O.E.C.D. Report No.: 252

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

STEYR DIESEL TRACTOR »PLUS 30«

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



Test No.: 030/68

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.: 252

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 30
Type:	Wheel tractor
Serial No.:	92-1430

Engine

Make:	Steyr-Daimler-Puch AG., Steyr
Model:	STEYR WD 210
Type:	Direct injection type Diesel, 4-stroke
Serial No.:	1020
Cylinders:	2 cylinders, vertical in line, bore/stroke: 105/115 mm, capacity: 1990 cm^3; compression ratio: 17,5:1; arrangement of valves: overhead; cylinder type: engine crank case with cast-in cylinders
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 litres; injection pump: Bosch distributor BOSCH EP/VA2/100H1 100BR 142; manufacturer's production setting: injection timing $18^{\circ} \pm 0,5^{\circ}$ before TDC; injection nozzle: BOSCH DLL 50 S 226; manufacturer's production setting: injection pressure 190 $\pm$ 5 kg/cm^2; quantity of fuel feed: 46 $\pm$ 1 mm^3/stroke at 2200 rev/min.
Governor:	Make: BOSCH Type: hydraulic governor Range of speed: 500 to 2400 rev/min Rated speeds for p.t.o.-work (540 rev/min) 2020 rev/min for field-work ..... 2200 rev/min for transportation-work ..... 2200 rev/min for belt-work (1020 rev/min) 2183 rev/min

Air cleaner:	Make: IFE 810 - 6000 P 67 Type: oil bath air cleaner; oil capacity: appr. 0,7 l
Lubrication system:	Forced feed from gear type pump; type of filter: oil filter in full flow, throw away filter; oil capacity: appr. 8 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. 10,8 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:	VARTA acid battery 12 Volt/98 Ah; DIN 72311

Transmission:

Clutch:	Make: FICHTEL and SACHS, model: K 225 Z (225 Ø), single-plate dry clutch, foot pedal operated, at engine p.t.o. a multi-plate clutch additional (equipment by request)
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: portal axle, bevel gear drive with Gleason-spiral cut, acting by intermediate gear on rear wheels; differential lock: lockable bevel gear-differential gear in the rear axle
Oil capacity:	Gearbox: 25 l SAE 90; rear axle, portal drive 2,25 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 2200 rev/min
On the field	1.L.	287,45	1,62 km/h
	2.L.	165,61	2,81
	3.L.	100,66	4,63
	4.L.	60,97	7,64
On roads	1.S.	79,30	5,88
	2.S.	45,69	10,20
	3.S.	27,77	16,79
	4.S.	16,82	27,71
Reverse	1.LR.	285,75	1,63
	2.LR.	164,63	2,83
	3.LR.	100,06	4,66
Reverse	1.SR.	78,83	5,91
	2.SR.	45,42	10,26
	3.SR.	27,60	16,89

Power take-off:

Location:	At rear in vertical centre plane of tractor, 617 mm above ground
Dimensions:	29 x 34,9 x 8,7, 6 splines A DIN 9611
Speed:	587 rev/min at rated engine speed 2200 rev/mi engine speed 2020 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. 0,1199 m
Number of p.t.o. revolutions	for one revolution of driving wheel 29,44; direction of rotation right viewed facing driving end with tractor in forward gear
Details of other p.t.o.:	Frontal p.t.o. 922 rev/min at engine speed 2200 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 1027,5 m/min and 1309 rev/min at rated engine speed 2200 rev/min
Engine speed:	2183 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/SR10H2/150/4; type: oil hydraulic; oil capacity: 10 l SHELL Tellus 23 SAE 104; 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: 720 mm at lowest position; position relative to p.t.o.: 557 mm; perforation: 5 holes with 130 mm distance at times

Trailer hitch: (rotating) Height above ground: 477, 505, 750 and 778 mm by changing trailer hitch case; distance from rear axle: 367 mm; position relative to p.t.o.: 120 mm

Towing hitch: Height above ground: 510 mm; distance from front axle: 560 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: 5,50-16 AS Front; ply rating: 4; maximum permissible weight on each tyre: 475 kp at 2,5 kp/cm^2 pressure; track width: 1250 mm; method of changing: at changed wheels 1450 mm (as equipment by request track width with changeable track 1250, 1350, 1450, 1550 and 1650 mm)

Driving wheels: Two at rear; type of tyres: tractor driving wheel tyres; size: 11,2/10-28 AS; ply rating: 6; rim size: W9 x 28; maximum permissible weight on each tyre: 995 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: 1850 mm

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

Weight without ballast:	Front:	725 kp
	Rear:	1036 kp
	Total:	1761 kp
Ballast:	Front 8 weights	125 kp
	Rear 2 weights per wheel:	107,5 kp
	water per wheel:	90 kp
Weight with full ballast:	Front:	850 kp
	Rear:	1431 kp
	Total:	2281 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): 20

Overall dimensions:

Overall length:	3250 mm, with front ballast weights 3350 mm
Overall width:	1614 mm, at changed wheels 1770 mm
Overall height:	1512 mm

Lighting:

	Height above ground of centre cm	Diameter cm	Distance from outside edge of tractor to centre cm
Head lights	82	14 x 7,5	57
Side lights	115	8	8
Rear lights	120	8	8
Reflectors	111	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: 26.4.1968 **Wieselburg a.d. Erlauf**
Type of dynamometer: Siemens-Schuckert pendulum generator G 273/15

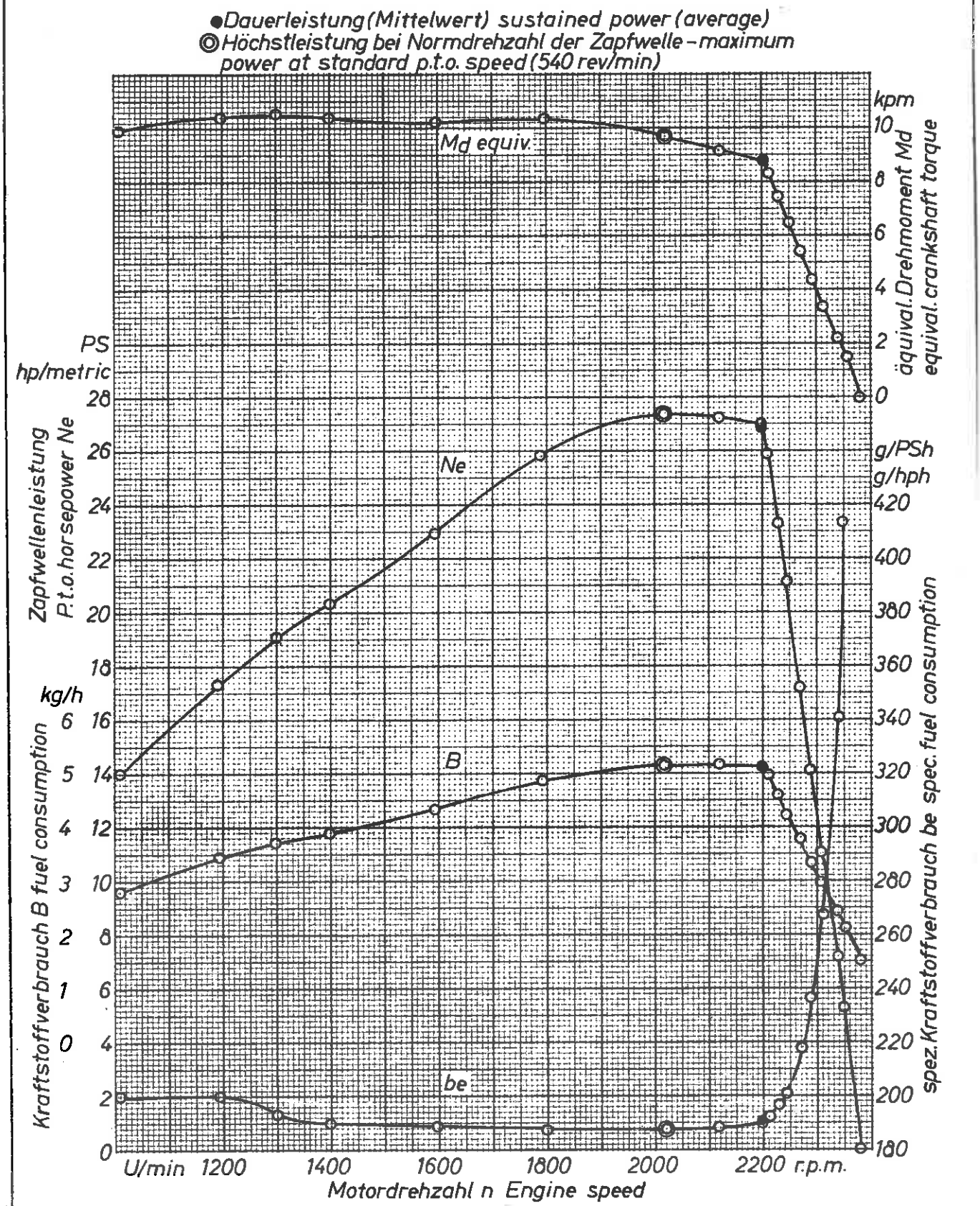
Horsepower (metric) hp	Speed		Fuel consumption		
	engine rev/min	p.t.o. rev/min	total l/h	specific g/hph	specific hph/l
Maximum power - 2 hours test					
26,8	2200	587	6,10	191	4,395
At standard p.t.o. speed (540 rev/min)					
27,4	2020	540	6,13	188	4,470
At standard belt speed					
27,1	2183	583	6,12	190	4,430
At the speed recommended by the manufacturer for drawbar work					
27,0	2200	587	6,11	190	4,420
Fuel consumption at part loads 85% of torque at maximum power					
23,3	2230	596	5,46	197	4,270
Unloaded					
0	2380	636	1,785	-	-
50% of torque at maximum power					
14,05	2290	612	3,96	237	3,550
Maximum power					
27,0	2200	587	6,11	190	4,420
25% of torque at maximum power					
7,19	2340	625	2,915	341	2,466
75% of torque at maximum power					
20,65	2245	600	5,04	205	4,096

No load maximum engine speed: 2380 rev/min
Equivalent torque at maximum power: 8,79 kpm
Maximum torque: 10,53 kpm at 1300 rev/min of the engine
Mean atmospheric conditions: Temperature: 20°C (aspiration temp. 32°C)
Pressure: 743 mm Hg
Relative humidity: 50%
Maximum temperature: Coolant: 80°C
Engine oil: 86°C
Fuel: 56°C

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 030/68

Zapfwellenleistung
P.t.o.-test

Steyr-Diesel-Traktor
Typ 30
Mot. Typ Steyr WD 210

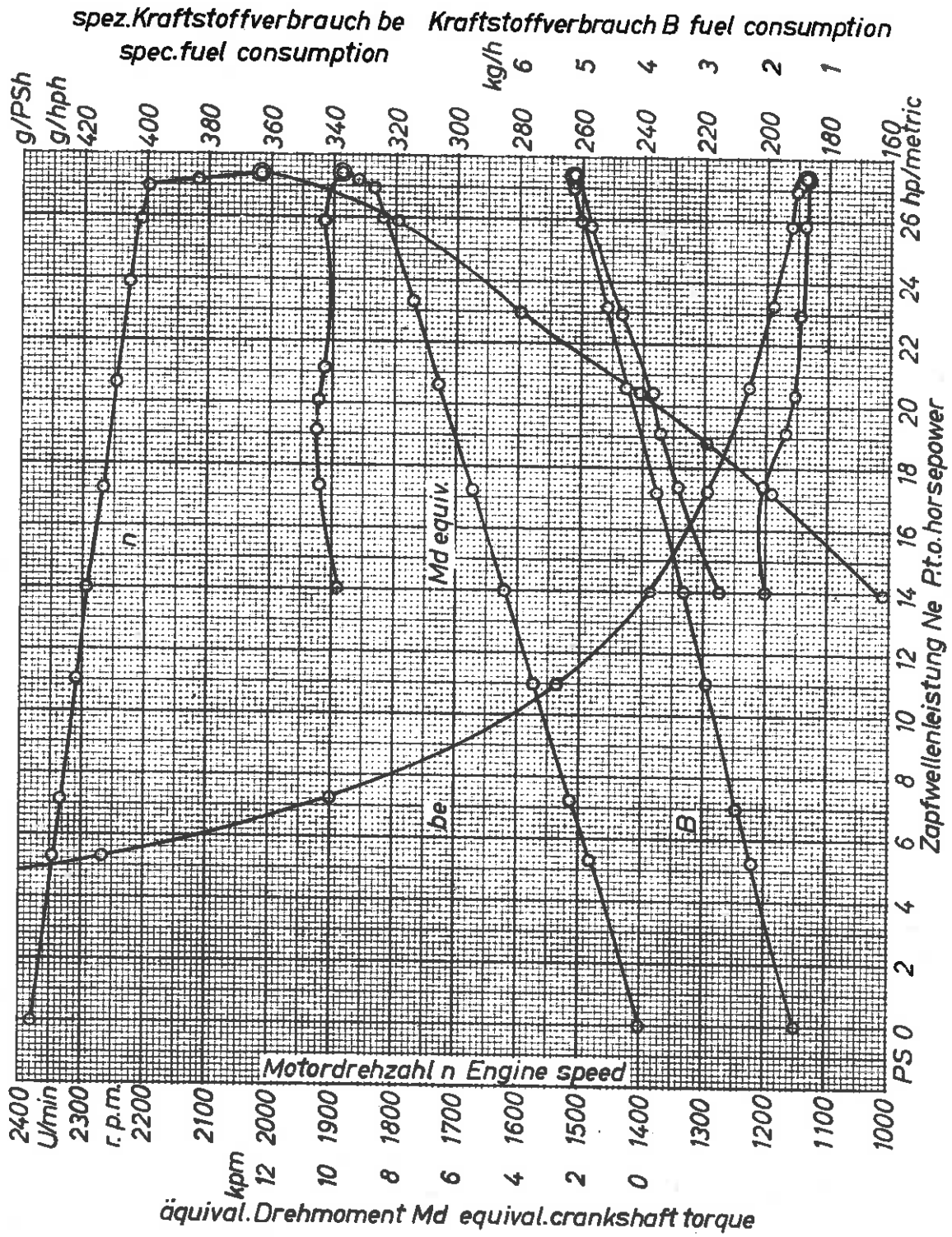


Motor Nr.: 1020	Barometerstand: 743 mm Hg	Kühlwassertemp: 80°C	Versuchstag: 26.4.68	Vers.-Leitung:
Schlepper Nr.: 92-1430	Lufttemperatur: 20°C	Öltemperatur: 84°C	Versuchs Nr.: Za 76/68	A. Reitler
Kraftstoff: 0,840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp.: 48°C	Kurvenblatt: 1	

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Typ 30
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Schlepper Nr.: 92-1430	Lufttemperatur: 20°C	Öltemperatur: 84°C	Versuchs Nr: 83/Za76	A. Reither
Kraftstoff: 0,840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp.: 48°C	Kurvenblatt: 2	

DRAWBAR PERFORMANCE

Date of tests: 19.6. - 27.6.1968
Type of track: concrete
Height of drawbar above ground: 660 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)												
2.L.	16,66	1800	2295	16,4	3,25	258	49	80	80	30	40	749
3.L.	21,70	1550	2020	12,9	3,56	236	48	82	81	28	48	750
1.S.	23,00	1250	2015	9,9	3,80	221	47	81	80	27	50	750
4.L.	23,10	950	2000	7,3	3,82	220	46	81	79	26	55	750
2.S.	22,90	685	2020	5,5	3,78	222	45	80	80	25	60	750
3.S.	21,80	385	2015	3,3	3,61	233	45	80	78	24	65	750
FIVE HOUR TEST at 75% of pull at maximum power (5,6 km/h)												
1.S.	19,80	940	2245	7,5	3,56	236	52	84	84	29	45	750
FIVE HOUR TEST at pull corresponding to 15% wheel slip (2,5 km/h)												
2.L.	16,30	1740	2300	15,0	3,25	258	56	85	86	27	50	750
MAXIMUM POWER (unballasted)												
3.L.	20,10	1350	2225	15,9	3,33	252	48	82	78	27	38	743
1.S.	21,85	1250	2000	13,8	3,59	234	48	81	78	27	40	743
4.L.	22,10	916	2010	9,0	3,67	229	48	81	80	26	45	743
2.S.	22,90	700	2000	6,5	3,82	220	46	80	79	25	48	743
3.S.	22,40	400	2010	3,6	3,73	225	46	78	76	24	50	743

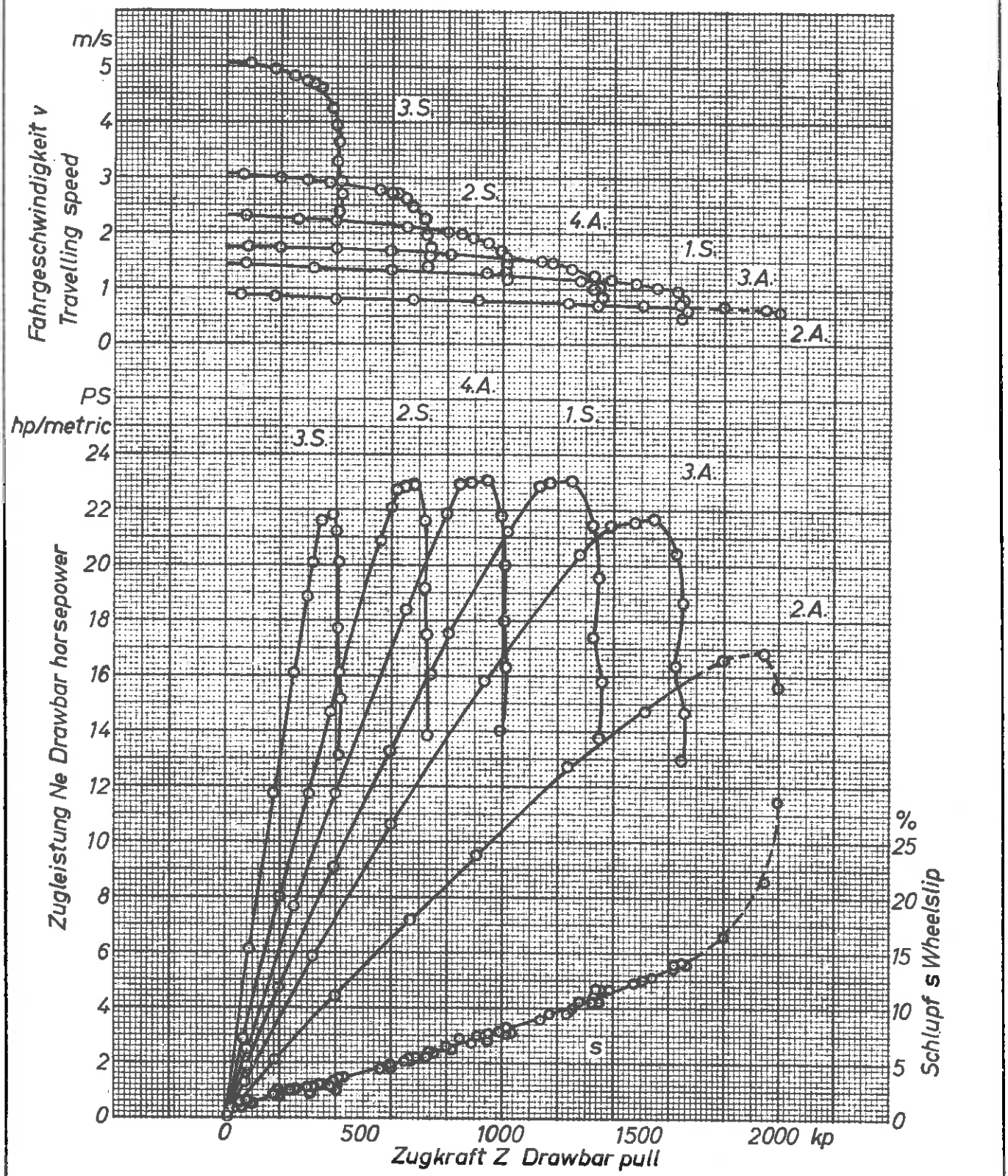
Total oil consumption during ten hours duration of test = 164 g

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Zugprüfung
Drawbar-test

Steyr-Diesel-Traktor
Typ 30
Mot. Typ Steyr WD 210

mit Ballast with ballast



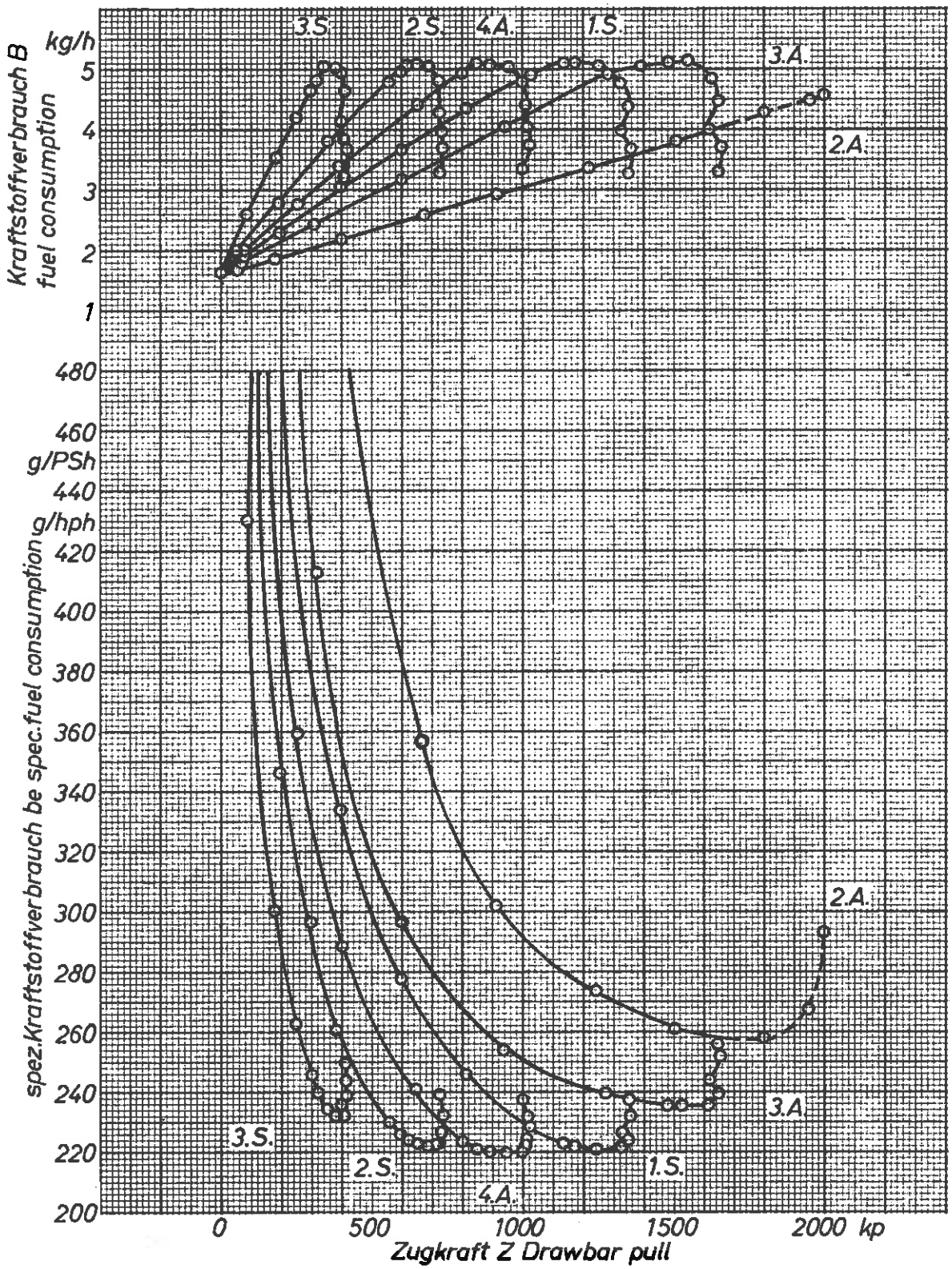
Motor Nr.: 1020	Barometerstand: 750mmHg	Kühlwassertemp: 82°C	Versuchstag: 27. 6. 68	Vers.-Leitung:
Schlepper Nr.: 92-1430	Lufttemperatur: 24-30°C	Öltemperatur: 78-81°C	Versuchs Nr.: 83/Zu 356-361	
Kraftstoff: 0,840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp.: 49°C	Kurvenblatt: 3	A. Reitlun

BUNDESVERSUCHS-U. PRÜFUNGSANST.
FÜR LANDW. MASCHINEN U. GERÄTE
WIESELBURG A.D. ERLAUF
PROTOKOLL NR. 030/68

Zugprüfung
Drawbar-test

Steyr-Diesel-Traktor
Typ 30
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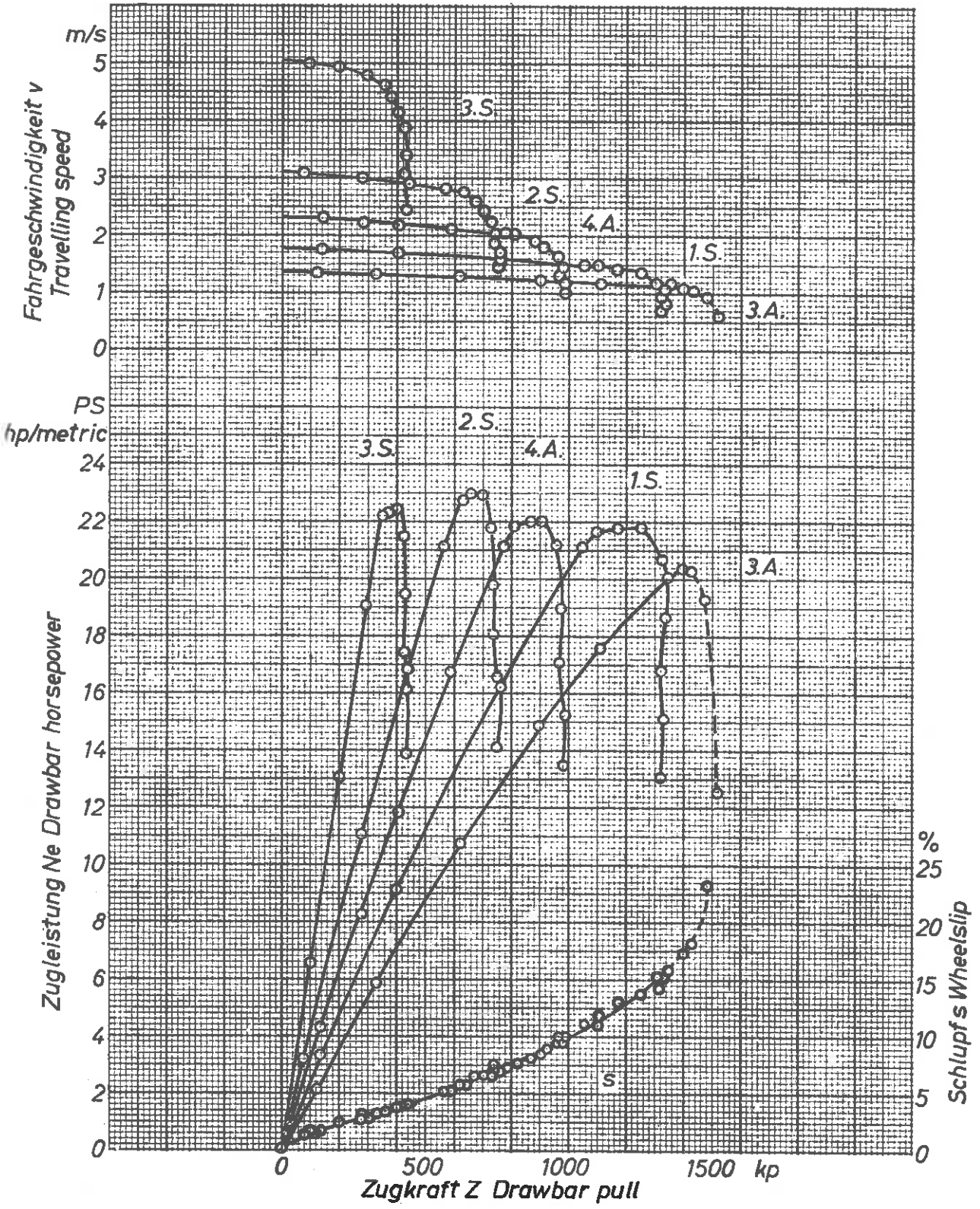
mit Ballast with ballast



Motor Nr.: 1020	Barometerstand: 750mm Hg	Kühlwassertemp: 82°C	Versuchstag: 27. 6. 68	Vers.-Leitung:
Schlepper Nr.: 92-1430	Lufttemperatur: 24-30°C	Öltemperatur: 78-81°C	Versuchs Nr.: 83/Zu 356-361	
Kraftstoff: 0,840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp.: 49°C	Kurvenblatt: 4	A. Reitler

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 030/68	**Zugprüfung Drawbar-test**	Steyr-Diesel-Traktor Typ 30 Mot. Typ Steyr WD 210

ohne Ballast without ballast



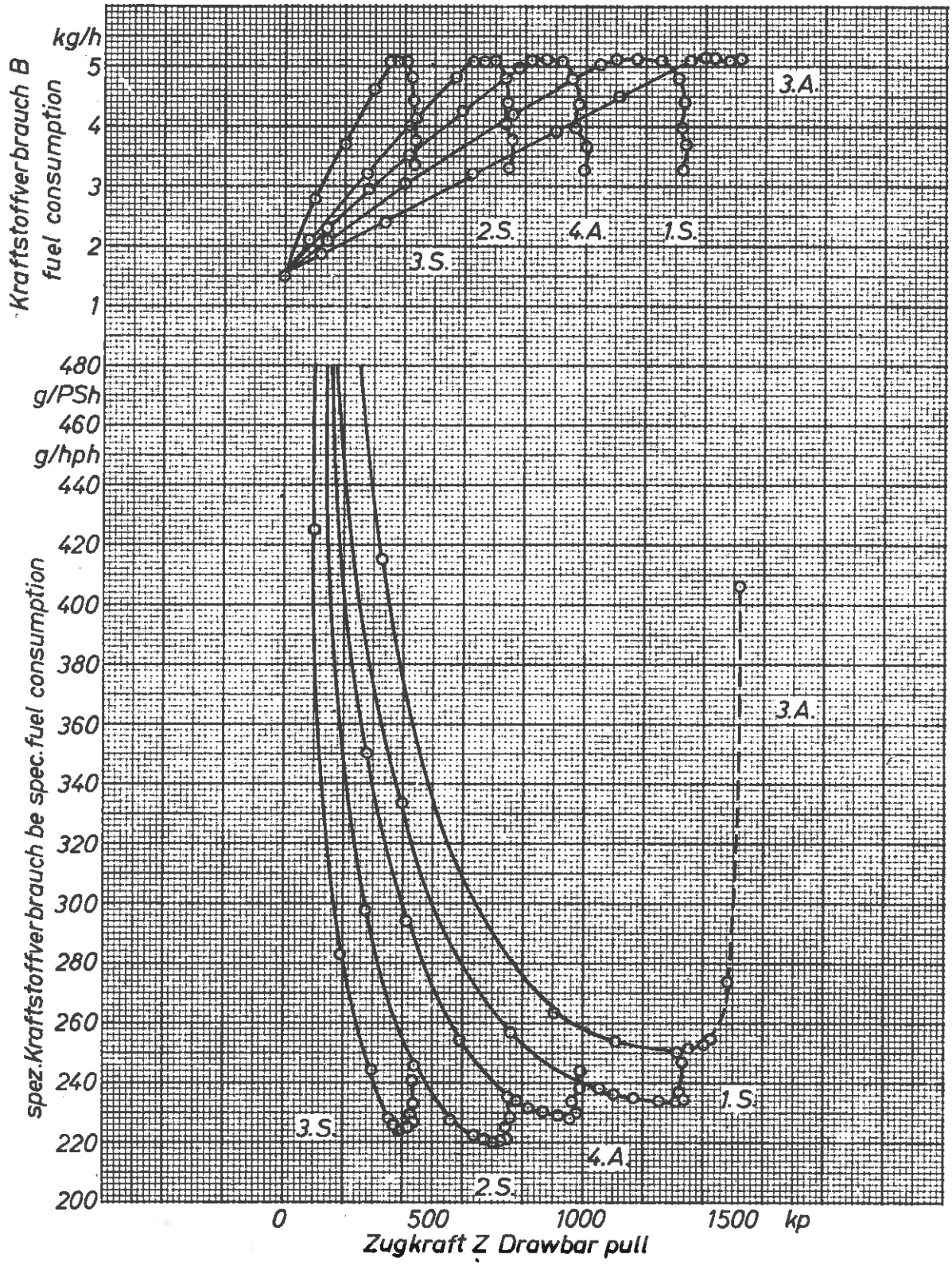
Motor Nr.: 1020	Barometerstand: 743 mm Hg	Kühlwassertemp: 82°C	Versuchstag: 19. 6. 68	Vers.-Leitung:
Schlepper Nr.: 92-1430	Lufttemperatur: 24-27°C	Öltemperatur: 76-80°C	Versuchs Nr.: 83/Zu 362-366	
Kraftstoff: 0,840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp.: 48°C	Kurvenblatt: 5	A. Reitlinger

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 030/68

Zugprüfung
Drawbar-test

Steyr-Diesel-Traktor
Typ 30
Mot. Typ Steyr WD 210

ohne Ballast without ballast



Motor Nr.: 1020	Barometerstand: 743 mm Hg	Kühlwassertemp: 82°C	Versuchstag: 19. 6. 68	Vers.-Leitung:
Schlepper Nr.: 92-1430	Lufttemperatur: 24-27°C	Öltemperatur: 76-80°C	Versuchs Nr.: 83/Zu 362-366	
Kraftstoff: 0,840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp.: 48°C	Kurvenblatt: 6	A. Reitlun

TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 5,50-16 AS Front, 4 ply, without ballast
rear: 11,2/10-28 AS 6 ply, without ballast

Track of wheels front: 1250 mm
rear: 1250 mm

	With brakes		Without brakes	
	right-hand	left-hand	right-hand	left-hand
Radius of turning space	2,585 m	3,11 m	3,485 m	3,61 m
Radius of turning circle	2,475 m	3,0 m	3,375 m	3,50 m

LOCATION OF CENTRE OF GRAVITY

Height above ground 622 mm

Distance forward from the vertical plane containing the axis of rear wheels 743 mm

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

BRAKE TESTS

Date of tests: 19th, 20th and 26th June 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

Cold Brakes

Results	Tractor without ballast	Tractor with ballast
Maximum deceleration m/s^2	4,0	4,1
Stopping distance m	7,40	8,55
Force on pedal kp	42	56

Brake fade characteristics (hot test)

Tractor without ballast:
Deceleration: hot/cold 87,5 %
Stopping distance: cold/hot 80 %
Force on pedal: cold/hot 97,7 %

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: 19th June 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: 20,5 km/h
Sound level: 82 dbA

NOISE MEASUREMENT AT THE DRIVER'S EAR

Date of test: 3rd July 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.S.	17,10	93	
2.S.	10,15	93	
4.L.	7,45	94	66
1.S.	5,56	94	
3.L.	4,39	94	
2.L.	2,70	94	

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: 24th June 1968, Wieselburg
Hydraulic fluid: SHELL Tellus 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	1320	170
At lower hitch points (height above ground in down position) 240 mm on the frame	615	890	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 maximum pressure	21,2 l/min
Pump delivery rate	19,3 l/min
Delivery pressure	170 kp/cm^2
Power (hydraulically)	7,29 hp (metric)

Note: Only one gear position possible, oil temperature 65°C
Relief of front axle: with frame about 956 kp
on the drawbar about 1700 kp

OPTIONAL TESTS

ENGINE TEST

Date and location of tests: 23.4.1968 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					
28,95	2200	587	6,08	176	4,76
At standard p.t.o. speed (540 rev/min)					
29,20	2020	540	6,05	174	4,825
At standard belt speed					
28,92	2183	583	6,03	175	4,795
At the speed recommended by the manufacturer for drawbar work					
28,92	2200	587	6,03	175	4,795
Fuel consumption at part loads 85% of torque at maximum power					
25,10	2240	598	5,47	183	4,59
Unloaded					
0	2390	638	1,56	-	-
50% of torque at maximum power					
15,10	2300	614	3,77	210	4,00
Maximum power					
28,92	2200	587	6,03	175	4,795
25% of torque at maximum power					
7,70	2345	626	2,66	290	2,895
75% of torque at maximum power					
22,20	2255	602	4,94	187	4,49

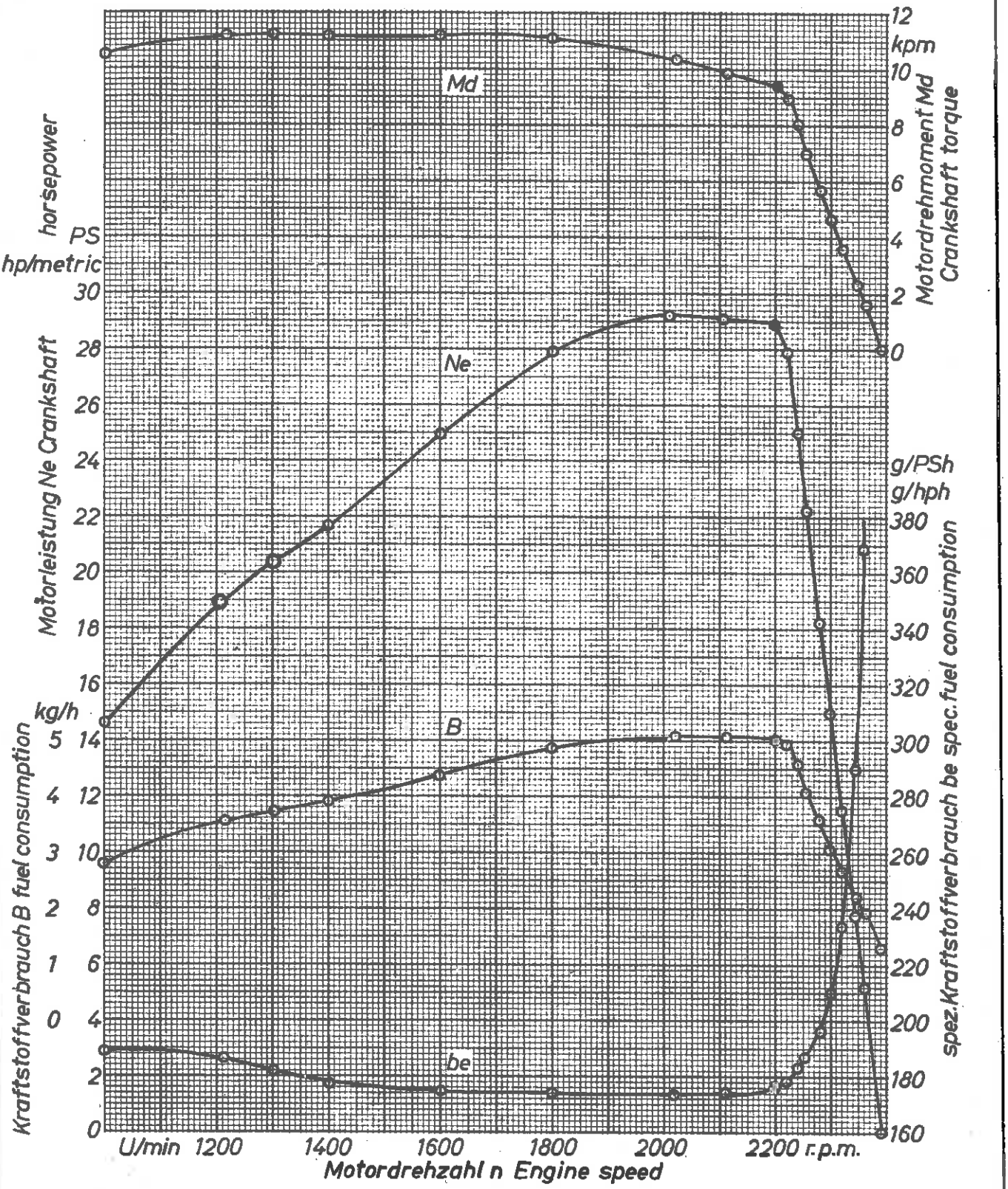
Optimum fuel consumption: 174 g/hph at 29,2 hp and 2020 rev/min
No load maximum engine speed: 2390 rev/min
Torque at maximum power: 9,41 kpm
Maximum torque: 11,23 kpm at 1300 rev/min of the engine
Mean atmospheric conditions: Temperature: 26°C (aspiration temp.34°C)
Pressure: 744 mm Hg
Relative humidity: 40%
Maximum temperature: Coolant: 80°C
Engine oil: 87°C
Fuel: 54°C

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF
PROTOKOLL NR. 030/68

Motorleistung
Engine - test

Steyr-Diesel-Traktor
Typ 30
Mot. Typ Steyr WD 210

●Dauerleistung (Mittelwert) sustained power (average)

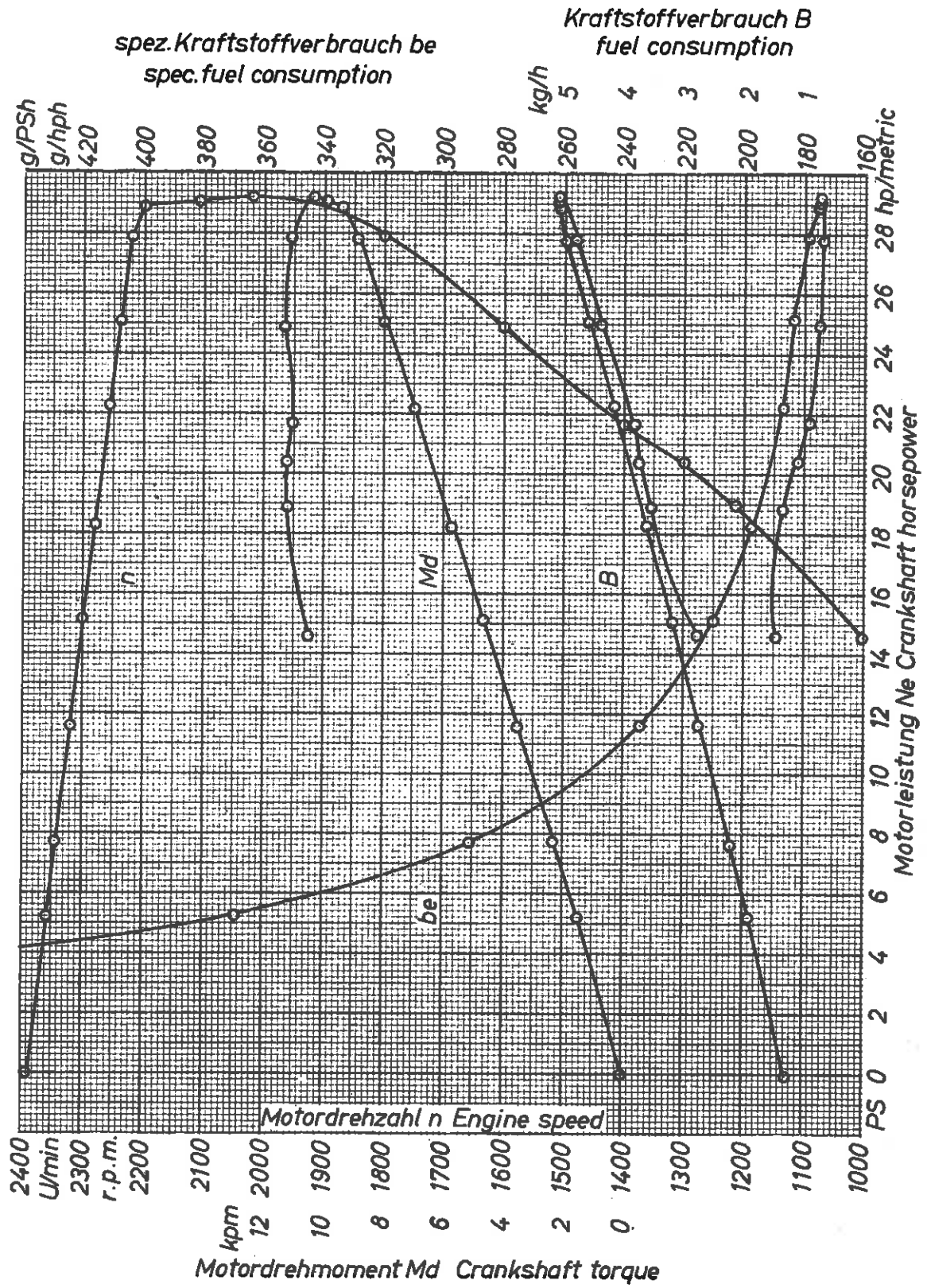


Motor Nr.: 1020	Barometerstand: 744 mm Hg	Kühlwassertemp: 78°C	Versuchstag: 23.4.68	Vers.-Leitung:
Schlepper Nr.: 92-1430	Lufttemperatur: 26°C	Öltemperatur: 82°C	Versuchs Nr.: 83/M105	A. Reitter
Kraftstoff: 0,840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp.: 49°C	Kurvenblatt: 7	

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 030/68

Motorleistung
Engine - test

Steyr-Diesel-Traktor
Typ 30
Mot. Typ Steyr WD 210



Motor Nr.: 1020	Barometerstand: 744 mm Hg	Kühlwassertemp.: 78°C	Versuchstag: 23.4.68	Vers.-Leitung:
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Kraftstoff: 0,840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp.: 49°C	Kurvenblatt: 8	

OPTIONAL TESTS

PERFORMANCE AT THE BELT PULLEY SHAFT

Date and location of tests: 17.5.1968 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					
25,95	2200	587/1309	6,12	198	4,24
At standard p.t.o. speed (540 rev/min)					
26,20	2020	540/1202	6,12	196	4,28
At standard belt speed					
25,92	2183	583/1300	6,14	199	4,22
At the speed recommended by the manufacturer for drawbar work					
25,92	2200	587/1309	6,14	199	4,22
Fuel consumption at part loads 85% of torque at maximum power					
22,40	2235	597/1330	5,47	205	4,095
Unloaded					
0	2390	638/1422	1,845	-	-
50% of torque at maximum power					
13,53	2295	613/1366	3,96	246	3,415
Maximum power					
25,92	2200	587/1309	6,14	199	4,22
25% of torque at maximum power					
6,90	2340	625/1393	2,965	361	2,327
75% of torque at maximum power					
19,90	2250	601/1340	5,02	212	3,964

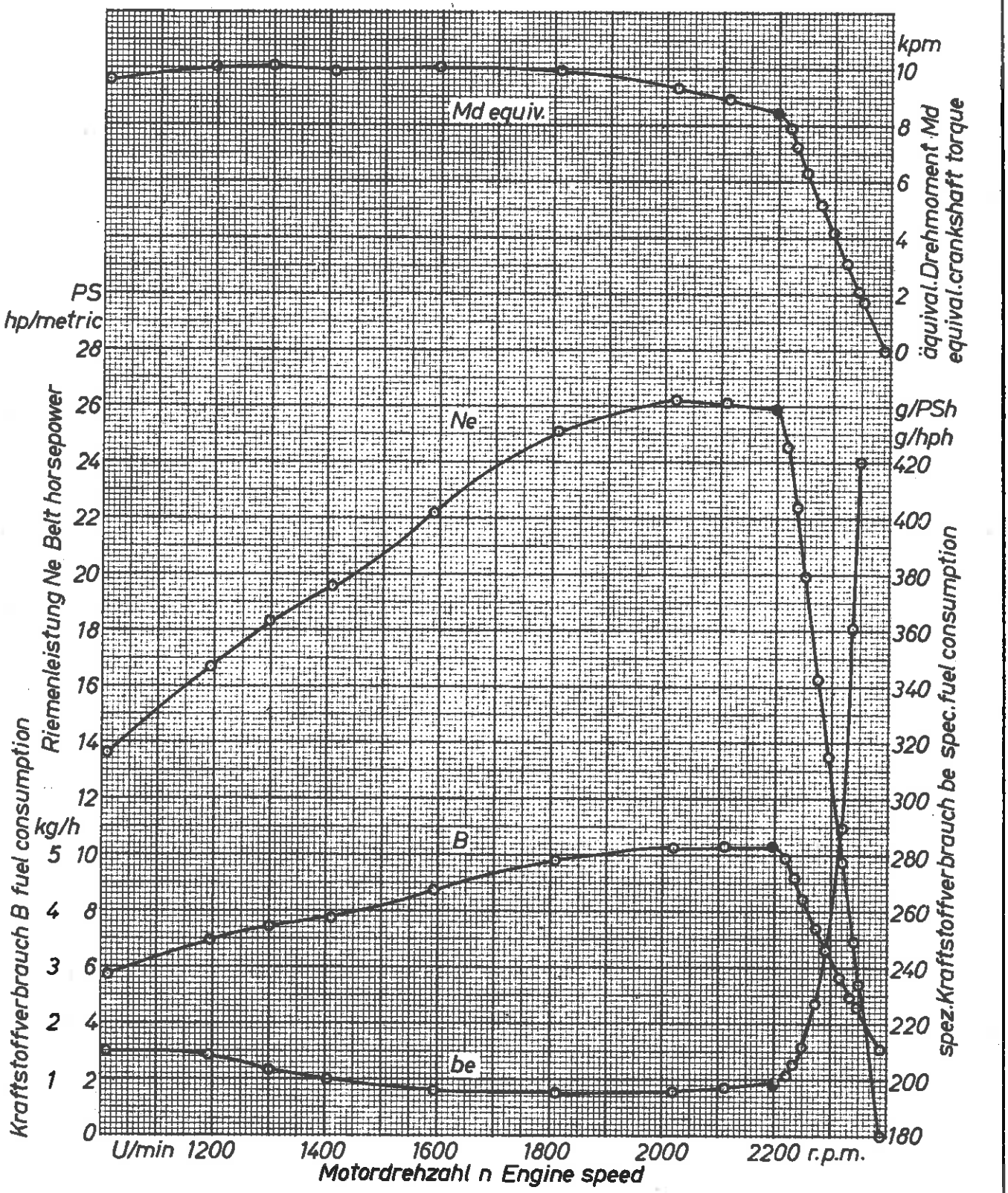
No load maximum engine speed: 2390 rev/min
Equivalent torque at maximum power: 8,44 kpm
Maximum torque: 10,06 kpm at 1300 rev/min of the engine
Mean atmospheric conditions: Temperature: 20°C (aspiration temp. 28°C)
Pressure: 741 mm Hg
Relative humidity: 70 %
Maximum temperature: Coolant: 80°C
Engine oil: 85°C
Fuel: 54°C

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Riemenleistung
Belt - test

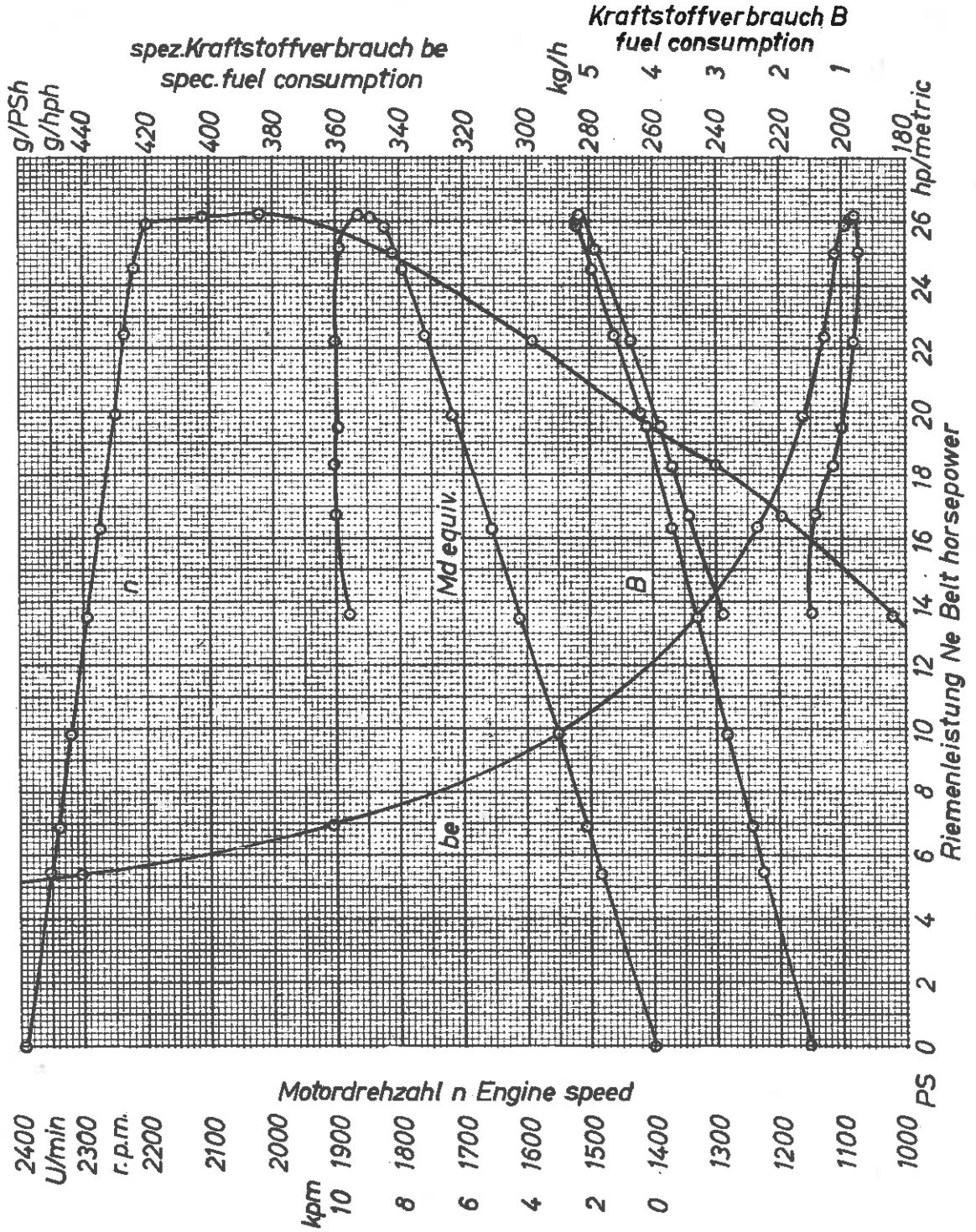
Steyr-Diesel-Traktor
Typ 30
Mot. Typ Steyr WD 210

● Dauerleistung (Mittelwert) sustained power (average)



Motor Nr.: 1020	Barometerstand: 741 mm Hg	Kühlwassertemp: 80°C	Versuchstag: 17. 5. 68	Vers.-Leitung:
Schlepper Nr.: 92-1430	Lufttemperatur: 20°C	Öltemperatur: 82°C	Versuchs Nr: 83/R16	A. Deitlen
Kraftstoff: 0,840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp.: 50°C	Kurvenblatt: 9	

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 030/68	**Riemenleistung** **Belt-test**	Steyr-Diesel-Traktor Typ 30 Mot. Typ Steyr WD 210



Motor Nr.: 1020	Barometerstand: 741 mm Hg	Kühlwassertemp: 80°C	Versuchstag: 17.5.68	Vers.-Leitung:
Schlepper Nr.: 92-1430	Lufttemperatur: 20°C	Öltemperatur: 82°C	Versuchs Nr: 83/R16	A. Reitler
Kraftstoff: 0,840/15°C	Motoröl: Shell Rotella S	Kraftstofftemp: 50°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