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

Agricultural Tractor D 538 S

Manufactured by: Hermann Lanz, Schlepperfabrik
7960 Aulendorf



Date of Tests: April - December 1969

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: 16. Febr. 1970 Serial No.: 308

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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
Lanz D 538 S

Test No. 69-26

TABLE OF CONTENTS

	Page
Specification of tractor	1 - 8
Fuel and lubricants used in tests	9
COMPULSORY TEST	
(1) Main power take-off performance	
Table with the results	1o
Diagrams with the results	11-12
(2) Drawbar performance tests on a concrete track	
Table with the results	13
Diagrams with the results	14-16
(3 and 4) Turning space and turning circle	17
(5) Location of centre of gravity	17
(6) Tests of brakes	18
(7) Measuring of ambient noise, emitted by the tractor	19
(8) Measuring of the noise at the driver's ear level	19
(9) Test of power lift and hydraulic pump performance	2o
OPTIONAL TESTS	
(1o) Engine tests	
Table with the results	21
Diagrams with the results	22-24

PRÜFUNGS-ABTEILUNG
Lanz D 538 S

Test No. 69-26

Tractor manufacturer:	Hermann Lanz, Schlepperfabrik, 7960 Aulendorf
Submitted for test by:	Manufacturer
Selected by:	Manufacturer with the agreement of the DLG testing station
Place of running-in:	Aulendorf and Groß-Umstadt
Duration of running-in:	Engine 60 hours, tractor 50 hours

SPECIFICATION OF TRACTOR

Tractor

Make: Hermann Lanz, Schlepperfabrik, 7960 Aulendorf
Model: D 538 S
Type: Diesel-tractor, unit construction, narrow
Serial No.: 538 025 S

Engine

Make: MWM- Motorenwerke Mannheim, 68 Mannheim
Model: D 208-3
Type: 4-stroke Diesel engine, water cooled
Serial No.: 208.3 07628

Cylinders: 3 cylinders, vertical in line; bore 95 mm, stroke 105 mm; capacity 2232 cm^3; compression ratio 17,5 : 1; overhead valves; replaceable cylinder liners

Fuel system: Fuel: Commercially available diesel oil;
Bosch type PES 3A 75 C 320/3 RS 1216 injection pump; Bosch type DLL 150 S 393 hole type injection nozzles with 4 holes; injection pressure 180 kp/cm^2; injection timing 22° before TDC; Bosch duo type filter type FJ/DF 5W5/103 with felt tube filter, pre-cleaner and wound filter element main filter; fuel feed pump Solex PE 15072; capacity of fuel tank appr. 35 l

Governor: Make: Robert Bosch GmbH., 7 Stuttgart
centrifugal variable speed type gorvernor;
governed range of engine speed 700 rev/min to 2300 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: Make: Donaldson GmbH., 4712 Werne
dry type filter type FWG 05-2510 with replaceable cartridge P 10-1275

PRÜFUNGS-ABTEILUNG
Lanz D 538 S

Test No. 69-26

Lubrication system: Forced feed from gear type pump with metal strainer in sump; Mann & Hummel type 67 402 92 188 multifilter with filter element H 7 - 70, bypass valve; oil capacity 7 l; recommended oil change period 120 h; recommended oil in winter HD SAE 10, in summer HD SAE 20

Cooling system: Water cooled, pressurized, impeller assisted with 400 mm dia 4 blade fan, thermostat for temperature control; cooling water capacity appr. 9 l

Electrical equipment: Voltage 12 Volt, negative earth

Starting device: Bosch type JD 12 V 1,8 PS starter motor, solenoid engaged

Starting aid: Beru type 129 MJ 9,5 V hot bulb type glow plugs

Generator: Bosch type LJ/GEH 90/12/1800 FR 11 generator

Battery: Lead acid battery 12 V 88 Ah

Transmission

Clutch: Make: Fichtel & Sachs AG., 872 Schweinfurt type DO 250/225 K dry disc type dual clutch, foot pedal operated

Gearbox: Make: Hermann Lanz, Schlepperfabrik, 7960 Aulendorf type D 534; selecting gear with 5 forward speeds and 1 reverse and group gear with 2 speeds giving 10 forward speeds and 2 reverse

Rear axle and final drive: Make: Hermann Lanz, Schlepperfabrik, 7960 Aulendorf crown wheel and pinion, bevel gear type differential gear with lock fitted, foot pedal operated, self-disengaging

Oil capacity: Total 34 l; recommended oil change period 2000 hours

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
Forward				
slow (L.)	1	454,5 : 1	0,98	0,26
	2	198,8 : 1	2,26	0,63
	3	85,7 : 1	5,24	1,45
	4	44,3 : 1	10,15	2,81
	5	33,8 : 1	13,31	3,70
fast (S.)	1	284,6 : 1	1,58	0,43
	2	124,5 : 1	3,60	0,99
	3	53,6 : 1	8,38	2,33
	4	27,7 : 1	16,20	4,49
	5	21,1 : 1	21,27	5,90
Reverse				
slow	R	82,7 : 1	5,43	1,50
fast	R	51,8 : 1	8,67	2,41

Power take-off	Proportional engine speed p.t.o., engaged by hand lever; 2 speeds
Location:	At rear of tractor, 435 mm above ground, 10 mm to the left of median plane
Dimensions:	Spline shaft 29 x 34,9 x 8,7 mm = 1 3/8", 6 splines (acc.to DIN 9611 Form A; BS 1495; ASAE S 203.5)
Speed:	560 rev/min at 2300 rev/min rated engine speed; standard p.t.o.-speed 540 rev/min at 2220 rev/min engine speed, may be set by aid of tractormeter; or 1073 rev/min at 2300 rev/min rated engine speed; standard p.t.o.-speed 1000 rev/min at 2140 rev/min engine speed, may be set by aid of tractormeter
Direction of rotation:	Clockwise viewed from tractor rear
Power lift	Make: Robert Bosch GmbH., 7 Stuttgart and Zahnradfabrik Passau, 839 Passau-Grubweg; unit construction with draft- and position control; single acting ram; Bosch type HY/ZFR 1/8 CL 102 gear type oil pump directly driven from engine; Bosch type HY/SR 10H 1/1 50 (4/2) control valve; maximum oil pressure 150 kp/cm; oil capacity 8 l; additional control valve for cutter bar lift and front end loader
Pull attachment	
Implement linkage:	Three-point implement linkage category I (acc.to DIN 9674) controlled by power lift; hitch point also usuable for implement category II; lift height above ground from 120 mm to 760 mm
Drawbar:	Fixed on hydraulically controlled implement linkage; height above ground adjustable from 120 mm to 760 mm by power lift; height above ground may be rigid fixed by hinging rods in brackets, height above ground 300 mm (acc.to DIN 9670); centre hole + 3 holes with 80 mm distance each apart either side of centre hole (acc.to DIN 9676); distance of centre hole to the end of p.t.o. at horizontal position of lower links 540 mm

Trailer hitch	At rear of tractor; height above ground 650 mm; distance from rear axle centre 450 mm
Towing hitch:	At front of tractor; height above ground 490 mm
Steering device	Make: Zahnradfabrik Friedrichshafen AG. 799 Friedrichshafen ZF-Gemmersteering Type 7328

Brakes

Parking brake:	Mechanically operated bandbrake acting on brake-drum on gear shaft, operated by ratchet handlever
Foot brake:	Mechanically operated internal shoe type brake acting on brake-drums in rear wheels, foot pedal operated
Steering brake:	Braking device and single parts of foot brake pedal; both pedal parts are locked together by a latch for normal use

Wheels

Steering wheel:	Two at front; 5,00-16 AS Frontal 4 ply pneumatics (acc. to DIN 7808); maximum permissible load on each tyre 375 kp at 2,5 kp/cm², when transporting mounted implements 562 kp; rims 3,25 x 16; track 885 - 985 - 1055 - 1085 - 1155 - 1255 mm by extending front axle and reversing wheels
Driving wheels:	Two at rear; 11,2/10-24 AS 6 ply pneumatics (acc.to DIN 7807); maximum permissible load on each tyre 1005 kp at 1,7 kp/cm², when transporting mounted implements 1206 kp; rims W 9 x 24/ ET = 30; track 820 mm and 970 mm by reversing wheels
Wheel base:	1800 mm

PRÜFUNGS-ABTEILUNG
Lanz D 538 S

Test No. 69-26

Weights

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

		without driver	with driver
Weight of tractor without ballast:	Front axle load:	622 kp	643 kp
	Rear axle load:	1000 kp	1052 kp
	Total:	1622 kp	1695 kp
Ballast front:	1 wheelweight (32 kp) per wheel	=	64 kp
Ballast rear:	6 wheelweights (67 kp each) per wheel	=	804 kp
	water in tyres	=	131 kp
		without driver	with driver
Weight of tractor with ballast	Front axle load:	686 kp	694 kp
	Rear axle load:	1935 kp	2000 kp
	Total:	2621 kp	2694 kp

Seat

Make: F. Brendel, 6791 Saalstadt
mold seat, parallelogram linkage suspended, sprung and shock absorber adjustable; height above ground 990 mm - 1025 mm according to spring adjustment

Number of grease points (whole tractor): 28

Overall dimensions

Overall length:	3070 mm with three-point linkage
Overall width:	1125 mm at 885 mm track, without ballast weights
Overall height:	1300 mm to top of steering wheel
Maximum ground clearance:	290 mm in median plane of tractor
	310 mm apart of median plane of tractor

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

	Height above ground of centre mm	Dimensions of area mm	Distance from outside edge of tractor to centre mm
Head lights	940	70 x 140	420
Rear lights	1000	65 x 90	185
Reflectors	780	70 Ø	190

PRÜFUNGS-ABTEILUNG
Lanz D 538 S

FUELS AND LUBRICANTS USED IN TESTS

Laboratory tests

Fuel:	Aral Diesel oil, specific gravity at 15°C: 0,828 kg/l (commercially available quality acc.to DIN 51 601)
Engine oil:	Aral HD SAE 20
Transmission oil:	Gasolin V 90

Track tests

Fuel:	Aral Diesel oil, specific gravity at 15°C: 0,828 kg/l (commercially available quality acc.to DIN 51 601)
Engine oil:	Aral HD SAE 20
Transmission oil:	Gasolin V 90

PRÜFUNGS-ABTEILUNG
Lanz D 538 S

Test No. 69-26

COMPULSORY TESTS

(1) MAIN POWER TAKE-OFF PERFORMANCE

Date and location of tests: 12.5.1969, 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					
36,4	2300	560	8,85	201	4,11
At standard p.t.o.speed (540 rev/min)					
35,6	2217	540	8,60	200	4,14
At the speed recommended by the manufacturer for drawbar work					
36,4	2300	560	8,85	201	4,11

Fuel consumption at part loads

(i) 85 % of torque at maximum power					
31,2	2327	566	7,40	197	4,22
(ii) unloaded					
-	2415	588	1,90	-	-
(iii) 50 % of the load defined in (i)					
15,9	2360	575	4,55	238	3,49
(iv) maximum power					
36,4	2300	560	8,85	201	4,11
(v) 25 % of the load defined in (i)					
8,0	2380	580	3,33	345	2,40
(vi) 75 % of the load defined in (i)					
23,6	2345	571	5,98	209	3,93

No load maximum engine speed: 2415 rev/min

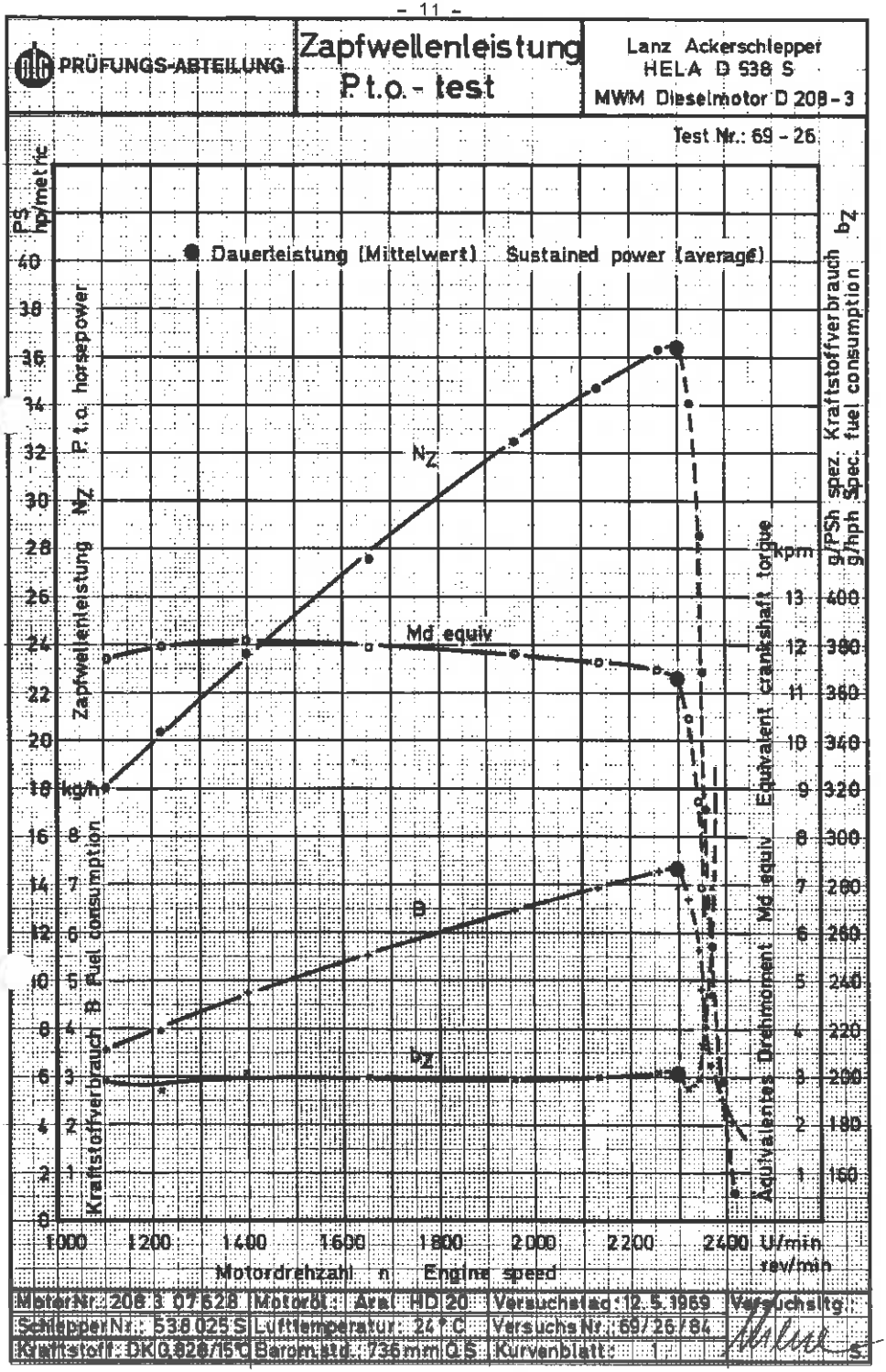
Torque*) at maximum power: 11,3 kpm

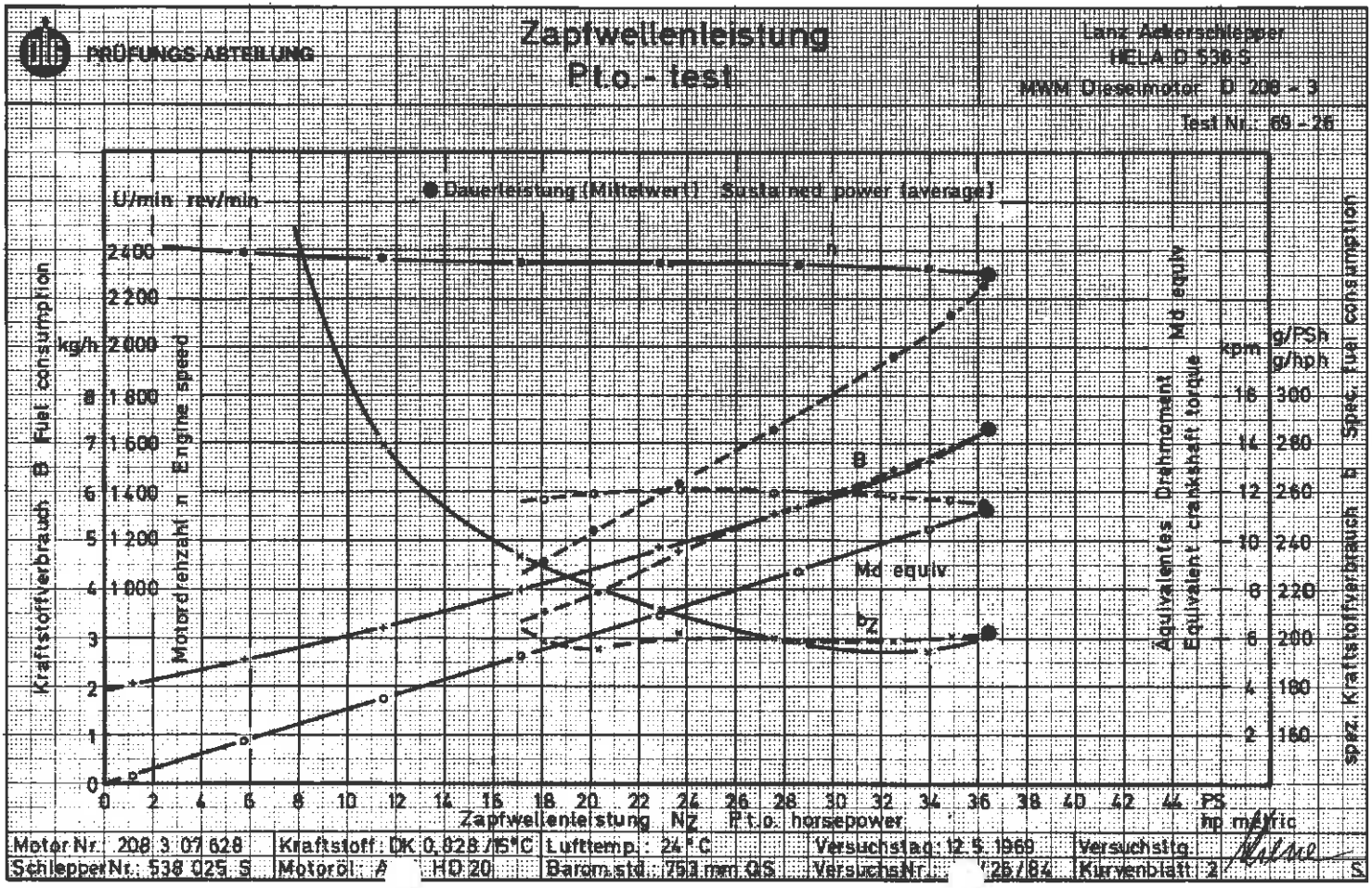
Maximum torque*) 12,1 kpm at 1500 rev/min of the engine

Mean atmospheric conditions: temperature: 25°C
pressure: 751 mm Hg
relative humidity: 65 %

Maximum temperatures: coolant: 85°C
engine oil: 87°C
Fuel: 28°C

*)The torque reported is the equivalent crankshaft torque


PRÜFUNGS-ABTEILUNG
Zapfwellenleistung
P.t.o. - test
Lanz Ackerschlepper
HELA D 538 S
MWM Dieselmotor D 208 - 3
Test Nr.: 69 - 26
Dauerleistung (Mittelwert) Sustained power (average)
PS hp/metric
P.t.o. horsepower
Zapfwellenleistung Nz
Nz
Md equiv
B
bz
Kraftstoffverbrauch B Fuel consumption
kg/h
Kraftstoffverbrauch bz spez. Fuel consumption
g/PSh g/hph
Äquivalentes Drehmoment Md equiv Equivalent crankshaft torque
kpm
Motordrehzahl n Engine speed
U/min rev/min
1000 1200 1400 1600 1800 2000 2200 2400
Motor Nr.: 208 3 07528
Motoröl: Aral HD 20
Versuchsdatum: 12. 5. 1969
Versuchsltg.:
Schlepper Nr.: 538 025 S
Lufttemperatur: 24 °C
Versuchs Nr.: 69/26/84
Kraftstoff: DK 0,826/15°C
Barom. std.: 736 mm Q.S.
Kurvenblatt: 1


PRÜFUNGS-ABTEILUNG
Zaptwellenleistung
Pt.o. - test
Lanz Ackerschlepper
HELA D 538 S
MWM Dieselmotor D 208 - 3
Test Nr.: 69 - 26
Dauerleistung (Mittelwert) Sustained power (average)
U/min rev/min
kg/h
Kraftstoffverbrauch B Fuel consumption
Motordrehzahl n Engine speed
Äquivalentes Drehmoment Md equiv
Equivalent crankshaft torque
g/PSh
g/hph
spez. Kraftstoffverbrauch b Spec. fuel consumption
Md equiv
b
n
Zapfwellenleistung NZ Pt.o. horsepower
PS
hp metric
Motor Nr. 208 3 07 628
Schlepper Nr.: 538 025 S
Kraftstoff: DK 0,828 / 15°C
Motoröl: A HD 20
Lufttemp.: 24 °C
Barom. std.: 750 mm QS
Versuchstag: 12.5.1969
Versuchs Nr.: 26/84
Versuchsstg.
Kurvenblatt 2

(2) DRAWBAR PERFORMANCE

Date of tests: 10.11.-11.12.1969
Type of track: Concrete
Height of drawbar above ground: 350 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	Temperatures Fuel °C	Coolant °C	Engine oil °C	Atmospheric conditions Temperature °C	Relative humidity %	Pressure mm Hg
(i) MAXIMUM POWER												
1.L.	8,40	2700	2370	15,5	2,21	375	1	80	85	1	72	754
1.S.	13,4	2700	2350	15,5	2,77	299	2	80	85	2	57	754
2.L.	19,0	2700	2340	15,5	3,13	264	6	80	85	6	72	749
2.S.	29,8	2700	2300	15,4	3,35	246	7	80	85	7	66	749
3.L.	31,1	1780	2300	8,6	3,51	237	1	80	85	1	65	754
3.S.	32,2	1120	2300	5,6	3,62	228	6	80	85	5	63	758
4.L.	32,4	910	2300	4,3	3,62	227	6	80	85	5	74	758
5.L.	31,2	640	2300	2,8	3,46	238	12	80	85	12	88	742
4.S.	29,6	510	2300	1,2	3,29	249	14	80	85	13	85	741
(ii) FIVE-HOUR-TEST AT 75% OF PULL AT MAXIMUM POWER IN 3rd GEAR OF L.GROUP												
3.L.	24,4	1340	2345	6,2	3,60	231	3	80	85	3	95	754
(iii) FIVE-HOUR-TEST AT PULL CORRESPONDING TO 15% WHEEL SLIP IN TEST (i)												
2.L.	19,0	2700	2340	15,5	3,13	264	3	80	85	3	95	754
Without ballast (v) MAXIMUM POWER												
2.S.	19,8	1720	2345	15,3	3,18	259	12	80	85	12	90	745
3.L.	28,0	1700	2300	15,0	3,05	263	12	80	85	12	93	745
3.S.	30,0	1060	2300	8,5	3,34	247	10	80	85	10	85	744
4.L.	30,4	870	2300	6,8	3,31	249	10	80	85	10	87	743
5.L.	30,6	650	2300	4,7	3,39	242	10	80	85	10	87	744
4.S.	30,2	520	2300	3,9	3,35	246	10	80	85	10	85	744

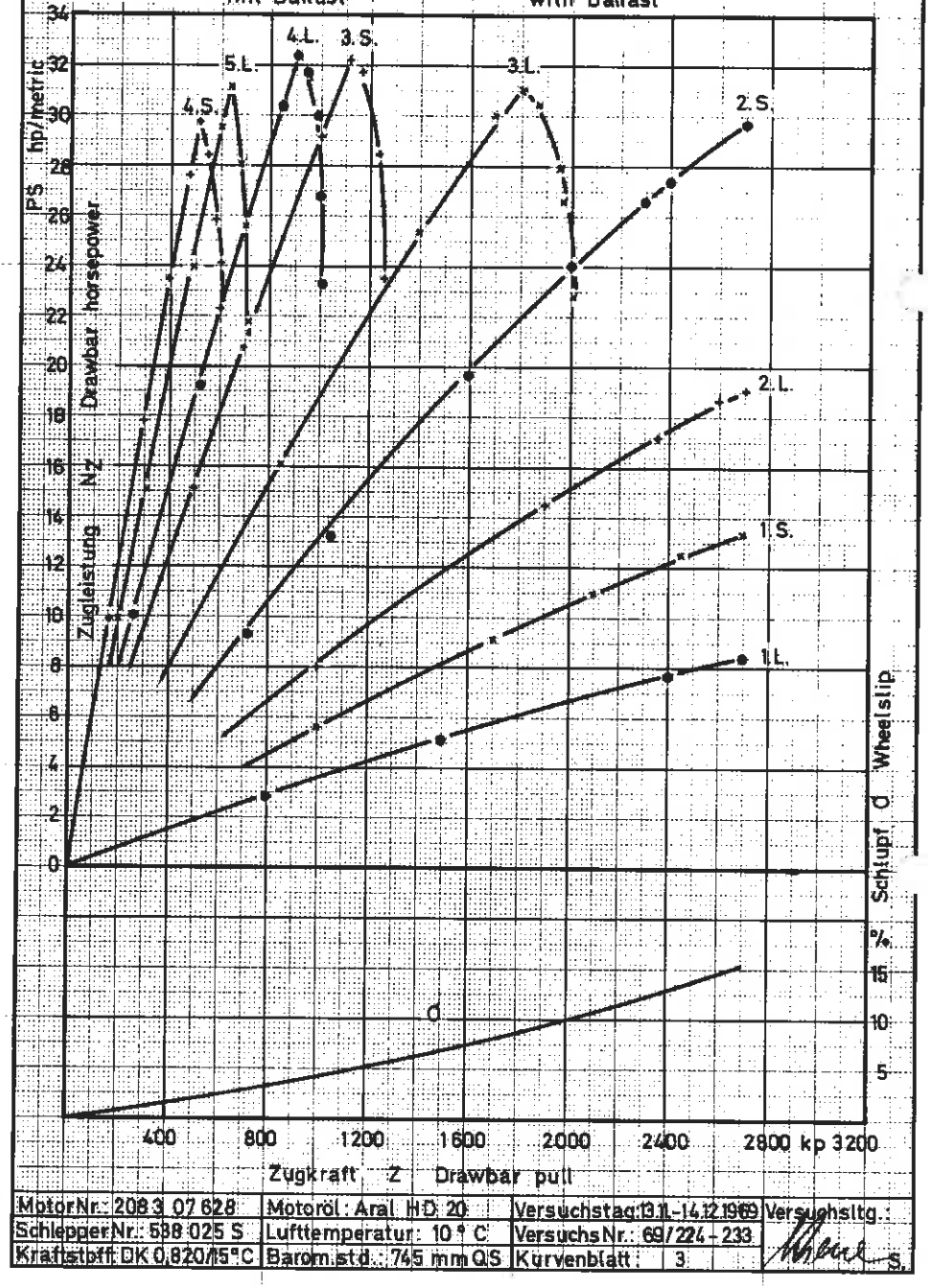
Engine oil consumption during ten hours duration of tests (ii) and (iii) : 31 g/h

PRÜFUNGS-ABTEILUNG

Zugprüfung
Drawbar - test

Lanz Ackerschlepper
HELA D 538 S
MWM Dieselmotor D 208-3

Test Nr.: 69-26



Motor Nr.: 208 3 07 628	Motoröl: Aral HD 20	Versuchstag: 13.11.-14.12.1969	Versuchsltg.:
Schlepper Nr.: 538 025 S	Lufttemperatur: 10 ° C	Versuchs Nr.: 69/224-233	
Kraftstoff: DK 0,820/15 °C	Barom. std.: 745 mm QS	Kurvenblatt: 3	S.

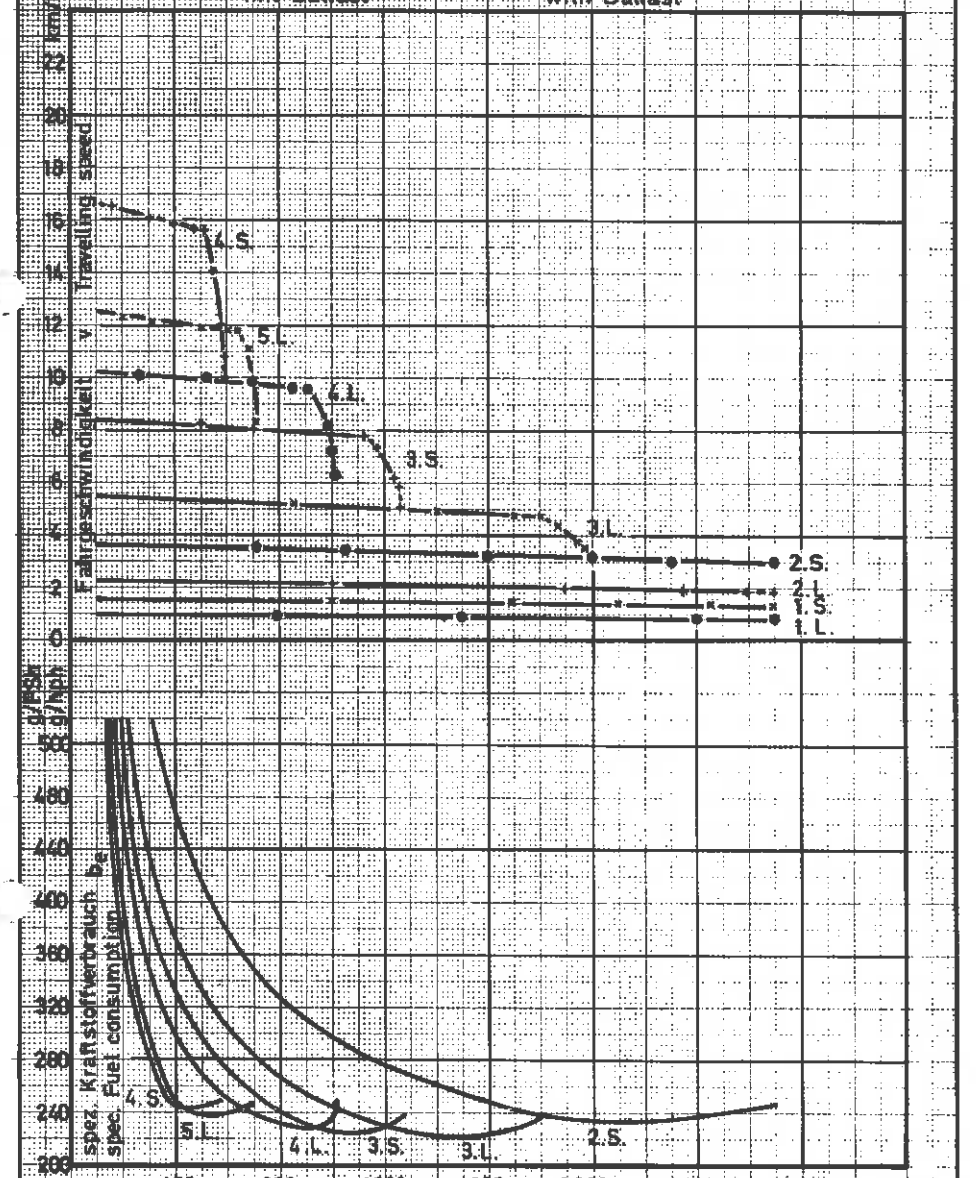
PRÜFUNGS-ABTEILUNG

Zugprüfung
Drawbar - test

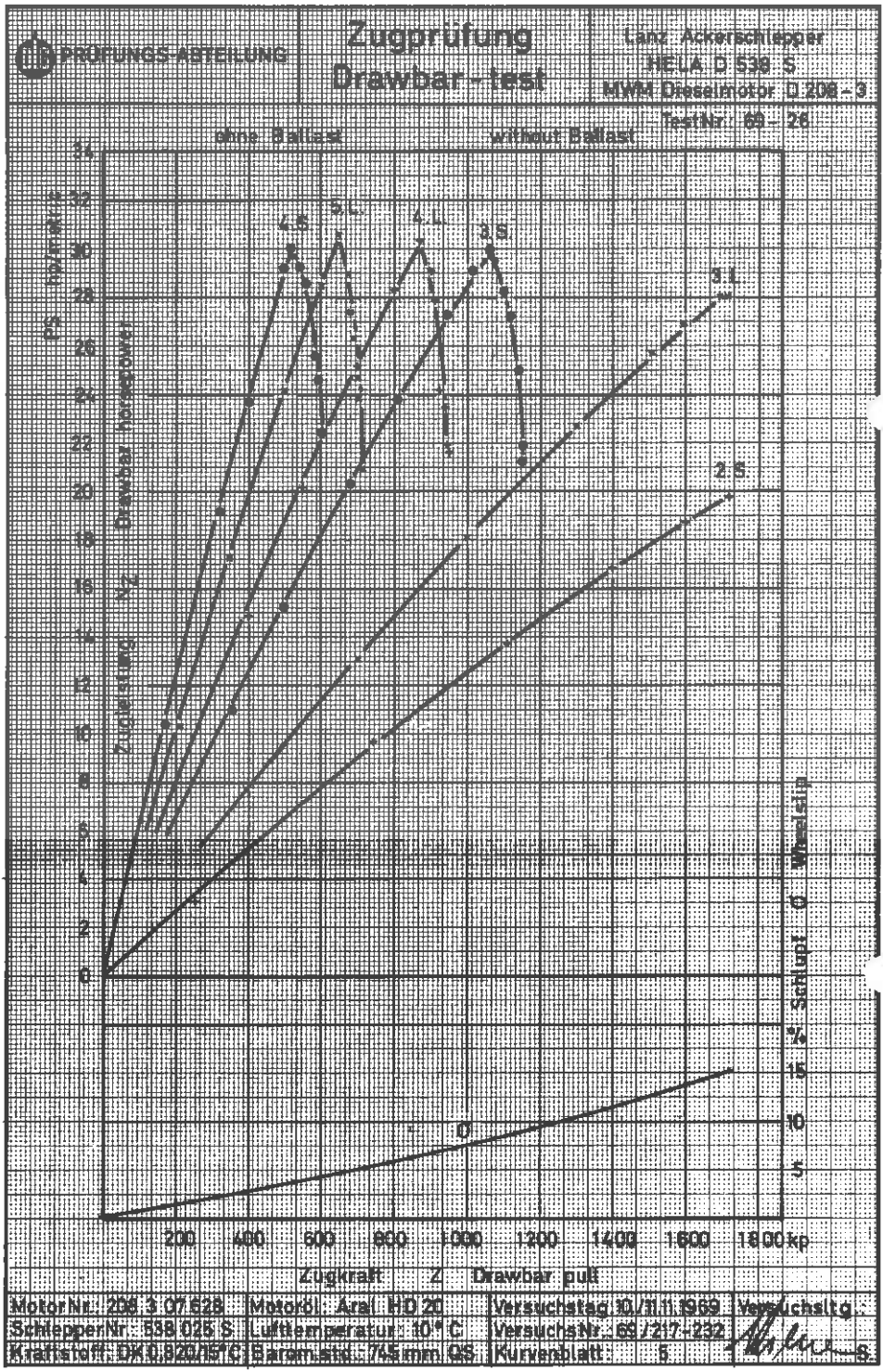
Lanz Ackerschlepper
HELA D 538 S
MWM Dieselmotor D 208-3

Test Nr. 69 - 26

mit Ballast with Ballast



Motor Nr.: 208 3 07 628	Motoröl: Aral HD 20	Versuchstag: 13.1.-14.12.1969	Versuchsltg.:
Schlepper Nr.: 538 025 S	Lufttemperatur: 10 °C	Versuchs Nr.: 69/224-233	
Kraftstoff: DK 0,820/15 °C	Barom. std.: 745 mm QS	Kurvenblatt: 4	


PRÜFUNGS-ABTEILUNG
Zugprüfung
Drawbar - test
Lanz Ackerschlepper
HELA D 538 S
MWM Dieselmotor D 208 - 3
Test Nr. 69 - 26
ohne Ballast
without Ballast
4 S
5 L
4 L
3 S
3 L
2 S
Drawbar horsepower
Fuel consumption
Wheelslip
Schlupf
Zugkraft Z Drawbar pull
200 400 600 800 1000 1200 1400 1600 1800 kp
Motor Nr. 208 3 07 628
Schlepper Nr. 538 025 S
Kraftstoff DK 0,820/15°C
Motoröl Aral HD 20
Lufttemperatur 10° C
Barom.-std. 745 mm QS
Versuchstag 10./11.1.1969
Versuchs Nr. 69/217-232
Kurvenblatt 5

PRÜFUNGS-ABTEILUNG
Lanz D 538 S

Test No. 69-26

(3 and 4) TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 5,00-16 AS Front 4 ply, without ballast
rear: 11,4/10-24 AS 6 ply, without ballast

Track of wheels front: 885 mm
rear: 820 mm

	With brakes		Without brakes	
	left-hand m	right-hand m	left-hand m	right-hand m
Radius of turning space	5,25	5,35	5,65	5,80
Radius of turning circle	5,00	5,10	5,40	5,55

(5) LOCATION OF CENTRE OF GRAVITY

	Without ballast mm
Height above ground	672
Distance forward from the vertical plane containing the axis of the rear wheels	202
Distance from the median plane of the tractor	0

(6) BRAKE TESTS

A) FOOT BRAKE

Type of track: Concrete

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

Travelling speed of tractor: 19,7 km/h

With cold brakes

		Tractor without ballast	Tractor with ballast
Maximum deceleration	m/s^2	4,7	5,3
Stopping distance	m	5,7	5,0
Force on pedal	kp	22	25

Brake fade characteristics, hot tests, tractor without ballast

Deceleration:	hot/cold	106%
Stopping distance:	cold/hot	104%
Force on pedal:	cold/hot	100%

B) PARKING BRAKE

Force applied on the brake lever, cold brake 50 kp.
No rotation of the rear-wheels of tractor occured when the tractor has been towed.

Force applied on the brake lever, hot brake 50 kp.
One hour after the brake has been applied no rotation of the rear-wheels of tractor occured when the tractor has been towed.

PRÜFUNGS-ABTEILUNG
Lanz D 530 S

Test No. 69-26

(7) MEASUREMENT OF AMBIENT NOISE EMITTED BY THE TRACTOR

Type of track: Concrete
Type of sound level meter: Brüel & Kjaer Typ 2203

Results of test

Speed: 5.S.
Travelling speed before acceleration: 19,7 km/h
Sound level: 79 dBA

(8) NOISE MEASUREMENT AT THE DRIVER'S EAR

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
3.S.	8,38	7,62	73

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

(9) TEST OF POWER LIFT AND HYDRAULIC PUMP PERFORMANCE

Date and location of tests: 25.3.1969, Gross-Umstadt

Hydraulic fluid: Engine oil HD SAE 20

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					
120	-	505	1578	150	1350
325	-	435	1808	150	1350
Measured on the test frame 610 mm to the rear of the hitch points					
120	150	505	1360	150	790
325	285	435	1190	150	790

Type of linkage lock for transport: hydraulically by shutting off the valve for lowering delay.

Opening pressure of the cylinder over-pressure relief valve: 190 kp/cm² (acc.to manufacturers specification)

PRÜFUNGS-ABTEILUNG
Lanz D 538 S

Test No. 69-26

OPTIONAL TESTS

(10) ENGINE TESTS

Date and location of tests: 23.4.1969, 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				
40,0	2300	9,11	189	4,39
At standard p.t.o.speed (540 rev/min)				
38,8	2217	8,78	187	4,42
At the speed recommended by the manufacturer for drawbar work				
40,0	2300	9,11	189	4,39

Fuel consumption at part loads

(i) 85 % of torque at maximum power				
34,7	2345	7,53	180	4,61
(ii) unloaded				
-	2450	1,65	-	-
(iii) 50 % of the load defined in (i)				
17,6	2375	4,51	212	3,89
(iv) maximum power				
40,0	2300	9,11	189	4,39
(v) 25 % of the load defined in (i)				
8,9	2401	3,23	302	2,75
(vi) 75 % of the load defined in (i)				
26,2	2360	5,98	189	4,38

Optimum fuel consumption : 172 g/hph at 19,8 hp and 1410 rev/min

Standard fuel consumption 1/2 (acc.to DIN 9606): 3,54/ 7,33 l/h

No load maximum engine speed: 2450 rev/min

Torque at maximum power: 12,5 kpm

Maximum torque: 13,2 kpm at 1500 rev/min of the engine

Mean atmospheric conditions: temperature: 19°C
pressure: 748 mm Hg
relative humidity: 75 %

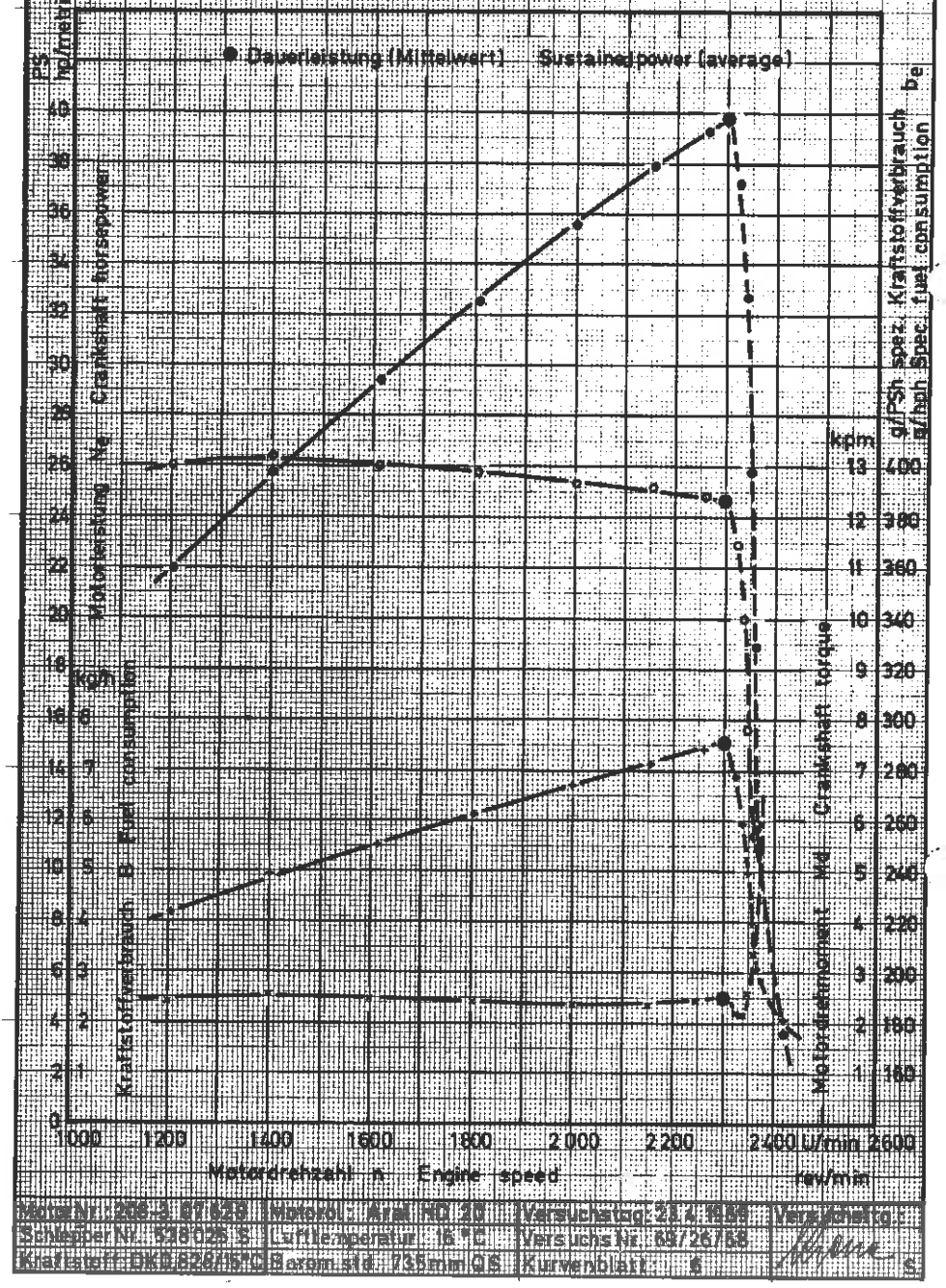
Maximum temperatures: coolant: 80°C
engine oil: 85°C
fuel: 22°C

PRÜFUNGS-ABTEILUNG

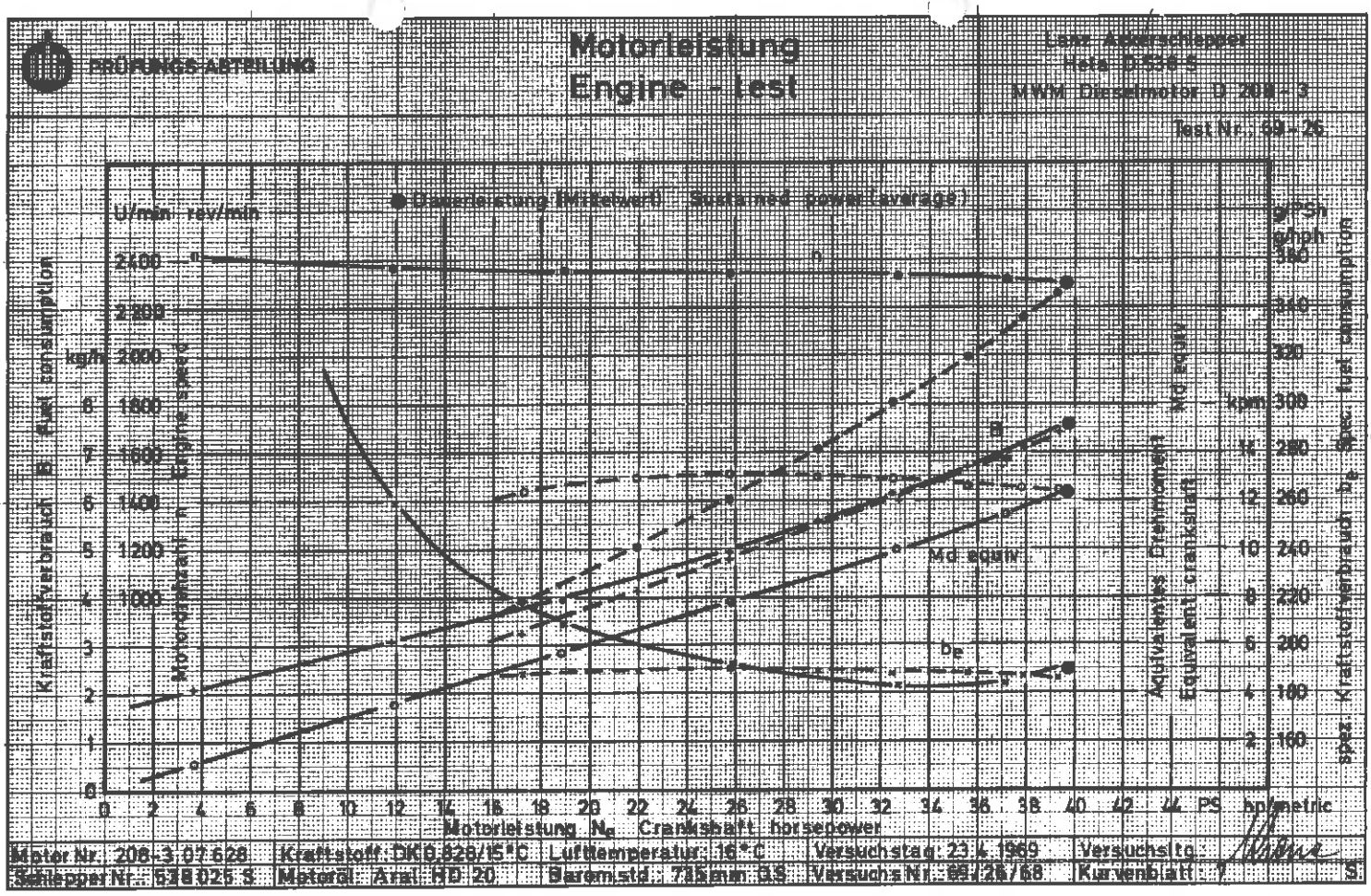
Motorleistung
Engine - test

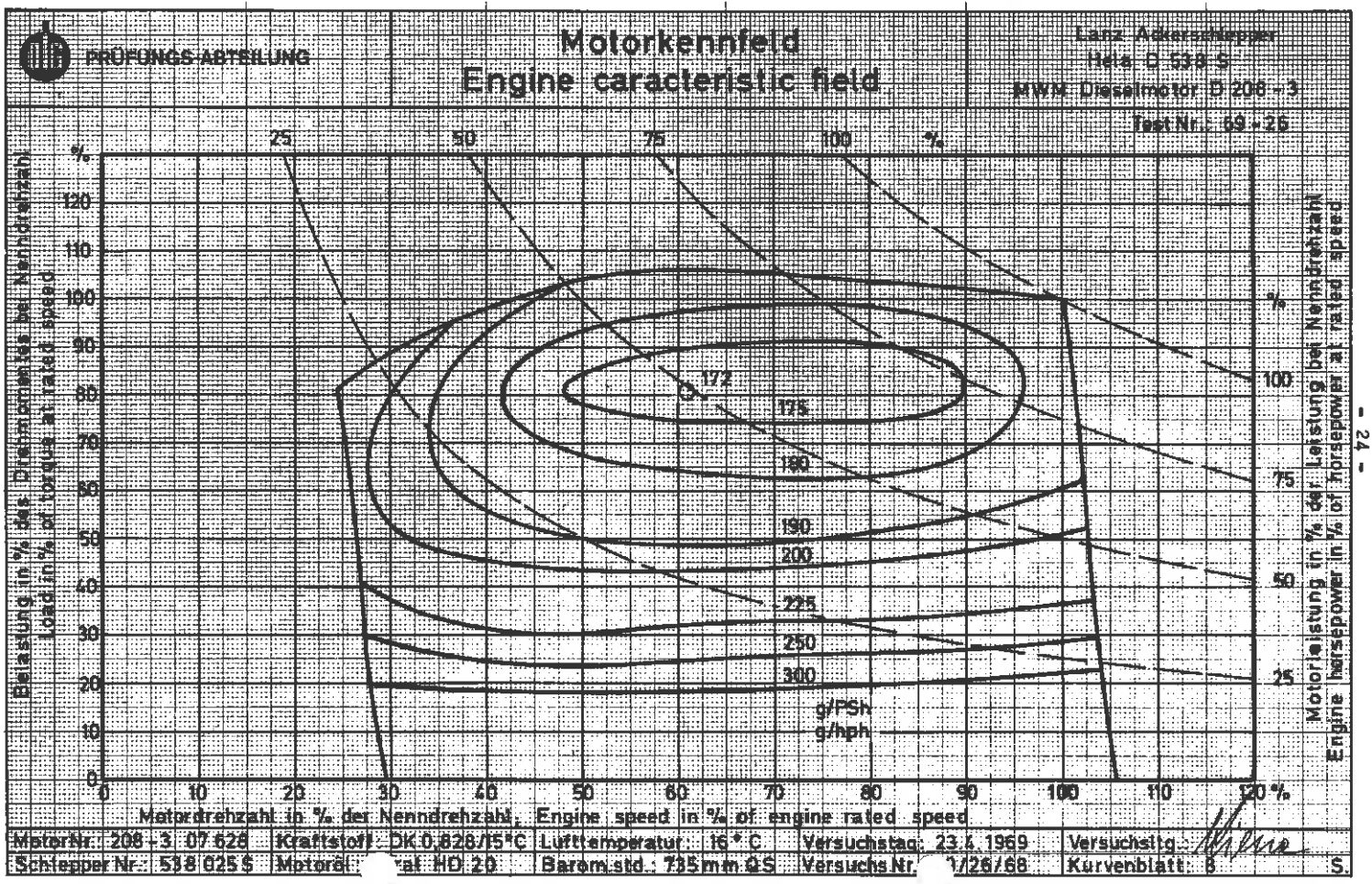
Lanz Ackerschlepper
Hela D 538 S
MWM Dieselmotor D 208-3

Test Nr.: 69 - 26



Motor Nr.: 208-3 67 629 | Motoröl: Aral HD 20 | Versuchstag: 21.4.1969 | Verglichen:
Schlepper Nr.: 538 025 S | Lufttemperatur: 16 °C | Versuchs Nr.: 69/26/68
Kraftstoff: DK 0,828/15°C | Barom. std. 735mm QS | Kurvenblatt: 5


PRÜFUNGS-ABTEILUNG
Motorleistung
Engine - test
Lanz Allzweckschlepper
Hela D 2416 S
MWM Dieselmotor D 208 - 3
Test Nr.: 69 - 26
Dauerleistung (Mittelwert) Sustained power (average)
U/min rev/min
2400
2200
2000
1800
1600
1400
1200
1000
kg/h
Kraftstoffverbrauch B fuel consumption
Motorleistung Engine power
Md equiv.
Aequivalentes Drehmoment
Equivalent crankshaft
Md equiv
kpm
mkg
Spez. Kraftstoffverbrauch be
spec. fuel consumption
g/PSh
g/hph
260
240
220
200
180
160
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 PS hp/metric
Motorleistung Ne Crankshaft horsepower
Motor Nr. 208-3 07 628
Schlepper Nr. 518 025 S
Kraftstoff: DK 0,828/15°C
Motoröl: Aral HD 20
Lufttemperatur: 16 °C
Barom.std. 735 mm QS
Versuchstag: 23.4.1969
Versuchs Nr.: 69/26/68
Versuchsstg.
Kurvenblatt
S.


PRÜFUNGS-ABTEILUNG
Motorkennfeld
Engine caracteristic field
Lanz Ackerschlepper
Helia D 538 S
MWM Dieselmotor D 208-3
Test Nr.: 69-26
Belastung in % des Drehmoments bei Nenndrehzahl
Load in % of torque at rated speed
Motorleistung in % der Leistung bei Nenndrehzahl
Engine horsepower in % of horsepower at rated speed
172
175
180
190
200
225
250
300
g/PSh
g/hph
Motordrehzahl in % der Nenndrehzahl, Engine speed in % of engine rated speed
Motor Nr.: 208-3 07 628
Kraftstoff: DK 0,828/15°C
Lufttemperatur: 16° C
Versuchstag: 23.4.1969
Versuchsltg.:
Schlepper Nr.: 538 025 S
Motoröl: MWM HD 20
Barom.std.: 735 mm QS
Versuchs Nr.: 1/26/68
Kurvenblatt: 8