OECD No 209

Report No. 4o24/SPF

Report on tests in accordance with O.E.C.D. Test Code for agricultural tractors

KLÖCKNER-HUMBOLDT-DEUTZ Diesel -Tractor D 25 c5

Manufactturer: KLÖCKNER - HUMBOLDT - DEUTZ, A.G., Köln-Deutz



Date of Test: January - May 1966

SCHLEPPER - PRÜFFELD DARMSTADT
Darmstadt - Kranichstein

SCHLEPPER-PRÜFFELD

KURATORIUM FÜR TECHNIK IN DER LANDWIRTSCHAFT

REPORT ON TEST No. 4024 /S P F

Deutz-Diesel Tractor D 25 05

Manufakturer: Klöckner-Humboldt-Deutz A.G.
Köln-Deutz

Test requested by: Klöckner-Humboldt-Deutz A.G.
Köln-Deutz

Date of Test: January - May 1966

This report has been approved by the OECD Coordinating Centre (C.N.E.E.M.A.,Antony,France) as beeing in accordance with the OECD Tractor Test Code.

It does not contain an evaluation of the performance of the tractor on practical farm work.

Date of Approval: 18. Oct. 1966

Number of Approval: 2 0 1

Darmstadt, 31. Oct. 1966

Schlepper-Prüffeld Darmstadt-Kranichstein

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SCHLEPPER-PRÜFFELD
Deutz D 25 05

Test No.4024/SPF

Tractor manufacturer:	Klöckner-Humboldt-Deutz A.G., Köln-Deutz
Submitted for test by:	manufacturer
Selected by:	manufacturer with the agreement of Schlepper-Prüffeld Darmstadt
Place of running-in:	Köln-Deutz and Darmstadt
Duration of running-in:	engine 100 hr, tractor 50 hr

SPECIFICATION OF TRACTOR

Tractor

Make: Klöckner-Humboldt-Deutz A.G.,Köln-Deutz
Model: D 25 05
Type: Diesel-tractor, unit construction
Serial No.: 7534/462

Engine

Make: Klöckner-Humboldt-Deutz A.G., Köln-Deutz
Model: F 2 L 812 S type S 1
Type: Air cooled 4-stroke Diesel -engine
Serial No.: 4314 489/90

Cylinders: 2 cylinders, vertical, in line; bore/stroke: 95/120 mm; capacity: 1700 cm^3; compression ratio: 20:1; arragement of valves: overhead valves; cylinder liners: replaceable ribbed single cylinders.

Fuel system: Fuel: commercially available Diesel-oil
Deutz type Nr. A 0155-17-46-110 injection pump; Bosch type DNO SD 165 injection nozzles; injection pressure 120 kp/cm^2; injection timing 21° before TDC; Pierburg type PE 15 507 fuel feed pump; felt tube filter element, sediment bowl and water trap incorporated in fuel tank; capacity of fuel tank: appr. 63 l

Governor: Make: Klöckner-Humboldt-Deutz A.G., Köln-Deutz; centrifugal variable speed type mechanical in corporated in injection pump; governed range of engine speed: 600 rev/min to 2200 rev/min;
rated speeds: for p.t.o.-, field-, tranportation- and beltwork 2100 rev/min

Air cleaner: Main: Make Motor Condensator, Mannheim, flush-oil type, oil capacity 1,14 litres;
Pre-cleaner: Make: Motor-Condensator, Mannheim, centrifugal type

Lubrication system: Forced feed from gear type pump; metal strainer in sump; Mann and Hummel screen type filter in full flow with by-pass valve; Oil capacity: 6 litres; recommended changing period 100-120 hours when normal branded HD-oil is used; 200-240 hours when branded HD-Supplement I-oil is used; recommended oil in:
Winter: HD SAE 20W/20
Summer: HD SAE 30
Tropics: HD SAE 30

Cooling system: Air cooling from V-belt driven axial blower

Electrical equipment Voltage 12 Volt

Starting device: Bosch 12 Volt type EJD 1,8/12 R 73 starter motor; Beru type 108 MJ 9,5 V glowing pin plugs

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

Battery: Lead acid type, 12 Volt 88 Ah, special cold starting battery

Transmission

Clutch: Fichtel and Sachs A.G., Schweinfurt, dry disc clutch, type K 200 KZ, operated by foot-pedal

Gearbox: Klöckner-Humboldt-Deutz A.G., Köln-Deutz, type TW 25.1 sliding gear type gearbox and 2-stage group gear giving 8 forward speeds and 2 reverse

Rear axle and final drive: Klöckner-Humboldt-Deutz A.G., Köln-Deutz; bevel gear type differential gear with crown-wheel and pinion; differential lock fitted, operated by hand lever, self-disengaging.

Oil capacity: Selecting gear, group gear and rear axle total appr. 14 l, recommended changing period after 1500 hrs

Group gear	Gear No.	Number of engine revolutions for one revolution of the driving wheel	Nominal travelling speed for rated speed of engine km/h	m/s
slow stage	1.	244,9:1	1,8	0,50
	2.	182,7:1	2,5	0,69
	3.	119,5:1	3,8	1,05
	4.	81,7:1	5,6	1,55
fast stage	1.	56,0:1	8,1	2,25
	2.	41,8:1	10,9	3,03
	3.	27,4:1	16,6	4,61
	4.	18,7:1	24,3	6,75
	1.R.	182,7:1	2,5	0,69
	2.R.	81,8:1	10,9	3,03

Power take-off	Main p.t.o., proportional engine speed, manually engaged;
Location:	At rear of tractor, in vertical centre plane of tractor, 525 mm above ground
Dimensions:	29 x 34,9 x 8,7 mm = $1\frac{3}{8}$", 6 spline (acc. to DIN 9611, Form A; BS 1495; ASAE S 203.2)
Speed:	610 rev/min at 2100 rev/min rated engine speed; standard p.t.o.-speed 540 rev/min at 1870 rev/min engine speed, may be set by aid of the tractormeter.
Direction of rotation:	Clockwise viewed from tractor rear.
Belt pulley	(not fitted on tractor tested; figures acc. to manufacturers statement)
Location:	At rear of tractor, driving device fitted on p.t.o.; manually engaged.
Dimensions:	Diameter 245 mm, width 100 mm
Speed:	1300 rev/min at 2100 rev/min rated engine speed; linear belt speed 16,7 m/s (acc. to DIN 9630)
Direction of rotation:	Anticlockwise, viewed from right hand side of tractor,
Power lift	Klöckner-Humboldt-Deutz A.G., Köln-Deutz (Deutz Transfermatic System) Hydraulic power lift with draft control, position control, floating position; single acting ram; Bosch type HY/ZRF 1/11 AL (112/1) gear type pump, directly driven from engine; maximum oil pressure 175 kp/cm²; oil capacity normaly appr. 9 l, with additional tank 12 l; hydraulic control valve Bosch type HY/SR 10 H 2/175 (6/2); 2 external tapings with additional hydraulic control valve Bosch type HY/SRZ 10 C 1/1 and HY/SRZ 10 H 1 B 4 .
Pull attachment	
Implement linkage:	Three-point implement linkage categorie I (acc.to DIN 9674) controlled by power lift. Lift hight above ground: from 95 mm to 930 mm, lift rod in foremost hole of lower link and changing of length of lift rods. from 205 mm to 915 mm, lift rod in rearemost hole of lower link and changing of length of lift rods.
Drawbar:	Fixed on hydraulically controlled implement linkage, with central hole and 3 holes in 80 mm distance apart either side of centre line (acc. to DIN 9676); hight above ground from 95 mm to 930 mm adjustable by power lift; distance from rear axle 873 mm at horizontal position of lower links; distance from centre of hole to end of p.t.o. 465 mm. Fixed mounted drawbar (acc. to DIN 9670) commercially available but not fitted an tractor tested.

Trailer hitch:	At rear on tractor; height above ground 675-705-770 mm when using one-axle trailers; changed by a pin. Height above ground 505-635-675-705-770 mm when using two-axle trailers, changed by a pin and reversing hitch. Distance from centre of rear axle 584 mm
Towing hitch:	At front of tractor; height above ground 500 mm

Steering device

Make: Zahnradfabrik Friedrichshafen Z.F.,Friedrichshafen; type 60, model 81 stud steering gear; operated by a handwheel.
(Optional: ZF type 09,model 74 Column Hydrosteering)

Brakes

Parking brake:	Combined with foot-brake, mechanically acting as internal shoe type brake on driving wheels; operated by handlever with locking ratch.
Foot brake:	Combined with parking- brake; mechanically acting as internal shoe type brake on driving wheels; operated by foot-brake. (Optional: divided brakes with hand-brake acting on a shaft of transmission)
Steering brake:	Operated by the divided foot-pedal of the foot-brake; at normal use both parts are connected by a bolt.

Wheels

Steering wheels:	Two at front. Tyres 6.00-16 AS Front 6 ply pneumatic (acc. to Din 7808); maximum permissible wheight on each tyre 620 kg at 3,5 kp/cm², when transporting mounted implements 775 kg; track from 1260 mm (acc. to DIN 9621) to 1860 mm in steps of 100 mm changed by extending front axle. (Optional: normal front axle with track 1260 mm and 1416 mm by reversing wheels)
Driving wheels:	Two at rear. Tyres 11,2/10-28 AS 6 ply pneumatic (acc.to DIN 7807); maximum permissible wheight on each tyre 1070 kg at 1,7 kp/cm² ; when transporting mounted implements 1230 kg; track 1219-1319-1441-1541-1634-1734 mm changed by reversing wheel centres and offset lug type rims. (Optional: reversible wheels, track 1250 mm and 1510 mm acc. to DIN 9621). Rims W 10 x 28
Wheel base:	1865 mm

Weights

With power lift, three-point linkage, full fuel tank and oil, as tested, but without driver.

Weight of tractor without ballast:	Front axle load:	714 kg
	Rear axle load :	931 kg
	Total:	1645 kg
Ballast front	10 weights at front-end of tractor = 300 kg	
Ballast rear	11 weights per wheel = 996 kg	
	water in tyres = 177 kg	
Weight of tractor with ballast:	Front axle load:	1079 kg
	Rear axle load :	2039 kg
	Total:	3118 kg

Seat

Make: Bremshey and Co., Solingen-Ohligs; pan seat with cushion and upholstered back rest, parallelogramm linkage, spring suspension and oil filled shock absorber, suspension adjustable to driver's weight; height above ground appr. 1160 mm, in centre plane of tractor.

Number of grease points (whole tractor) 14

Overall dimensions

Overall length:	3245 mm with drawbar in three-point linkage
Overall width :	1550 mm at 1219 mm and 1250 mm track, without ballast weights
Overall height:	1480 mm to top of back rest
Maximum ground clearance:	380 mm above centreline of tractor 370 mm at 400 mm appart centre line.

Lighting equipment

Electric 12 Volt, acc. to StVZO (German lighting regulation) addionally head-light main beam.

	Height above ground of centre mm	Diameter mm	Distance from outside edge of tractor to centre mm
Head lights	90	131	320
Side lights	1215	80	100
Rear lights	1170	80	165
Reflectors	940	38 x 125	160

Special remarks

Fuel system

According to manufacturers statement the injection pressure now ammounts 115 kp/cm^2

SCHLEPPER-PRÜFFELD
Deutz D 25 05

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FUELS AND LUBRICANTS USED IN TESTS

Laboratory tests

Fuel:	Shell Diesel oil, specific gravity at 15°C 0,83 kg/l (commercially available quality acc. to DIN 51 601)
Engine-oil:	Shell Talona HD 20 (SAE)
Transmission oil:	SAE 90

Track tests

Fuel:	Shell Diesel oil, specific gravity at 15°C 0,83 kg/l (commercially available quality acc. to DIN 51 601)
Engine-oil:	Shell Talona HD 20 (SAE)
Transmission oil:	SAE 90

COMPULSORY TESTS

(1) MAIN POWER - TAKE-OFF PERFORMANCE

Date and location of tests: January 1966, Darmstadt-Kranichstein

Type of dynamometer: Schenck hydraulic dynamometer

Maximum power

Horsepower (metric hp.)	Speed		Total	Fuel consumption	
	Engine rev/min	p.t.o. rev/min	litre/hour	Specific g/hp	hph/litre
At maximum power - 2 hours test					
21,8	2100	608	5,27	201	4,14
At standard p.t.o. speed (540/1000 rev/min)					
18,9	1870	540	4,68	204	4,03
At standard belt speed (16,65 m/s)					
21,8	2100	608	5,27	201	4,14
At the speed recommended by the manufacturer for drawbar work					
21,8	2100	608	5,27	201	4,14

Fuel consumption at part loads

(i) 85 % of torque at maximum power					
18,8	2130	615	4,77	211	3,94
(ii) unloaded					
1,6	2165	626	2,01	1055	0,80
(iii) 50 % of the load defined in (i)					
9,5	2150	622	3,06	268	3,16
(iv) maximum power					
21,8	2100	608	5,27	201	4,14
(v) 25 % of the load defined in (i)					
4,8	2165	626	2,48	430	1,94
(vi) 75 % of the load defined in (i)					
14,2	2145	620	4,07	238	3,49

No load maximum engine speed: 2180 rev/min

Equivalent torque at maximum power: 7,44 kpm

Maximum equivalent torque 7,65 kpm at 1975 rev/min of the engine

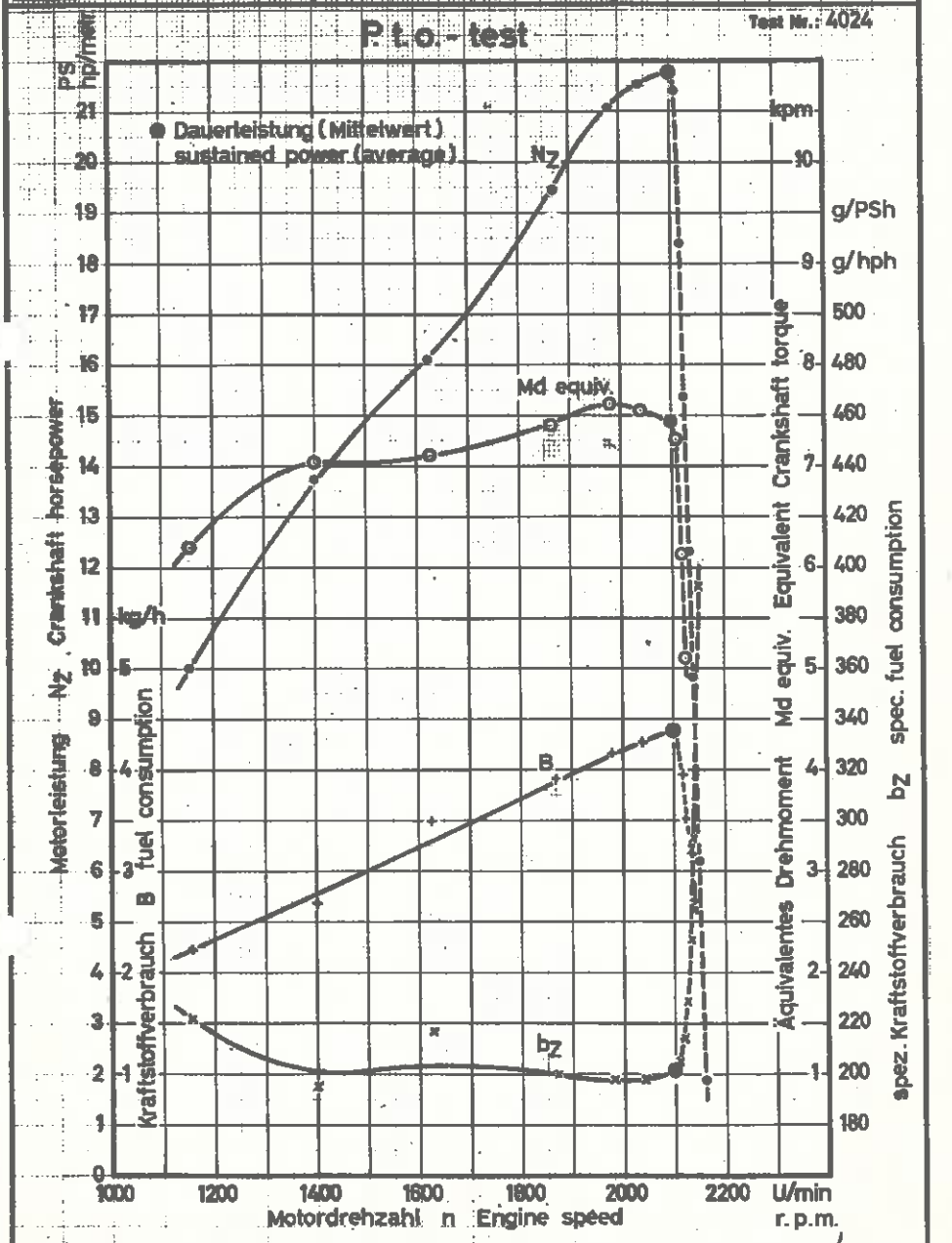
Means atmospheric conditions temperature: 11°C
pressure: 756 mm Hg.
relative humidity: 53 %

Maximum temperatures coolant: not recorded
engine oil: 67°C
fuel: 20°C

Schlepperprüffeld Darmstadt | **Zapfwellenleistung** | Deutz Dieselschlepper D 25 D5, Deutz Dieselmotor F 2 L 812

P.t.o.-test

Test Nr.: 4024



Motor Nr.: 43 14 489/90	Motoröl: Shell Talona HD20	Versuchstag: 24. 1. 1966	Versuchsltg.:
Schlepper Nr.: 7534/462	Lufttemperatur: 14° C	Versuchs Nr.: 01/4024/66	
Kraftstoff: DK 0,830/15°C	Barometerstd.: 753mmQS	Kurvenblatt: 1	Fl.

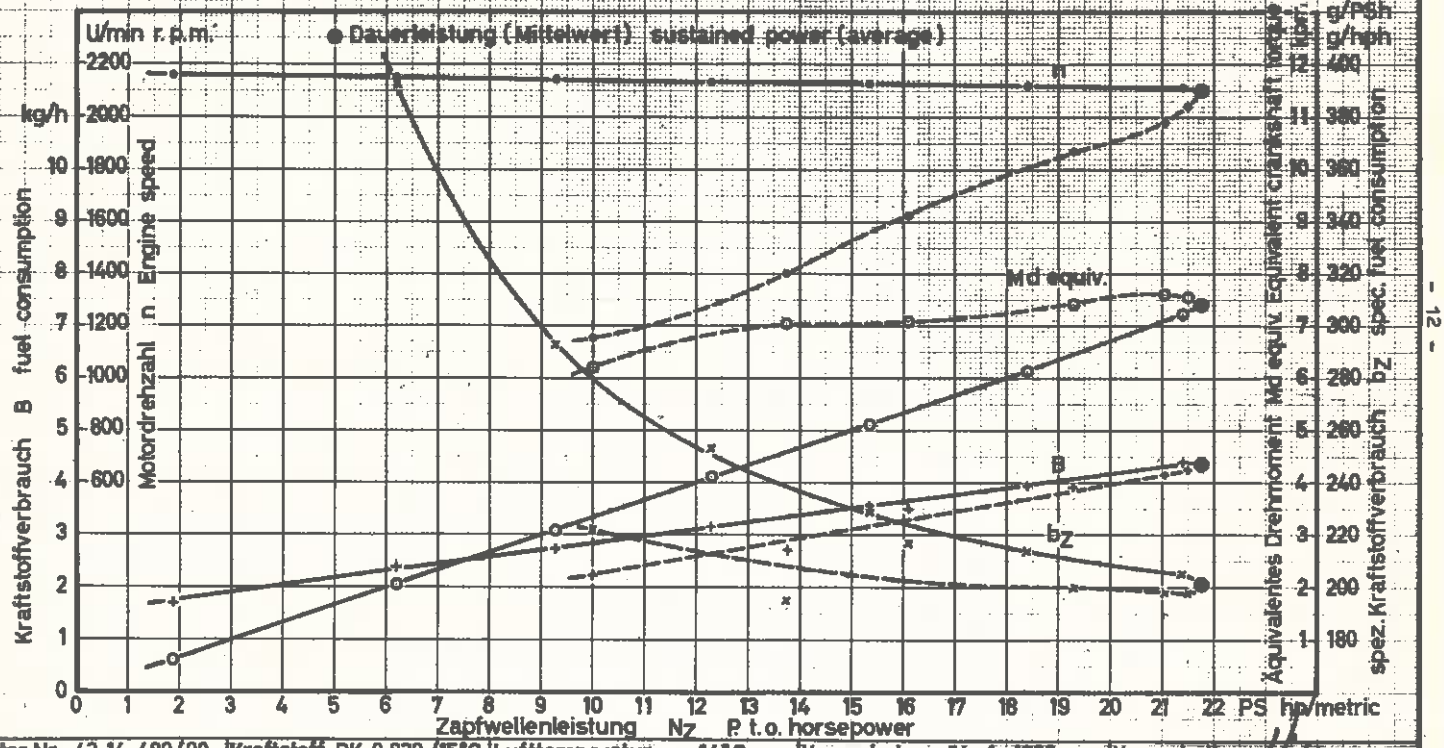
Schlepperprüffeld Darmstadt

Zapfwellenleistung

Deutz Dieselmotor
D 28 06
Deutz Dieselmotor F 2 L 612

P.t.o.- test

Test-Nr. 4024



Motor Nr.: 43 14 489/90	Kraftstoff: DK 0,830 /15°C	Lufttemperatur: 14°C	Versuchstag: 24. 1. 1966	Versuchsltg.:
Schlepper Nr.: 7534/462	Motoröl: Shell Talona HD 20	Barometerstand: 753 mm QS	Versuchs Nr.: 01 [illegible] 24/66	Kurvenblatt: 2 Pf.

(2) DRAWBAR PERFORMANCE

Date of tests: 12.-20.4.1966

Type of track: concrete

Height of drawbar above ground: 580 mm

Gear No. and Group	Horse power hp(metric)	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 (tractor ballasted)												
1.S.	15,6	2740	2145	15,0	3,02	276	8	not.rec.	78	8	65	741
2.S.	16,3	2110	2100	11,9	3,11	267	14	not.rec.	80	16	65	741
3.S.	17,4	1396	2100	7,4	3,30	252	14	not.rec.	82	16	65	741
4.S.	17,8	940	2100	4,4	3,37	247	10	not.rec.	75	5	60	743
1.F.	18,0	640	2100	2,9	3,41	245	12	not.rec.	78	7	60	743
2.F.	17,0	448	2100	2,1	3,22	260	18	not.rec.	82	15	55	740
(ii) FIVE-HOUR-TEST AT 75 % OF PULL AT MAXIMUM POWER IN 4th GEAR OF SLOW GROUP												
4.S.	14,0	708	2160	3,0	3,07	268	21	not.rec.	61	21	62	747
(iii) FIVE-HOUR-TEST AT PULL CORRESPONDING TO 15 % WHEEL SLIP IN TEST (i)												
1.S.	15,6	2740	2145	15,0	3,00	278	18	not.rec.	71	17	62	747
(v) MAXIMUM POWER (tractor unballasted)												
1.S.	8,7	1490	2133	15,5	-	-	28	not.rec.	66	30	60	750
2.S.	12,1	1550	2140	15,6	-	-	24	not.rec.	66	25	60	750
3.S.	17,0	1405	2100	12,3	-	-	27	not.rec.	74	28	60	750
4.S.	17,8	950	2100	7,3	-	-	24	not.rec.	74	25	65	754
1.F.	18,4	654	2100	4,6	-	-	28	not.rec.	73	30	60	754
2.F.	17,8	464	2100	2,7	-	-	30	not.rec.	73	33	60	754

Total oil consumption during ten hours duration of tests (ii) and (iii) 22,3 g/h

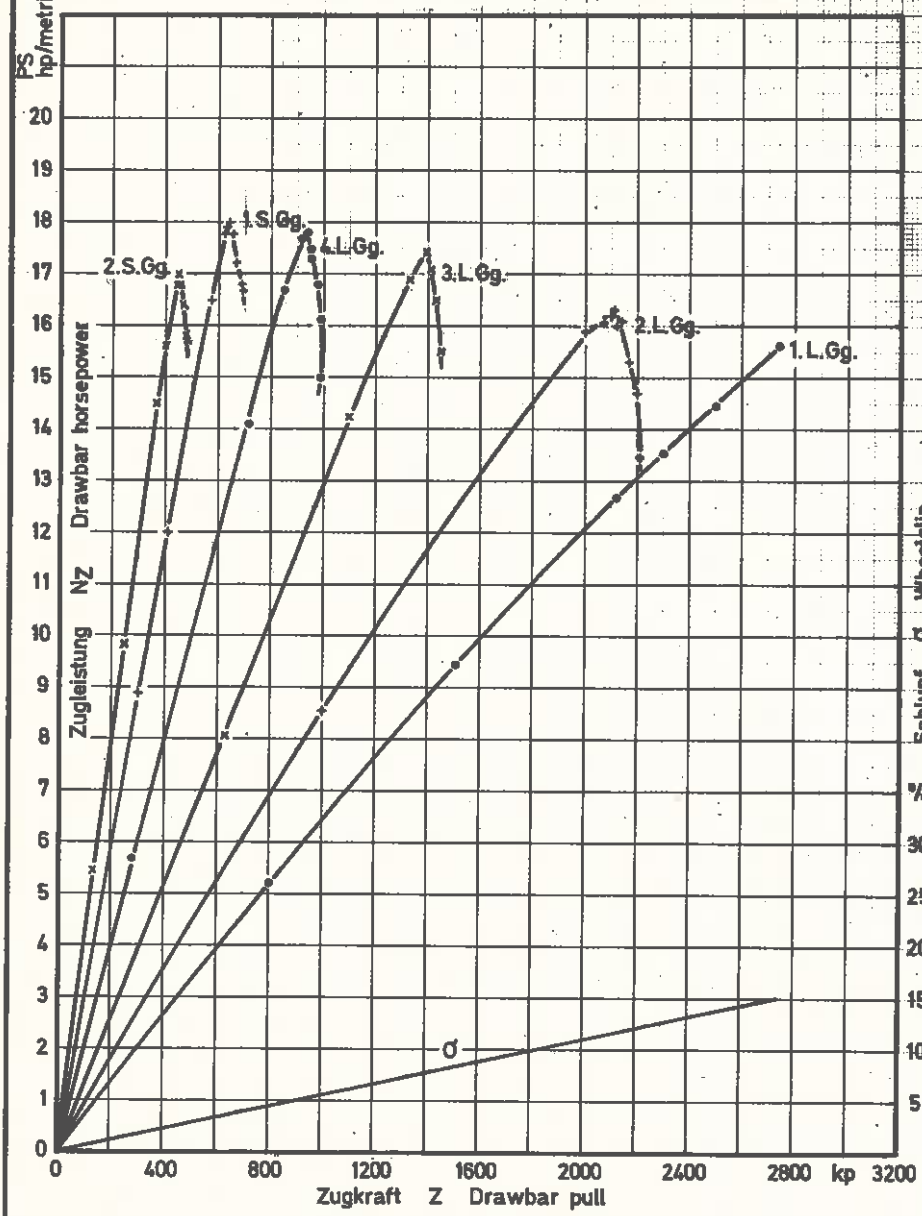
Schlepperprüffeld Darmstadt

Zugprüfung
Drawbar-test

Deutz Dieselschlepper
D 25 05
Deutz Dieselmotor F 2 L 612

mit Ballast with ballast

Test Nr.: 4024



Motor Nr.: 43 14 489/90	Motoröl: Shell Talona HD 20	Versuchstag: 12. 4. 1966	Versuchsltg.:
Schlepper Nr.: 7534/462	Lufttemperatur: 16 ° C	Versuchs Nr.: 4024/024/66	
Kraftstoff: DK 0,830/15 ° C	Barometerstd.: 741 mm QS	Kurvenblatt: 6	Fl.

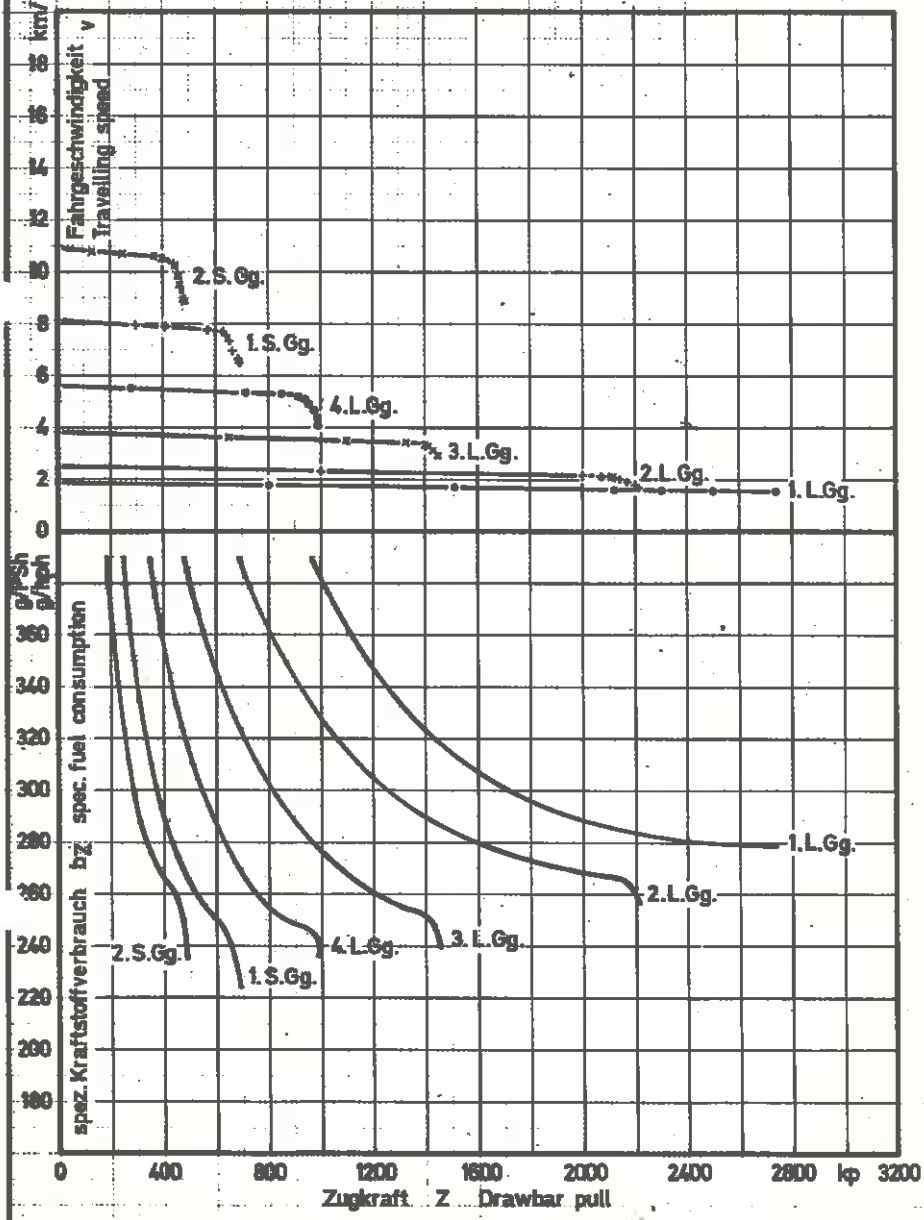
Schlepperprüffeld Darmstadt

Zugprüfung
Drawbar - test

Deutz Dieselschlepper D 25.06
Deutz Dieselmotor F 2 L 812

mit Ballast — with ballast

Test Nr.: 4024



Motor Nr.: 43 14 489/90	Motoröl: Shell Talona HD 20	Versuchstag: 12. 4. 1966	Versuchsltg.:
Schlepper Nr.: 7534/462	Lufttemperatur: 16° C	Versuchs Nr.: 4024/024/66	
Kraftstoff: DK 0,830/15°C	Barometerstd.: 741 mm QS	Kurvenblatt: 7	FL

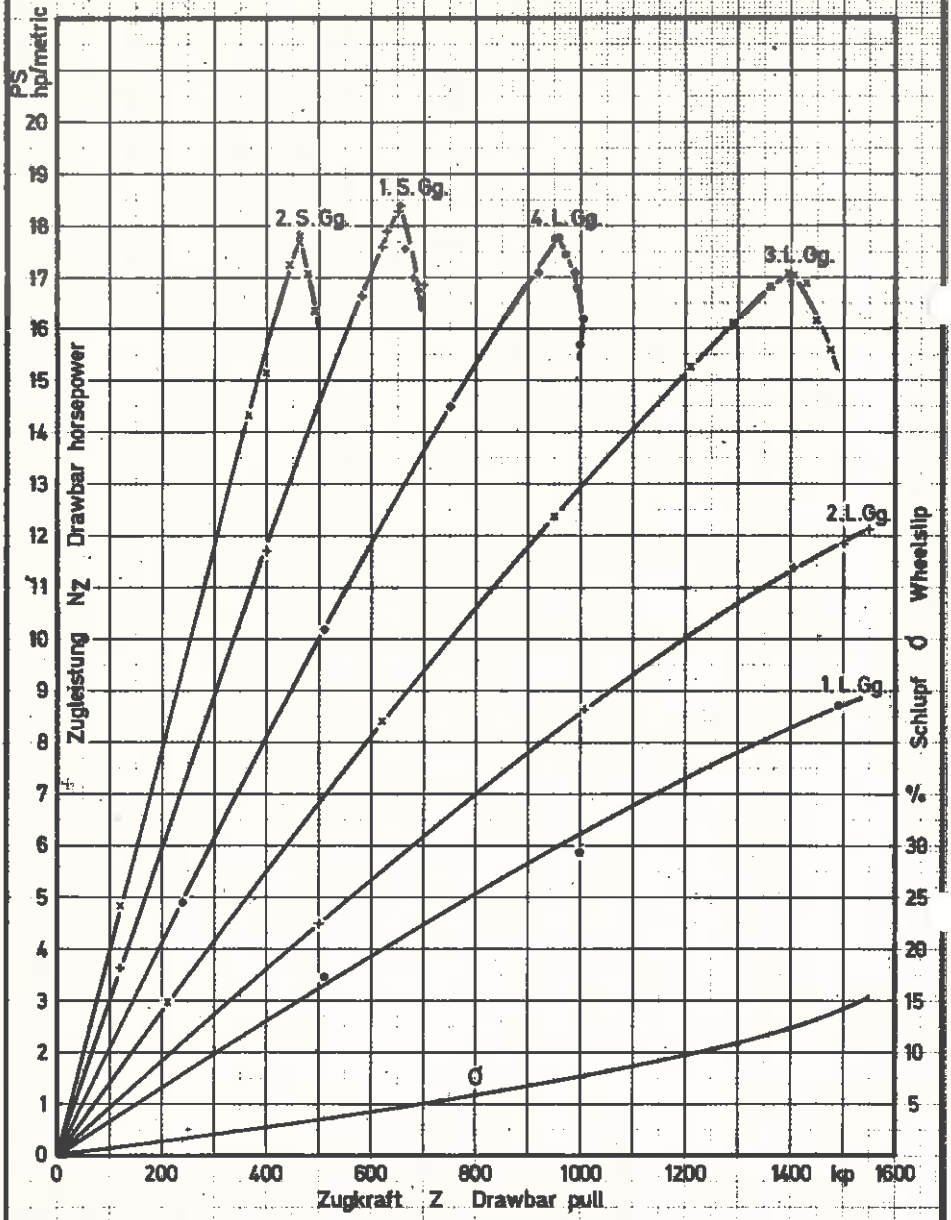
Schlepperprüffeld Darmstadt

Zugprüfung
Drawbar - test

Deutz Dieselschlepper D 25.06
Deutz Dieselmotor F 2 L 612

ohne Ballast without ballast

Test Nr.: 4024



Motor Nr.: 43 14 489 / 90	Motoröl: Shell Talona HD 20	Versuchstag: 13. 5. 1966	Versuchsltg.:
Schlepper Nr.: 7534 / 462	Lufttemperatur: 16° C	Versuchs Nr.: 4024 / 056 / 66	
Kraftstoff: DK 0,830 / 15° C	Barometerstd.: 747mm QS	Kurvenblatt: 8	FL

(3 and 4) TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 6,00-16 AS Front, without ballast
rear: 11,2/10-28 AS, with ballast

Track of wheel front: 1260 mm
rear: 1250 mm

	With brakes		Without brakes	
	left-hand	right-hand	left-hand	right-hand
Radius of turning space	3,4 m	3,3 m	3,7 m	3,6 m
Radius of turning circle	3,2 m	3,2 m	3,5 m	3,4 m

(5) LOCATION OF CENTRE OF GRAVITY

	With ballast	Without ballast
Height above ground	585 mm	665 mm
Distance forward from the vertical plane containing the axis of the rear wheels	634 mm	778 mm
Distance from the medium plane parallel to the longitudinal axis of the tractor bisecting the track	0 mm	0 mm

(6) BRAKE TESTS

A) FOOT BRAKE

Date of Test: 20.5.1966

Type of Track: concrete

Type of decelerometer: IfK Brake recorder, Aug. Fischer K.G., Göttingen

Travelling speed of tractor: 24,3 km/h, 4th gear fast group

With cold brakes

		Tractor without ballast	Tractor with ballast
Deceleration	m/s^2	6,0	6,2
Stopping distance	m	8,7	8,6
Force on pedal	kp	22	36

Brake fade characteristics, hot tests, tractor without ballast

Deceleration: hot/cold 86,7 %

Stopping distance: cold/hot 100,0 %

Force on pedal: cold/hot 100,0 %

B) PARKING BRAKE

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

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

SCHLEPPER-PRÜFFELD
Deutz D 25 05

Test No.4024/SPF

(7) MEASURMENT OF AMBIENT NOISE EMITTET BY THE TRACTOR

Date of Test: 24.5.1966
Type of Track: concrete
Type of sound level meter: EZGN, Rohde & Schwarz, München

Results of tests

Speed: 4th gear of fast group
Travelling speed before acceleration: 18,3 km/h
Sound level: 86 dBA

(8) NOISE MEASURMENT AT THE DRIVERS EAR

Date of Test: 24.5.1966
Type of sound level meter: EZGN, Rohde & Schwarz, München
Type of octavefilter: PBO Rohde & Schwarz, München
Type of Track: concrete

No cab fitted on tractor

Results of tests

Gear	Travelling speed*) nominal km/h	real	Sone
1.F.	8,1	7,8	121
4.S.	5,6	5,2	141

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

SCHLEPPER-PRÜFFELD
Deutz D 25 05

Test No. 4024/SPF

(9) TEST OF POWER LIFT AND HYDRAULIC PUMP PERFORMANCE

Date and location of tests: 26. 5. 1966, Darmstadt-Kranichstein

Hydraulic fluid: Shell Talona HD 20 (Engine oil)

POWER LIFT

a) Lift rods in the foremost holes of the lower links

Height above ground in down position hitch point	test frame	Total vertical movement	Maximum force exerted through full lift range	Pressure of hydr. oil	Lifting force at front axle load = 0 kp
mm	mm	mm	kp	kp/cm²	kp
Measured at the hitch points of lower links					
80	-	640	1210	175	1290 *)
325	-	572	1350	175	1570
Measured at the test frame 610 mm to the rear of the hitch points					
80	90	675	938	175	938
325	320	722	833	175	960

*) = max.Lifting force

b) Lift rods in the rearemost holes of the lower links

Height above ground in down position hitch point	test frame	Total vertical movement	Maximum force exerted through full lift range	Pressure of hydr. oil	Lifting force at front axle load = 0 kp
mm	mm	mm	kp	kp/cm²	kp
Measured at the hitch points of lower links					
183	-	552	1335	175	1600
415	-	467	1515	175	1620
Measured at the test frame 610 mm to the rear of the hitch points					
183	180	598	1000	175	945
415	415	597	897	175	930

Type of linkage lock for tranporte: not fitted

Oppening pressure of the cylinder over pressure relief valve: 220-250 kp/cm² (not tested, manufacturers rating)

PUMP CHARACTERISTICS

(i) opening pressure of relief valve: 177 kp/cm²
sustained pressure by the open relief valve: 174 kp/cm²

Pump delivery rate at external tapping:
(ii) at minimum pressure 24,5 l/min
(iii) at maximum hydraulic power 23,3 l/min

Power 8,9 hp (metric)

Delivery pressure 170 kp/cm²

OPTIONAL TESTS

(10) Engine Test

Date and location of tests: January 1966, Darmstadt-Kranichstein

Type of dynamometer: Schenck hydraulic dynamometer

Maximum power

Horsepower (metric hp.)	Speed Engine rev/min	Total litre/hour	Fuel consumption Specific g/hp	hph/litre
At maximum power - 2 hours test				
22,3	2100	5,17	197	4,32
At standard p.t.o. speed (540/1000 rev/min)				
20,6	1870	4,73	190	4,35
At standard belt speed (16,65 m/s)				
22,3	2100	5,17	197	4,32
At the speed recommended by the manufacturer for drawbar work				
22,3	2100	5,17	197	4,32

Fuel consumption at part loads

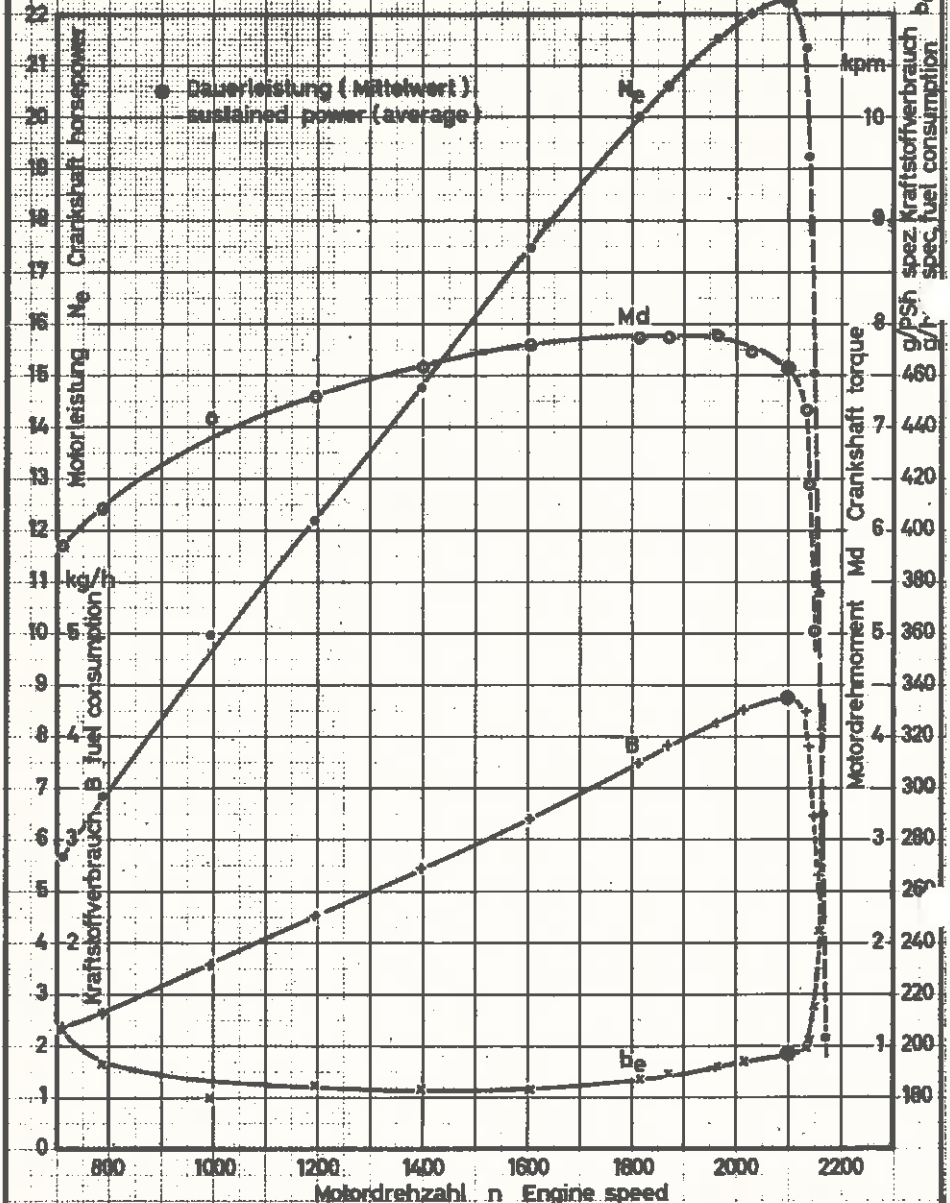
(i) 85 % of torque at maximum power				
19,1	2143	4,62	202	4,13
(ii) unloaded				
0,9	2182	1,70	1610	0,15
(iii) 50 % of the load defined in (i)				
9,7	2163	3,01	259	3,22
(iv) maximum power				
22,3	2100	5,17	197	4,32
(v) 25 % of the load defined in (i)				
4,8	2170	2,31	397	2,05
(vi) 75 % of the load defined in (i)				
14,4	2152	3,82	220	3,77

Optimum fuel consumption: 183 g/hph at 15,9 hp and 1506 rev/min
No load maximum engine speed: 2185 rev/min
Torque at maximum power: 7,7 kpm
Maximum torque: 7,9 kpm at 1965 rev/min of the engine
Means atmospheric conditions temperature: 14°C
pressure: 749 mm Hg.
relative humidity: 51 %

Maximum temperatures
coolant: no recorded
engine oil: 69°C
fuel: 22°C

Schlepperprüffeld Darmstadt | **Motorleistung** | Deutz Dieselschlepper D 25.05 Deutz Dieselmotor F 2 L 812

PS hp/metric — Engine - test — Test Nr.: 4024

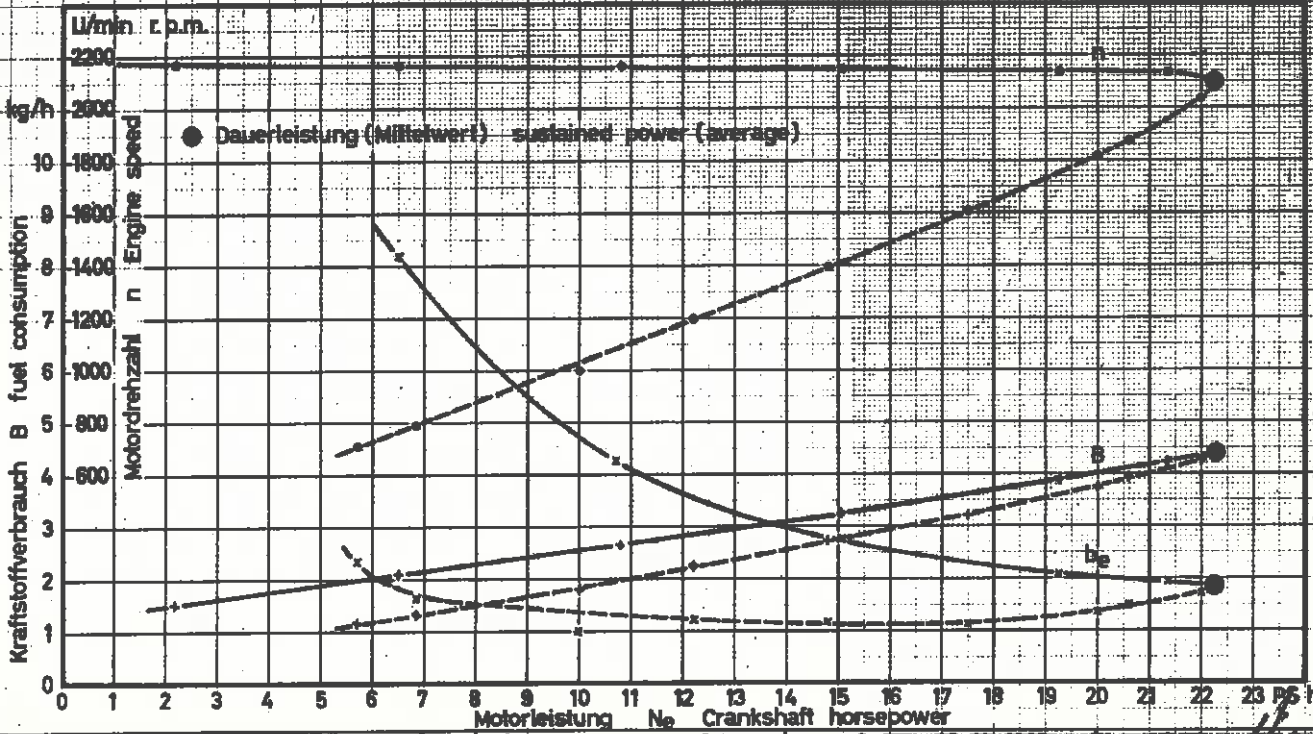


Motor Nr.: 43 14 489/90	Motoröl: Shell Talona HD 20	Versuchstag: 15.12.1965	Versuchsltg.:
Schlepper Nr.: 7534/462	Lufttemperatur: 14 °C	Versuchs Nr.: 149/4024/65	Fl.
Kraftstoff: DK 0,830/15 °C	Barometerstd.: 754 mm QS	Kurvenblatt: 3	

Schlepperprüffeld Darmstadt

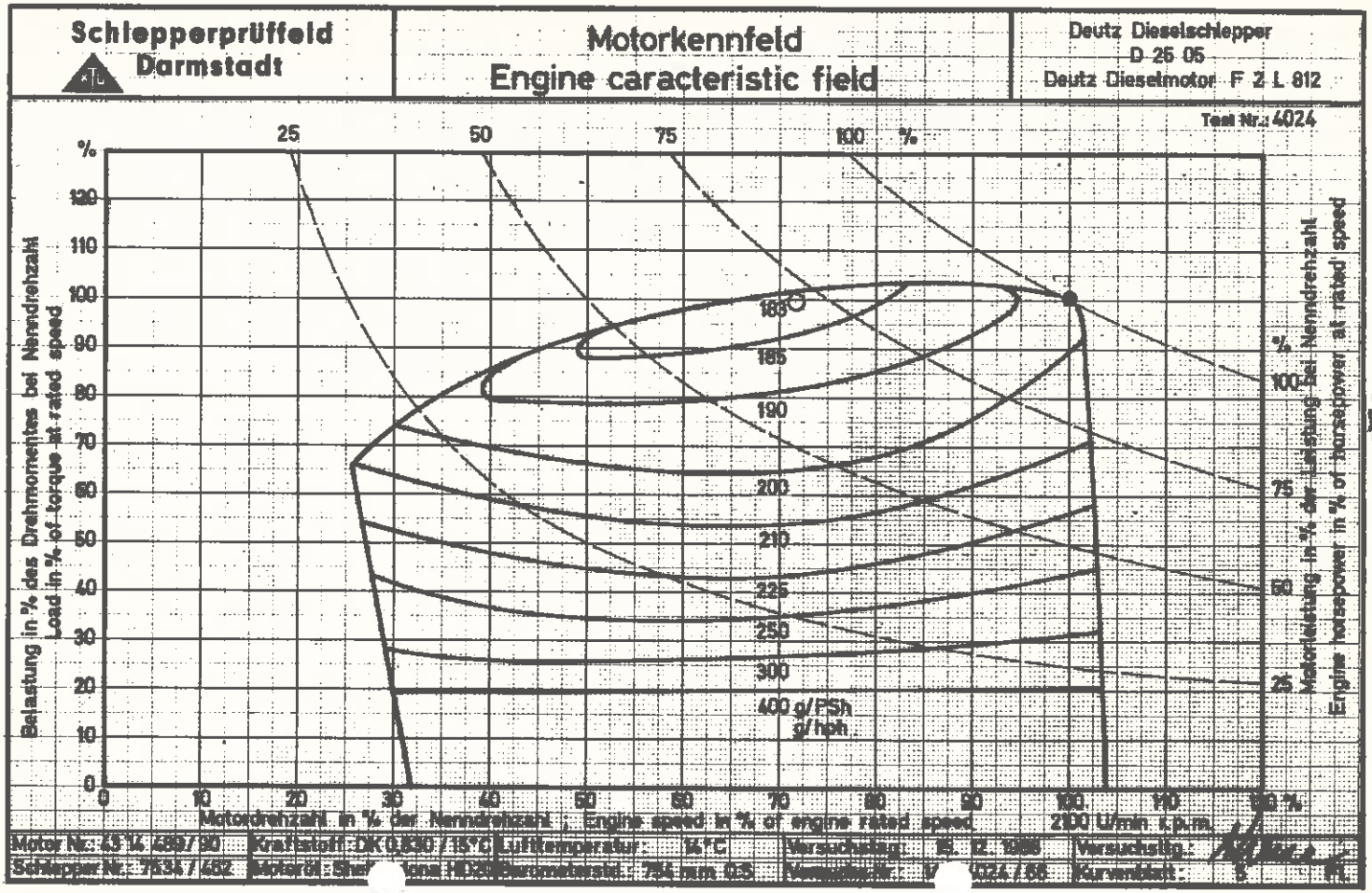
Motorleistung

Engine - test



Motor Nr.: 43 14 489/90	Kraftstoff: DK 0,830 /15°C	Lufttemperatur: 14 ° C	Versuchstag: 15. 12. 1965	Versuchstg.:
Schlepper Nr.: 7534 /462	Motoröl: Shell Talona HD 20	Barometerstd.: 754 mm Q.S	Versuchs Nr.: 149/4024/65	Kurvenblatt: 4

Pf.


Schlepperprüffeld
Darmstadt
Motorkennfeld
Engine caracteristic field
Deutz Dieselschlepper
D 25 05
Deutz Dieselmotor F 2 L 812
Test Nr.: 4024
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
2100 U/min r.p.m.
185
190
200
210
225
250
300
400 g/PSh
g/hph