O.E.C.D. No.: 467
Printed: February 1975

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



DEUTZ-AGRICULTURAL TRACTOR D 7206

Manufactured by: KLÖCKNER-HUMBOLDT-DEUTZ AG
D-5000 Köln-Deutz

Date of Tests: July till October 1974

DLG-Testing Station for Agricultural Machinery
D-6114 Groß-Umstadt

DEUTSCHE LANDWIRTSCHAFTS-GESELLSCHAFT e.V.
Prüfungsabteilung für Landmaschinen
D-6000 Frankfurt/Main 1, Zimmerweg 16

This bulletin is based on engineering tests in accordance with the O.E.C.D. STANDARD CODE for the Official Testing of Agricultural Tractors. It does not contain an evaluation of the performance of the tractor on practical work.

This report has been approved by the O.E.C.D. Coordinating Center (C.N.E.E.M.A., France) as being in accordance with the O.E.C.D. STANDARD CODE.

Date of Approval: 7th January 1975

Serial No.: 467

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

The relation with the former used Technical System of Units is given by the following formulas:

Forces:	1 N	=	0,102 kp	or	1 kp	=	9,81 N
Powers:	1 kW	=	1,36 PS	or	1 PS	=	0,736 kW
Pressures:	1 bar	=	1,02 kp/cm²	or	1 kp/cm²	=	0,981 bar
	1000 mbar = 750,1 mm Hg						

All rights including th right of translation, reprint and photomechanical copying - also of excerpts - reserved by DEUTSCHE LANDWIRTSCHAFTS-GESELLSCHAFT e.V., D-6000 Ffm. 1

Printed in Germany

TABLE OF CONTENTS

	Page
Specification of tractor	4 to 11
Fuel and lubricants used in tests	12
COMPULSORY TESTS	
(1) Main power take-off performance	13 to 15
(2) Drawbar performance on a concrete track	16 and 17
(3) Turning space and turning circle	18
(4) Location of centre of gravity	18
(5) Braking performance	19
(6) Ambient noise, emitted by the tractor	20
(7) Noise at the driver's ear level	20
(8) Power lift and hydraulic pump performance	21 to 24
OPTIONAL TESTS	
(9) Engine performance	25 to 28

PRÜFUNGS-ABTEILUNG
Deutz D 7206

Test No. 74-124

Tractor manufacturer:	KLÖCKNER-HUMBOLDT-DEUTZ AG D-5000 Köln-Deutz
Submitted for test by:	Manufacturer
Selected by:	Manufacturer with agreement by DLG
Place of running-in:	Köln and Groß-Umstadt
Duration of running-in:	Engine and tractor appr. 100 hours

SPECIFICATION OF TRACTOR

Tractor

Make:	KLÖCKNER-HUMBOLDT-DEUTZ AG
Model:	D 7206
Type:	Wheel type tractor, unit construction; rear wheel driven
Serial No:	7573/0001

Engine

Make:	Own make
Model:	F4L 912
Type:	4-stroke Diesel engine with direct injection; air cooled
Serial No:	5301 867
Cylinders:	4 in line; bore 100 mm, stroke 120 mm; displacement 3768 cm^3; compression ratio 17 : 1
Valves:	Overhead
Fuel system:	PIERBURG fuel feed pump PE 15 252; BOSCH-in line injection pump: PES 4 A 80 D 410/3 RS 1183; manufacturer's production setting 56 mm^3/stroke at rated engine speed and full load; injection timing 28° before TDC; BOSCH-multihole injection nozzles DLLA 149 S 394; injection pressure 175 bar; MANN-fuel filter with replaceable cartridge; capacity of fuel tank appr. 92 l
Governor:	BOSCH-mechanically acting centrifugal variable speed governor: EP/RSV 325-1150 A8 B 657 DL; governed range of engine speed 700 to 2450 rev/min; rated engine speed 2300 rev/min

PRÜFUNGS-ABTEILUNG
Deutz D 7206

Test No. 74-124

Air cleaner:	DEUTZ-SICCOPUR dry paper element filter; pre-cleaner incorporated; with maintenance indicator; manufactured by MANN UND HUMMEL
Exhaust silencer:	Own make; 2-chamber expansion type silencer; 125 mm diameter 460 mm long; situated on the left hand side of clutch housing; mouth showing rearward
Lubrication system:	Forced feed from rotary pump; strainer in sump; MANN-oil filter in full flow with by-pass valve; replaceable cartridge; oil capacity 11 l; oil changing period 100 to 200 hours when using HD-S1-oil or 200 to 240 hours when using HD-B-oil; recommended oil viscosities: winter SAE 10W summer SAE 20W/20 tropics SAE 30
Cooling system:	Air cooling with axial blower; V-belt driven
Starting system:	Electrical; BOSCH-starter motor JD 12V 2,2 kW; BOSCH-flame type plug in intake pipe
Electrical equipment:	12 Volt negative earth; BOSCH-three phase alternator: G1 RL 14V 28A 22; 1 lead acid battery 110 Ah at 20 hours rating

Transmission

Clutch:	FICHTEL UND SACHS AG; independent dry dual disc type clutch DUT 295 H-250/295; driving part, pedal operated; p.t.o. part hand lever operated

Gear box:	Own make; TW 55.4; constant mesh speed change gear with 4 forward speeds; 1st and 2nd speed collar shifted 3rd and 4th speed synchronized; group gear with 3 forward groups (slow-, fast- and intermediate group) and 1 reverse group; slow- and fast group collar shifted; intermediate group pin coupling shifted; reverse group sliding gear shifted; total 12 forward and 4 reverse speeds
Rear axle and final drive:	Crown wheel and pinion; bevel gear type differential with lock fitted; pedal operated, self-disengaging; spur gear final drive
Oil capacity:	Speed change gear, group gear, rear axle and final drive total 36,5 l
Oil changing period:	1500 hours

Total ratios and speeds see page 7

Power take-off	Independent p.t.o.; driven through the hand lever operated clutch disc; preselectable by hand lever; at rear of tractor; 715 mm above ground in tractor median plane; 29 x 34,9 x 8,7 mm = 1 3/8 in, 6 splines; (DIN 9611 Form A; BS. 1495; ASAE S. 203.7); 613 rev/min at rated engine speed; standard p.t.o. speed 540 rev/min at 2025 rev/min engine speed; may be set by aid of tractormeter; direction of rotation clockwise (viewed from tractor rear)

PRÜFUNGS-ABTEILUNG
Deutz D 7206

Test No. 74-124

Total ratios and speeds

Group	Gear No.	Number of engine revolutions for one revolution of the driving wheel	Nominal travelling speed at rated engine speed *)	
			km/h	m/s
Slow group	1	277,15	2,24	0,62
	2	178,39	3,48	0,97
	3	142,64	4,35	1,21
	4	104,32	5,95	1,65
Inter-mediate group	1	140,99	4,40	1,22
	2	90,82	6,83	1,90
	3	72,55	8,56	2,38
	4	53,08	11,69	3,25
Fast group	1	67,67	9,17	2,55
	2	43,57	14,24	3,96
	3	34,83	17,82	4,95
	4	25,48	24,36	6,77
Reverse group	1	114,87	5,40	1,50
	2	73,93	8,39	2,33
	3	59,14	10,50	2,92
	4	43,25	14,35	3,99

*) calculated with the rolling radius 714 mm acc. to manufacturer's specification

Belt pulley

Optional; not fitted on tractor tested;
figures acc. to manufacturer's specification;
at rear of tractor;
driving device attached to p.t.o.;
engaged by p.t.o. hand lever;
320 diameter, 140 mm width;
1288 rev/min at rated engine speed;
linear belt speed 21,57 m/s;
direction of rotation anticlockwise
(viewed from the right hand side of tractor)

PRÜFUNGS-ABTEILUNG
Deutz D 7206

Test No. 74-124

Power lift	Own make; K 45.1; DEUTZ-TRANSFERMATIC System; hydraulic power lift, unit construction; draught control, position control, floating position; single acting ram, bore 90 mm, stroke 152 mm; overpressure relief valve for ram adjusted at 250 $\pm$ 30 bar; BOSCH gear pump HY/ZFR 1/11 CL (212/1) with hydrostatic stearing HY/ZFR 1/14 CL (212/1); directly driven by engine; DEUTZ-control valve; maximum oil pressure 200 bar; up to 4 oil tappings for single or double acting remote rams with supplementary DEUTZ-control valves available; hydraulic linkage lock for transport; oil tank incorporated in the lift unit; oil capacity 14,5 l; 7 l may be taken off by oil tappings; oil changing period 1500 hours
Implement linkage	Three point linkage, category II (DIN 9674); lift rods length adjustable from 610 to 740 mm; lifting range above ground with: lift rods short from 420 to 1035 mm lift rods long from 150 to 815 mm
Drawbar	Fitted on clevis of lower links; centre hole and 3 holes on either side with 80 mm distance each (DIN 9676); all holes 33 mm diameter; height above ground adjustable by power lift from 165 to 1050 mm dependent from lift rods length; measured at the surface of drawbar; in standard height 450 mm above ground mechanically - hydraulically lockable with lift rods 740 mm long; with lower links in horizontal position distance of centre hole: from rear axle centre 970 mm from end of p.t.o. shaft 575 mm

Pull attachment

Trailer hitch:	Height above ground 805, 870, 935, 705, 770, 835 mm; changeable by shifting and reversing hitch; hitch hole 33 mm diameter; distance of hitch hole to rear axle center 675 mm; permissible bearing load 1000 kg
Towing hitch:	700 mm above ground
Steering	ZAHNRADFABRIK FRIEDRICHSHAFEN AG hydrostatic column steering; 7409; with flow dividing valve incorporated; operated by hand wheel; acting on front wheels; (optional: ZF-Gemmer steering 7340)

Brakes

Parking brake:	Simplex shoe type brake; mechanically acting on 2 external brake drums on the differential half shafts on either side; brake drums 180 mm diameter; operated by hand lever with ratchet
Foot brake:	Simplex shoe type brake; mechanically acting on 2 external brake drums on the differential half shafts on either side; brake drums 250 mm diameter; pedal operated Both brakes don't interact mutually
Steering brake:	Operated by single parts of the divided foot brake pedal; for normal use both parts of the brake pedal are locked together by safety bolt

Wheels

Steering wheels:	Two pneumatics at front, 7,50-20 AS 6 ply; maximum permissible load on each tyre 1000 kg at 2,25 bar inflation pressure and 25 km/h speed; track width: 1425, 1525, 1625, 1725, 1825, 1925 mm; changeable by extending front axle; rims 5,50 F x 20
Driving wheels:	Two pneumatics at rear, 18,4-30 AS 8 ply; maximum permissible load on each tyre 2270 kg at 1,1 bar inflation pressure and 25 km/h speed; track width: 1514, 1614, 1729, 1829, 1923, 2023 mm; changeable by turning wheels and offset lug type rims; rims W 14 L x 30
Wheel base:	2415 mm
Other wheels:	Optional available are:
	Steering wheels: 6,00-19; 7,50-16; 7,50-18
	Driving wheels: 13,6-36; 13,6-38; 15,5-38; 16,9-30; 16,9-34

Weights — Ready for use as tested

		without driver	with driver
Without ballast:	front	920 kg	925 kg
	rear	1770 kg	1845 kg
	total	2690 kg	2770 kg
Front ballast:	2 built in weights total		153 kg
	3 front weights 40 kg each		120 kg
Rear ballast:	11 weights per wheel 60 kg each		1320 kg
	water in the tyres		640 kg
With ballast:	front	1312 kg	1326 kg
	rear	3615 kg	3677 kg
	total	4927 kg	5003 kg

Number of grease points (whole tractor): 14

PRÜFUNGS-ABTEILUNG
Deutz D 7206

Test No. 74-124

Seat

GRAMMER
DS 20/D 3 H;
upholstered mould seat with back rest;
adjustable spring with shock absorber;
parallelogram guidance;
height of seat platform above ground 940 mm;
height of seat above platform appr. 500 mm in median position not compressed;
adjustable on inclined guideways 150 mm to and fro and simultaneously 95 mm up and down;
additional independent height adjustment in the range of 125 mm in 9 steps

Dimensions

Overall length: 3965 mm with three point linkage without ballast
4235 mm with three point linkage with ballast

Overall width: 1960 mm at smallest track width
2470 mm at largest track width

Overall height: 1745 mm to top of steering wheel

Ground clearance: 430 mm in tractor's median plane

Lighting equipment: Electric, 12 V
acc. to German governmentel regulations

	Dimensions of area mm	Height above ground to centre mm	Distance from outside edge of tractor to centre mm ***)
Head lights	130 ø	1015	765
Side lights *)	85 x 90	1705	255
Rear lights **)	85 x 90	1520	265
Reflectors	75 ø	1035	45

*) in combination with direction indicator
**) in combination with direction indicator and stop light
***) at 1514 mm track width

PRÜFUNGS-ABTEILUNG
Deutz D 7206

Test No. 74-124

FUELS AND LUBRICANTS USED IN TESTS

Fuel:	ARAL Diesel fuel (DIN 51601) specific gravity at 15°C on laboratory tests 0,832 kg/l on drawbar tests 0,830 kg/l
Engine oil:	SHELL ROTELLA SX 20W/20
Transmission oil:	SAE 90
Hydraulic oil:	Engine oil HD SAE 20W/20

PRÜFUNGS-ABTEILUNG
Deutz D 7206

Test No. 74-124

COMPULSORY TESTS

(1) MAIN POWER TAKE-OFF PERFORMANCE

Date of tests: 5th August 1974
Type of dynamometer: Schenck hydraulic dynamometer U1-40

Maximum power

Power kW	Speed engine rev/min	Speed p.t.o. rev/min	Fuel consumption total 1/h	Fuel consumption total kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
At maximum power 2-hour test						
50,7	2300	613	15,25	12,77	250	3,66
At standard p.t.o. speed (540 rev/min)						
46,9	2025	540	13,35	11,19	239	3,51
At the speed recommended for drawbar work						
50,7	2300	613	15,25	12,77	250	3,66

Part loads

(i) 85% of the torque at maximum power						
43,7	2332	622	12,71	10,64	244	3,44
(ii) unloaded						
-	2401	640	3,40	2,85	-	-
(iii) 50% of the load defined in (i)						
22,3	2374	633	7,85	6,57	295	3,39
(iv) maximum power						
50,7	2300	613	15,25	12,77	250	3,66
(v) 25% of the load defined in (i)						
11,2	2383	636	5,61	4,70	421	2,00
(vi) 75% of the load defined in (i)						
33,0	2352	627	10,20	8,54	259	3,24

No load maximum engine speed: 2401 rev/min
Equivalent crankshaft torque at maximum power: 211 Nm
Maximum equivalent crankshaft torque: 234 Nm at 1600 rev/min of the engine

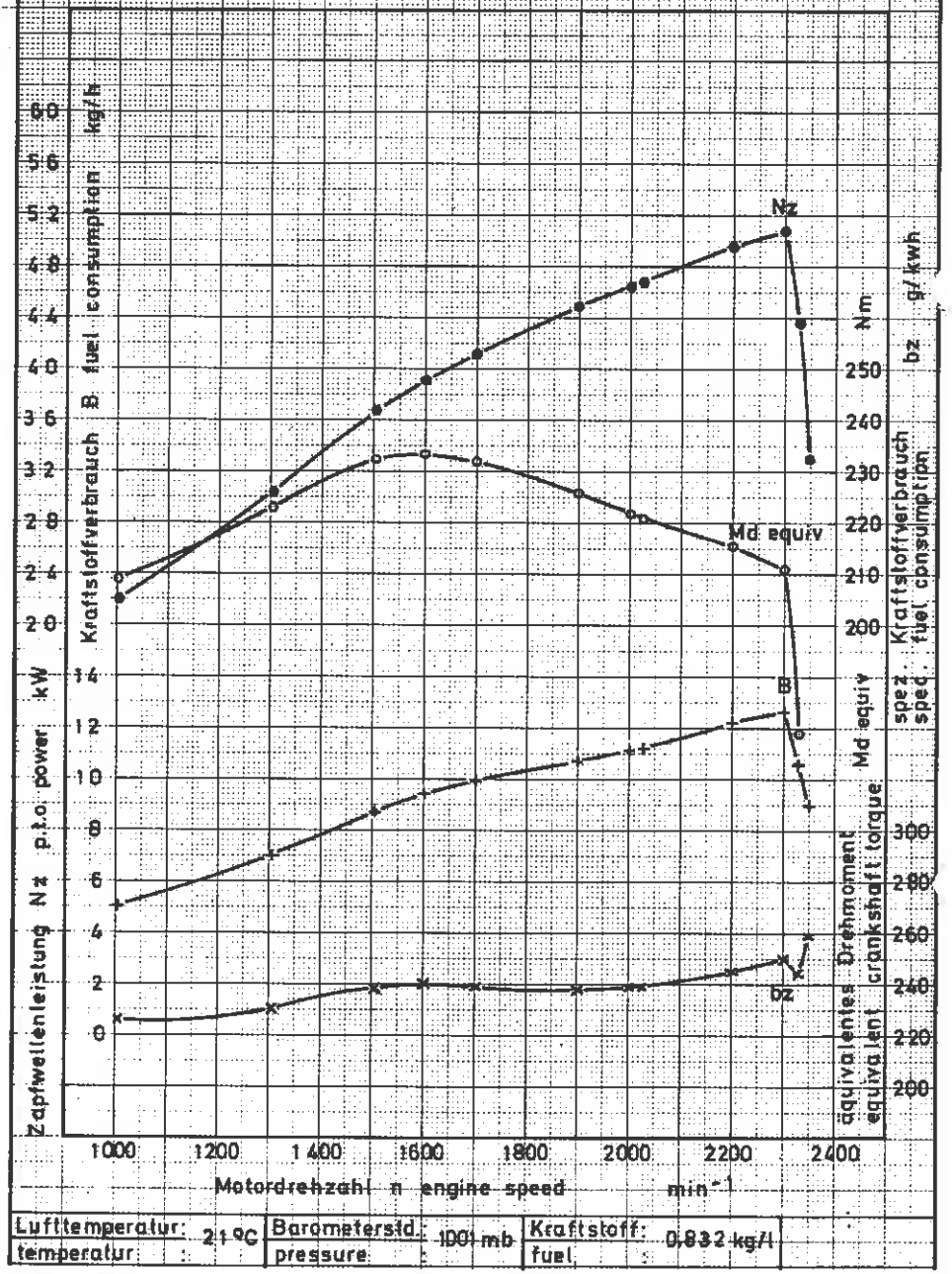
Mean atmospheric conditions:
- temperature 21°C
- pressure 1001 mbar
- relative humidity 70%

Maximum temperatures:
- coolant not recorded
- engine oil 105°C
- fuel 25°C

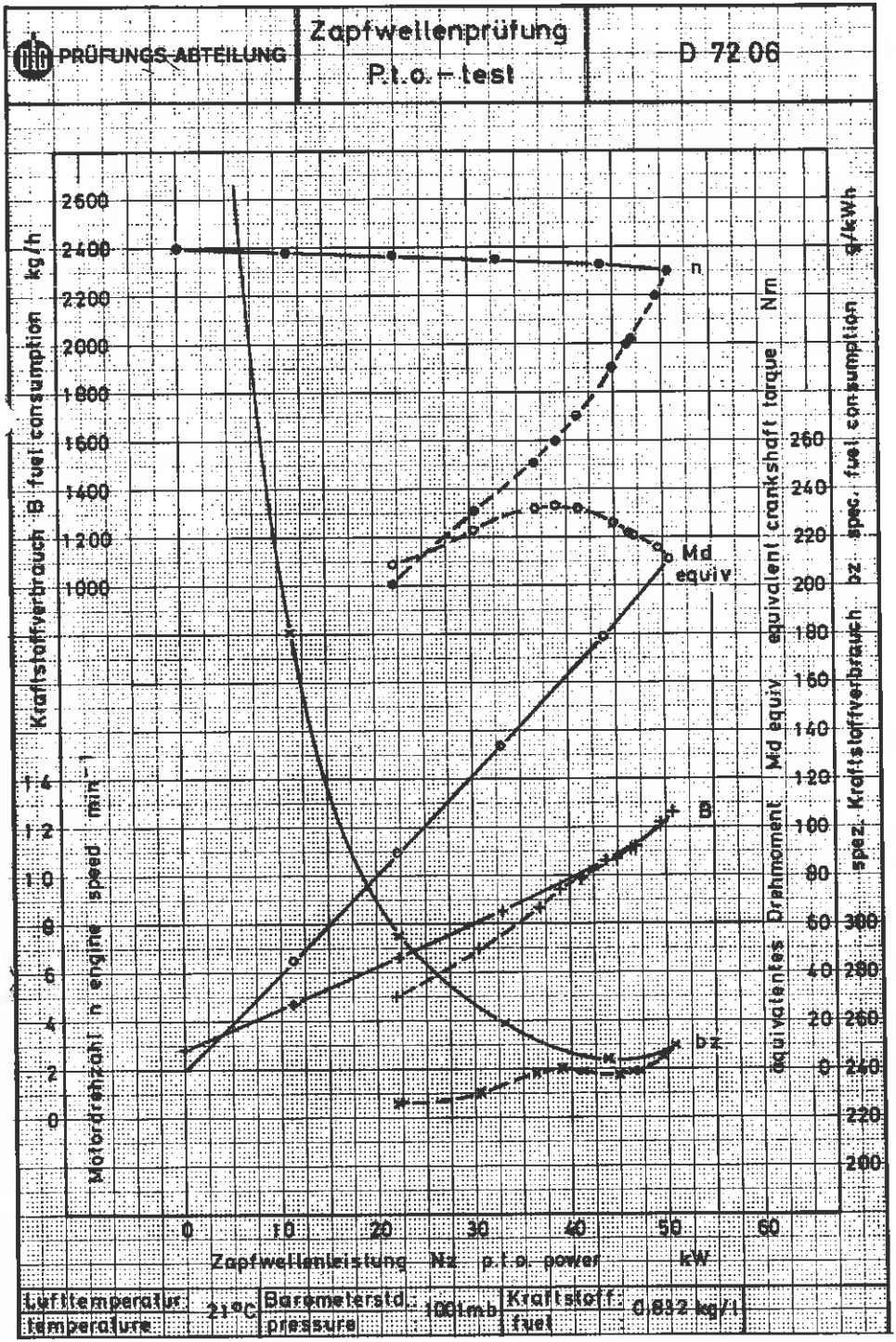
PRÜFUNGS-ABTEILUNG

Zapfwellenprüfung
P.t.o.-test

D 72 06



Lufttemperatur: temperature :	21 °C	Barometerstd.: pressure :	1001 mb	Kraftstoff: fuel :	0,832 kg/l


PRÜFUNGS-ABTEILUNG
Zapfwellenprüfung
P.t.o.-test
D 72 06
Kraftstoffverbrauch B fuel consumption kg/h
Motordrehzahl n engine speed min⁻¹
Drehmoment Md equiv equivalent crankshaft torque Nm
spez. Kraftstoffverbrauch bz spec. fuel consumption g/kWh
äquivalentes
n
Md equiv
B
bz
Zapfwellenleistung Nz p.t.o. power kW
Lufttemperatur temperature 21°C
Barometerstd. pressure 1001 mb
Kraftstoff fuel 0,832 kg/l

PRÜFUNGS-ABTEILUNG
Deutz D 7206

(2) DRAWBAR PERFORMANCE

Date of test: 19th August and 5th till 8th October 1974
Type of track: Conrete

Gear No. and Group	Speed km/h	Horse-power kW	Drawbar pull N	Engine speed rev/min	Slip of wheels %	Specific energy kWh/l
(i) MAXIMUM POWER with ballast height of drawbar above ground 510 mm						
1 slow	2,00	25,4	45600	2351	15,1	2,47
2 slow	3,02	38,7	46400	2316	14,9	2,75
3 slow	3,95	43,2	39450	2300	11,6	2,80
1 inter	4,02	43,6	39000	2300	11,3	2,81
4 slow	5,64	45,0	28700	2301	7,8	2,91
2 inter	6,48	45,1	25000	2301	6,2	2,93
3 inter	8,34	45,1	19430	2301	4,9	2,92
1 fast	8,99	45,3	18150	2301	4,6	2,94
4 inter	11,54	45,3	14120	2300	3,6	2,94
2 fast	13,96	44,4	11430	2300	2,7	2,89
(ii) FIVE-HOUR-TEST at 75% of pull at maximum power in 2 inter gear of slow group						
2 inter	6,69	34,9	18780	2335	4,4	2,91
(iii) FIVE-HOUR-TEST at pull corresponding to 15% wheel slip in test (i)						
2 slow	-	-	46400	2315	-	-
(v) MAXIMUM POWER without ballast height of drawbar above ground 580 mm						
3 slow	3,84	31,1	29150	2338	14,8	2,62
1 inter	3,88	31,6	29300	2336	15,0	2,62
4 slow	5,17	41,0	28600	2300	14,8	2,67
2 inter	6,24	41,6	24030	2300	10,1	2,70
3 inter	8,00	43,9	19750	2301	8,0	2,84
1 fast	8,62	44,0	18400	2300	7,5	2,88
4 inter	11,19	44,7	14430	2300	5,7	2,90
2 fast	13,80	43,8	11420	2299	4,4	2,88

Total oil consumption during ten hours duration of tests (ii) and (iii): 46 g/h

PRÜFUNGS-ABTEILUNG

Test No. 74-124

Tyres make and size — front: FIRESTONE 7,50-20 AS FRONT 6 ply; rear: CONTINENTAL 18,4-30 AS FARMER 6 ply

Specific fuel consumpt. g/kWh	Temperatures: Fuel °C	Coolant °C	Engine oil °C	Atmospheric conditions: Temperature °C	Relative humidity %	Pressure mbar
tyre inflation pressure 1,4 bar active tyre radius under static load 734 mm						
338	15	-	82	10	92	990
303	14	-	74	10	91	990
298	15	-	74	10	91	990
298	15	-	80	11	90	990
287	15	-	81	13	84	1002
284	15	-	85	14	81	1002
286	15	-	81	13	82	1002
283	15	-	82	11	85	1002
283	15	-	82	12	83	1002
288	15	-	82	12	82	1002
286	14	-	80	13	85	990
-	14	-	81	12	86	990
tyre inflation pressure 1,1 bar active tyre radius under static load 747 mm						
317	20	-	88	17	96	1012
318	21	-	80	18	98	1012
312	21	-	82	19	95	1011
296	20	-	82	19	96	1011
292	21	-	80	20	94	1011
288	20	-	80	20	94	1011
286	20	-	90	20	98	1011
288	21	-	82	20	95	1011

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

(3) TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 7,50-20 AS Front 6 ply
rear: 18,4-30 AS 8 ply

Track of wheels front: 1425 mm
rear: 1514 mm

	With brakes		Without brakes	
	left-hand m	right-hand m	left-hand m	right-hand m
Radius of turning space	3,94	3,92	4,30	4,30
Radius of turning circle	3,79	3,76	4,15	4,15

(4) LOCATION OF CENTRE OF GRAVITY

Height above ground	840 mm
Distance forward from the vertical plane containing the axis of the rear wheels	805 mm
Distance of the median plane of the tractor at the right hand side	10 mm

(5) BRAKING PERFORMANCE

A) FOOT BRAKE

Date of tests: 20th August 1974
Type of track: Concrete
Type of decelerometer: MOTO METER-Bremsverzögerungs- und Pedalkraftschreiber

Weight of ballasted tractor: 5003 kg with driver

Cold brakes

		with ballast	without ballast
Travelling speed	km/h	25,0	25,0
Deceleration	m/s^2	4,9	4,3
Stopping distance	m	6,2	6,6
Force on pedal	N	750	390
Force on pedal to achieve a deceleration of 2,5 m/s^2	N	380	230

Brake fade characteristics (hot tests)

Deceleration	hot/cold	%	92	102
Stopping distance	cold/hot	%	103	103
Force on pedal	cold/hot	%	101	114

B) PARK BRAKE

Tractor facing up slope:
Pull on hand brake 260 N, tractor does not roll

Tractor facing down slope:
Pull on hand brake 310 N, tractor does not roll

(6) AMBIENT NOISE EMITTED BY THE TRACTOR

Date of test: 21st August 1974
Type of track: Concrete
Type of sound level meter: Brüel and Kjaer type 2203

Results of test

Gear: 4th fast
Travelling speed before acceleration: 19,5 km/h
Sound level: 89 dB(A)

(7) NOISE AT THE DRIVER'S EAR LEVEL

Date of tests: 27th August
Type of track: Concrete
Type of sound level meter: Brüel and Kjaer type 2607
Type of frequency analyser: Brüel and Kjaer type 1614
(fitted with octave filter)

No cab or frame fitted on tractor

Results of tests

Gear	Drawbar pull at which the tractor develops the maximum sound level N	Travelling speed nominal km/h	Travelling speed effective km/h	Sound level dB(A)
1 slow	28800	2,24	2,00	92
2 slow	28750	3,48	2,96	93,5
3 slow	27600	4,35	3,84	95
1 inter	27600	4,40	3,91	94
4 slow	27750	5,95	5,20	100
2 inter*	24500	6,83	6,22	96
3 inter	19330	8,56	8,14	96
1 fast	18270	9,17	8,80	93,5
4 inter	14320	11,69	11,37	94,5
2 fast	11610	14,24	13,83	93,5
3 fast	9760	17,82	17,66	93,5
4 fast	light load	24,36	25,55	92

*) The second intermediate gear corresponds to the travelling speed nearest to 7,5 km/h

PRÜFUNGS-ABTEILUNG
Deutz D 7206

Test No. 74-124

(8) POWER LIFT AND HYDRAULIC PUMP PERFORMANCE

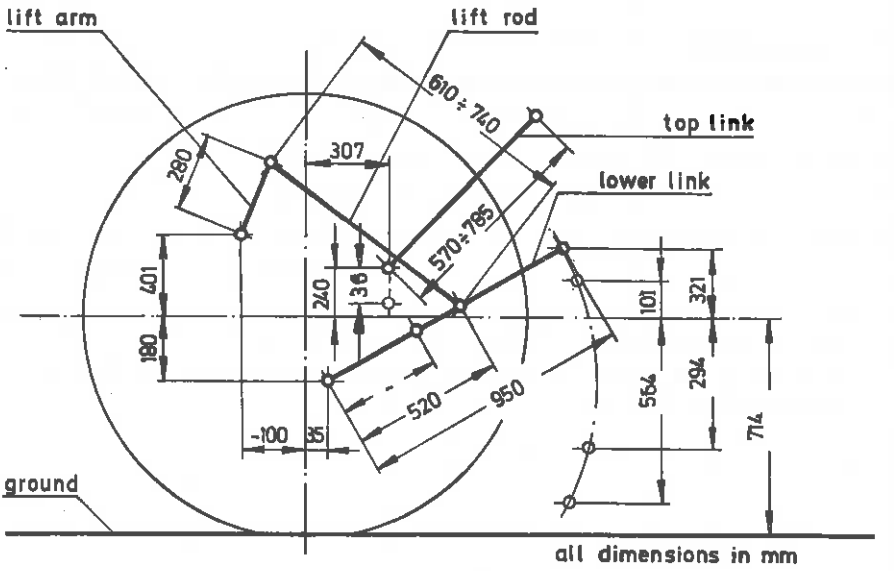
Date of tests: 6th August 1974

HYDRAULIC PUMP

(1)	Opening pressure of relief valve in remote circuit	210 bar
	Sustained pressure by open relief valve	200 bar
(2)	Pump delivery rate at minimum pressure and maximum engine speed	30,1 l/min
(3)	Pump delivery rate	26,5 l/min
	Delivery pressure	186 bar
	Hydraulic power	8,25 kW

POWER LIFT

Dimensions of linkage geometry for the table on page 24



PRÜFUNGS-ABTEILUNG
Deutz D 7206

LIFTING FORCES

Lifting heights relative to horizontal lower links

mm	-385	-370	-300	-200	-137	-114	-100	0
at hitch points maximum mechanical advantage								
N						22650	23150	24450
minimum mechanical advantage								
N	21900		22600	22825			23250	23400

Max. force exerted throughout the whole range 22650 N

Force at which front of tractor lifts with maximum allowable front ballast 32380 N

at test frame maximum mechanical advantage								
N		24700	23950	23075			22100	21200
minimum mechanical advantage								
N					20500		20625	20500

Max. force exerted throughout the whole range 19150 N

Force at which front of tractor lifts with maximum allowable front ballast 19890 N

PRÜFUNGS-ABTEILUNG

Test No. 74-124

0	+100	+200	+281	+300	+328	+400	+500	+600	+691
lift rods 610 mm long									
24450	24800	25400		25600		26150	28250		
lift rods 740 mm long									
23400	23750	24450	25450						

lift rods 740 mm long

21200	20375	19600		19200	19150				
lift rods 610 mm long									
20500	20250	19550		18400		17475	16625	16075	15820

All values of forces for pressure at max. hydraulic power 186 bar; calculated from measurements at max. oil pressure 200 bar, see page 21

LINKAGE GEOMETRY when connected to the standard frame	Maximum mechanical advantage	Minimum mechanical advantage
Projected length in side view:		
Lower links	950 mm	950 mm
Lift arms	280 mm	280 mm
Lift rods	740 mm	610 mm
Top link	678 mm	680 mm
Distance of lift rod connection point from pivot point of lower link	520 mm	520 mm
The following dimensions are given relative to rear axel centre line 714 mm above ground		
Lower link pivot point	35 mm behind, 180 mm below	35 mm behind, 180 mm below
Top link pivot point	307 mm behind, 240 mm above	307 mm behind, 204 mm above
Lift arm pivot point	100 mm behind, 407 mm above	100 mm behind, 407 mm above
Maximum and minimum height of lower link hitch points	101 mm above, 564 mm below	321 mm above, 294 mm below
Height of lower link hitch points when locked in the highest transport position	1035 mm above ground	

PRÜFUNGS-ABTEILUNG
Deutz D 7206

Test No. 74-124

OPTIONAL TESTS

(9) ENGINE PERFORMANCE

Date of tests: 17th July 1974
Type of dynamometer: Schenck eddy current dynamometer W150

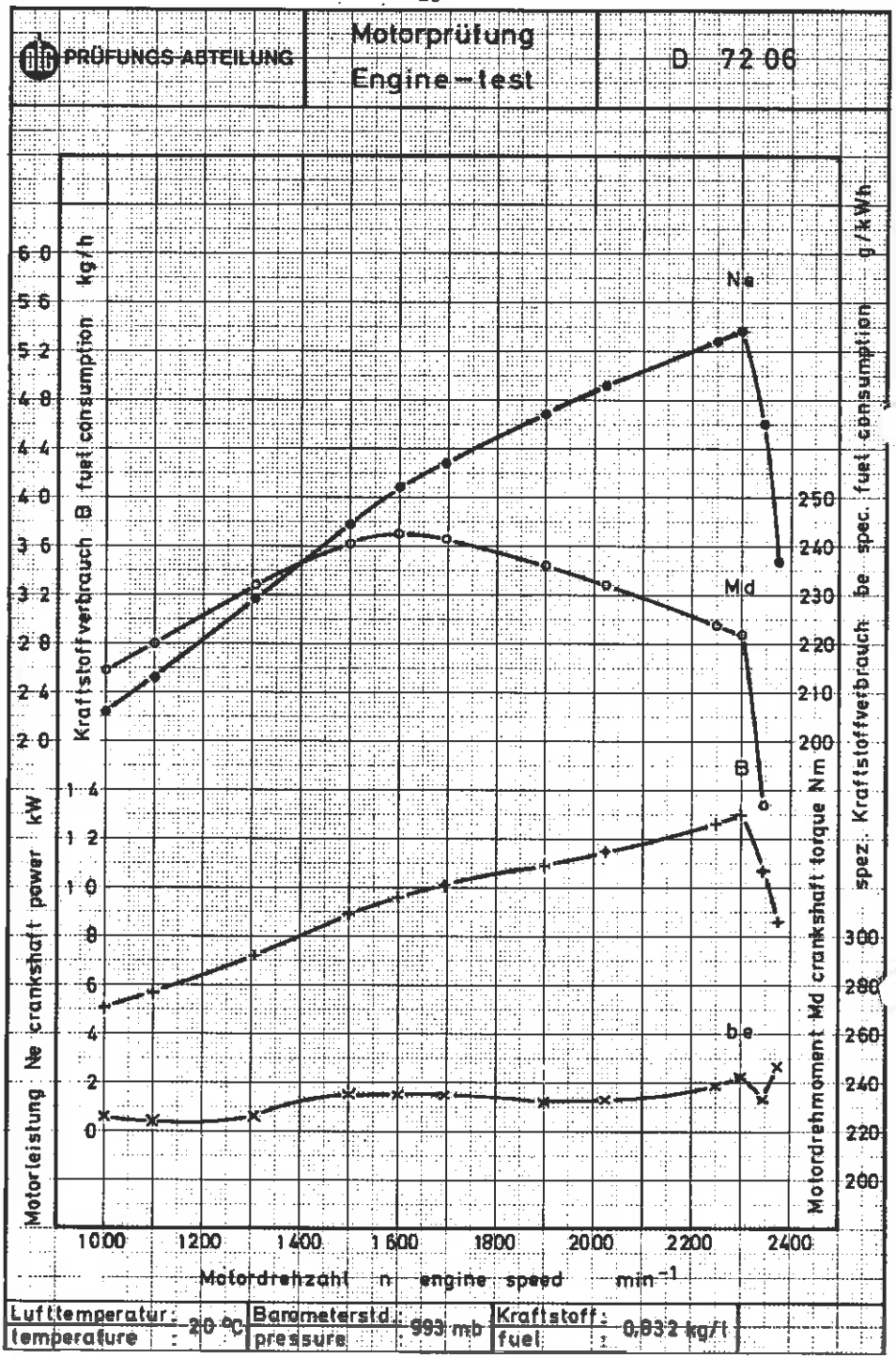
Maximum power

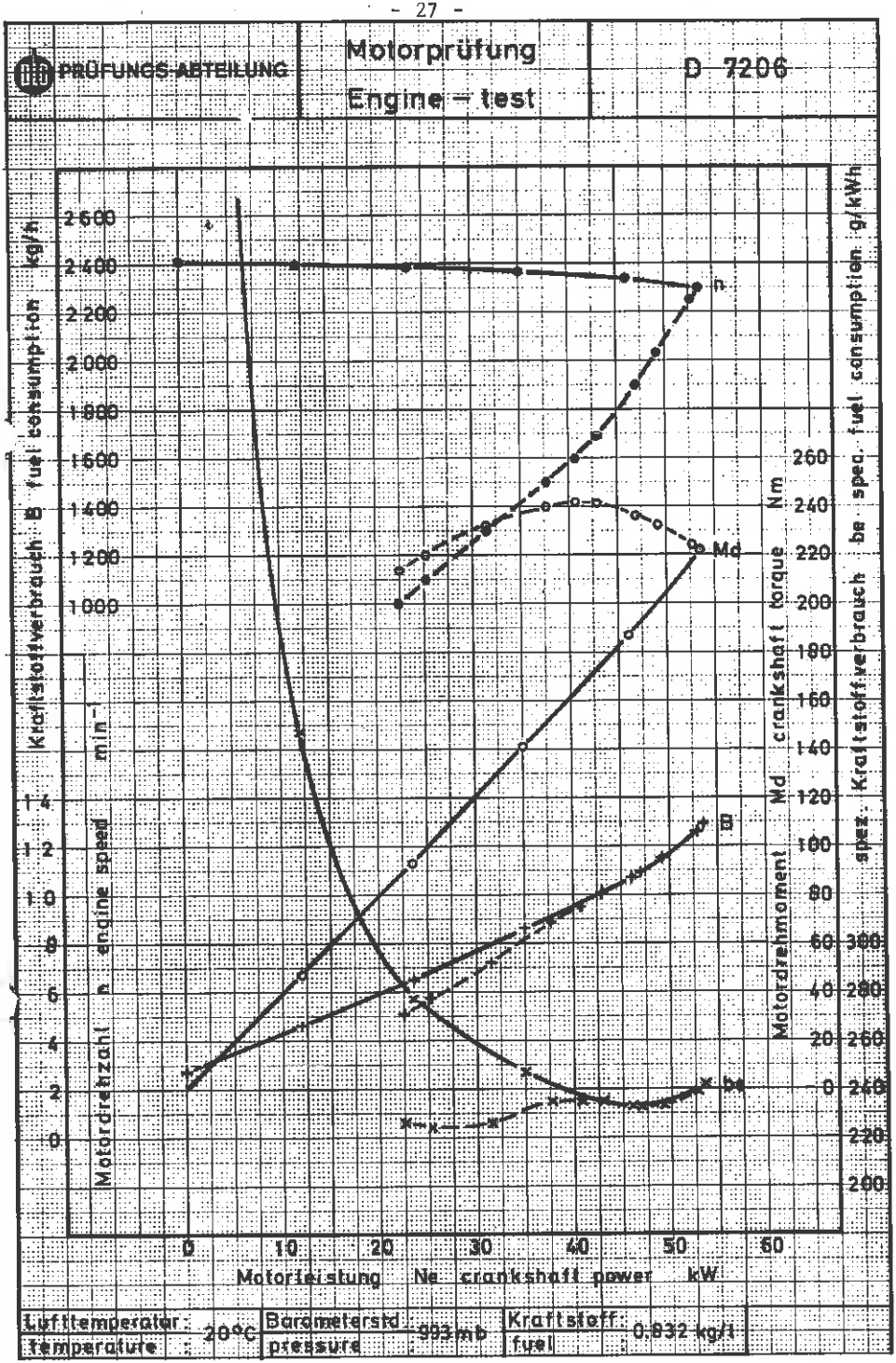
Power kW	Engine speed rev/min	Fuel consumption total l/h	Fuel consumption total kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
At maximum power 2-hour test					
53,5	2300	15,56	12,94	242	3,44
At standard p.t.o. speed (540 rev/min)					
49,2	2025	13,78	11,46	233	3,57
At the speed recommended for drawbar work					
53,5	2300	15,56	12,94	242	3,44
Fuel consumption at part loads					
(i) 85% of torque at maximum power					
45,9	2344	12,86	10,70	233	3,57
(ii) unloaded					
-	2412	3,25	2,70	-	-
(iii) 50% of the load defined in (i)					
23,4	2387	7,78	6,47	277	3,00
(iv) maximum power					
53,5	2300	15,56	12,94	242	3,44
(v) 25% of the load defined in (i)					
11,9	2404	5,52	4,59	387	2,15
(vi) 75% of the load defined in (i)					
34,9	2374	10,37	8,63	247	3,37

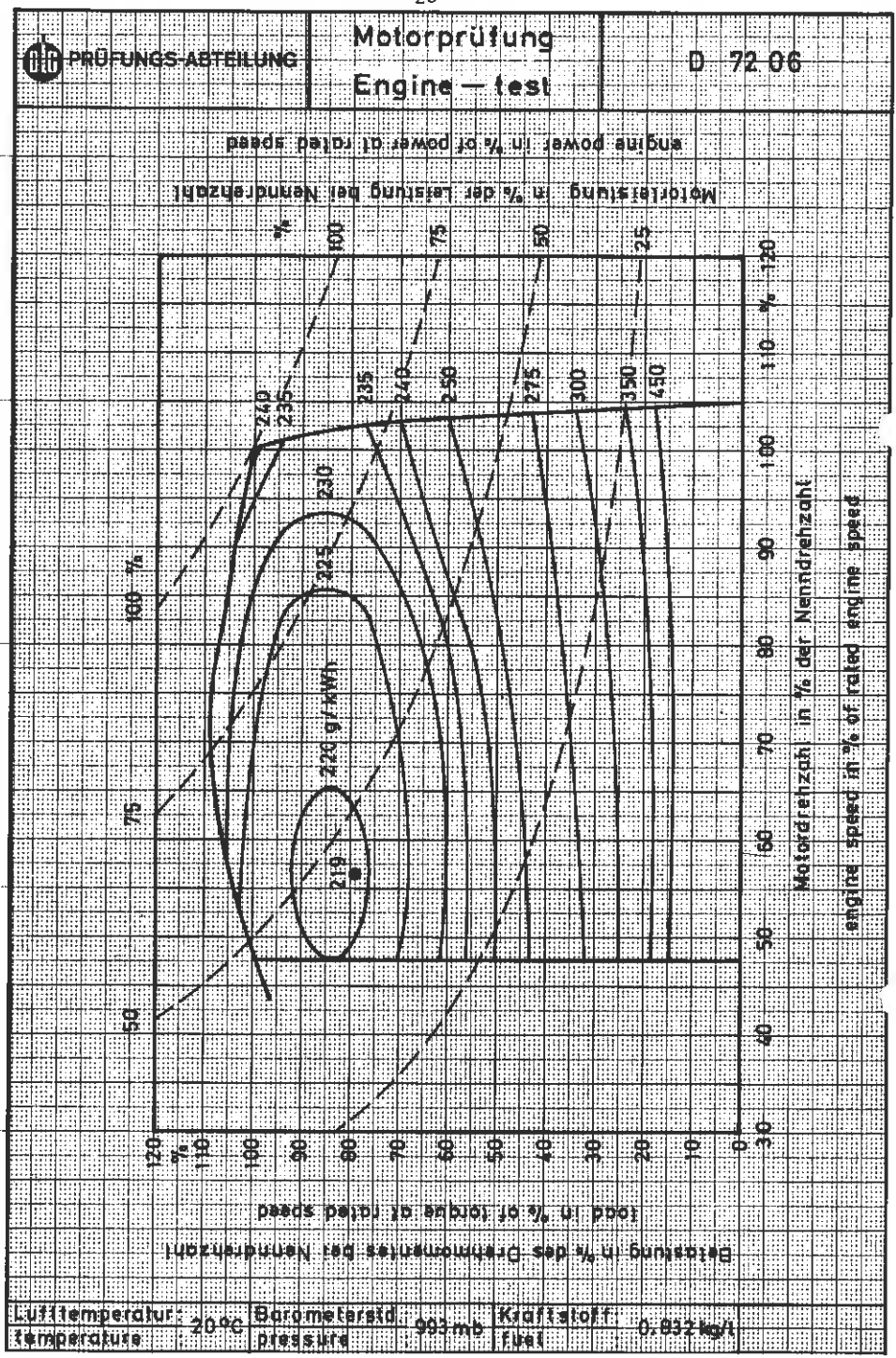
Optimum fuel consumption: 219 g/kWh at 23,9 kW and 1301 rev/min
Standard fuel consumption 1/2 (DIN 9606): 6,06/12,57 l/h
No load maximum engine speed: 2412 rev/min
Torque at maximum power: 222 Nm
Maximum torque: 242 Nm at 1600 rev/min of the engine

Mean atmospheric conditions: temperature 20°C
pressure 993 mbar
relative humidity 95%

Maximum temperatures: coolant not recorded
engine oil 100°C
fuel 23°C


PRÜFUNGS-ABTEILUNG
Motorprüfung
Engine-test
D 72 06
Ne
Md
B
b.e
Motorleistung Ne crankshaft power kW
Kraftstoffverbrauch B fuel consumption kg/h
Motordrehmoment Md crankshaft torque Nm
spez. Kraftstoffverbrauch be spec. fuel consumption g/kWh
Motordrehzahl n engine speed min⁻¹
1000 1200 1400 1600 1800 2000 2200 2400
Lufttemperatur : 20 °C
temperature
Barometerstd. : 993 mb
pressure
Kraftstoff : 0,832 kg/l
fuel


PRÜFUNGS-ABTEILUNG
Motorprüfung
Engine – test
D 7206
Kraftstoffverbrauch B fuel consumption kg/h
2600
2400
2200
2000
1800
1600
1400
1200
1000
Motordrehzahl n engine speed min⁻¹
14
12
10
8
6
4
2
0
n
Md
be
Md crankshaft torque Nm
260
240
220
200
180
160
140
120
100
80
60
40
20
0
spez. Kraftstoffverbrauch be spec. fuel consumption g/kWh
300
280
260
240
220
200
0
10
20
30
40
50
60
Motorleistung Ne crankshaft power kW
Lufttemperatur temperature : 20°C
Barometerstd pressure : 993 mb
Kraftstoff fuel : 0,832 kg/l


PRÜFUNGS-ABTEILUNG
Motorprüfung
Engine — test
D 72 06
Motorleistung in % der Leistung bei Nenndrehzahl
engine power in % of power at rated speed
Motordrehzahl in % der Nenndrehzahl
engine speed in % of rated engine speed
Belastung in % des Drehmomentes bei Nenndrehzahl
load in % of torque at rated speed
Lufttemperatur
temperature
20°C
Barometerstd
pressure
993 mb
Kraftstoff
fuel
0,832 kg/l
240
235
230
225
220 g/kWh
235
240
250
275
300
350
450
219