Report on test in accordance
with OECD STANDARD CODE

OECD No. 1208



Agricultural Tractor
FENDT FARMER 275 S (4WD)

Type denomination 297/2

Manufacturer

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

Deutsche Landwirtschafts-Gesellschaft e.V.
Zimmerweg 16 · D-6000 Frankfurt a. M. 1
Telefon: (069) 71 68-0 · Telex: 04 131 85 dlg-d

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: November 1988 till February 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. 1208

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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PRÜFUNGS-ABTEILUNG
FENDT FARMER 275 S

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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. 90 hours
Location of test:	D-6114 Groß-Umstadt

SPECIFICATION OF TRACTOR

Tractor

Make:	FENDT
Trade name:	FARMER 275 S
Type denomination:	297/2
Type:	Four wheel-drive tractor, unit construction
Serial No.:	297/21/0026 1st serial no. 297/21/0026

Engine

Make:	DEUTZ
Model:	F4L 913
Type:	Aircooled 4-stroke diesel engine, direct injection, naturally-aspirated
Serial No.:	744 0456
Cylinders:	4, in-line, bore/stroke 102/125 mm, capacity 4086 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 85D410/3RS 2610, serial no. 75021885; manufacturer's production setting of injection pump: Flow rate (rated engine speed and full load) 55+1,0 mm³/stroke, timing 19,5+1° static and +6° dynamic before TDC; BOSCH multihole injection nozzles DLLA 149 S 774, injection pressure 17,5+0,8 MPa

Governor:	BOSCH, centrifugal variable speed governor RSV 325-1150 A8C 2102L, governed range of engine speed from 650 to 2440 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
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 oval, 119 to 164 mm dia, 525 mm long; mouth showing laterally rearwards down, 420 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 21/6 synchromesh gear box with 3 forward gears and 1 reverse gear; 1 close stepped synchromesh gear box with 3 ranges FL, FM and FS; 1 range gearbox with road range S (collar shifted) and field range A (sliding gear change); 3 independent synchronized overdrive speeds; total 21 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 213 FSD 50, driven by universal joint shaft in medium 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 from steering angle; bevel gear drive, bevel gear with multi-disc limited slip differential; 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
Forward speeds				
A	FL	1	429,81	1,40
		2	268,63	2,24
		3	170,13	3,54
	FM	1	352,22	1,71
		2	220,14	2,74
		3	139,42	4,32
	FS	1	298,71	2,02
		2	186,69	3,23
		3	118,24	5,10
S	FL	1	107,45	5,61
		2	67,16	8,97
		3	42,53	14,17
	FM	1	88,06	6,84
		2	55,09	10,95
		3	34,86	17,29
	FS	1	74,68	8,07
		2	46,67	12,91
		3	29,56	20,39
1st overdrive			25,46	23,67
2nd overdrive			20,22	29,81
3rd overdrive			16,27	37,05
Reverse speeds				
A	FL	R	296,91	2,03
	FM	R	243,31	2,48
	FS	R	206,35	2,92
S	FL	R	74,23	8,12
	FM	R	60,83	9,91
	FS	R	51,59	11,68

*) calculated with a tyre dynamic radius of 695 mm (ISO 4251/1-1984)

Number of revolutions of front wheels for one revolution of rear wheels: 1,4511

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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 640 mm
distance from tractor's median plane 0 mm
distance from rear wheel axis 308 mm

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		

Optional p.t.o.: Front p.t.o. is available for
540 or 1000 rev/min
(not fitted on tested tractor)

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

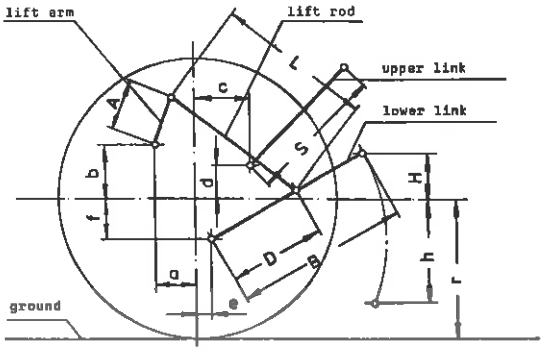
Hydraulic system: Open centre
BOSCH gear type pump HY/ZFS 11/16 L
gear driven by engine;
delivery 39 l/min at rated engine speed;
oil filter in return line;
BOSCH control valve EHR;
2 single acting cylinders, bore 55 mm,
stroke 175 mm, no safety valve;
linkage lock for transport by lowering
throttle and mechanical lock of control
switch;
maximum working pressure 18,0+1 MPa

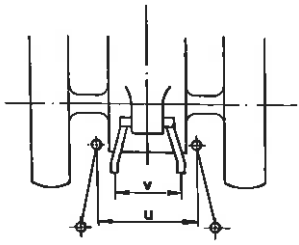
3 single acting and 2 double acting additional control valves of which one single acting valve is equipped with an adjustable flow control;
oil tappings at rear and at both sides of tractor's middle, separate return lines;

separate oil reservoir at the right side of the engine with 14 dm³ capacity, 12 dm³ can be taken off stationary or travelling

Three-point linkage at rear:

With WALTERSCHEID quick couplers, category 1 or 2;
in conformity with ISO 730/1-1977;
lower links side stabilization by quick clamping devices with middle centering





Three-point linkage at front:

Optionally available; not fitted to tested tractor

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Dimensions of rear implement linkage (Cat.2; projected lengths in mm, underlined dimensions are valid for power lift measurements p.21)

Rear tyres	radius index	(r)	695
Front tyres	radius index	(r')	490
Length of lift arms		(A)	264
Length of lower links		(B)	851
Distance of lift arm pivot points from rear wheel centre	horizontal	(a)	-110
	vertical	(b)	334
Horizontal distance between lower link pivot points		(u)	405
Horizontal distance between lift arm end points		(v)	490
Length of upper link		(S)	574 to 847, 665
Distance of upper link pivot point from rear wheel centre	horizontal	(c)	217, 257 or 297
	vertical	(d)	356, 300 or 244
Distance of lower link pivot point from rear wheel centre	horizontal	(e)	92
	vertical	(f)	155
Distance of lower link pivot points from lift rod pivot points on lower links		(D)	461
Length of lift rods		(L)	539 to 654, 605

Height of lower link hitch points relative to rear wheels' centre line (situated 695 mm above ground), these data are valid for unloaded power lift:

Length of lift rods	(L)	605	539	654
Linkage distance of lift rods	(D)	461		
Lowest position	(h)	495	360	605
Highest position	(H)	165	255	75
Transport position	(H')	165	255	75

Transport lock: Hydraulical, control-valve switch locked

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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 445, 735, 775, 815,	865 mm
	behind rear wheel axis, horizontally	475 mm
	above p.t.o. shaft end, vertically 95, 135, 175,	225 mm
	below p.t.o. shaft end vertically	195 mm
	behind p.t.o. shaft end, horizontally	167 mm
	maximum permissible vertical load	1000 kg
Holed drawbar:	Short bar,	
	length between joint balls	825 mm
	thickness/width	30/80 mm
	9 holes between joint balls,	
	distance between the holes each	80 mm
	hole dia	33 mm
	height above ground	
	minimum	90 mm
	maximum	950 mm
	horizontal distance of holes' centre line to p.t.o. shaft end (lower links in horizontal position)	635 mm
Towing hitch:	Height above ground	790 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;
1 FENDT steering cylinder, symmetrical design, in front axle integrated, directly acting on steering levers;
bore/stroke 63/145 mm, piston rod 36 mm dia

Brakes

Service brake:

KNOTT, ATE and FENDT,
pedal operated muscle power brake with hydraulic transmission, acting on 2 brake drums on the differential half shafts of rear axle, 180 mm dia, 60 mm width;
1 additional caliper brake on joint shaft to front axle drive, disc 224 mm dia;
front wheel drive is additionally engaged, when braking

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 shafts of rear axle; drum 180 mm dia, 30 mm width

Wheels

Steered wheels:	At front, 2 pneumatics 12.4 R 20, rims W11x20
Driving wheels:	At front and at rear, at rear: 2 pneumatics 16.9 R 30, rims W14Lx30
Wheel base:	2180 mm
Track adjustment:	At front 1395 and 1495 mm, by reversing wheels; at rear 1362 and 1502 mm, by reversing wheels; optionally available offset lug type rims

Available tyres:

Tyre size	
Front	Rear
12.5 - 18 MPT 10 ply	16.9 R 28 8 ply
335/80 R 18 132 G	480/70 R 28 138 A8
10.5 - 20 MPT 6 ply	14.9 R 28 6 ply
12.5 - 20 MPT 10 ply	14.9 R 28 128 A8
12.4 R 20 116 A8	14.9 - 30 6 ply
11.2 R 20 6 ply	16.9 R 30 8 ply
9.5 R 20 6 ply	12.4 - 32 6 ply
275/80 R 20 125 G	12.4 R 32 122 A8
335/80 R 20 134 G	12.4 - 36 6 ply
9.5 R 24 107 A8	12.4 R 36 124 A8
	11.2 R 36 120 A8
	9.5 R 36 114 A8
	9.5 - 42 10 ply

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Protective structure

Cab:	FENDT, model 294.500; OECD-tested, approval no. CSS 066/6/NM 0062; not tiltable, mounted by 4 silent blocks on tractor; 1 door and 1 step each on the left and right; steps 540 mm, driver's platform 735 mm above ground; front- and rear-windows tiltable, roof hatch; separate heating and ventilation system in the roof; EBERSPÄCHER diesel-fuel heater with blower (1-stage), additional fresh air blower (3-stages), air intake above windscreen, air outlet jets in the roof, heating possible by recirculating air		

Noise reduction materials:

roof and roof hatch	plastic (GFK), foam with textile		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	foam with textile		3-10 mm
- down	foam with PU-hide		20 mm
mudguards	foam with PU-hide		20 mm
side walls, doors, middle posts	foam with textile		3-10 mm
floor	nopped mat (PUR)		4-5 mm
	Polyethylen-foam (PE)	appr.	9 mm
seat support and 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 44/1HB
mechanical suspension,
adjustable hydraulic shock absorber;

height of unloaded seat above platform steplessly adjustable from 495 mm to 560 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	915	225
Sidelights	65 x 15	1410	793
Rearlights	85 x 30	1350	740
Reflectors 1st pair 2nd pair	 90 x 45 75 Ø	 1350 640	 740 365

TEST CONDITIONS

Overall dimensions

	Without ballast	With ballast
Length	3690 mm	4200 mm
Width	1995 mm	1995 mm
Height	2350 mm to top of cab	
Ground clearance	370 mm below front axle differential	

Tractor mass (with cab)

	Ballasted		Unballasted	
	Without driver kg	With driver kg	Without driver kg	With driver kg
Front	1980	2000	1090	1110
Rear	2430	2500	1720	1790
Total	4410	4500	2810	2900

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Ballast

	Number of weights	Total mass kg	Water kg
Front	15	609	125
Rear	6	330	536

Tyres and track widths specifications

	Front	Rear
Tyres:	PIRELLI TM 200	KLEBER
dimensions	12.4 R 20	16.9 R 30
ply rating/load and speed index	-/116 A8	6 ply/-
type	radial	radial
maximum load	1250 kg	1900 kg
at inflation pressure	160 kPa	170 kPa
at travelling speed	40 km/h	40 km/h
dynamic radius index	490 mm	695 mm
Chosen track width	1495 mm	1502 mm
Technically permissible axle load	2000 kg	3400 kg

Technically permissible total weight 4500 kg

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	2,7 each	1000/2	-
Front axle differential	6,0		
Front final drives	0,3 each		
Hydraulic system including steering	14,0	1000/2	1000/2

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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 Typ Viscosity Classification API	 Engine oil SAE 20W/20 CD	 ESSO Essolube XD 3+ 20W/20 CD

Grease: Multipurpose grease

Number of lubrication points: 9

Fuel

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

Density at 15°C: at p.t.o. tests 0,837 g/cm³
at drawbar performance tests 0,835 g/cm³

REPAIRS: None

REMARKS: None

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COMPULSORY TESTS

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

Date of tests: 3rd November 1988
Location of tests: DLG-Testing Station Groß-Umstadt
Type of dynamometer: SCHENCK hydraulic dynamometer U1-40

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
Maximum power						
1.1 At 2-hour test						
52,5	2300	590	15,21	12,73	243	3,45
1.2 At rated speed						
52,5	2300	590	15,21	12,73	243	3,45
1.3 At standard p.t.o. speed						
51,4	2104	540	14,59	12,21	238	3,52
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						
52,5	2300	590	15,21	12,73	243	3,45
1.4.2 85% of the torque obtained in 1.4.1						
45,8	2360	606	13,37	11,19	245	3,42
1.4.3 75% of the torque defined in 1.4.2						
34,5	2374	609	10,73	8,98	260	3,22
1.4.4 50% of the torque defined in 1.4.2						
23,2	2395	615	8,30	6,94	299	2,80
1.4.5 25% of the torque defined in 1.4.2						
11,7	2416	620	6,03	5,05	431	1,94
1.4.6 unloaded						
-	2440	626	3,95	3,31	-	-

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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						
51,4	2104	540	14,59	12,21	238	3,52
1.5.2 85% of the torque obtained in 1.5.1						
44,9	2163	555	12,62	10,56	235	3,56
1.5.3 75% of the torque defined in 1.5.2						
34,0	2183	560	10,04	8,40	247	3,38
1.5.4 50% of the torque defined in 1.5.2						
22,9	2204	565	7,63	6,39	279	2,99
1.5.5 25% of the torque defined in 1.5.2						
11,5	2227	571	5,28	4,42	383	2,19
1.5.6 unloaded						
-	2249	577	3,35	2,81	-	-

No load maximum engine speed: 2440 rev/min
Equivalent flywheel torque at rated engine speed: 218 Nm
Maximum equivalent flywheel torque: 265 Nm at 1403 rev/min of the engine

Mean atmospheric conditions

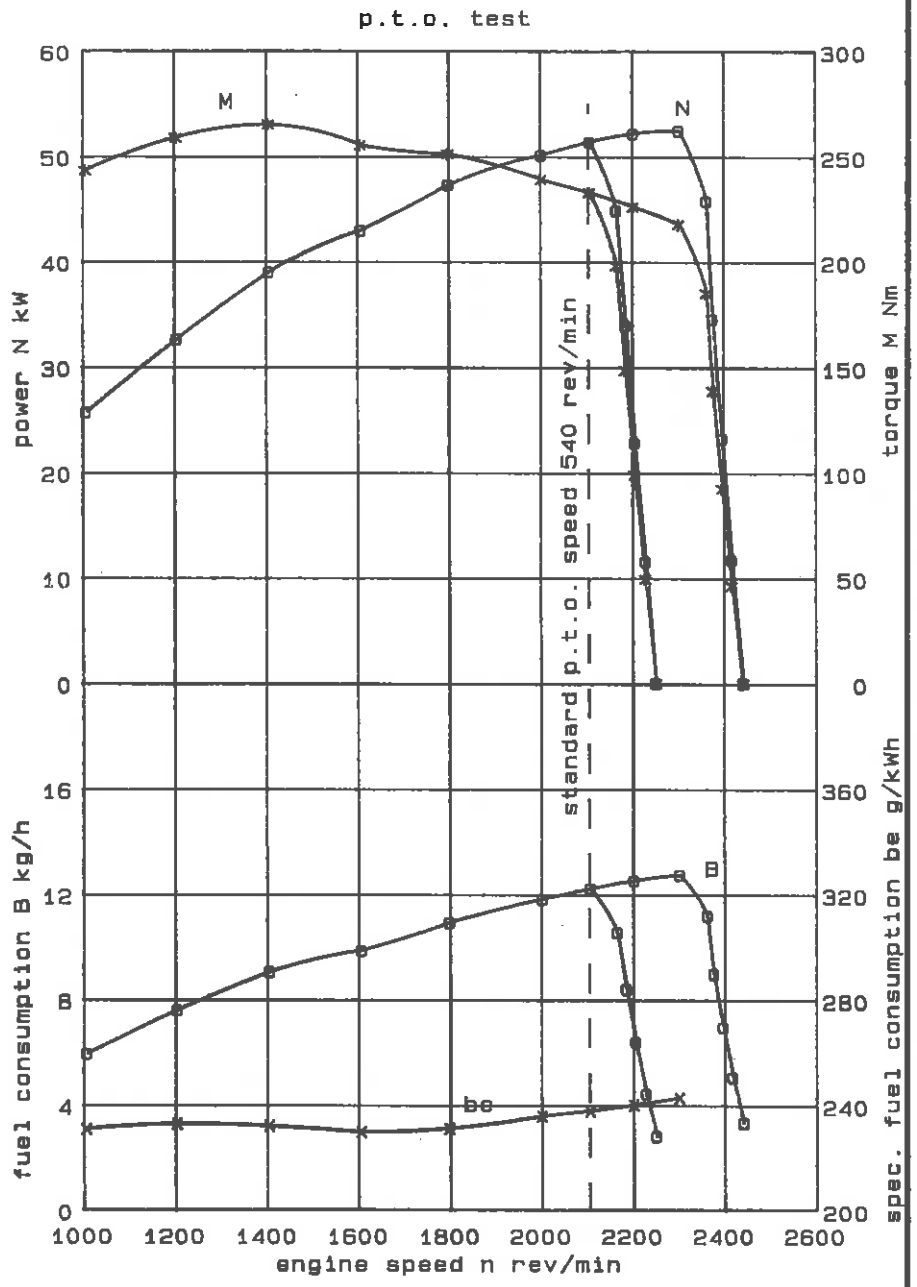
temperature	19 °C
pressure	101 kPa
rel. humidity	35 %

Maximum temperatures

cylinder head	105 °C
oil	110 °C
fuel	21 °C
air intake	22 °C

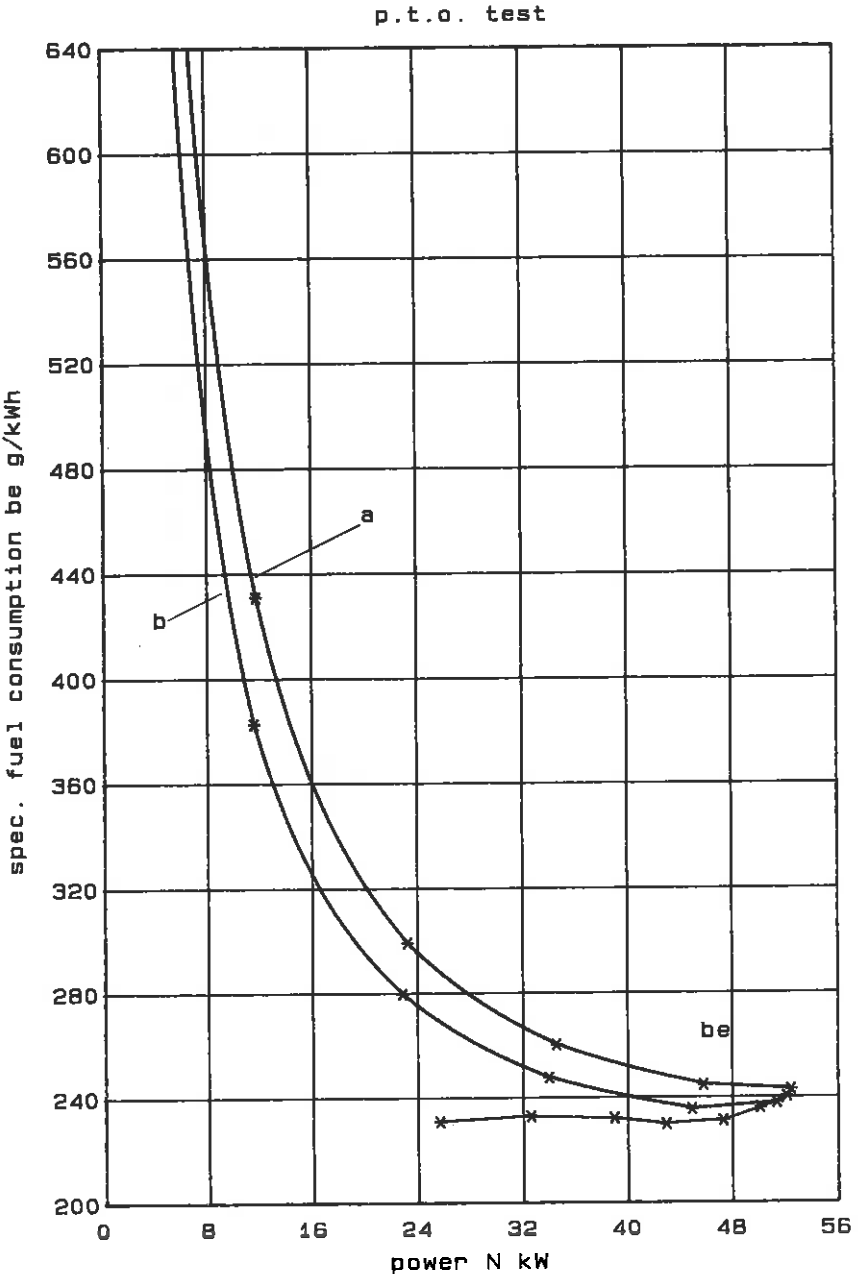
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2 HYDRAULIC POWER AND LIFTING FORCE

Date of tests: 13th and 31st January 1989

2.1 Hydraulic power test

Sustained pressure with relief valve open 18,4 MPa
Pump delivery rate at minimum pressure 41,1 l/min

	Hydraulic power kW	Flow rate l/min	Pressure MPa	Oil temperature °C
At 90% of the actual relief valve setting	10,1	36,6	16,6	65
At max. power	10,1	36,6	16,6	65

Tapping point used for test: At rear of tractor (single acting), separate return pipe

2.2 Power lift test

	At the hitch point	On the frame
Height of lower hitch points above ground in down position	200 mm	200 mm
Vertical movement without lifting forces	655 mm	800 mm
Vertical movement with lifting forces	635 mm	770 mm
Max. corrected force exerted through full range	16,9 kN	14,9 kN
Corresponding pressure	16,6 MPa	16,6 MPa
Moment about rear axle	-	23,1 kNm
Max. tilt angle of mast from vertical	-	10,0 °

Lifting heights relative to horizontal lower links

mm	-385	-340	-300	-200	-100	0	+100	+200	+295	+300	+385

Lifting forces at hitch points, corrected to 16,6 MPa

kN		16,9	17,1	18,7	19,6	20,2	20,9	21,3	21,6		

Lifting forces at standard frame, corrected to 16,6 MPa

kN	15,3		16,0	16,4	16,6	16,6	16,4	16,0		15,5	14,9

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3 DRAWBAR PERFORMANCE

Date of tests: 6th till 9th February 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 420 mm					
3 A FS	4,47	37,8	30,45	2356	14,9
1 S FL	4,90	41,3	30,32	2350	14,9
1 S FM	6,23	45,2	26,14	2302	9,3
1 S FS	7,49	46,7	22,44	2297	7,2
2 S FL	8,48	47,6	20,19	2302	5,9
2 S FM	10,49	47,1	16,16	2302	4,5
2 S FS	12,45	46,8	13,52	2300	3,6
3.2 MAXIMUM POWER IN TESTED GEARS (ballasted tractor) height of drawbar above ground 415 mm					
1 A FL	1,25	15,7	45,12	2391	15,1
1 A FM	1,53	19,1	45,19	2385	15,2
1 A FS	1,79	22,4	45,02	2385	15,1
2 A FL	1,98	24,9	45,19	2379	15,2
2 A FM	2,42	30,4	45,18	2367	14,9
2 A FS	2,84	35,5	44,95	2359	15,0
3 A FL	3,09	38,9	45,29	2347	15,0
3 A FM	3,94	44,5	40,63	2297	9,3
3 A FS	4,77	46,4	35,02	2300	6,7
1 S FL	5,32	47,3	31,99	2300	5,6
1 S FM	6,58	47,4	25,96	2300	4,3
1 S FS	7,79	46,5	21,55	2297	3,5
2 S FL	8,69	46,7	19,36	2297	3,1
2 S FM	10,68	46,2	15,58	2300	2,4
3.3.1 FIVE-HOUR-TEST at 75% of pull at maximum power in 1 S FM gear					
1 S FM	6,83	36,9	19,47	2356	3,0
3.3.2 FIVE-HOUR-TEST at pull corresponding to 15% wheel slip in test 3.2					
3 A FL	3,12	39,3	45,29	2344	-

Total oil consumption during ten hours duration of tests 3.3.1 and 3.3.2 : 57 g/h

PRÜFUNGS-ABTEILUNG

Test No. 88-169

Tyre size front: 12.4 R 20
rear: 16.9 R 30

Specific fuel consumpt. g/kWh	Specific energy kWh/l	Temperatures Fuel °C	Cylinder-head °C	Engine-oil °C	Atmospheric conditions Tempe-rature °C	Relative humidity %	Pressure kPa
tyre inflation pressure 80 kPa at front, 160 kPa at rear							
310	2,69	34	75	95	9	94	101,5
303	2,75	34	73	93	9	97	101,5
284	2,94	34	85	102	9	95	101,5
275	3,03	33	84	103	9	94	101,5
270	3,09	34	84	102	9	95	101,5
273	3,06	34	85	100	10	94	101,5
275	3,04	33	84	101	10	97	101,5
tyre inflation pressure 120 kPa at front, 160 kPa at rear							
428	1,95	40	50	90	3	100	100,7
386	2,16	35	56	85	3	100	100,7
359	2,33	37	60	90	3	95	100,6
359	2,32	34	57	84	5	95	100,6
331	2,52	37	58	83	4	94	100,6
318	2,63	37	60	84	5	99	100,6
315	2,65	31	64	87	4	98	100,6
289	2,89	32	80	101	5	99	100,6
277	3,02	33	84	103	5	89	100,6
271	3,07	32	84	104	5	85	100,6
271	3,08	31	83	102	5	87	100,6
275	3,03	33	84	101	5	80	100,6
275	3,04	33	85	102	5	95	100,6
278	3,00	31	84	103	5	92	100,6
284	2,94	32	56	83	8	82	100,6
-	-	28	63	89	3	93	100,9

Test 3.3.2 was carried out with additional ballast of 330 kg, the figures not quoted are therefore irrelevant

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

Wheel equipment front: 12.4 R 20
rear: 16.9 R 30

Track of wheels front: 1495 mm
rear: 1502 mm

	With brakes		Without brakes	
	left-hand m	right-hand m	left-hand m	right-hand m
Radius of turning area	3,56	3,60	3,96	4,04
Radius of turning circle	3,30	3,34	3,80	3,78

5 LOCATION OF CENTRE OF GRAVITY

Height above ground	817 mm
Distance forward from rear axle centre	835 mm
Distance from tractor's median plane, to the left	1 mm

PRÜFUNGS-ABTEILUNG
FENDT FARMER 275 S

Test No. 88-169

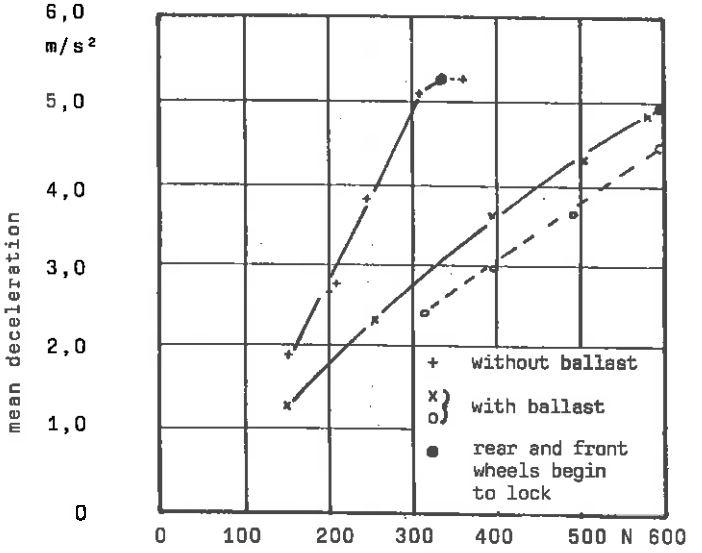
6 BRAKING (Front wheel drive switch in position "off", front wheel drive is engaged automatically when braking)

Date of tests: 7th and 8th February 1989

	Tractor mass (with driver) front kg	rear kg	total kg	Speed before application of brakes km/h
Without ballast	1110	1790	2900	38,6
With ballast	2000	2500	4500	38,2

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	270	250

PRÜFUNGS-ABTEILUNG
FENDT FARMER 275 S

Test No. 88-169

7 MEASUREMENTS OF EXTERNAL NOISE LEVEL

Date of test: 7th February 1989
Type of track: Concrete
Type of sound level meter: BRÜEL & KJAER model 2233

Results of test

Gear: 3rd Overdrive*)
Travelling speed before acceleration: 28,9 km/h
Sound level: 85,5 dB(A)

APPENDIX

MEASUREMENTS OF NOISE IN THE PROTECTIVE STRUCTURE

Results of OECD-test no. CSS 066/6/NM 0062 with FENDT safety cab model 294.500
measured with long exhaust pipe, mouth showing upwards

Date of test: 5th 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 FS +)	22,52	7,90	84,5
1 S FS +)	light load	8,52	82,5
3rd Overdrive*)	light load	38,47	84,0

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

*) Front wheel drive disengaged

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Deutsche Landwirtschafts-Gesellschaft e.V. (DLG)
Fachbereich Landtechnik — Prüfungsabteilung —
Zimmerweg 16 (DLG-Haus)
D-6000 Frankfurt am Main 1