GEPRÜFT

PROT.Nr.

O.E.C.D. Report No.: 253

REPORT ON TEST IN ACCORDANCE WITH O.E.C.D. TEST CODE FOR AGRICULTURAL TRACTORS

STEYR-DIESEL-TRACTOR »PLUS 40«

Manufactured by: Steyr-Daimler-Puch AG.,
Steyr, Oberösterreich,
Austria



Test No.: 031/68

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

Date of Approval: 19.12.1968 Serial No.: 253

BUNDESVERSUCHS- UND PRÜFUNGSANSTALT FÜR LANDWIRTSCHAFTLICHE MASCHINEN UND GERÄTE, WIESELBURG

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 an practical farm work.

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Tractor manufacturer:	STEYR-DAIMLER-PUCH AG., A-4400 Steyr
Submitted for test by:	Manufacturer
Selected by:	Bundesversuchs- und Prüfungsanstalt für landwirtschaftliche Maschinen und Geräte, Wieselburg
Place of running-in:	Steyr-Daimler-Puch AG., Steyr
Duration of running-in:	25 hours

SPECIFICATION OF TRACTOR

Tractor

Make:	Steyr-Daimler-Puch AG., Steyr
Model:	PLUS 40
Type:	Wheel tractor
Serial No.:	192-1467

Engine

Make:	Steyr-Daimler-Puch AG., Steyr
Model:	STEYR WD 307
Type:	Direct injection type Diesel, 4-stroke
Serial No.:	1020
Cylinders:	3 cylinders, vertical in line, bore/stroke: 98/100 mm, capacity: 2262 cm^3; compression ratio: 16,8 : 1; arrangement of valves: overhead; cylinder type: wet liners
Fuel system:	Type of fuel feed: by wing unit pump in the Bosch distributor injection pump; fuel filter: strainer in the tank, Bosch duble filter with water trap; capacity of fuel tank: appr. 62 l; injection pump: Bosch distributor BOSCH EP/VA3/90H1 200 BR 143; manufacturer's production setting: injection timing 23° - 1° before TDC; injection nozzle: BOSCH DLLA 150 S 396 or F. & M. D1 LMK 150/21 manufacturer's production setting: injection pressure 220 + 5 kg/cm^2; quantity of fuel feed: 37 + 1 mm^3/stroke at 2400 rev/min
Governor:	Make: BOSCH Type: hydraulic governor Range of speed: 600 to 2650 rev/min Rated speeds for p.t.o.-work (540 rev/min) 2195 rev/mi for field-work ..... 2400 rev/mi for transportation-work ..... 2400 rev/mi for belt-work (1020 rev/min) 2370 rev/mi

Air cleaner:	Make: IFE 808 - 6000 E Type: oil bath air cleaner; oil capacity: appr. 1 l
Lubrication system:	Forced feed from gear type pump; type of filter: oil filter in full flow, throw away filter; oil capacity: appr. 6 l; oil change period: 200 hours
Cooling system:	Type: water circulation by water pump, sealed cooling system with frost protected STEYR longtime filling (-35°C), control-eye for coolants control; coolant capacity: appr. 10,4 l; means of temperature control: indicate instrument
Starting system:	BOSCH type JD (R) 12 V 1,8 PS starter motor; aids for cold starting: glow filament in the intake manifold

Electrical system:

Voltage:	12
Generator:	BOSCH type EH (R) 14 V 11 A 19
Battery:	BÄREN acid battery 12 Volt/98 Ah; DIN 72311

Transmission:

Clutch:	Make: STEYR-DAIMLER-PUCH AG., Steyr single-plate dry clutch, foot pedal operated, for engine p.t.o. a not inter-dependent multiplate clutch operated by hand lever
Gearbox:	Make: STEYR-DAIMLER-PUCH AG., Steyr, Type: group gearbox, 2 x 4 speeds forward, 2 x 3 reverse
Rear axle and final drive:	Make: STEYR-DAIMLER-PUCH AG., Steyr, Type: central axle, bevel gear drive with Gleason-spiral cut, acting by planetary gear on rear wheels; differential lock: lockable bevel differential gear in the rear axle
Oil capacity:	Gearbox and rear axle: 25 l SAE 90; planetary gear: 2,8 l SAE 90; change period: 1200 h

Group gear	Gear No.	Number of engine revolutions for one revolution of the driving wheel	Nominal travelling speed for rated speed of engine 2400 rev/min
On the field	1.L.	336,32	1,57 km/h
	2.L.	193,76	2,73
	3.L.	117,77	4,49
	4.L.	71,34	7,41
On roads	1.S.	92,78	5,70
	2.S.	53,45	9,89
	3.S.	32,49	16,26
	4.S.	19,68	26,85
Reverse	1.LR.	334,33	1,58
	2.LR.	192,62	2,74
	3.LR.	117,07	4,51
Reverse	1.SR.	92,23	5,73
	2.SR.	53,14	9,94
	3.SR.	32,30	16,36

Power take-off:

Location:	At rear in vertical centre plane of tractor, 484 mm above ground
Dimensions:	29 x 34,9 x 8,7, 6 splines A DIN 9611
Speed:	590 rev/min at rated engine speed 2400 rev/min, engine speed 2195 rev/min at standard p.t.o. speed 540 rev/min
Direction of rotation:	Right viewed from driving end
Ground speed:	Distance travelled for 1 revolution of p.t.o. 0,1065 m
Number of p.t.o. revolutions for one revolution of driving wheel	34,44; direction of rotation right viewed facing driving end with tractor in forward gear
Details of other p.t.o.:	Frontal p.t.o. 943 rev/min at engine speed 2400 rev/min, for use to drive the mowing machine

Belt pulley:

Location:	At rear of tractor, right beside the mean p.t.o.
Dimensions:	250 mm dia, 160 mm width
Speed:	Linear 1034 m/min and 1317 rev/min at rated engine speed 2400 rev/min
Engine speed:	2370 rev/min at standard linear speed 1020 m/min
Direction of rotation:	Right viewed from shaft end

Power lift: Make: STEYR-DAIMLER-PUCH AG., Steyr, control gear BOSCH HY/SR10H2/175/4; type: oil hydraulic; oil capacity: 10 l SHELL Tellus 23 SAE 10W; vertical lift movement: max. 615 mm to 855 mm above ground

Pull attachments:

Drawbar: Fixed on three point implement linkage; height above ground: max. 855 mm, min. 240 mm; method of changing position: adjustable by power lift; distance from rear axle: 850 mm at lowest position; position relative to p.t.o.: 607 mm; perforation: 5 holes with 130 mm distance at times

Trailer hitch: (rotating) Height above ground: 352, 380, 625, 653 and 689 mm by changing trailer hitch case; distance from rear axle: 367 mm; position relative to p.t.o.: 110 mm

Towing hitch: Height above ground: 460 mm; distance from front axle: 430 mm

Steering: Make: Zahnradfabrik Friedrichshafen (ZF); system: Gemmersteering, model: Gd 7328; type: worm roller steering; method of operation: mechanic, by hand wheel

Brakes: Make: STEYR-DAIMLER-PUCH AG., Steyr; type: mechanical internal shoe brake acting on rear wheels; method of operation: by foot pedal; type of parking brake: mechanical internal shoe brake acting on rear wheels; method of operation: by hand lever brake

Wheels:

Steering wheels: Two at front; type of tyres: tractor front wheel tyres; size: 6,00-16AS Front; ply rating: 6; maximum permissible weight on each tyre: 560 kp at 2,5 kp/cm^2 pressure; (for operation with front loader to 6 km/h up to 100 % overloading); track width: 1270 mm; method of changing: at changed wheels 1430 mm (as equipment by request track width with changeable track 1270, 1370, 1470, 1570 and 1670 mm)

Driving wheels: Two at rear; type of tyres: tractor driving wheel tyres; size: 12,4/11-28 AS; ply rating: 6; rim size: W10 x 28; maximum permissible weight on each tyre: 1200 kp at 1,5 kp/cm^2 pressure; track width: 1250 mm; method of changing: at changed wheels 1500 mm (as equipment by request graduated with 50 mm from 1250 to 1650 mm changeable)

Wheel base: 1950 mm

Tractor and ballast weights:
(without driver but with tank full)

Weight without ballast:	Front:	730 kp
	Rear:	1140 kp
	Total:	1870 kp
Ballast:	Front 8 weights	125 kp
	Rear 3 weights per wheel:	160 kp
	water per wheel:	125 kp
Weight with full ballast:	Front:	855 kp
	Rear:	1710 kp
	Total:	2565 kp

Seat: Tilting suspended seat with spring properties tested by BVPA Wieselburg; make: FRITZMEIER or GRAMMER; suspension: torsion bars at FRITZMEIER-seat, helical springs at GRAMMER-seat; damping: hydraulically; adjustment: the spring of the seat is adjustable by a screw; axial adjustment: 80 mm

Number of grease points: (Whole tractor): 18

Overall dimensions:

Overall length:	3330 mm, with front ballast weights 3450 mm
Overall width:	1614 mm, at changed wheels 1800 mm 1774 mm with ballast wights
Overall height:	1534 mm

Lighting:

	Height above ground of centre cm	Diameter cm	Distance from outside edge of tractor to centre cm
Head lights	78	14 x 7,5	60,5
Side lights	120	8	8
Rear lights	119,5	8	8
Reflectors	110,5	10,2 x 5,8	8

FUEL AND LUBRICANTS USED IN TESTS:

Laboratory tests:	Fuel: ELAN Diesel fuel, specific gravity at 15°C: 0,840 kp/l, Cetane No. 46,8 (quality corresponds with DIN 51601) Engine oil: SHELL Rotella S Oil SAE 30 HD Transmission oil: SHELL high pressure transmission oil light HDL SAE 90
Track tests:	Fuel: ELAN Diesel fuel, specific gravity at 15°C: 0,840 kp/l, Cetane No. 46,8 (quality corresponds with DIN 51601) Engine oil: SHELL Rotella S Oil SAE 30 HD Transmission oil: SHELL high pressure transmission oil light HDL SAE 90

COMPULSORY TESTS

POWER TAKE-OFF PERFORMANCE

Date and location of tests: 29.4.1968, Wieselburg a.d. Erlauf
Type of dynamometer: Siemens-Schuckert pendulum generator G 273/15

Horsepower (metric) hp	Speed		Fuel consumption		
	engine rev/min	p.t.o. rev/min	total l/h	specific g/hph	specific hph/l
Maximum power - 2 hours test					
34,35	2400	590	8,12	198	4,23
At standard p.t.o. speed (540 rev/min)					
34,60	2195	540	7,94	193	4,36
At standard belt speed					
34,80	2370	583	8,18	197	4,26
At the speed recommended by the manufacturer for drawbar work					
34,90	2400	590	8,25	198	4,23
Fuel consumption at part loads 85% of torque at maximum power					
30,30	2455	604	7,32	203	4,14
Unloaded					
0	2620	644	2,535	-	-
50% of torque at maximum power					
18,30	2520	620	5,21	239	3,51
Maximum power					
34,90	2400	590	8,25	198	4,23
25% of torque at maximum power					
9,33	2570	632	3,92	353	2,38
75% of torque at maximum power					
26,95	2475	609	6,67	208	4,04

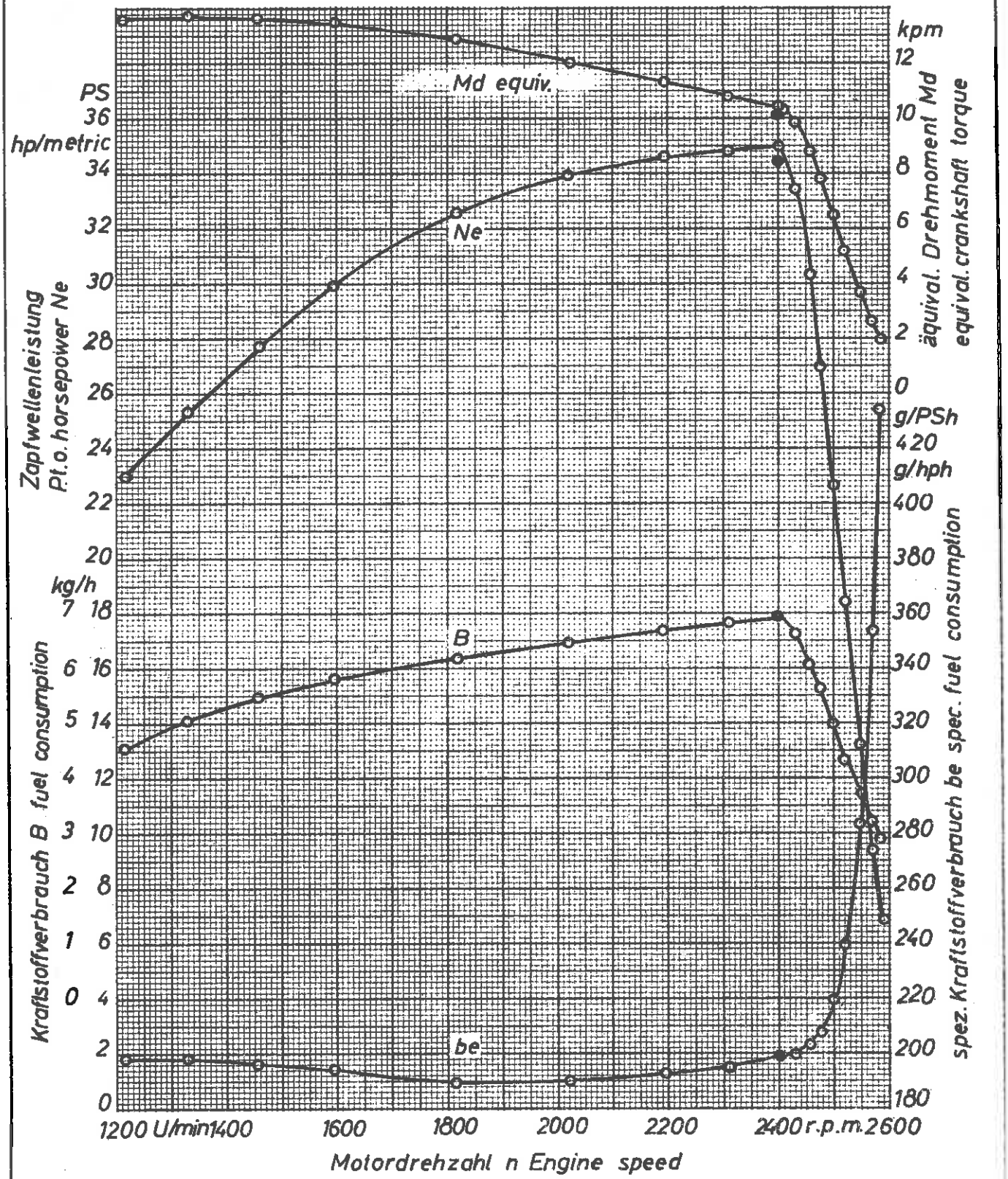
No load maximum engine speed: 2620 rev/min
Equivalent torque at maximum power: 10,41 kpm
Maximum torque: 13,65 kpm at 1330 rev/min of the engine
Mean atmospheric conditions: Temperature: 23°C (aspiration temp. 32°C)
Pressure: 732 mm Hg
Relative humidity: 45 %
Maximum temperature: Coolant: 85°C
Engine oil: 89°C
Fuel: 60°C

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 031/68

Zapfwellenleistung
P.t.o.-test

Steyr-Diesel-Traktor
Typ 40
Mot. Typ Steyr WD 307

● Dauerleistung (Mittelwert) sustained power (average)

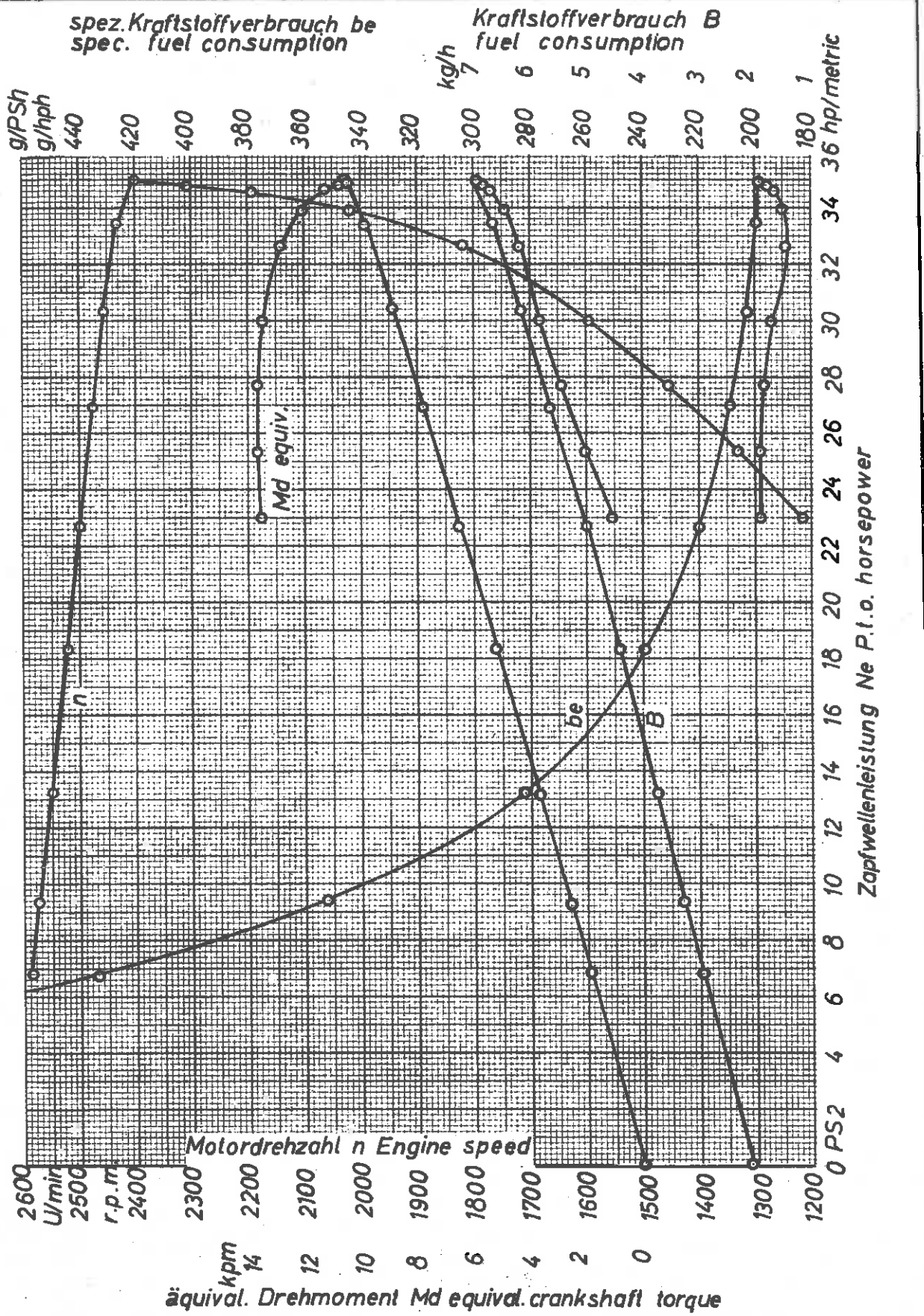


Motor Nr.: 1020	Barometerstand: 732 mm Hg	Kühlwassertemp: 81°C	Versuchstag: 29.4.68	Vers.-Leitung:
Schlepper Nr.: 192-1467	Lufttemperatur: 23°C	Öltemperatur: 85°C	Versuchs Nr.: 84/Za 77	A. Reitlun
Kraftstoff: Q840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp.: 55°C	Kurvenblatt: 1	

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Typ 40
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Motor Nr.: 1020	Barometerstand: 732 mm Hg	Kühlwassertemp.: 81° C	Versuchstag: 29.4.68	Vers.-Leitung:
Schlepper Nr.: 192-1467	Lufttemperatur: 23° C	Öltemperatur: 85° C	Versuchs Nr.: 84/Za 77	A. Reither
Kraftstoff: 0,840/15° C	Motoröl: Shell Rotella S	Kraftstofftemp.: 55° C	Kurvenblatt: 2	

DRAWBAR PERFORMANCE

Date of tests: 20. - 28.6.1968
Type of track: concrete
Height of drawbar above ground: 680 mm

Gear No.	Horse-power (metric) hp	Draw-bar 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 Tempera-ture °C	Relative humidity %	Press. mm/hg
MAXIMUM POWER (ballasted)												
3.L.	27,7	1870	2400	13,3	3,32	253	54	86	84	27	58	749
1.S.	30,1	1530	2400	10,1	3,57	235	50	84	84	26	65	749
4.S.	31,6	1210	2390	7,6	3,74	224	46	83	84	25	64	749
2.S.	32,2	905	2390	5,8	3,84	219	46	82	80	25	68	749
3.S.	30,8	512	2395	3,5	3,67	228	40	80	80	23	78	749
FIVE HOUR TEST at 75% of pull at maximum power												
1.S.	24,0	1150	2480	7,5	3,36	250	58	85	86	28	48	750
FIVE HOUR TEST at pull corresponding to 15% wheel slip												
3.L.	27,4	2000	2250	15,0	3,33	252	60	88	89	30	42	751
MAXIMUM POWER (unballasted)												
1.S.	29,5	1600	2380	15,1	3,50	240	45	82	82	20	72	742
4.L.	30,6	1200	2400	10,1	3,64	231	44	82	81	21	70	743
2.S.	31,4	900	2390	7,4	3,77	223	42	81	79	22	65	743
3.S.	30,4	510	2400	4,8	3,65	230	38	80	76	22	65	743

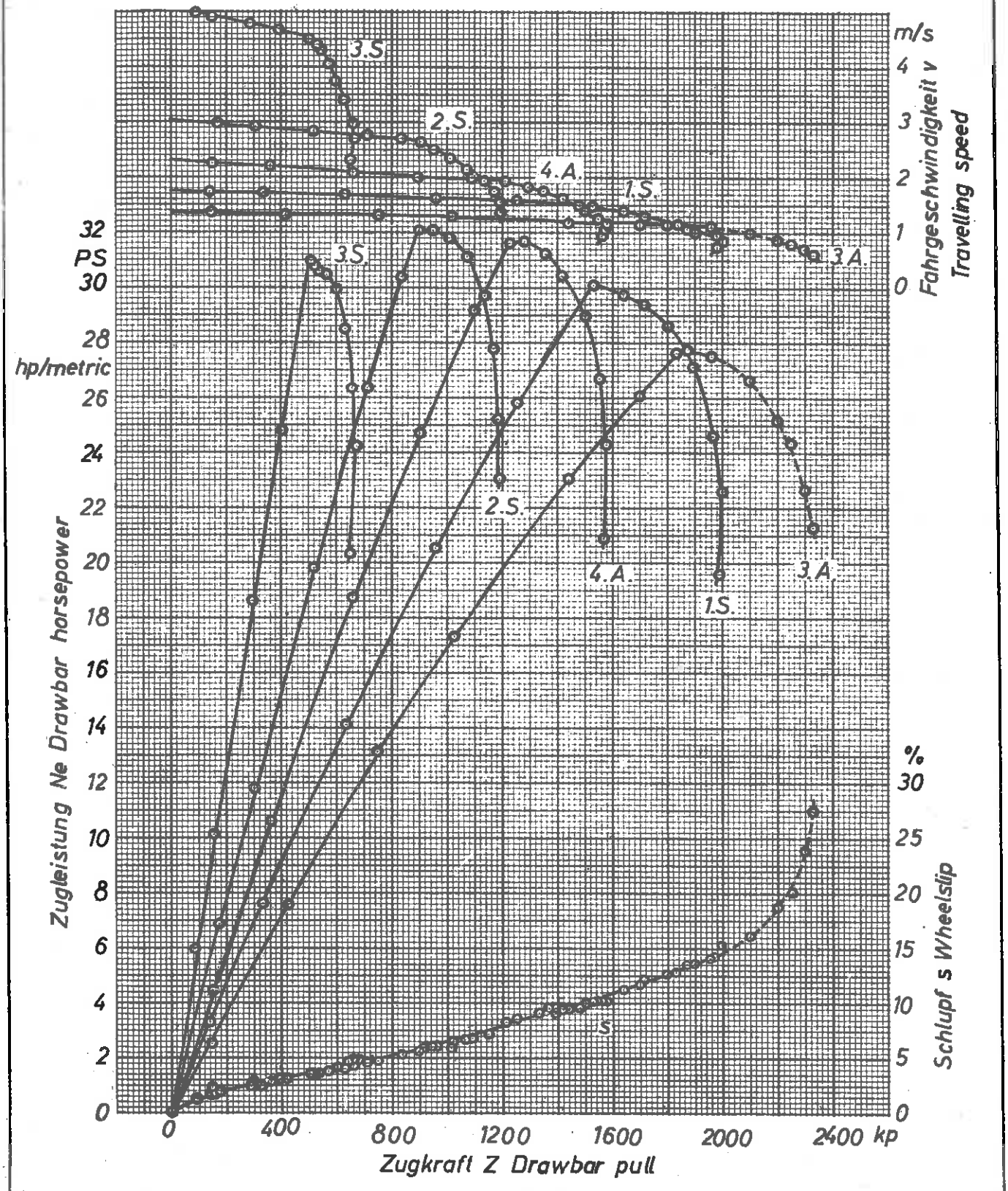
Total oil consumption during ten hours duration of test = 297 g

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Zugprüfung
Drawbar-test

Steyr-Diesel-Traktor
Typ 40
Mot. Typ Steyr WD 307

mit Ballast with ballast



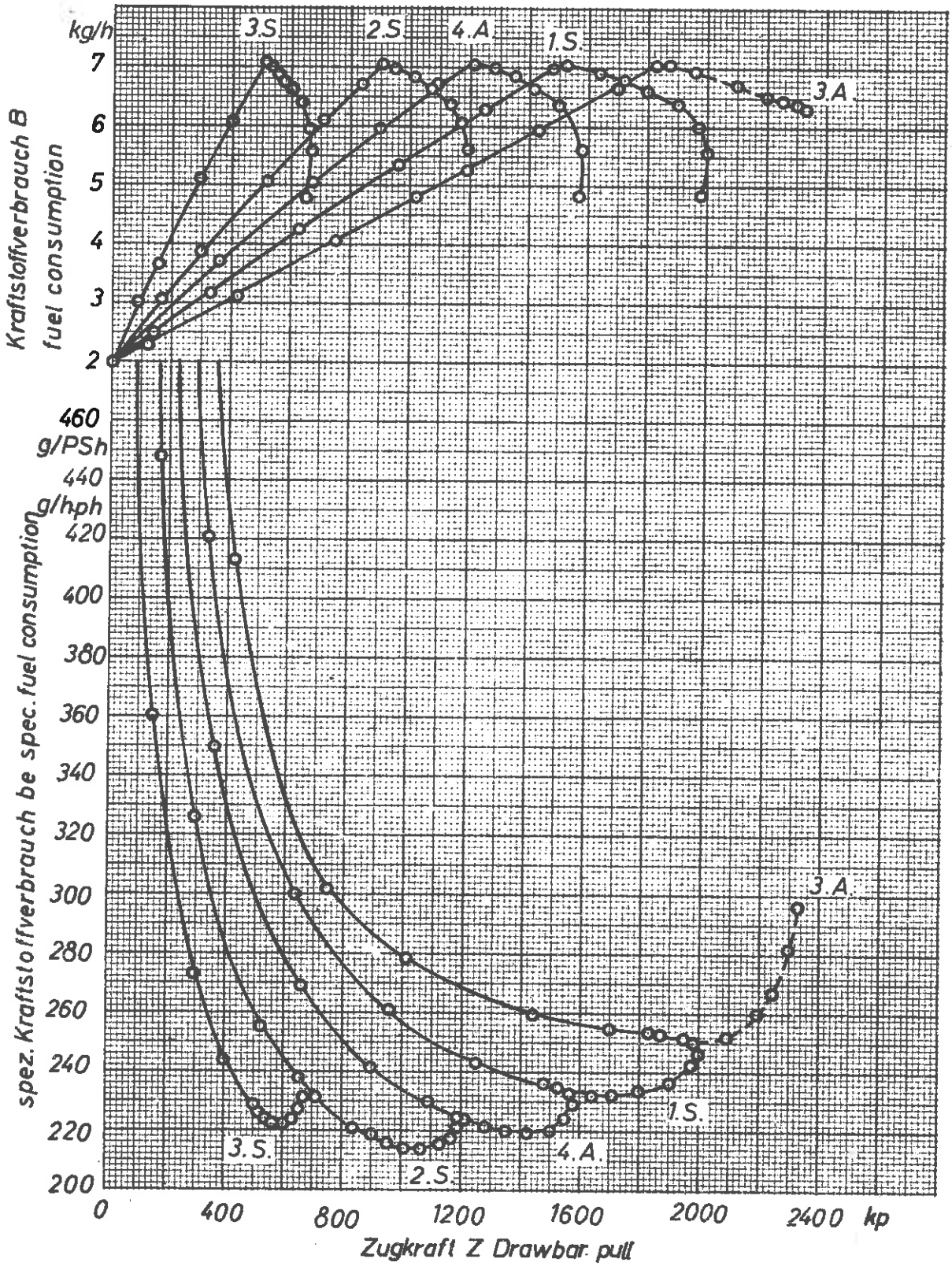
Motor Nr.: 1020	Barometerstand: 749 mm Hg	Kühlwassertemp: 86° C	Versuchstag: 20.6.68	Vers.-Leitung:
Schlepper Nr.: 192-1467	Lufttemperatur: 23-27° C	Öltemperatur: 80-84° C	Versuchs Nr: 84/Zu 367-371	
Kraftstoff: 0,840/15° C	Motoröl: Shell Rotella S	Kraftstofftemp.: 54° C	Kurvenblatt: 3	A. Reitlinger

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Steyr-Diesel-Traktor
Typ 40
Mot. Typ Steyr WD307

mit Ballast with ballast



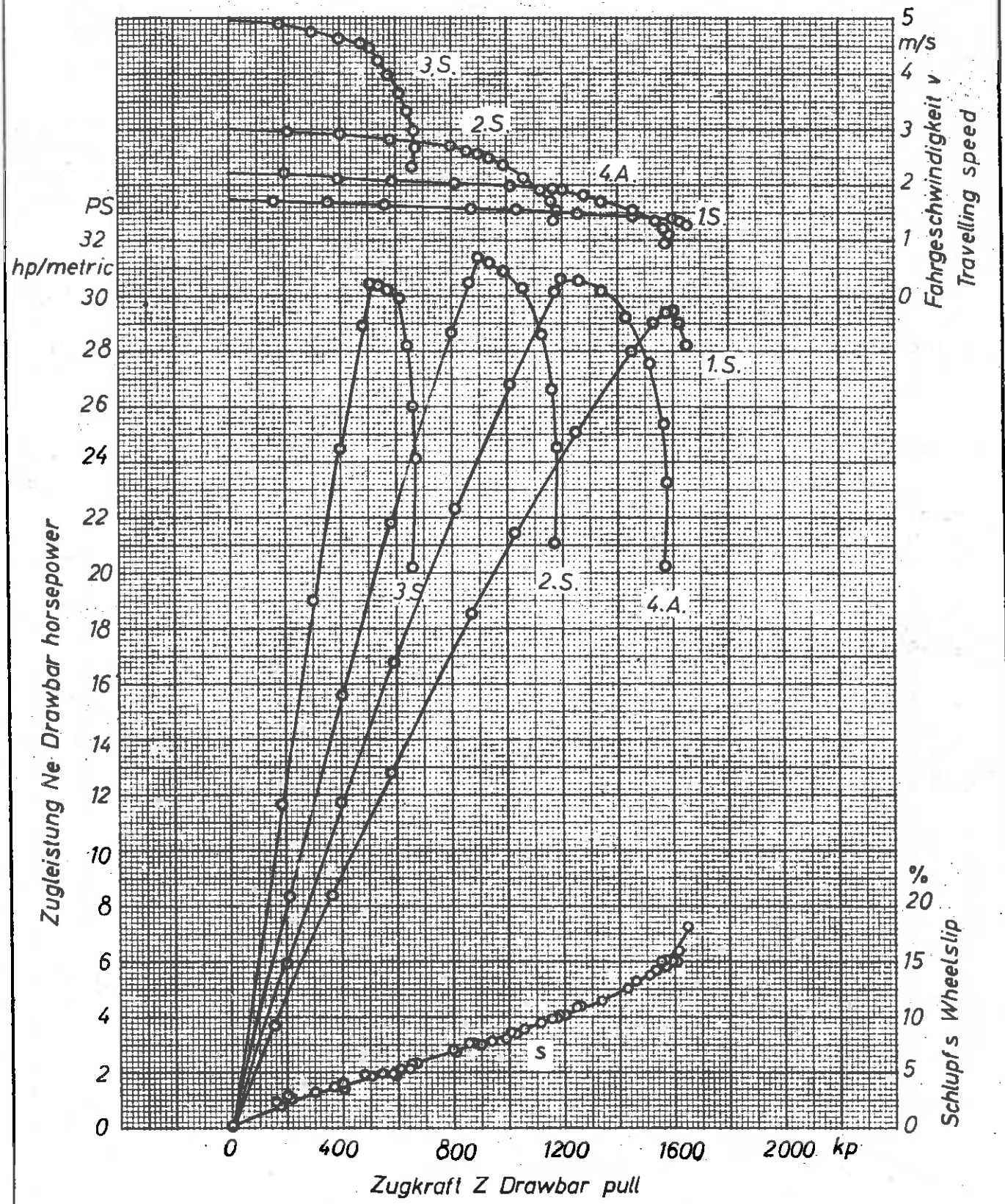
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Kraftstoff: 0,840/15° C	Motoröl: Shell Rotella S	Kraftstofftemp.: 54° C	Kurvenblatt: 4	A. Reitlinger

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 031/68

Zugprüfung
Drawbar-test

Steyr-Diesel-Traktor
Typ 40
Mot. Typ Steyr WD 307

ohne Ballast without ballast



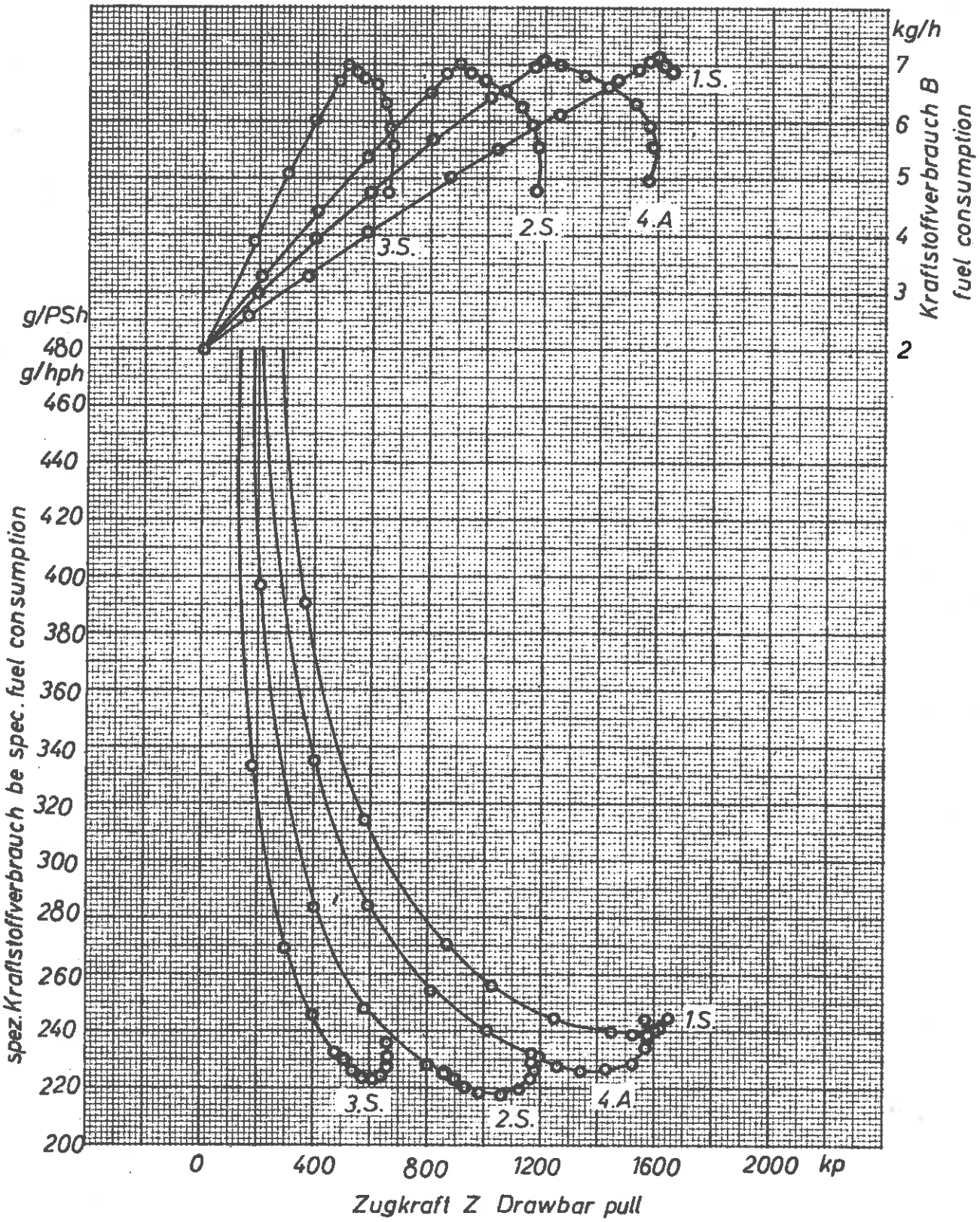
Motor Nr.: 1020	Barometerstand: 743 mm Hg	Kühlwassertemp: 82° C	Versuchstag: 28.6.68	Vers.-Leitung:
Schlepper Nr.: 192-1467	Lufttemperatur: 20-22° C	Öltemperatur 76-82° C	Versuchs Nr.: 84/Zu 372-375	
Kraftstoff: 0,840/15° C	Motoröl: Shell Rotella S	Kraftstofftemp.: 45° C	Kurvenblatt: 5	A. Reitlen

BUNDESVERSUCHS-U. PRÜFUNGSANST.
FÜR LANDW. MASCHINEN U. GERÄTE
WIESELBURG A.D. ERLAUF
PROTOKOLL NR. 031/68

Zugprüfung
Drawbar-test

Steyr-Diesel-Traktor
Typ 40
Mot. Typ Steyr WD 307

ohne Ballast without ballast



Motor Nr.: 1020	Barometerstand: 743 mm Hg	Kühlwassertemp: 82° C	Versuchstag: 28.6.68	Vers.-Leitung:
Schlepper Nr.: 192-1467	Lufttemperatur: 20-22° C	Öltemperatur 76-82° C	Versuchs Nr: 84/Zu 372-375	
Kraftstoff: 0,840/15° C	Motoröl: Shell Rotella S	Kraftstofftemp.: 45° C	Kurvenblatt: 6	A. Reitlen

TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 6,00-16 AS Front, 6 ply, without ballast
rear: 12,4/11-28 AS, 6 ply, without ballast

Track of wheels front: 1270 mm
rear: 1250 mm

	With brakes		Without brakes	
	right-hand	left-hand	right-hand	left-hand
Radius of turning space	3,16 m	3,18 m	3,48 m	3,48 m
Radius of turning circle	3,07 m	3,05 m	3,37 m	3,37 m

LOCATION OF CENTRE OF GRAVITY

Height above ground 686 mm

Distance forward from the vertical plane containing the axis of rear wheels 744 mm

Distance from the median plane parallel to the longitudinal axis of the tractor bisecting the track 0 mm

BRAKE TESTS

Date of tests: 20., 24. and 26.6.1968
Type of track: concrete
Instrument: Recorder for deceleration and force on pedal
No. 03382, Tüv-Typ-Prüf.-Nr. 04/Stuttgart
Travelling speed of tractor: 25 km/h

Results	Tractor without ballast	Tractor with ballast
Maximum deceleration m/s^2	4,5	4,5
Stopping distance m	7,2	7,45
Force on pedal kp	36	53

Brake fade characteristics (hot test)

Tractor without ballast:
Deceleration: hot/cold 93,3 %
Stopping distance: cold/hot 96 %
Force on pedal: cold/hot 90 %

Efficacy of parking brake

Force on the hand lever of the brake at cold and hot condition wasn't measured, because the service brake and parking brake presents one system and the hand lever fixes the pedal of service brake only. Hereby the rear wheels of the tractor slides by dragging

MEASUREMENT OF AMBIENT NOISE EMITTED BY THE TRACTOR

Date of tests: 26.6.1968
Type of track: concrete (on open land)
Type of sound level meter: Precisions Sound Level Meter Type 2203, Brüel & Kjoer/Copenhagen

Results of tests:

Gear: 4.S.
Travelling speed: 20 km/h
Sound level: 84 dbA

NOISE MEASUREMENT AT THE DRIVER'S EAR

Date of test: 4.7.1968
Type of track: concrete
Type of sound level meter: Precisions Sound Level Meter Type 2203
Type of octavfilter: Octave Filter Set Typ 1613, Brüel & Kjoer/Copenhagen
Tractor without cab

Results of tests:

Gear	Travelling speed km/h	dbA	sones
3.L.	4,20	92	
1.S.	5,47	91	
4.L.	7,20	92	59
2.S.	9,90	92	
3.S.	16,70	94	64

The first gear tested corresponds to the travelling speed nearest to 7,25 km/h
Sone evolution according to Stevens

POWER LIFT AND HYDRAULIC PUMP PERFORMANCE

Date and location of test: 25.6.1968, Wieselburg
Hydraulic fluid: SHELL Telles Oil 23 SAE 10 W

	Vertical movement mm	Maximum force exerted through full range kp	pressure kp/cm^2
Linkage giving maximum mechanical advantage: only one position possible	615	1580	170
At lower hitch points (height above ground in down position) 240 mm on the frame	615	808	170

Type of linkage lock for transport: mechanically by two retaining clutches, which act on the gudgeons on the both lifting levers

Opening pressure of the cylinder over-pressure relief valve: 175 kp/cm^2

Pump characteristics:

Opening pressure of the relief valve	175 kp/cm^2
Sustained pressure by the open relief valve	175 kp/cm^2
Pump delivery rate at minimum pressure	23 l/min
Pump delivery rate	21,1 l/min
Delivery pressure	170 kp/cm^2
Power (hydraulically)	7,96 hp (metric)

Note: Only one gear position possible, oil temperature 65°C
Relief of front axle: with frame about 881 kp
on the drawbar about 1720 kp

OPTIONAL TESTS

ENGINE TEST

Date and location of tests: 20.3.1968 Wieselburg a.d. Erlauf
Type of dynamometer: Siemens-Schuckert pendulum generator G 273/15

Horsepower (metric) hp	Speed		Fuel consumption		
	engine rev/min	p.t.o. rev/min	total l/h	specific g/hph	specific hph/l
Maximum power - 2 hours test					
39,0	2400	590	8,45	182	4,62
At standard p.t.o. speed (540 rev/min)					
39,70	2195	540	8,32	176	4,77
At standard belt speed					
39,90	2370	583	8,50	179	4,69
At the speed recommended by the manufacturer for drawbar work					
40,0	2400	590	8,56	180	4,67
Fuel consumption at part loads 85% of torque at maximum power					
34,70	2450	603	7,54	182	4,60
Unloaded					
0	2620	644	2,31	-	-
50% of torque at maximum power					
21,0	2520	620	5,20	208	4,04
Maximum power					
40,0	2400	590	8,56	180	4,67
25% of torque at maximum power					
10,70	2570	632	3,73	293	2,87
75% of torque at maximum power					
30,90	2470	607	6,84	186	4,52

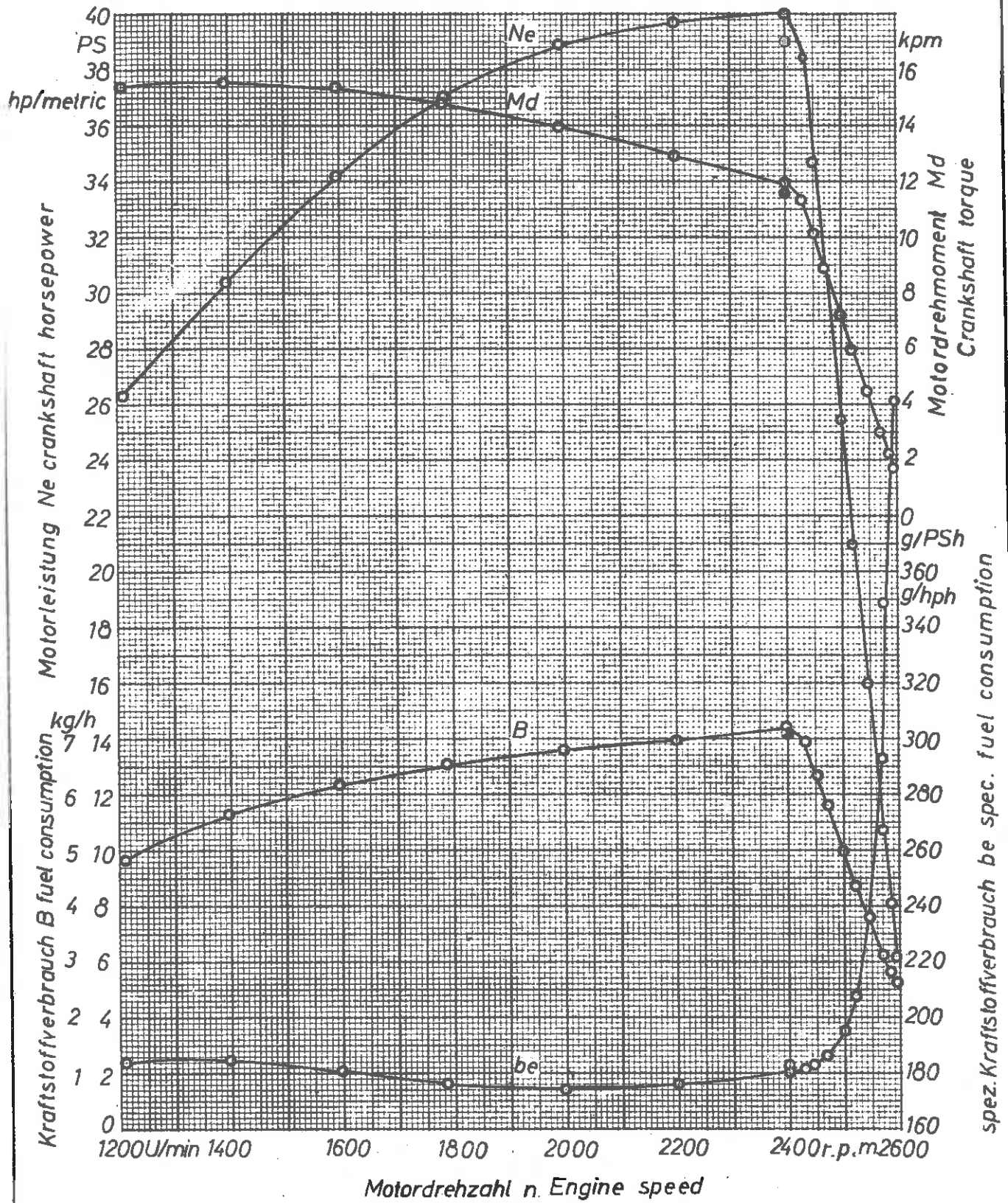
Optimum fuel consumtion: 174 g/hph at 38,9 hp and 1996 rev/min
No load maximum engine speed: 2620 rev/min
Torque at maximum power: 11,94 kpm
Maximum torque: 15,58 kpm at 1400 rev/min of the engine
Mean atmospheric conditions: Temperature: 13°C (aspiration temp. 15°C)
Pressure: 739 mm Hg
Relative humidity: 60 %
Maximum temperature: Coolant: 80°C
Engine oil: 89°C
Fuel: 46°C

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 031/68

Motorleistung Engine- test

Steyr-Diesel-Traktor
Typ 40
Mot. Typ Steyr WD 307

● Dauerleistung (Mittelwert) sustained power (average)

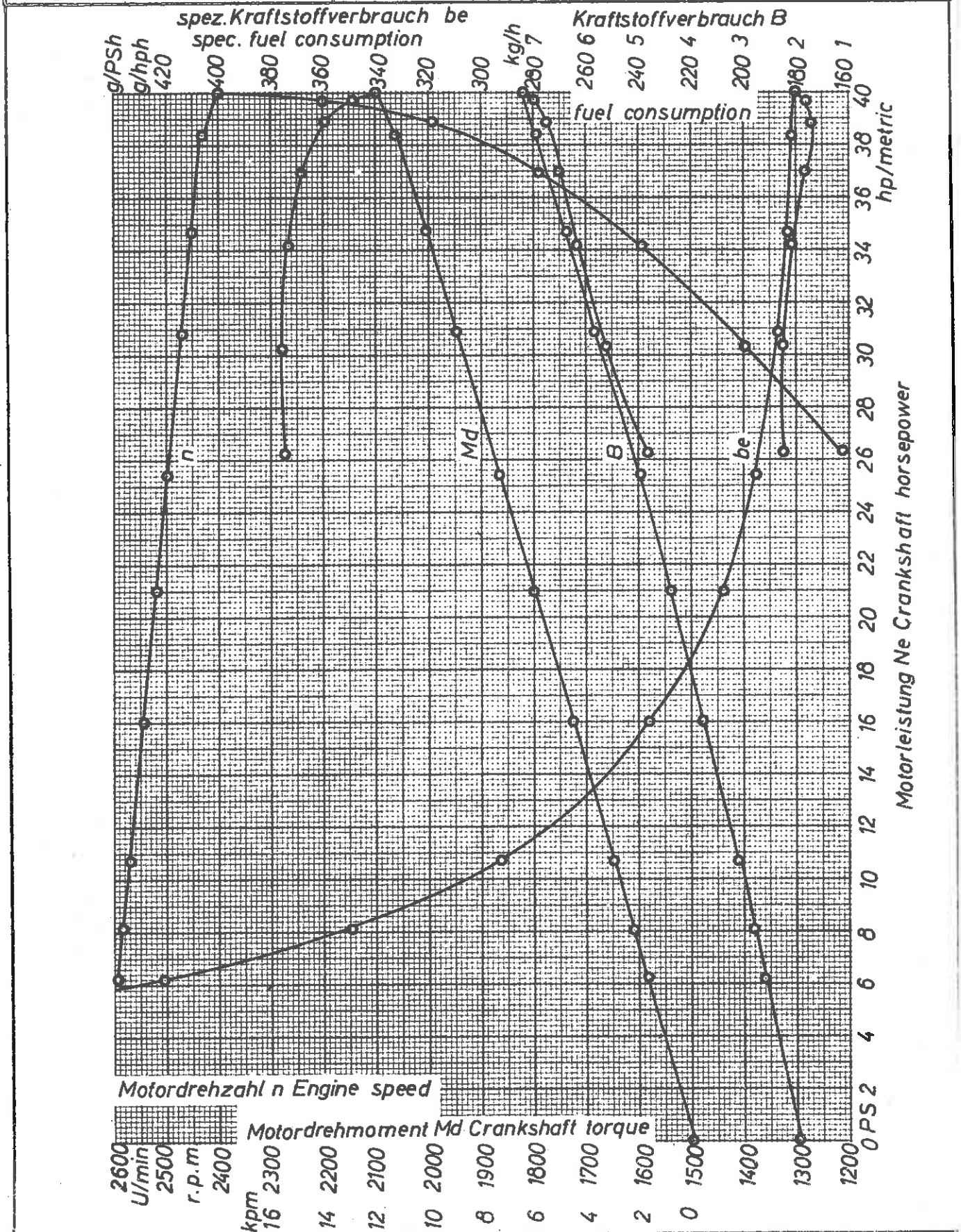


Motor Nr.: 1020	Barometerstand: 739 mmHg	Kühlwassertemp: 80° C	Versuchstag: 20.3.68	Vers.-Leitung:
Schlepper Nr.: 192-1467	Lufttemperatur: 13° C	Öltemperatur: 80° C	Versuchs Nr: 84/M107	A. Reitlberger
Kraftstoff: 0840/15° C	Motoröl: Shell Rotella S	Kraftstofftemp.: 35° C	Kurvenblatt: 7	

BUNDESVERSUCHS-U. PRÜFUNGSANST.
FÜR LANDW. MASCHINEN U. GERÄTE
WIESELBURG A.D. ERLAUF
PROTOKOLL NR. 031/68

Motorleistung
Engine - test

Steyr-Diesel-Traktor
Typ 40
Mot. Typ Steyr WD307



Motor-Nr.: 1020	Barometerstand: 739 mm Hg	Kühlwassertemp.: 80° C	Versuchstag: 20.3.68	Vers.-Leitung:
Schlepper Nr.: 192-1467	Lufttemperatur: 13° C	Öltemperatur: 80° C	Versuchs Nr.: 84/M107	A. Reitter
Kraftstoff: 0,840/15° C	Motoröl: Shell Rotella S	Kraftstofftemp.: 35° C	Kurvenblatt: 8	

OPTIONAL TESTS

PERFORMANCE AT THE BELT PULLEY SHAFT

Date and location of tests: 20.5.1968 Wieselburg a.d. Erlauf
Type of dynamometer: Siemens-Schuckert pendulum generator G 273/15

Horsepower (metric) hp	Speed		Fuel consumption		
	engine rev/min	p.t.o. rev/min	total l/h	specific g/hph	specific hph/l
Maximum power - 2 hours test					
34,25	2400	590/1317	8,14	200	4,21
At standard p.t.o. speed (540 rev/min)					
34,20	2195	540/1205	8,00	196	4,27
At standard belt speed					
34,60	2370	583/1300	8,28	201	4,13
At the speed recommended by the manufacturer for drawbar work					
34,65	2400	590/1317	8,34	202	4,15
Fuel consumption at part loads 85% of torque at maximum power					
30,0	2450	602/1345	7,36	206	4,08
Unloaded					
0	2620	644/1438	2,48	-	-
50% of torque at maximum power					
18,16	2520	620/1383	5,23	242	3,47
Maximum power					
34,65	2400	590/1317	8,34	202	4,15
25% of torque at maximum power					
9,26	2570	632/1410	3,97	360	2,33
75% of torque at maximum power					
26,80	2475	609/1358	6,76	212	3,96

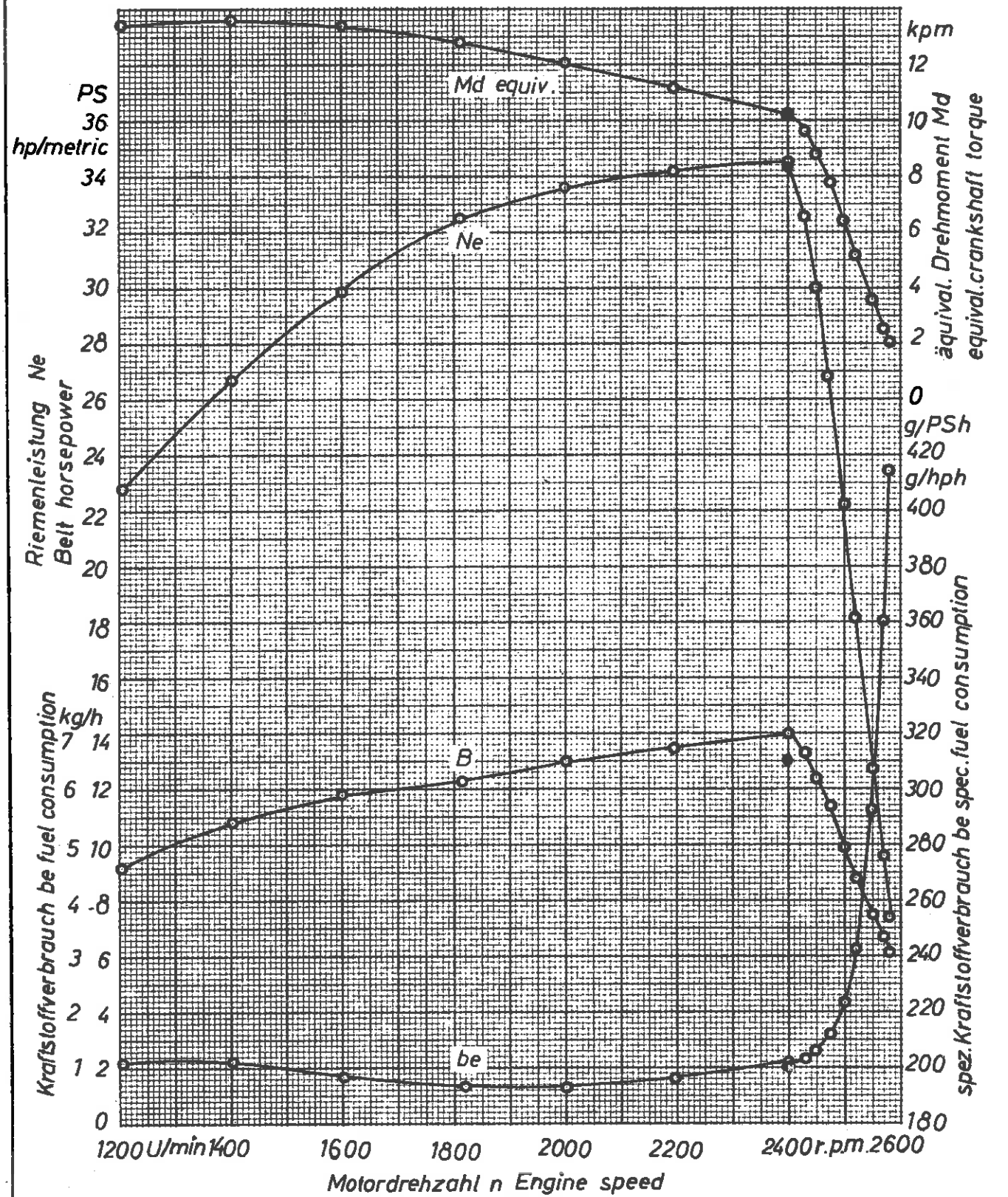
No load maximum engine speed: 2620 rev/min
Equivalent torque at maximum power: 10,33 kpm
Maximum torque: 13,60 kpm at 1400 rev/min of the engine
Mean atmospheric conditions: Temperature: 18°C (aspiration temp. 22°C)
Pressure: 738 mm Hg
Relative humidity: 50 %
Maximum temperature: Coolant: 84°C
Engine oil: 88°C
Fuel: 60°C

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 031/68

Riemenleistung
Belt-test

Steyr-Diesel-Traktor
Typ 40
Mot. Typ Steyr WD 307

●Dauerleistung(Mittelwert) sustained power(average)

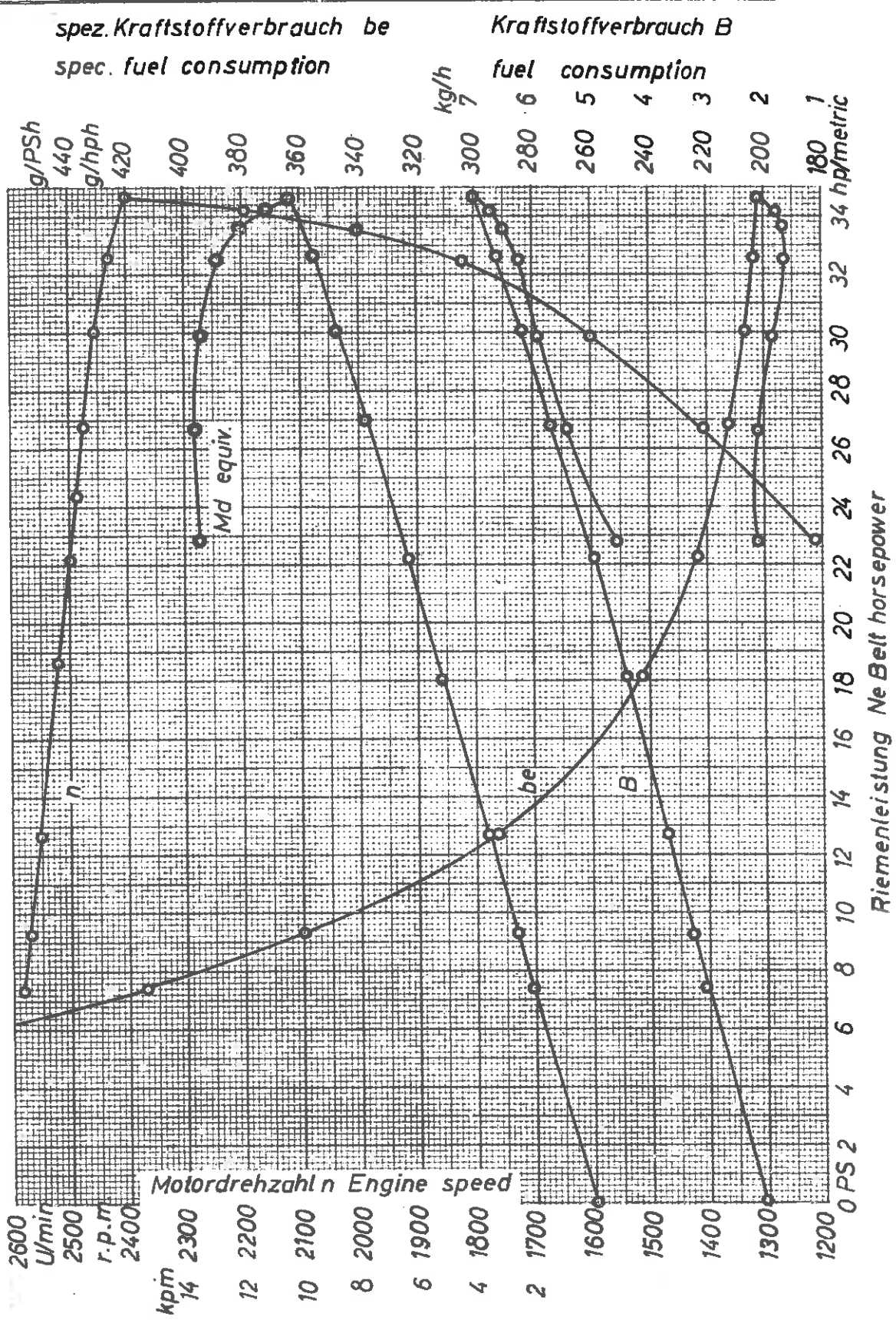


Motor Nr.: 1020	Barometerstand: 783 mm Hg	Kühlwassertemp: 81°C	Versuchstag: 20.5.68	Vers.-Leitung:
Schlepper Nr.: 192-1467	Lufttemperatur: 18°C	Öltemperatur: 84°C	Versuchs Nr.: 84/R17	A. Reitlun
Kraftstoff: 0,840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp.: 54°C	Kurvenblatt: 9	

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PROTOKOLL NR. 031/68

Riemenleistung
Belt-test

Steyr-Diesel-Traktor
Typ 40
Mot. Typ Steyr WD 307



Motor Nr.: 1020	Barometerstand: 783 mm Hg	Kühlwassertemp: 81°C	Versuchstag: 20.5.68	Vers.-Leitung:
Schlepper Nr.: 192-1467	Lufttemperatur: 18° C	Öltemperatur: 84°C	Versuchs Nr.: 84/R17	A. Reitlen
Kraftstoff: 0,840/15° C	Motoröl: Shell Rotella S	Kraftstofftemp: 54°C	Kurvenblatt: 10	

Notes: Repairs and adjustments during tests were not performed.

Head of department:
Dipl.Ing.Zehetner

Officer in charge:
A.Reither

The director:
Dipl.Ing.Dr.Scheruga
Hofrat