed index	-/122 A8
type	radial
maximum load	1500 kg at 240 kPa and 40 km/h
Rims:	W10x16

Oils and lubrication

Capacity and change interval:

	Capacity dm^3	Oil change h/years	Filter change h/years
Engine	9,3	250/-	250/-
Gearbox including rear axle	26,5	1000/2	-
Rear final drives	1,9 each		
Front axle differential	3,5		
Front final drives	0,5 each		
Hydraulic system including steering	14,0		100/2

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Specification

	Recommended	Used during test
Engine oil: Type Viscosity below -10°C over -10°C Classification API	 Engine oil SAE 10W SAE 15W/30 or SAE 15W/40 CD	 ESSO UNIFARM 15W/40 CD
Gear oil: Gear box Type Viscosity Classification API Front axle and all final drives Type Viscosity Classification API	 Multipurpose-gear oil SAE 80 GL4 Hypoid-gear oil SAE 85W/90 or 80W/90 GL5	 MOBIL MOBILUBE GX 80 SAE 80 GL4 MOBIL MOBILUBE SAE 85W/90 GL5
Hydraulic system and steering Type Viscosity Classification API	 Engine oil SAE 20W/20 CD	 ESSO Essolube XD 3+ 20W/20 CD

Grease: Multipurpose grease

Number of lubrication points: 5

Fuel

Type: ARAL Diesel-fuel in conformity with DIN 51 601 .

Density at 15°C: at p.t.o. tests 0,832 kg/l
at drawbar performance tests 0,835 kg/l

REPAIRS: None

REMARKS: None

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COMPULSORY TESTS

1. MAIN POWER TAKE OFF PERFORMANCE (540 rev/min)

Date of tests: 8th September 1988
Location of tests: DLG-Testing Station Groß-Umstadt
Type of dynamometer: SCHENCK hydraulic dynamometer U1-40

Power	Speed		Fuel consumption			Specific
	Engine	P.t.o.	hourly		specific	energy
kW	rev/min	rev/min	l/h	kg/h	g/kWh	kWh/l
Maximum power						
1.1 At 2-hour test						
48,1	2300	590	14,16	11,78	245	3,40
1.2 At rated speed						
48,1	2300	590	14,16	11,78	245	3,40
1.3 At standard p.t.o. speed						
46,1	2104	540	13,35	11,11	241	3,45
1.4 Part loads, the governor hand lever in the position corresponding to maximum power at full load (curve a)						
1.4.1 the torque corresponding to maximum power at rated speed						
48,1	2300	590	14,16	11,78	245	3,40
1.4.2 85% of the torque obtained in 1.4.1						
41,7	2345	602	12,33	10,26	246	3,38
1.4.3 75% of the torque defined in 1.4.2						
31,3	2352	604	9,89	8,23	263	3,17
1.4.4 50% of the torque defined in 1.4.2						
21,0	2367	608	7,53	6,26	298	2,79
1.4.5 25% of the torque defined in 1.4.2						
10,5	2371	608	5,43	4,52	429	1,94
1.4.6 unloaded						
-	2403	617	3,64	3,03	-	-

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Power kW	Speed Engine rev/min	Speed P.t.o. rev/min	Fuel consumption hourly l/h	Fuel consumption hourly kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
1.5 Part loads, the governor hand lever in the position corresponding to the standard p.t.o. speed at full load (curve b)						
1.5.1 the torque corresponding to maximum power						
46,1	2104	540	13,35	11,11	241	3,45
1.5.2 85% of the torque obtained in 1.5.1						
40,2	2157	554	11,54	9,60	239	3,48
1.5.3 75% of the torque defined in 1.5.2						
30,4	2176	558	9,15	7,61	251	3,32
1.5.4 50% of the torque defined in 1.5.2						
20,3	2183	560	6,99	5,81	286	2,91
1.5.5 25% of the torque defined in 1.5.2						
10,2	2205	566	5,00	4,16	406	2,05
1.5.6 unloaded						
-	2225	571	3,13	2,60	-	-

No load maximum engine speed: 2403 rev/m
Equivalent flywheel torque at rated engine speed: 200 Nm
Maximum equivalent flywheel torque: 229 Nm at 1505 rev/min of the engine

Mean atmospheric conditions

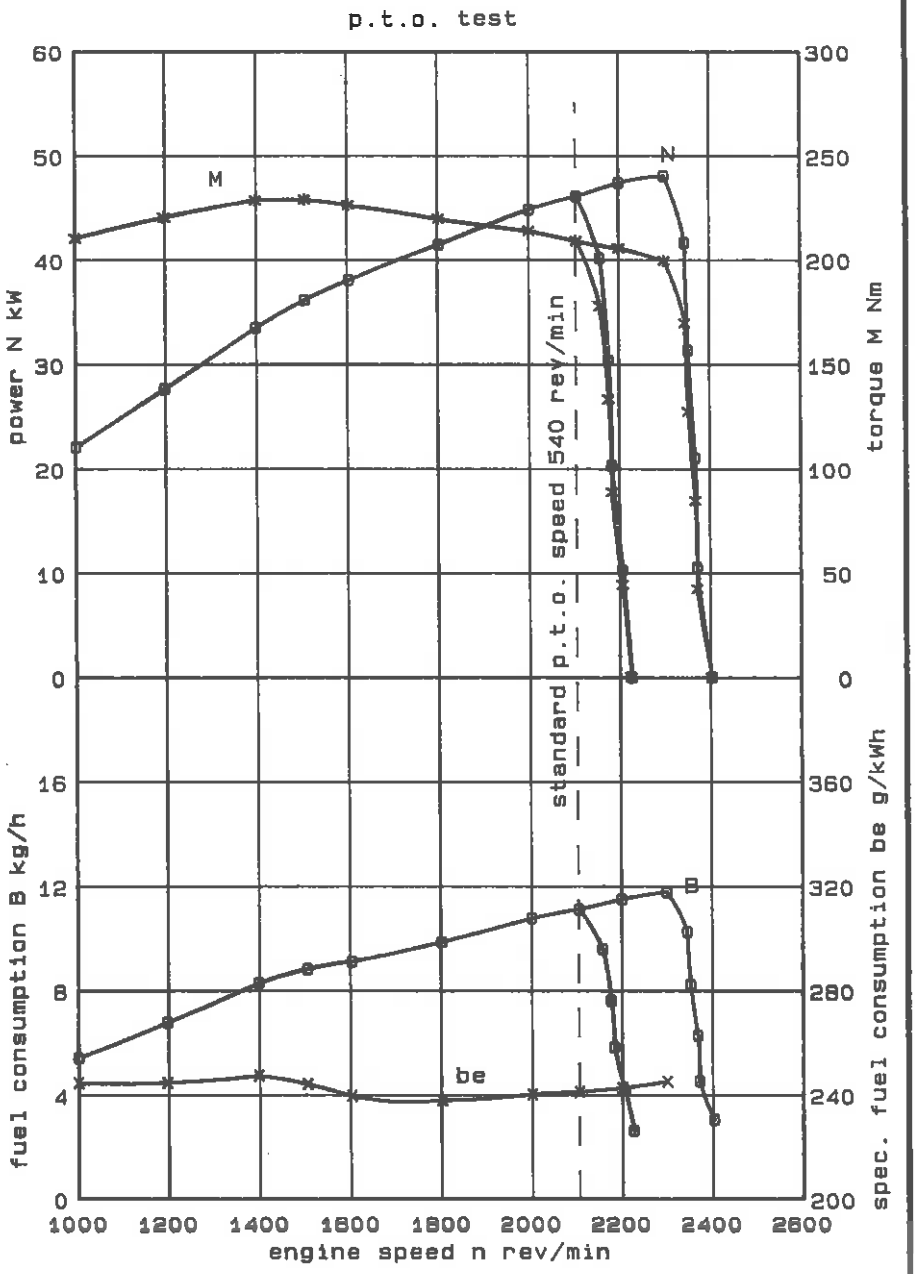
temperature	20 °C
pressure	101 kPa
rel. humidity	55 %

Maximum temperatures

cylinder head	99 °C
oil	105 °C
fuel	23 °C
air intake	23 °C

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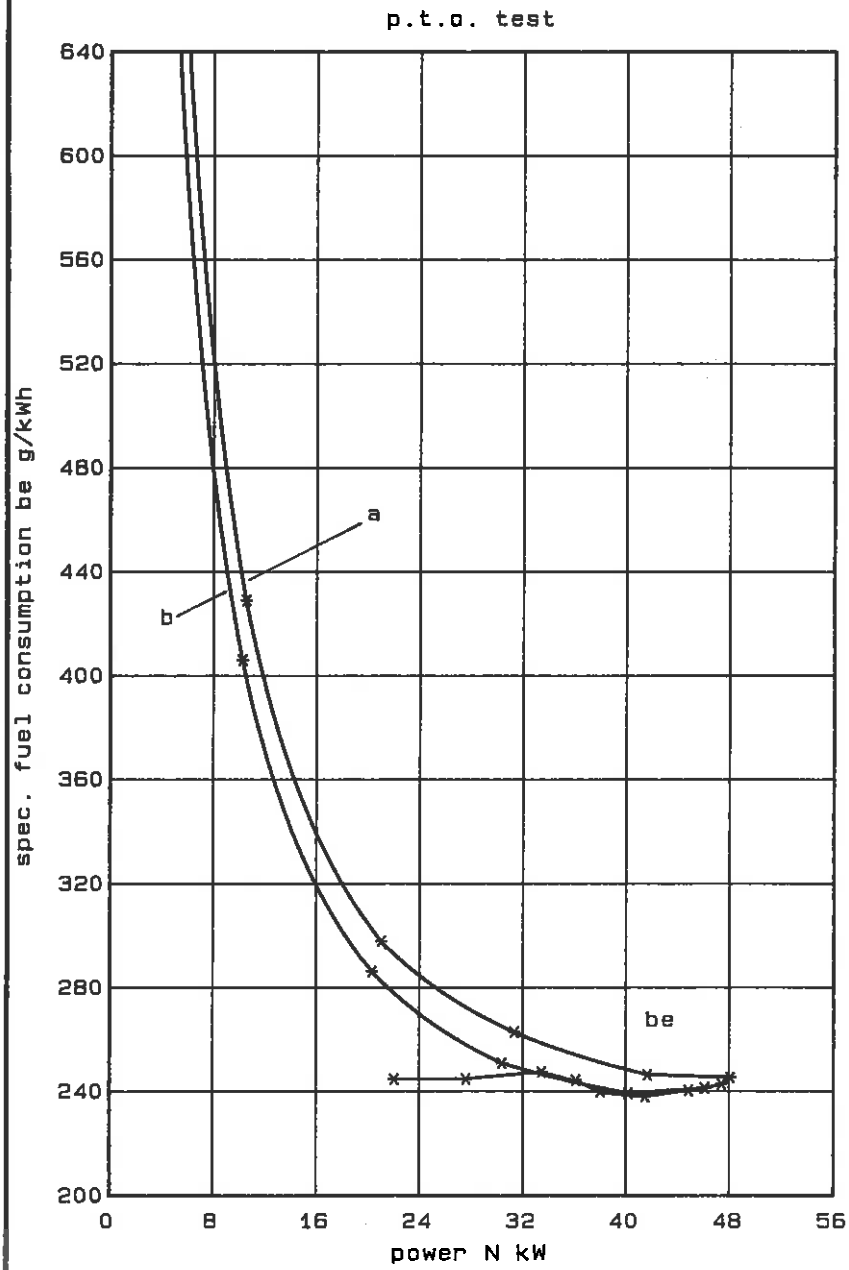
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2 HYDRAULIC POWER AND LIFTING FORCE

Date of tests: 7th and 14th February 1989

2.1 Hydraulic power test (at "fast action" delivery, see page 8)

Sustained pressure with relief valve open **18,8 MPa**
Pump delivery rate at minimum pressure **49,5 l/min**

	Hydraulic power kW	Flow rate l/min	Pressure MPa	Oil temperature °C
At 90% of the actual relief valve setting	8,6	30,4	16,9	65
At max. power	12,6	47,1	16,1	65

Tapping point used for test: At rear of tractor
Return: lateral, on the right, in tractor's middle

2.2 Power lift test

	At the hitch point	On the frame
Height of lower hitch points above ground in down position	175 mm	175 mm
Vertical movement without lifting forces	670 mm	825 mm
Vertical movement with lifting forces	650 mm	793 mm
Max. corrected force exerted through full range	14,7 kN	13,5 kN
Corresponding pressure	16,1 MPa	16,1 MPa
Moment about rear axle	-	20,2 kNm
Max. tilt angle of mast from vertical	-	12,5 °

Lifting heights relative to horizontal lower links

mm	-293	-273	-200	-100	0	+100	+200	+300	+377	+400	+500

Lifting forces at hitch points, corrected to 16,1 MPa

kN		14,7	15,2	16,0	16,8	18,1	19,4	20,8	21,9		

Lifting forces at standard frame, corrected to 16,1 MPa

kN	13,7		13,9	14,1	14,6	15,0	15,0	14,8		14,3	13,5

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3 DRAWBAR PERFORMANCE

Date of tests: 28th February till 8th March 1989
Type of track: Concrete

Gear	Driving speed km/h	Power kW	Drawbar pull kN	Engine speed rev/min	Slip of wheels %
3.1	Maximum power in tested gears (unballasted tractor) height of drawbar above ground 380 mm				
3 A FS	4,43	28,8	23,39	2350	15,0
1 S FL	4,84	31,2	23,21	2335	15,1
1 S FM	5,85	36,9	22,69	2300	14,4
1 S FS	7,28	38,2	18,89	2302	9,7
2 S FL	8,23	38,9	17,02	2302	8,2
2 S FM	10,23	39,5	13,89	2300	6,4
2 S FS	12,21	39,0	11,49	2302	5,0
3 S FL	13,47	38,5	10,28	2300	4,3
3.2	Maximum power in tested gears (ballasted tractor) height of drawbar above ground 380 mm				
1 A FL	1,25	11,5	33,04	2376	14,8
1 A FM	1,52	13,9	33,01	2373	14,9
1 A FS	1,79	16,4	32,98	2367	14,8
2 A FL	1,98	18,2	33,04	2362	15,0
2 A FM	2,41	22,0	32,89	2353	14,9
2 A FS	2,83	25,9	33,01	2353	15,1
3 A FL	3,09	28,2	32,81	2335	14,9
3 A FM	3,74	34,4	33,09	2320	15,1
3 A FS	4,49	36,9	29,61	2302	12,7
1 S FL	5,04	38,0	27,12	2297	10,9
1 S FM	6,32	39,6	22,54	2300	8,3
1 S FS	7,62	39,3	18,58	2302	6,2
2 S FL	8,52	39,5	16,69	2297	5,5
2 S FM	10,56	39,7	13,55	2302	4,2
2 S FS	12,49	38,8	11,17	2297	3,2
3.3.1	Five-hour-test at 75% of pull at maximum power in 1 S FS gear				
1 S FS	7,90	30,6	13,94	2344	4,4
3.3.2	Five-hour-test at pull corresponding to 15% wheel slip in test 3.2				
3 A FM	3,49	32,1	33,11	2320	-

Total oil consumption during ten hours duration of tests 3.3.1 and 3.3.2 : 51 g/h

PRÜFUNGS-ABTEILUNG

Test No. 88-146

Tyre size front: 10.0/75 - 15.3
rear: 12.4 R 24

Specific fuel consumption g/kWh	Specific energy kWh/l	Temperatures Fuel °C	Cylinder-head °C	Engine-oil °C	Atmospheric conditions Temperature °C	Relative humidity %	Pressure kPa
tyre inflation pressure: 150 kPa at front, 80 kPa at rear							
333	2,51	50	55	75	8	74	97,9
321	2,60	45	81	92	8	70	97,8
318	2,62	45	77	90	8	73	97,8
306	2,72	44	69	84	8	75	97,9
305	2,74	45	74	85	9	74	97,9
298	2,80	42	77	88	8	74	97,9
301	2,78	43	76	88	8	76	97,9
305	2,74	42	77	87	8	76	97,9
tyre inflation pressure: 300 kPa at front, 110 kPa at rear							
467	1,79	38	57	78	13	58	100,0
432	1,93	41	57	78	14	54	100,0
398	2,10	41	58	79	14	56	100,0
383	2,18	39	57	78	14	54	100,0
357	2,34	41	59	77	15	54	100,0
341	2,45	39	59	78	15	54	100,0
339	2,46	35	64	85	17	51	99,7
327	2,55	40	60	82	17	49	99,7
319	2,61	39	55	83	17	49	99,7
311	2,68	36	60	85	18	48	99,7
296	2,82	35	61	86	17	46	99,7
300	2,78	34	67	86	18	44	99,6
296	2,82	35	68	84	17	51	99,6
296	2,82	34	60	86	10	58	99,4
305	2,74	35	65	85	9	60	99,4
309	2,70	30	60	84	8	74	100,7
-	-	26	56	89	5	74	99,5

Test 3.3.2 was carried out with additional ballast of 250 kg
the figures not quoted are therefore irrelevant

4 TURNING AREA AND TURNING CIRCLE (front wheel drive disengaged)

Wheel equipment front: 10.0/75 - 15.3
rear: 12.4 R 24

Track of wheels front: 844 mm
rear: 853 mm

	With brakes		Without brakes	
	left-hand m	right-hand m	left-hand m	right-hand m
Radius of turning area	3,31	3,22	3,66	3,60
Radius of turning circle	3,16	3,07	3,51	3,45

5 LOCATION OF CENTRE OF GRAVITY

Height above ground	709 mm
Distance forward from rear axle centre	829 mm
Distance from tractor's median plane	0 mm

PRÜFUNGS-ABTEILUNG

FENDT FARMER 270 V

Test No. 88-146

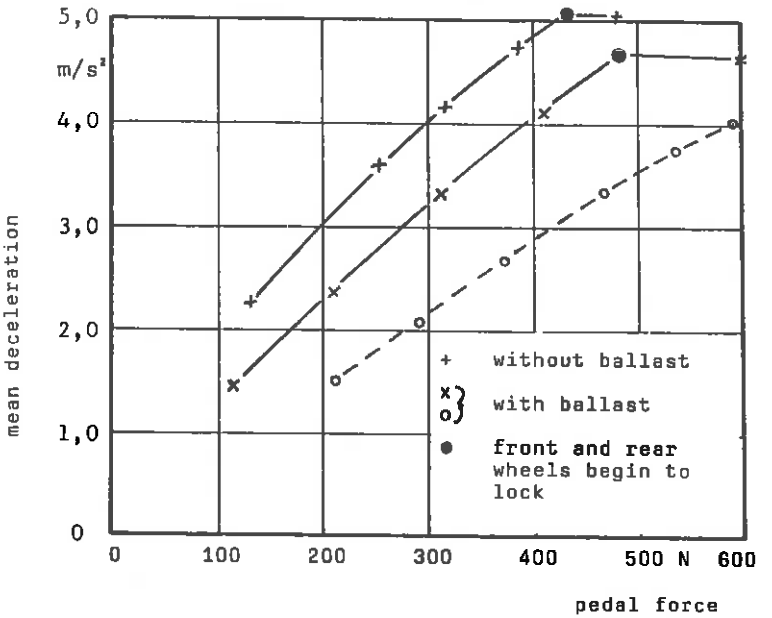
6 BRAKING (Front wheel drive is automatically engaged when brake is actuated)

Date of tests: 2nd and 6th March 1989

	Tractor mass (with driver) front kg	rear kg	total kg	Speed before application of brakes km/h
Without ballast	955	1420	2375	33,8
With ballast	1800	1700	3500	33,6

6.1 Cold service braking device test

6.2 Fade test



No significant deviation of tractor from original course and no abnormal vibrations

Brakes-heating: Actuating of brake for 1 km with pedal force corresponding to 1 m/s²

6.3 Parking braking device test

		Ballasted tractor on 18% - slope up	down
Braking device control force	N	140	170

PRÜFUNGS-ABTEILUNG
FENDT FARMER 270 V

Test No. 88-146

7 MEASUREMENT OF EXTERNAL NOISE LEVEL

Date of test: 2nd March 1989
Type of track: Concrete
Type of sound level meter: BRÜEL & KJAER model 2233

Results of test

Gear: 2nd overdrive *)
travelling speed
before acceleration: 25,2 km/h
Sound level: 84,5 dB(A)

APPENDIX

MEASUREMENT OF NOISE IN THE PROTECTIVE STRUCTURE

Results of OECD-Test No. CSS 067/1/NM 0064, with FENDT cab 205.500
(tractor fitted with long exhaust pipe, mouth showing upwards)

Date of test: 2nd August 1988
Type of track: Concrete
Type of sound level meter: BRÜEL & KJAER model 2233

Gear	Drawbar pull kN	Travelling speed km/h	Sound level dB(A)
1 S FM +)	19,82	5,91	85,0
1 S FM +)	light load	7,24	81,5
2nd overdrive *)	light load	34,39	84,0

+) The 1 S FM gear corresponds to the nominal travelling speed nearest to 7,5 km/h

*) Front wheel drive disengaged

Published
with the support of the Federal Minister for Food, Agriculture and Forestry

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