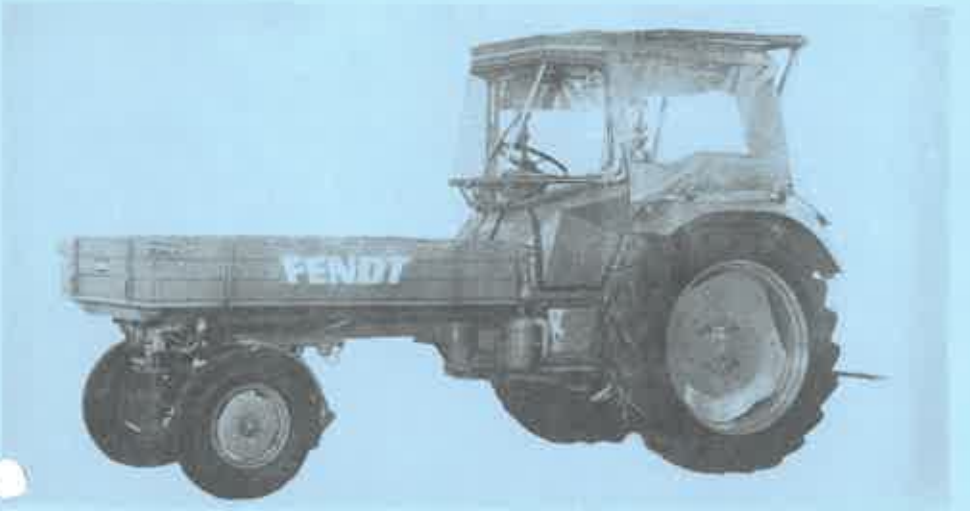
Report on test in accordance with
O.E.C.D.-Test Code for Agricultural Tractors

TOOLCARRIER F 250 G
„ FENDT ONE-MAN SYSTEM "

Manufactured by: XAVER FENDT & CO.
Maschinen- und Schlepperfabrik
8952 Marktoberdorf/ Germany



Date of Tests: December 1969 - June 1970

This report has been approved by the O.E.C.D. Co-ordinating Centre (C.N.E.E.M.A., France) as being in accordance with the O.E.C.D.-Tractor Test Code.

Date of Approval: 11.August 1970 Serial No.: 335

DEUTSCHE LANDWIRTSCHAFTS-GESELLSCHAFT e.V.
Prüfungsabteilung für Landmaschinen
6 Frankfurt am Main, Zimmerweg 16

This bulletin is based on engineering tests in accordance with the O.E.C.D.-Tractor Test Code. It does not contain an evaluation of the performance of the tractor on practical farm work.

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PRÜFUNGS-ABTEILUNG
Fendt F 250 GT

Test No. 69-4

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PRÜFUNGS-ABTEILUNG Test No.: 69-4
Fendt F 250 GT

Tractor manufacturer: Xaver Fendt & Co., Maschinen-und Schlepperfabrik 8952 Marktoberdorf/Germany
Submitted for test by: Manufacturer
Selected by: Manufacturer with the agreement of the DLG testing station
Place of running-in: Marktoberdorf and Groß-Umstadt
Duration of running-in: Engine appr. 40 hours, tractor appr. 30 hours

SPECIFICATION OF TRACTOR

Tractor:

Make: Xaver Fendt & Co., Maschinen-und Schlepperfabrik 8952 Marktoberdorf/Germany
Model: F 250 GT
Type: Tool carrier type tractor; mono-block construction comprising engine, transmission and rear axle, connected with front axle by a central squar tubular spar
Serial No.: 250/ 0022 V

Engine

Make: Motorenwerke Mannheim AG., 68 Mannheim
Model: D 925-L3
Type: Air cooled Diesel engine, direct injection
Serial No.: 925.3.01015
Cylinders: 3 cylinders, horizontal in line; 95 mm bore, 120 mm stroke, capacity 2550 cm^3; compression ratio 17,5 : 1; overhead valves; replaceable ribbed single cylinders
Fuel system: Fuel: Commercially available diesel oil; Bosch type EP/VA 3/ 100 H 115 OBRV 2583 distributor type injection pump; Bosch multi hole type injection nozzles; injection pressure 180 kp/cm^2; injection timing 28° before TDC; Pierburg type fuel feed pump; metal strainer incorporated in feed pump; Bosch dual box type filter with sediment bowl, water trap and replaceable filter elements; capacity of fuel tank appr. 60 l
Governor: Make: Robert Bosch GmbH.,7 Stuttgart, hydraulic variable speed type governor incorporated in injection pump; governed range of engine speed 700 rev/min to 2405 rev/min; rated engine speed for p.t.o.-work 2300 rev/min
for field-work 2300 rev/min
for transportation-work 2300 rev/min
for belt-work 2300 rev/min
Air cleaner: Main cleaner
Make: Mann & Hummel Filterwerk, 714 Ludwigsburg
oil-bath type, oil capacity 0,6 l, type 32 034 75 153

Pre-cleaner
Make: Mann & Hummel Filterwerk, 714 Ludwigsburg
cyclonic filter, type 48 036 67 140

PRÜFUNGS-ABTEILUNG
Fendt F 250 GT

Test No. 69-4

Lubrication system:	Forced feed from gear type pump; metal straine in sump; fine filter with replaceable filter element in full flow; oil capacity 6,5 l; recommended oil change period 100 - 120 hours; recommended oil in winter HD SAE 10 in summer HD SAE 20 in tropics HD SAE 30
Cooling system:	Air cooling from V-belt driven axial blower
Electrical equipment	Voltage 12 Volt, negative earth
Starting device:	Bosch 12 Volt type JF (R) 12 V 2,5 PS starter motor
Starting aid:	None
Generator:	Bosch type EH 14 V 16 A 26
Battery:	Lead acid type battery 12 V 38 Ah
Transmission	
Clutch:	Make: Fichtel & Sachs AG., 872 Schweinfurt dry dual disc type clutch type DUT 250 L, operated by foot pedal
Gearbox:	Make: Xaver Fendt & Co., 8952 Marktoberdorf/Germany fully synchromesh speed selecting gear with 6 forward speeds and 1 overdrive speed independent from group gear, 2 stage group gear, giving total 13 forward speeds and 4 reverse; special group gear with 3 creeping speeds optional available
Rear axle and final drive:	Make: Xaver Fendt & Co., 8952 Marktoberdorf/Germany bevel gear type differential gear with crown wheel and pinion; differential lock fitted, operated by foot pedal, self disengaging
Oil capacity:	44 l; recommended oil change period 1000 hours or each year

PRÜFUNGS-ABTEILUNG Test No. 69-4

Fendt F 250 GT

Total ratios and speeds

Group gear	Gear No.	Number of engine revolutions for one revolution of the driving wheel	Theoretical travelling speed at rated engine speed of 2300 rev/min km/h	m/s
Creeping group (Kr.)	1	1755,34 : 1	0,343	0,0953
	2	1061,70 : 1	0,567	0,157
	3	605,17 : 1	0,994	0,276
Slow group (L.)	1	438,84 : 1	1,37	0,380
	2	265,42 : 1	2,27	0,630
	3	151,29 : 1	3,98	1,105
	4	106,17 : 1	5,66	1,572
	5	64,22 : 1	9,37	2,603
	6	36,60 : 1	16,43	4,564
Fast group (S.)	1	346,92 : 1	1,73	0,481
	2	209,83 : 1	2,87	0,797
	3	119,60 : 1	5,03	1,397
	4	83,93 : 1	7,17	1,991
	5	50,77 : 1	11,86	3,294
	6	28,94 : 1	20,75	5,764
Fast gear (S.G.)		20,13 : 1	29,88	8,300
Creeping group	1.R.	1082,99 : 1	0,555	0,154
Slow group	1.R.	270,75 : 1	2,22	0,617
	2.R.	65,42 : 1	9,18	2,550
Fast group	1.R.	213,98 : 1	2,81	0,781
	2.R.	51,73 : 1	11,63	3,230

The creeping group was not fitted on tractor tested

PRUFUNGS-ABTEILUNG Test No. 69-4
Fendt F 250 GT

Power take-off

a) Main p.t.o.: live power take-off, engageable for 2 speeds, to be clutched by a separate hand lever under the go of the tractor

Location: At rear of tractor

Dimensions: Spline shaft 29 x 34,9 x 8,7 mm = $1\frac{3}{8}$", 6 splines (acc.to DIN 9611 Form A; BS 1495; ASAE S 203.5)

Speed: 1) 593 rev/min at 2300 rev/min rated engine speed; standard p.t.o.-speed 540 rev/min at 2095 rev/min engine speed

2) 1150 rev/min at 2300 rev/min rated engine speed; standard p.t.o.-speed 1000rev/min at 2000 rev/min engine speed; speeds to be controlled by tractormeter

Direction of rotation: Clockwise, viewed from tractor rear

b) Front p.t.o.: live power take-off, to be clutched by a separate hand lever under the go of the tractor

Location: To the left hand side of the transmission case, extending to the front, 710 mm above ground, 245 mm to the left of tractor's median plane

Dimensions: Spline shaft 29 x 34,9 x 8,7 mm = $1\frac{3}{8}$", 6 splines (acc.to DIN 9611 Form A; BS 1495; ASAE S 203.5)

Speed: 564 rev/min at 2300 rev/min rated engine speed; standard p.t.o.-speed 540 rev/min at 2200 rev/min engine speed. The speeds may be controlled by a tractormeter

Direction of rotation: Clockwise, viewed from tractor rear

c) Ground speed p.t.o.: the main p.t.o. optional, the front p.t.o. in series may be engaged to ground speed p.t.o. both by a hand lever

Location and dimensions: Same as with main p.t.o. and front p.t.o. (see under a) and b)

Gear ratios: Main p.t.o., driving wheel : p.t.o. = 4,28 : 1
front p.t.o., driving wheel : p.t.o. = 4,07 : 1

Travelling distance: 0,95 m at 1 revolution of main p.t.o.
1,0 m at 1 revolution of front p.t.o.

Direction of rotation: Clockwise in all forward speeds, viewed from tractor rear

PRÜFUNGS-ABTEILUNG Test No. 69-4
Fendt F 250 GT

Belt pulley (not fitted on tractor tested; dimensions acc. to manufacturers specification)

Location: At rear of tractor, driving unit with quickcoupling mounted on p.t.o.-shaft

Dimensions: 225 mm diameter, 150 mm width

Speed: 1484 rev/min at 2300 rev/min rated engine speed; linear belt speed 17,47 m/s

Direction of rotation: Clockwise or anticlockwise, viewed from right hand side of tractor, according to mounting of driving unit

Power lift

Make: Xaver Fendt & Co., 8952 Marktoberdorf/ Germany

a) Power lift at the rear of tractor.
Live hydraulic power lift with draft control, position control, both infinitely mixable and floating position; Bosch type ZFR 1/16 Cl (112/1) gear type oil pump, directly driven from engine; Bosch type HY/SRZ 10 H 3 B 2 control valve; single acting ram; maximum oil pressure 175 kp/cm^2; oil capacity normaly 10,5 l ; with mower barfitted 13,5 l; mechanic lock for transport position of power lift

b) Power lift between front- and rear axle. 2 single acting rams controlled by separate control valve; 1 single external tapping and 1 dual external tapping

Pull attachment

Implement linkage: Three-point implement linkage catagory II, controlled by power lift;
lift height above ground: From 90 mm to 920 mm.
The lower links may be fitted with normal ball joints or with quickcouplers

Drawbar: Fixed on three-point linkage; height above ground from 9o mm to 920 mm adjustable by power lift;
height to be fixed by mechanical lock in standard height; centre hole and 4 holes with 210 mm distance each apart either side of centre hole; distance of centre hole from the end of p.t.o. with horizontal lower links 660 mm

PRÜFUNGS-ABTEILUNG
Fendt F 250 GT

Test No.69-4

Trailer hitch:	At rear of tractor; height above ground from 495 mm to 965 mm adjustable in 9 steps by shifting and reversing hitch by aid of bolts;distance from rear axle centre line 533 mm
Towing hitch:	At front of tractor; height above ground 650 mm

Steering device

Make: Zahnradfabrik Friedrichshafen AG.,
799 Friedrichshafen
and Xaver Fendt & Co., 8952 Marktoberdorf/ Germany
ZF-Ross-hydrostatic steering device type 8420 955 121

Brakes

Parking brake:	Mechanically operated by hand lever, acting as disc type brake on a transmission shaft
Foot brake:	Hydraulically operated by foot pedal, acting as Servo internal shoe type brake on brake drums in rear wheels
Steering brake:	Hydraulically operated by the single parts of the divided foot brake pedal; for normal use both pedal parts are to be locket together with a bolt

Wheels

Steering wheels:	Two at front. Tyres 7,50-15 L AS Front, 6 ply (acc.to DIN 7808); maximum permissible weight on each tyre 670 kp at 2,5 kp/cm², when transporting mounted implements 835 kp; rim 5 1/2 J x 15; tracks 1260 - 1360 - 1510 mm, adjustable by extending front axle
Driving wheels:	Two at rear. Tyres 12,4/11-36 AS, 6 ply (acc.to DIN 7807); maximum permissible weight on each tyre 1350 kp at 1,5 kp/cm², when transporting mounted implements 1550 kp; rim W10 x 36; tracks 1360 mm and 1500 mm (optional also 1280 mm), changed by reversing wheels
Wheel base:	2887 mm

Weights With power lift, three-point linkage, full fuel tank and oil, as tested

		without driver	with driver
Weight of tractor without ballast:	Front axle load	486 kp	492 kp
	Rear axle load	1938 kp	2002 kp
	Total	2424 kp	2494 kp
Ballast front:	13 pieces at front end of tractor	each 33 kp, total	429 kp
	loading plank-bed		145 kp
Ballast:	on loading plank-bed		70 kp
Ballast rear:	2 pieces per wheel, 60 kp each,	total	240 kp
	water in tyres		362 kp
Weight of tractor with ballast:		without driver	with driver
	Front axle load	1230 kp	1240 kp
	Rear axle load	2440 kp	2500 kp
	Total	3670 kp	3740 kp

Seat Make: Xaver Fendt & Co., 8952 Marktoberdorf
upholstered seat with hydraulic shock absorber and spring, adjustable according to driver's weight; height above ground appr. 1275 mm; in lengthwise direction adjustable by 70 mm; in median plane of the traktor

Number of grease points (whole tractor): 23

Loading plank-bed Length 1990 mm, width 1350 mm, height 300 mm
capacity 0,8 m³

Overall dimensions

Overall length:	4565 mm with three-point linkage fitted with quick coupler
Overall width:	1775 mm at 1360 mm track, without ballast weights
Overall height:	1815 mm to top of steering hand wheel
	2520 mm cab and safety frame fitted
Maximum ground clearance:	415 mm in median plane of tractor
	445 mm apart median plane

Lighting equipment Electric 12 Volt, acc.to StVZO (German Government regulation) additionally head light main beam

	Height above ground of centre mm	Dimensions of area mm	Distance from outside edge of tractor to centre mm
Head lights	825	105 Ø	315
Rear lights	1415	119 x 67	255
Reflectors	1100	124 x 36	212

PRÜFUNGS-ABTEILUNG
Fendt F 250 GT

Test No. 69-4

FUELS AND LUBRICANTS USED IN TESTS

Laboratory tests

Fuel:	Aral Diesel oil, specific gravity at 15°C : 0,820 kg (commercially available quality acc.to DIN 51 601)
Engine oil:	Shell Rotella SAE HD 20
Transmission oil:	Transmission oil SAE 80

Track tests

Fuel:	Aral Diesel oil, specific gravity at 15°C : 0,820 kg (commercially available quality acc.to DIN 51 601)
Engine oil:	Shell Rotella SAE HD 20
Transmission oil:	Transmission oil SAE 80

PRÜFUNGS-ABTEILUNG Test No. 69-4

Fendt F 250 GT

COMPULSORY TESTS

(1) MAIN POWER TAKE-OFF PERFORMANCE

Date and location of tests: 5.1.1970, Groß-Umstadt

Type of dynamometer: Schenck hydraulic dynamometer U1-40

Maximum power

Horsepower (metric) hp	Speed engine rev/min	Speed p.t.o. rev/min	Fuel consumption total l/h	Fuel consumption specific g/hph	hph/l
At maximum power 2-hour test					
42,7	2300	594	10,40	199	4,10
At standard p.t.o. speed (540 rev/min)					
40,3	2093	540	9,53	194	3,80
At the speed recommended by the manufacturer for drawbar work					
42,7	2300	594	10,40	199	4,10
Fuel consumption at part loads					
(i) 85% of torque at maximum power					
37,4	2372	612	8,87	194	4,22
(ii) unloaded					
-	2410	625	2,52	-	-
(iii) 50% of the load defined in (i)					
18,9	2395	618	5,36	232	3,53
(iv) maximum power					
42,7	2300	594	10,40	199	4,10
(v) 25% of the load defined in (i)					
9,5	2410	622	4,03	348	2,37
(vi) 75% of the load defined in (i)					
28,2	2383	616	7,12	206	3,96

No load maximum engine speed: 2410 rev/min

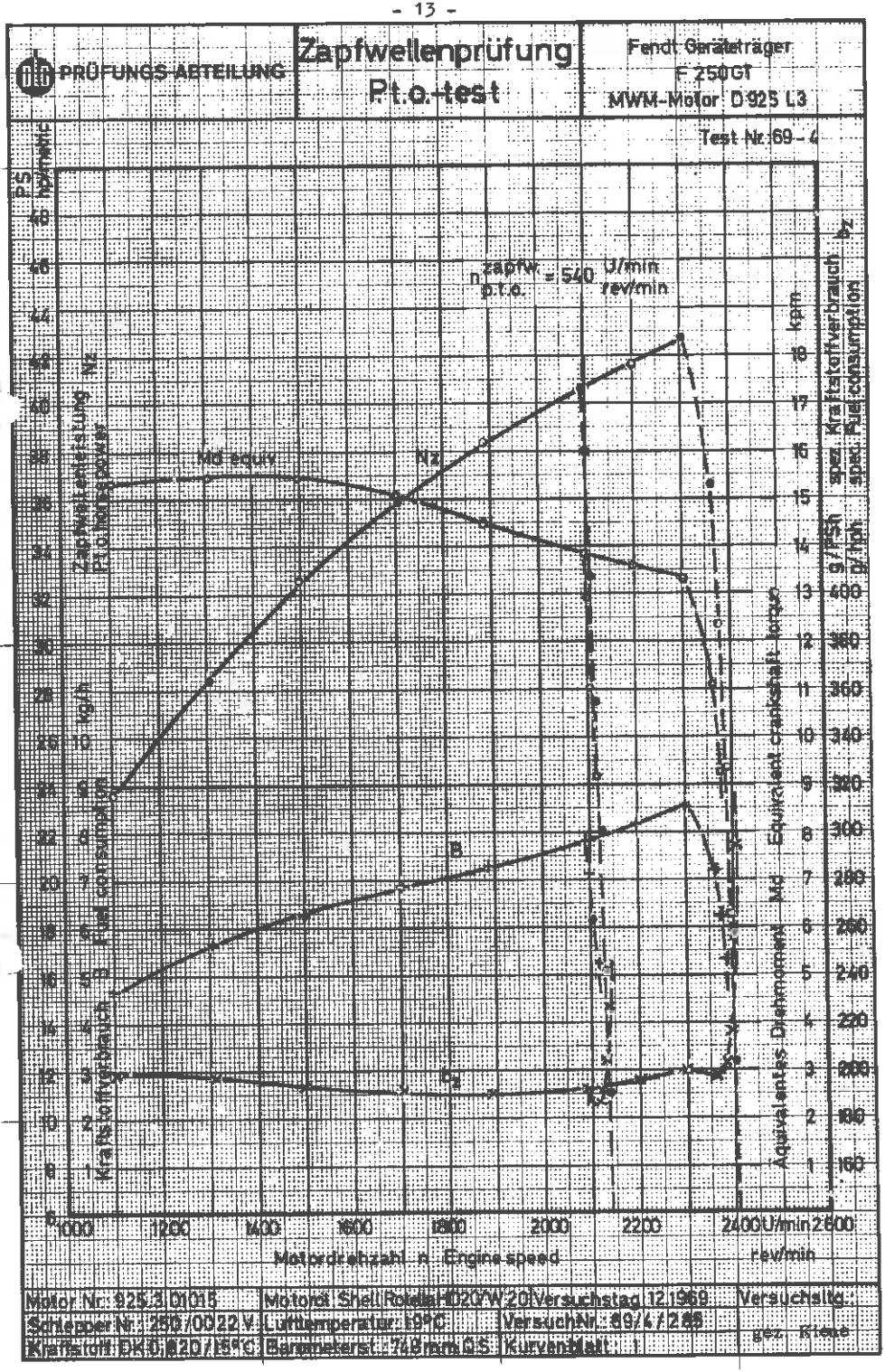
Torque*) at maximum power: 13,3 kpm

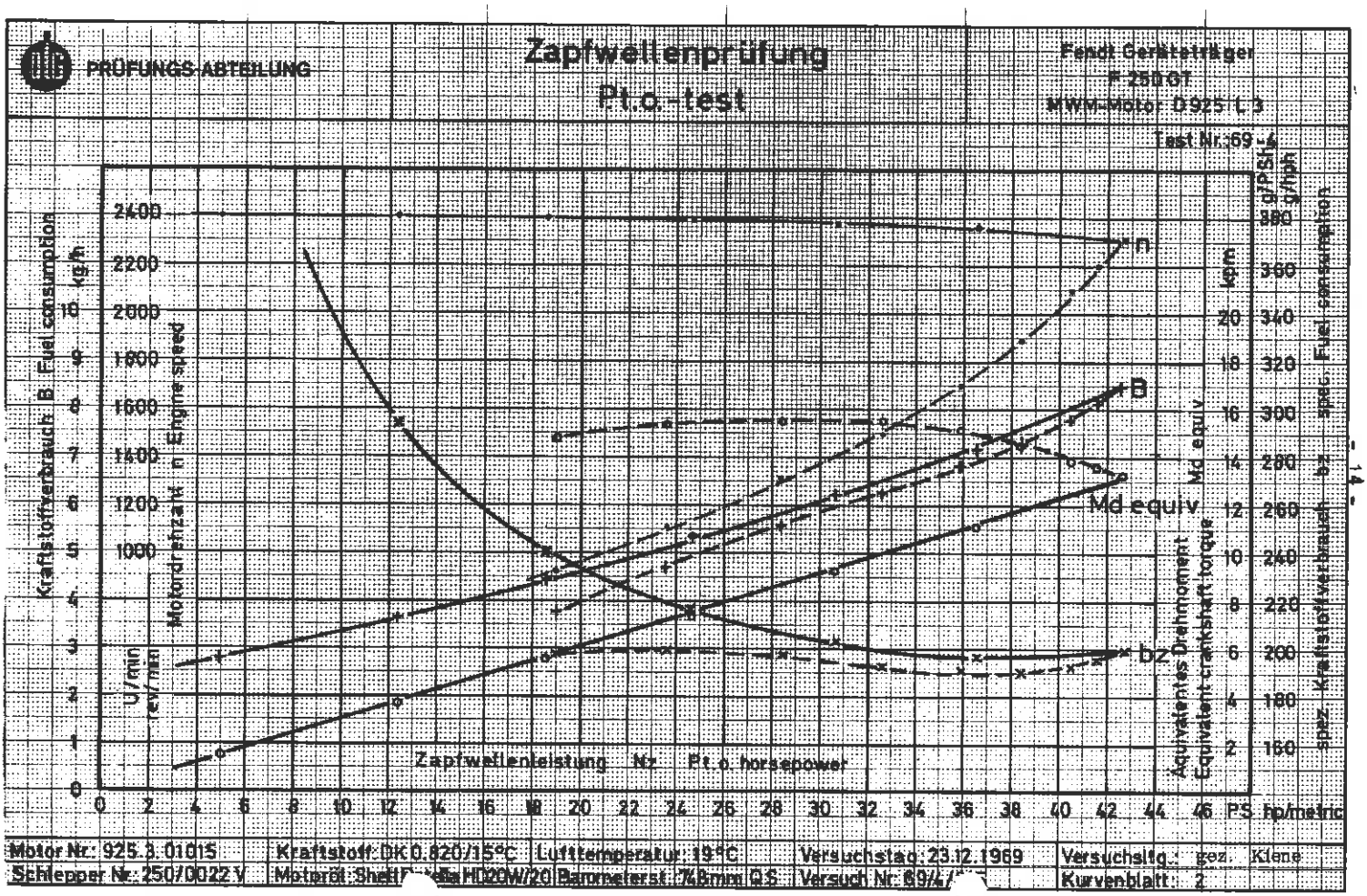
Maximum torque*) 15,5 kpm at 1410 rev/min of the engine

Mean atmospheric conditions: temperature: 20°C
pressure: 726 mm Hg
relative humidity: 48%

Maximum temperatures: coolant: not recorded
engine oil: 86°C
Fuel: 18°C

*) The torque reported is the equivalent crankshaft torque


PRÜFUNGS-ABTEILUNG
Zapfwellenprüfung
P.t.o.-test
Fendt Geräteträger
F 250 GT
MWM-Motor D 925 L3
Test Nr. 69 - 4
n zapfw. p.t.o. = 540 U/min rev/min
Md equiv
Nz
Zapfwellenleistung P.t.o. power
Kraftstoffverbrauch
Fuel consumption
Equivalent crankshaft torque
Aquivalentes Drehmoment
Motordrehzahl n. Engine speed
U/min rev/min
kg/h
kpm
g/PSh
g/hph
spez. Kraftstoffverbrauch
spec. fuel consumption
Motor Nr. 925 3 01015
Motoröl Shell Rotella T 20 W 20
Versuchstag 12.1969
Versuchsltg.:
Schlepper Nr.: 250/0022 V
Luftemperatur: 19°C
Versuch Nr. 69/4/288
gez. Krieke
Kraftstoff DK 0 820/1969
Barometerst.: 748 mm QS
Kurvenblatt


PRÜFUNGS-ABTEILUNG
Zapfwellenprüfung
Pt.o.-test
Fendt Geräteträger
F 250 GT
MWM-Motor D 925 L 3
Test Nr. 69
Kraftstoffverbrauch B Fuel consumption kg/h
Motordrehzahl n Engine speed U/min rev/min
Zapfwellenleistung Nz Pt.o. horsepower
Aquivalentes Drehmoment Equivalent crankshaft torque Md equiv
spez. Kraftstoffverbrauch bz spec. Fuel consumption g/PSh g/hph
n
B
Md equiv
bz
PS hp/metric
Motor Nr: 925.3.01015
Schlepper Nr: 250/0022 V
Kraftstoff: DK 0.820/15°C
Motoröl: Shell
Lufttemperatur: 19°C
Barometerst.: 748mm QS
Versuchstag: 23.12.1969
Versuch Nr: 69/
Versuchsltg.: gez. Kliene
Kurvenblatt: 2

(2) DRAWBAR PERFORMANCE

Date of tests: 1.-11.6.1970

Type of track: Concrete

Height of drawbar above ground: 745 mm

With ballast

Gear No. and Group	Horse-power (metric) hp	Drawbar pull kp	Engine speed rev/min	Slip of wheels %	Specific work hph/l	Specific fuel consumpt. g/hph	Temperature Fuel °C	Coolant °C	Engine oil °C	Atmospheric conditions Temperature °C	Relative humidity %	Pressure mm Hg
(i) MAXIMUM POWER												
1.L.	14,4	3230	2405	15,5	2,55	322	26	-	85	28	69	748
1.S.	18,0	3200	2395	15,3	2,56	320	24	-	85	25	71	748
2.L.	23,5	3200	2395	15,2	3,08	266	24	-	85	25	73	748
2.S.	29,9	3250	2370	15,3	3,21	255	24	-	85	24	73	748
3.L.	33,4	2600	2300	11,8	3,21	255	27	-	85	28	68	747
3.S.	34,6	2050	2300	9,0	3,33	246	27	-	85	28	73	746
4.L.	35,0	1830	2300	8,1	3,35	244	29	-	85	30	67	746
4.S.	35,2	1420	2300	6,1	3,37	243	30	-	85	30	62	744
5.L.	35,5	1080	2300	4,6	3,36	243	30	-	85	29	66	744
5.S.	35,5	845	2300	3,6	3,40	242	30	-	85	29	67	744
6.L.	35,0	590	2300	2,4	3,35	244	30	-	85	29	74	742
(ii) FIVE-HOUR-TEST AT 75% OF PULL AT MAXIMUM POWER IN 4th GEAR OF SLOW GROUP												
4.L.	28,5	1390	2415	6,1	3,43	238	27	-	85	24	73	748
(iii) FIVE-HOUR-TEST AT PULL CORRESPONDING TO 15% WHEEL SLIP IN TEST(i)												
2.S.	29,9	3250	2370	15,3	3,21	255	27	-	85	24	73	748
Without ballast												
(v) MAXIMUM POWER												
4.L.	30,0	1510	2375	7,2	3,53	233	19	-	85	18	85	756
4.S.	36,6	1500	2300	7,1	3,53	233	19	-	85	19	82	756
5.L.	36,6	1130	2295	5,2	3,54	232	19	-	85	19	85	756
5.S.	37,5	900	2300	3,9	3,59	229	19	-	85	19	60	756
6.L.	37,1	635	2300	3,1	3,55	232	19	-	85	19	60	756

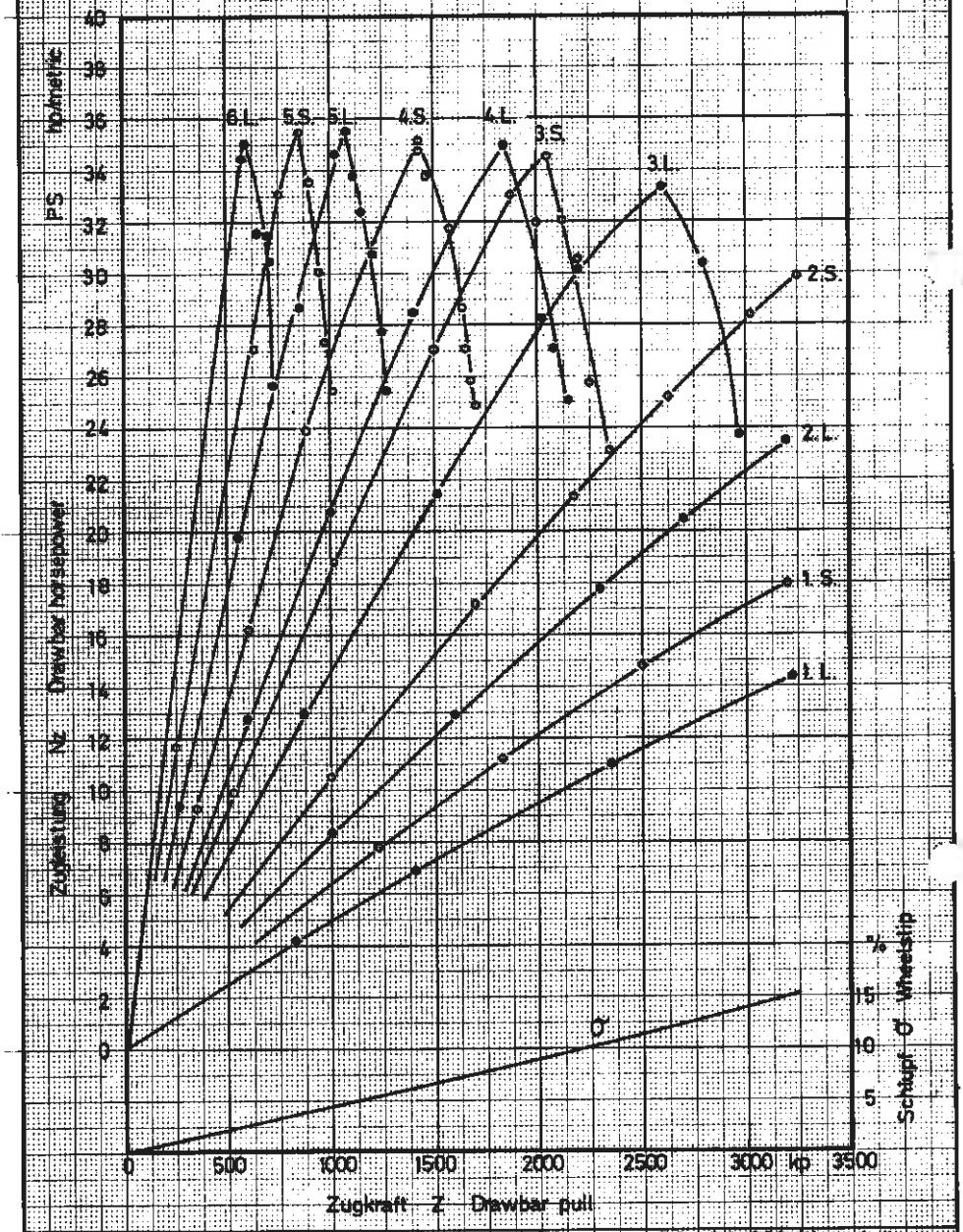
Engine oil consumption during ten hours duration of tests (ii) and (iii) : 91 g/h

PRÜFUNGS-ABTEILUNG

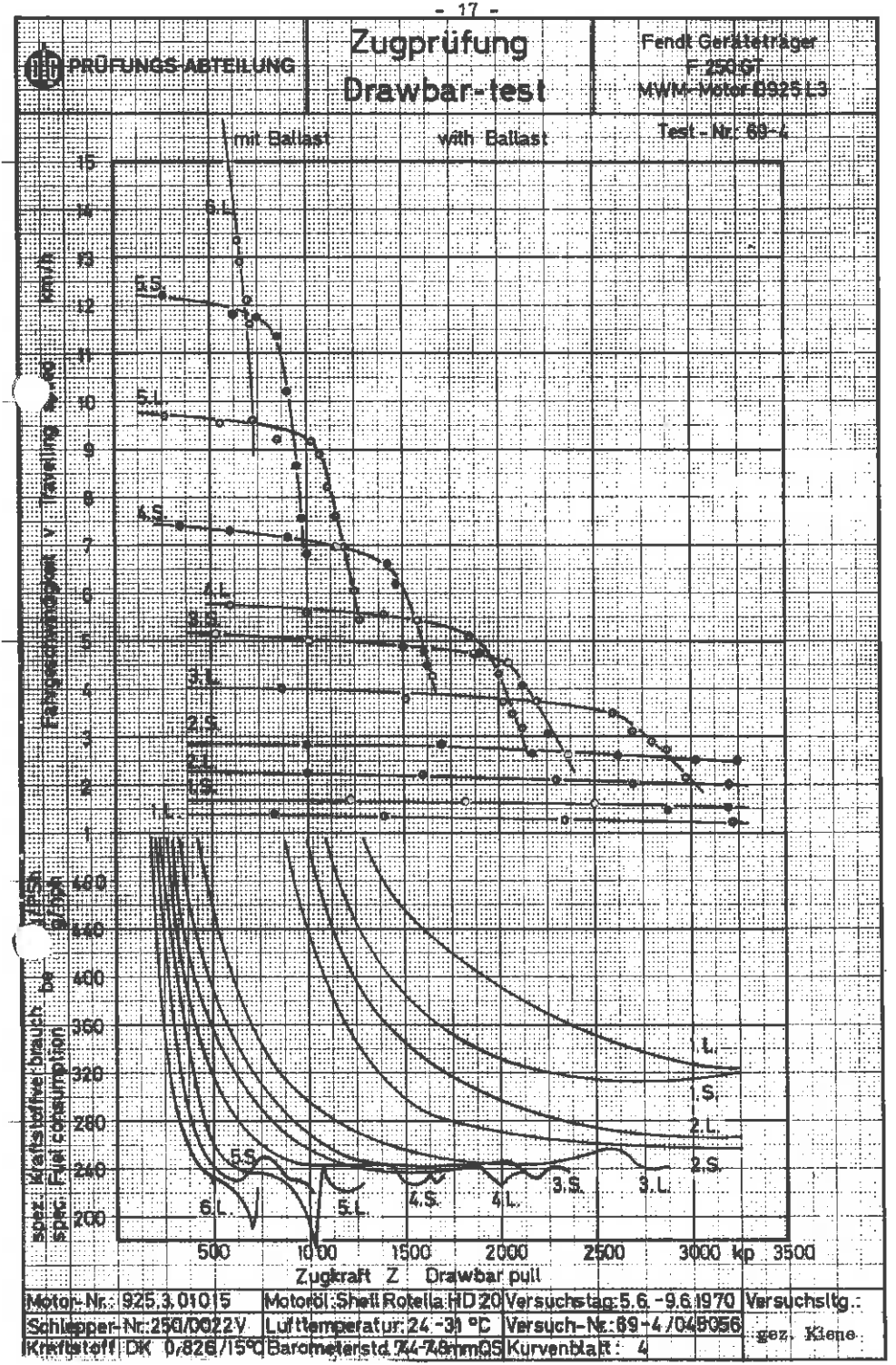
Zugprüfung
Drawbar-test

Fendt Geräteträger
F 250GT
MWM-Motor D 925 L3

mit Ballast — with Ballast — Test-Nr.: 69-4



Motor-Nr.: 925.3 01015	Motoröl: Shell Rotella HD 20	Versuchstag: 5.6. - 9.6.1970	Versuchsltg.:
Schlepper-Nr.: 250/0022 V	Lufttemperatur: 24 -31°C	Versuch-Nr.: 69-4/045-056	gez. Kiene
Kraftstoff: DK 0.82 6 /15°C	Barometerstd.: 744/748 mm QS	Kurvenblatt: 3	

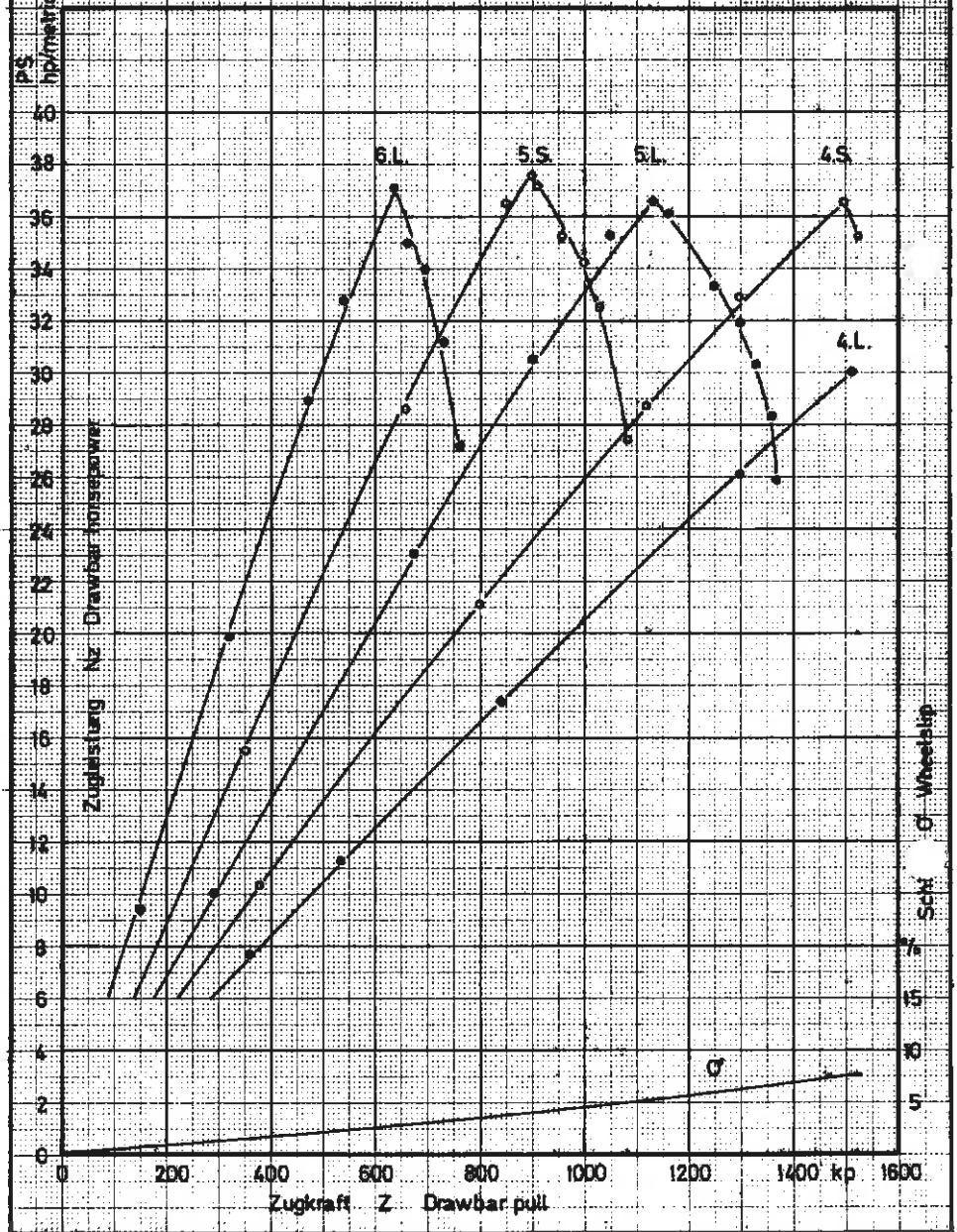

PRÜFUNGS-ABTEILUNG
Zugprüfung
Drawbar-test
Fendt Geräteträger
F 250 GT
MWM-Motor D925 L3
mit Ballast
with Ballast
Test-Nr. 69-4
Fahrgeschwindigkeit v Travelling speed km/h
spez. Kraftstoffverbrauch be spec. fuel consumption g/PSh
Zugkraft Z Drawbar pull
kp
1.L.
1.S.
2.L.
2.S.
3.L.
3.S.
4.L.
4.S.
5.L.
5.S.
6.L.
Motor-Nr.: 925.3.010 15
Motoröl: Shell Rotella HD 20
Versuchstag: 5.6. - 9.6.1970
Versuchsltg.:
Schlepper-Nr.: 250/0022 V
Lufttemperatur: 24 - 31 °C
Versuch-Nr.: 69-4/048056
gez. Kiene
Kraftstoff: DK 0,826/15°C
Barometerstd.: 744-748 mmQS
Kurvenblatt: 4

PRÜFUNGS-ABTEILUNG

Zugprüfung
Drawbar - test

Fendt Geräteträger F 250 GT
MWM-Motor D925 L 3

ohne Ballast — without Ballast — Test-Nr. 69-4



Motor-Nr.: 925.3.01015	Motoröl: Shell Rotella HD 20	Versuchstag: 20.5.-2.6.1970	Versuchsltg.:
Schlepper-Nr.: 250/0022 V	Lufttemperatur: 8 - 19 °C	Versuch-Nr.: 69-4/039-044	gez. Kiene
Kraftstoff: DK 0,825/15°C	Barometerstd.: 755-769 mb	Kurvenblatt: 5	

PRÜFUNGS-ABTEILUNG
Fendt F 250 GT

Test No. 69-4

(3 and 4) TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 7,50-15 AS Front 6 ply, without ballast
rear: 12,4/11-36 AS 6 ply, without ballast

Track of wheels front: 1360 mm
rear: 1360 mm

	With brakes left-hand	With brakes right-hand	Without brakes left-hand	Without brakes right-hand
Radius of turning space	4,18 m	4,04 m	4,70 m	4,57 m
Radius of turning circle	3,85 m	3,71 m	4,36 m	4,24 m

(5) LOCATION OF CENTRE OF GRAVITY
without ballast

	With loading plank bed mm	Without loading plank bed mm
Height above ground	784	764
Distance forward from the vertical plane containing te axis of the rear wheels	685	578
Distance from the median plane of the tractor	0	7 to the left side

PRÜFUNGS-ABTEILUNG
Fendt 250 GT

Test No. 69-4

(6) BRAKE TESTS

A) FOOT BRAKE

Date of test: 3.6.1970

Type of track: Concrete

Type of decelerometer: Moto Meter Bremsverzögerungs-und Pedalkraft-schreiber, Moto Meter Hermann Schlaich 7 Stuttgart N

Travelling speed of tractor: 30,8 km/h

With cold brakes

		Tractor without ballast	Tractor with ballast
Maximum deceleration	m/s^2	5,7	4,8
Stopping distance	m	8,0	8,8
Force on pedal	kp	56	68

Brake fade characteristics, hot test, tractor without ballast

Deceleration:	hot/cold	100%
Stopping distance:	cold/hot	100%
Force on pedal:	cold/hot	100%

B) PARKING BRAKE

Force applied on the brake lever, cold brake 36 kp.

No rotation of the rear-wheels of tractor occured when the tractor has been towed.

Tests with hot hand brake not applicable; disc of hand brake is not influenced by the temperature of the foot brake drum.

(7) MEASUREMENT OF AMBIENT NOISE EMITTED BY THE TRACTOR

Date of test: 26.1.1970
Type of track: Concrete
Type of sound level meter: Brüel & Kjaer, Typ 2203

Results of test

Gear: Fast gear
Travelling speed before acceleration: 22,5 km/h
Sound level: 88 dBA

(8) NOISE MEASUREMENT AT THE DRIVER'S EAR

Date of test: 10.6.1970
Type of track: Concrete
Type of sound level meter: EZGN, Rohde & Schwarz, 8 München
Type of octavfilter: PBO, Rohde & Schwarz, 8 München

No cab fitted on tractor

Results of tests

Gear	Travelling speed *) nominal km/h	real km/h	Sone
4.F.	7,18	6,92	97
3.S.	5,03	3,69	103

*) The first gear tested corresponds to the travelling speed nearest to 7,25 km/h

PRÜFUNGS-ABTEILUNG
Fendt F 250 GT

Test No. 69-4

(9) TEST OF POWER LIFT AND HYDRAULIC PUMP PERFORMANCE

Date and location of tests: 27.1.1970

Hydraulic fluid: Aral HD SAE 10

POWER LIFT

Height above ground in down position: hitch point (mm)	Height above ground in down position: test frame (mm)	Total vertical movement (mm)	Maximum force exerted through full lift range (kp)	Pressure of hydr. oil (kp/cm²)	Linkage load at which unballasted front end of tractor lifts off the ground (kp)
Measured on the hitch points of lower links					
90	-	720	1235	175	1375
290	-	650	1460	175	1375
Measured on the test frame 610 mm to the rear of the hitch points					
90	160	637	1540	175	860
290	315	605	1570	175	860

Type of linkage lock for transport: Mechanical lock

PUMP CHARACTERISTICS

(i) opening pressure of relief valve: 178 kp/cm²
sustained pressure by the open relief valve: 175 kp/cm²

Pump delivery rate at external tapping
(ii) atminimum pressure: 35,3 l/min
(iii) at maximum hydraulic power: 32,1 l/min
maximum hydraulic power: 11,25 hp (metric)
delivery pressure: 157 kp/cm²

PRÜFUNGS-ABTEILUNG
Fendt F 250 GT

Test No. 69-4

OPTIONAL TESTS

(10) ENGINE TESTS

Date and location of tests: 1.12.1969, Groß-Umstadt

Type of dynamometer: Schenck hydraulic dynamometer U1-20

Maximum power

Horsepower (metric) hp	Engine speed rev/min	Fuel consumption total l/h	Fuel consumption specific g/hph	hph/l
At maximum power 2-hour test				
47,0	2300	10,40	181	4,52
At standard p.t.o. speed (540 rev/min)				
44,4	2093	9,51	175	4,57
At the speed recommended by the manufacturer for drawbar work				
47,0	2300	10,40	181	4,52

Fuel consumption at part loads

(i) 85% of torque at maximum power				
40,9	2360	8,98	180	4,56
(ii) unloaded				
-	2410	1,70	-	-
(iii) 50% of the load defined in (i)				
20,7	2396	5,27	209	3,93
(iv) maximum power				
47,0	2300	10,40	181	4,52
(v) 25% of the load defined in (i)				
10,3	2400	3,89	310	2,65
(vi) 75% of the load defined in (i)				
30,8	2380	7,12	190	4,33

Optimum fuel consumption: 166 g/hph at 36,8 hp and 1770 rev/min

Standard fuel consumption 1/2 (acc.to DIN 9606) : 4,1/ 8,1 l/h

No load maximum engine speed: 2410 rev/min

Torque at maximum power: 14,6 kpm

Maximum torque: 17,05kpm at 1400 rev/min of the engine

Mean atmospheric conditions: temperature: 19°C
pressure: 757 mm Hg
relative humidity: 34%

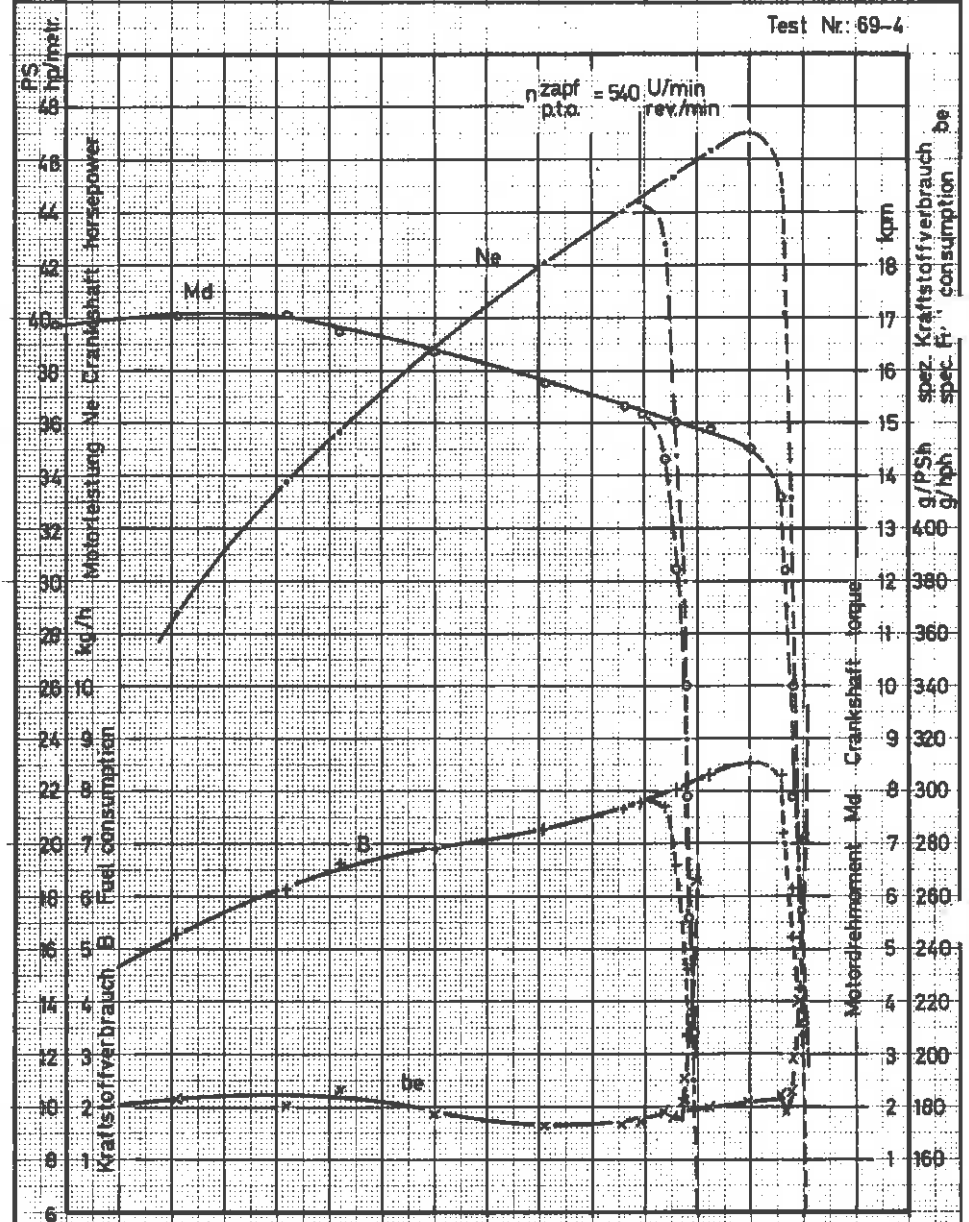
Maximum temperatures: coolant: not recorded
engine oil: 86°C
fuel: 22°C

PRÜFUNGS-ABTEILUNG

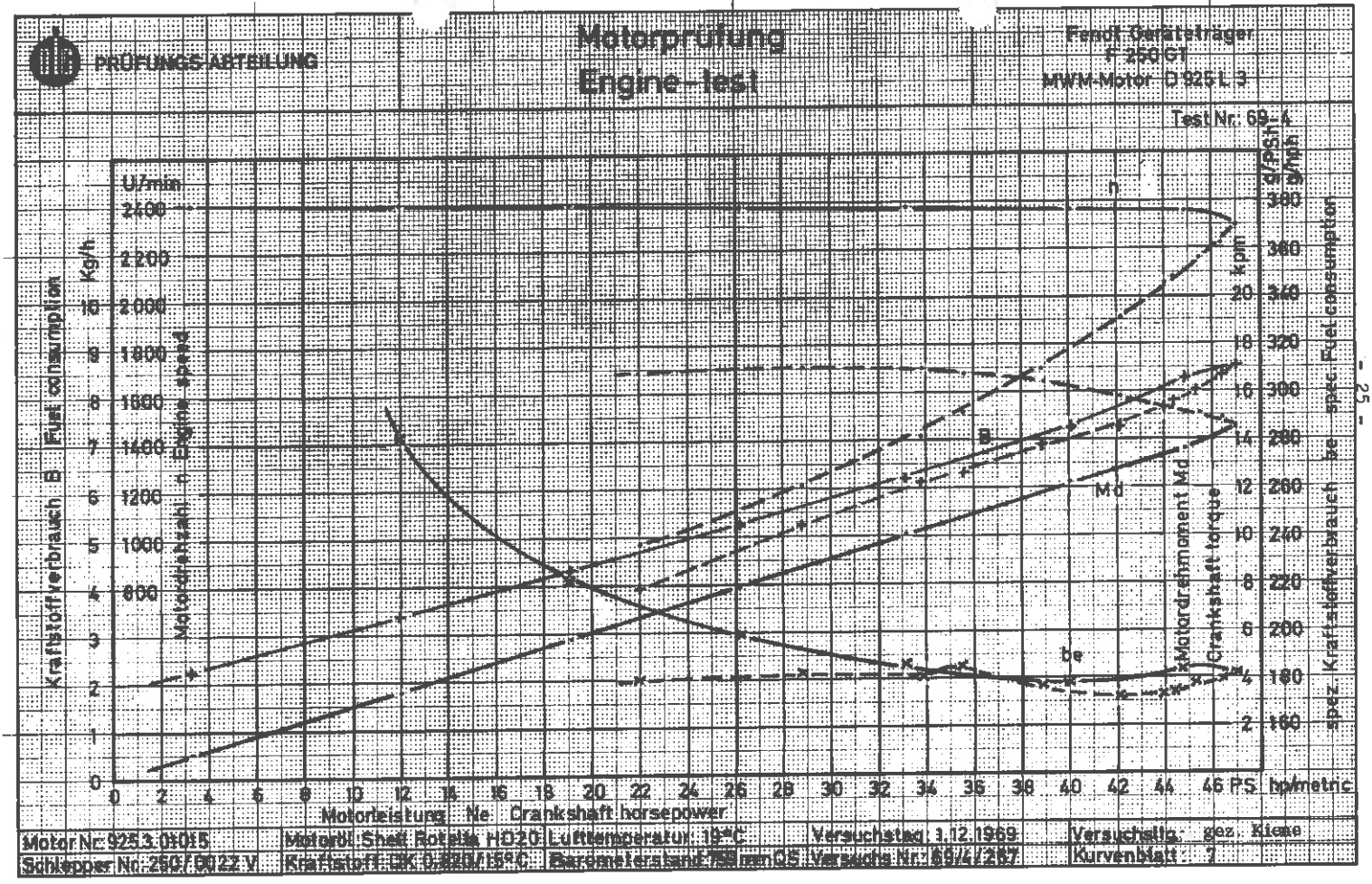
Motorprüfung
Engine - test

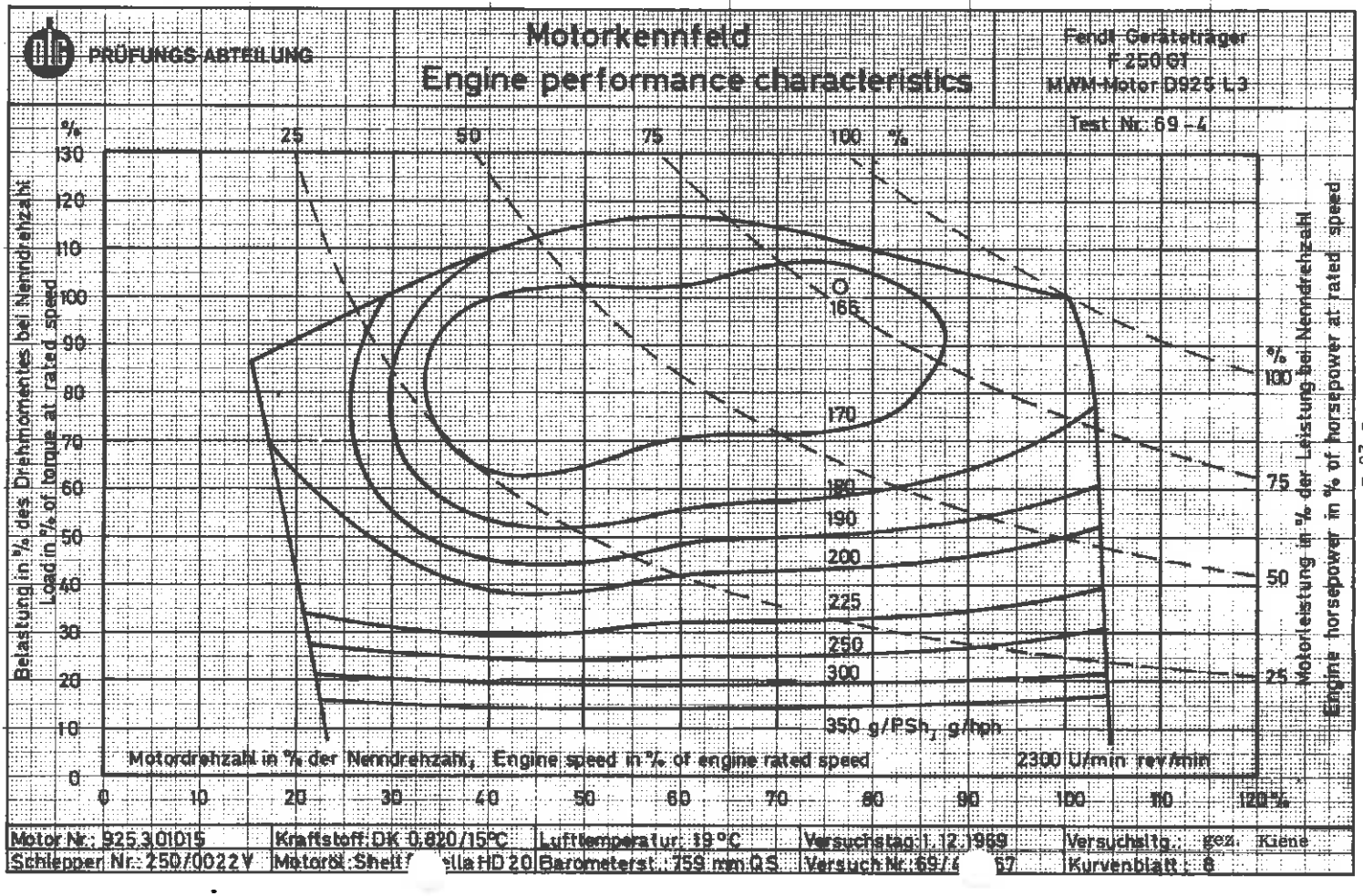
Fendt Geräteträger
F 250 GT
MWM Motor D 925 L 3

Test Nr.: 69-4



Motor Nr.: 925.3.01015	Motoröl: Shell Rotella HD 20	Versuchstag: 1.12.1969	Versuchsltg.:
Schlepper Nr.: 250/0022 V	Lufttemperatur: 19 °C	Versuch Nr.: 69/4 / 267	gez. Kiene
Kraftstoff: DK 0,820/15°C	Barometerst.: 759 mm QS	Kurvenblatt: 6	


PRÜFUNGSABTEILUNG
Motorprüfung
Engine-test
Fendt Geräteträger
F 250 GT
MWM-Motor D 925 L 3
Test Nr. 69-4
U/min
Kg/h
Kraftstoffverbrauch B Fuel consumption
Motordrehzahl n Engine speed
h
km
B
Md
be
Motordrehmoment Md
Crankshaft torque
g/PSh
spez. Kraftstoffverbrauch be spec. Fuel consumption
Motorleistung Ne Crankshaft horsepower
PS hp/metric
Motor Nr. 9253.01015
Schlepper Nr. 250/9022 V
Motoröl: Shell Rotella HD 20 Lufttemperatur: 19 °C
Kraftstoff: DK 0,820/15 °C Barometerstand: 739 mm QS
Versuchstag: 3.12.1969
Versuchs Nr.: 69/4/267
Versuchsltg.: gez. Kiese
Kurvenblatt: 1


PRÜFUNGS-ABTEILUNG
Motorkennfeld
Engine performance characteristics
Fendt Geräteträger
F 250 GT
MWM-Motor D925 L3
Test Nr. 69 - 4
Belastung in % des Drehmomentes bei Nenndrehzahl
Load in % of torque at rated speed
Motorleistung in % der Leistung bei Nenndrehzahl
Engine horsepower in % of horsepower at rated speed
Motordrehzahl in % der Nenndrehzahl, Engine speed in % of engine rated speed
2300 U/min rev/min
165
170
180
190
200
225
250
300
350 g/PSh, g/hph
Motor Nr.: 925 3 01015
Kraftstoff: DK 0,820/15°C
Lufttemperatur: 19 °C
Versuchstag: 1. 12. 969
Versuchsltg.: gez. Kiene
Schlepper Nr.: 250/0022 V
Motoröl: Shell
HD 20
Barometerst.: 759 mm QS
Kurvenblatt: 8