O.E.C.D. Report No.: 315

BUNDESVERSUCHS - UND PRÜFUNGSANSTALT
für landwirtschaftliche Maschinen und Geräte,
Wieselburg

Diesel-Tractor URSUS C-335

Manufactured by: Zakłady mechaniczne »URSUS«, Warszawy, Poland

Serial No: 315
Date of Approval: 18th March 1970

Test No: 022/69
Date of Test: 19. 8. 1969

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. Test Code

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.

TABLE OF CONTENTS

Tractor manufacturer:	Zakłady mechaniczne URSUS, Warszawy, Polska
Submitted for test by:	MOTOIMPORT, Warszawy, Polska
Selected by:	Manufacturer by agreement with Bundesversuchs- und Prüfungsanstalt für landwirtschaftliche Maschinen und Geräte, Wieselburg a.d. Erlauf
Place of running-in:	Manufacturer
Duration of running-in:	50 hours

SPECIFICATION OF TRACTOR

Tractor

Make:	Zakłady mechaniczne "URSUS", Warszawy
Model:	URSUS C-335
Type:	Wheel tractor
Serial No.:	000389

Engine

Make:	Zakłady mechaniczne "URSUS", Warszawy
Model:	S-312 C
Type:	Direct injection, type Diesel, 4-stroke
Serial No.:	123701
Cylinders:	2 cylinders, vertical in line, bore/stroke: 102/120 mm; capacity: 1960 cm^3; compression ratio: 17 : 1; arrangement of valves: overhead; wet replaceable cylinder liners
Fuel system:	Type of fuel feed: piston feed pump; fuel filter: strainer in the tank, dual chamber filter with felt and paper elements model FD 10 RP 2.4; capacity of fuel tank: appr. 35 l; injection pump: FRIEDMANN & MAIER P22T 7,5-17a 32AIRVF; manufacturers setting injection timing 30^{o} before TDC; injection nozzle: FRIEDMANN & MAIER D1Z1; injection pressure 135 + 5 kp/cm^2
Governor:	Make: FRIEDMANN & MAIER, type: centrifugal governor R 4V20-110/348; range of speed: 450 - 2450 rev/min; rated speed for p.t.o.-work (540 rev/min) 2160 rev/min field work ..... 2200 rev/min transport-work ..... 2200 rev/min belt work (1020 m/min) 2165 rev/min

Air cleaner: Make: URSUS VT-251; type: oil bath air cleaner, pre-cleaner cyclone; oil capacity: appr. 0,35 l

Lubrication system: Forced feed from gear type pump; type of filter: centrifugal full flow filter; oil capacity: appr. 6,2 l; change period: 200 hours, recommended oil in summer: SAE 30
in winter: SAE 20

Cooling system: Water circulation by water pump; thermostat for temperature control; temperature indicator; cooling water capacity: 10 l

Starting system: Electrical; ELMOT 125/4 PS; 12 V, 4 hp; aids for cold starting: heater plug respectively glow filament in the intake manifold

Electrical system:

Voltage: 12

Generator: ELMOT p4m; 12 V, 13 A, 150 W; direct current

Battery: ZAP 3SE 160-acid battery, 2 x 6 V, 190 Ah

Transmission:

Clutch: Make: URSUS; type: dry dual disk type clutch for travelling gear and engine p.t.o.; model: 280/280 FERODO; foot pedal operated

Gearbox: Make: URSUS; type: selecting gear; 6 forward speeds and 2 reverse

Rear axle and final drive: Make: URSUS; type: central axle, bevel gear drive with Oerlikon cut, acting by planetary gear and intermediate gear on rear wheels; differential lock: lockable bevel differential gear in the rear axle

Oil capacity: Gearbox and rear axle: 23 l; intermediate gear 1,1 l each (SAE 80); change period: 800 hours

Total ratios and speeds:

Gear No.	Number of engine revolutions for one revolution of the driving wheel	Nominal travelling speed for rated speed of engine 2200 rev/min
1.	266,95	1,87 km/h
2.	138,39	3,63 km/h
3.	86,49	5,79 km/h
4.	65,99	7,57 km/h
5.	34,17	14,65 km/h
6.	21,35	23,44 km/h
1.R.	318,21	1,57 km/h
2.R.	78,59	6,36 km/h

Power take-off:

Location:	At rear of tractor, in median plane of tractor; height above ground in minimum position 350 mm, in maximum position 610 mm
Dimensions:	29 x 34,9 x 8,7 = 1 3/8", 6 splines (acc. to DIN 9611 Form A)
Speed:	550 rev/min at rated engine speed 2200 rev/min, engine speed 2160 rev/min at standard p.t.o. speed 540 rev/min
Direction of rotation:	Right viewed from driving end
Ground speed:	Travelling distance for 1 revolution of ground speed p.t.o. 0,44 m; gear ratio between driving wheel and p.t.o. = 1 : 8,44; direction of rotation: right viewed facing driving end with tractor in forward gear

Belt pulley:

Location:	At rear of tractor; driving device attached to p.t.o.; manually engaged
Dimensions:	240 mm dia, 145 mm width
Speed:	1375 rev/min at 2200 rev/min rated engine speed; linear belt speed 1036 m/min
Engine speed:	2165 rev/min at standard belt speed 1020 m/min
Direction of rotation:	Right viewed from driving end

Power lift: Make: ARCHIMEDES, Wroclaw, Polska; type: oil hydraulic; oil capacity: 23 l (oil volume in the gear box); external tapping: up to 10 l; vertical lift movement above ground: 580 mm to 855 mm

Pull attachments:

Drawbar:	Threepoint implement linkage; height above ground: max. 855 mm, min. 275 mm; method of changing position: adjustable by power lift; distance from rear axle: 810 mm (horizontal); position relative to p.t.o.: 610 mm; 15 holes with 40 mm distance, 21,5 mm dia
Inflexible drawbar:	Height above ground: 355 mm; distance from rear axle: 365 mm, position relative to p.t.o.: 200 mm, 5 holes with 64 mm distance, 27,5 mm dia
Trailer hitch:	Height above ground: 680 mm, distance from rear axle: 400 mm; position relative to p.t.o.: 230 mm
Towing hitch:	Height above ground: 625 mm; distance from front axle: 165 mm
Hitch:	Height above ground: max. 315 mm, min. 100 mm; distance from rear axle: 365 mm; position relative to p.t.o.: 200 mm

Steering: Make: URSUS; type: segment steering; by hand wheel operated; oil capacity: 1,5 l SAE 20 or 30

Brakes: Make: URSUS; 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

Wheels:

Steering wheels: Two at front; type of tyres: tractor front wheel tyres; size: 6,00-16; ply rating: 4; maximum permissible weight on each tyre: 430 kp at 1,5 kp/cm^2 pressure; track width: 1250/1350/1500/1750 mm; method of changing: sliding tube-axle

Driving wheels: Two at rear; type of tyres: tractor driving wheel tyres; size: 11-28; ply rating: 6; maximum permissible weight on each tyre: 950 kp at 1 kp/cm^2 pressure; track width: 1250/1350/1400/1500/1600/1700/1750/1850 mm; method of changing: changed by reversing wheels and offset lug type rims; wheel base: in min. position 1950 mm, in max. position 1870 mm

Tractor and ballast weights:

(without driver but with tank full)

Weight without ballast:
Front: 640 kp
Rear: 1140 kp
Total: 1780 kp

Ballast:

Front:	2 weights	per wheel:	33,5 kp
		total:	67,0 kp
Rear:	4 weights	per wheel:	132,5 kp
		total:	265,0 kp
	water	per wheel:	90,0 kp
		total:	180,0 kp

Weight with full ballast:
Front: 707 kp
Rear: 1585 kp
Total: 2292 kp

Seat: Make: URSUS; type: mould seat;
suspension: parallelogram;
damping: telescopic shock absorber;
adjustment: steps changed in horizontal position;
axial adjustment: 100 mm

Overall dimensions:

Overall lenght:	3080 mm
Overall width:	1535 mm at 1250 mm track, width ballast weights 1660 mm
Overall height:	1990 mm in minimum position 2070 mm in maximum position
Ground clearance:	400 mm in minimum position 480 mm in maximum position

Lighting:

	Height above ground of centre cm.	Diameter cm	Distance from outside edge of tractor to centre cm
Head lights	105,5	15	38,5
Side lights	-	-	-
Rear lights	122,5	11	21
Reflectors	101,5	5	12

Pneumatic brake for trailer:

Compressor: Make: Zakłady mechaniczne Tarnów; model: SP 110; one cylinder, bore/stroke: 62/36 mm; capacity at 1400 rev/min: 90 l/min; nominal pressure: 5 kp/cm^2; non-disengageable; tyre pump equipment

Air box: Make: MZM; model: 15 c BN-65/3617-05; capacity: 15 l; pressure: 8 kp/cm^2; working pressure for trailer braking: 4,8-5,3 kp/cm^2

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 acc. to DIN 51601);
engine oil: BP Tractor oil UNIVERSAL SAE 30;
transmission oil: BP Tractor oil UNIVERSAL SAE 30

Track tests: Fuel: ELAN Diesel fuel, specific gravity at 15°C: 0,840 kp/l, Cetane No. 46,8 (quality acc. to DIN 51601);
engine oil: BP Tractor oil UNIVERSAL SAE 30
transmission oil: BP Tractor oil UNIVERSAL SAE 30

COMPULSORY TESTS

POWER TAKE-OFF PERFORMANCE

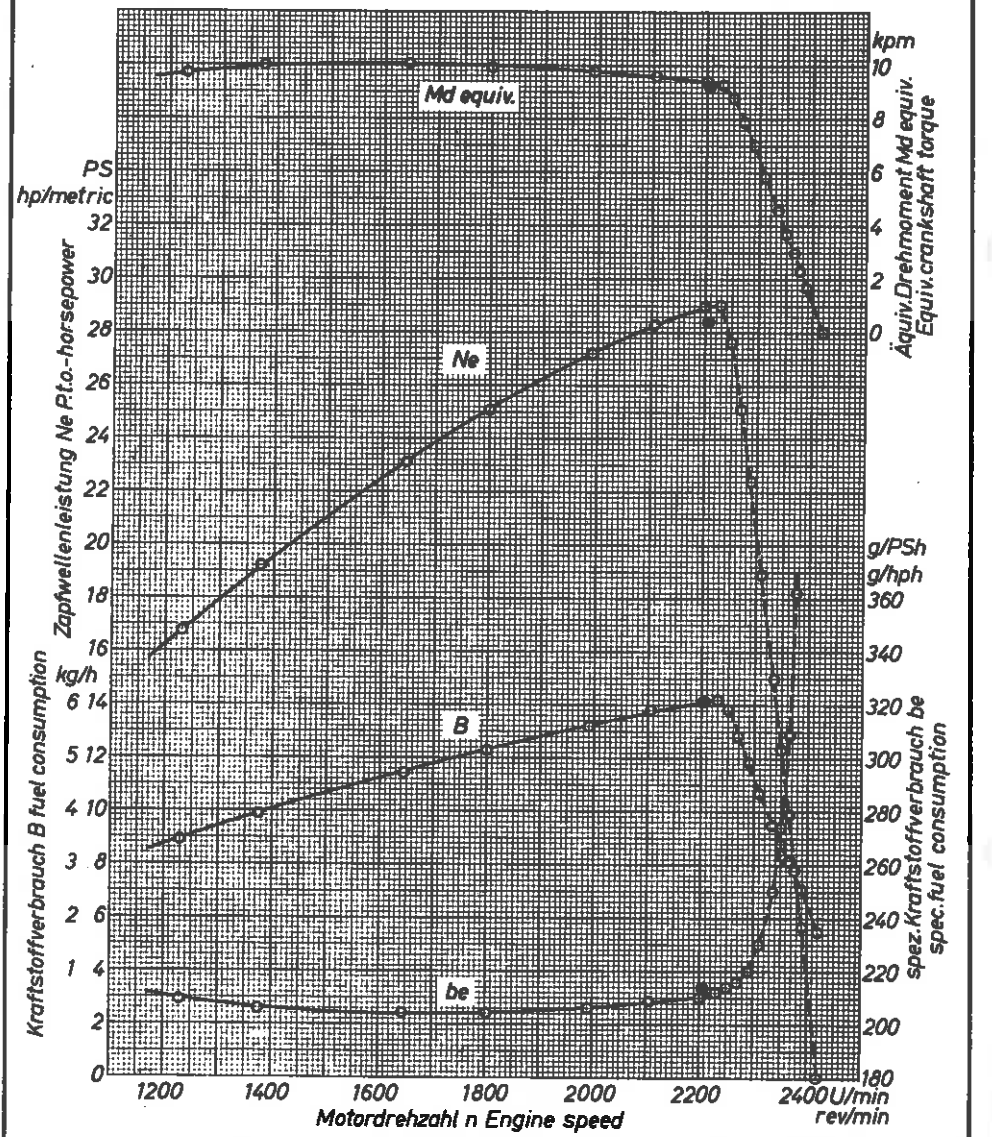
Date and location of tests: 10th July 1969, Wieselburg
Type of dynamometer: Siemens-Schuckert pendulum generator G 273/15

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					
28,40	2204	551	7,24	214	3,925
At standard p.t.o. speed (540 rev/min)					
28,65	2160	540	7,13	209	4,020
At standard belt speed					
28,70	2165	541	7,14	209	4,020
At the speed recommended by the manufacturer for drawbar work					
29,0	2232	558	7,27	212	3,990
Fuel consumption at part loads 85% of torque at maximum power					
25,10	2270	567	6,45	216	3,890
Unloaded					
0	2420	605	2,08	-	-
50% of torque at maximum power					
15,0	2335	584	4,46	250	3,360
Maximum power					
29,0	2232	558	7,27	212	3,990
25% of torque at maximum power					
7,78	2375	594	3,35	362	2,320
75% of torque at maximum power					
22,40	2290	572	5,87	220	3,815

No load maximum engine speed: 2420 rev/min
Equivalent torque at maximum power: 9,31 kpm
Maximum torque: 10,06 kpm at 1644 rev/min of the engine
Mean atmospheric conditions: temperature: 19°C (aspirations temp. 23°C)
pressure: 748 mm Hg
relative humidity: 74 %
Maximum temperature: coolant: 90°C
engine oil: 106°C
fuel: 58°C

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 022/69	**Zapfwellenprüfung** **P.t.o.-test**	URSUS-Dieseltraktor Typ C-335 Mot. Typ URSUS S-312 C

●Dauerleistung (Mittelwert) sustained power (average)

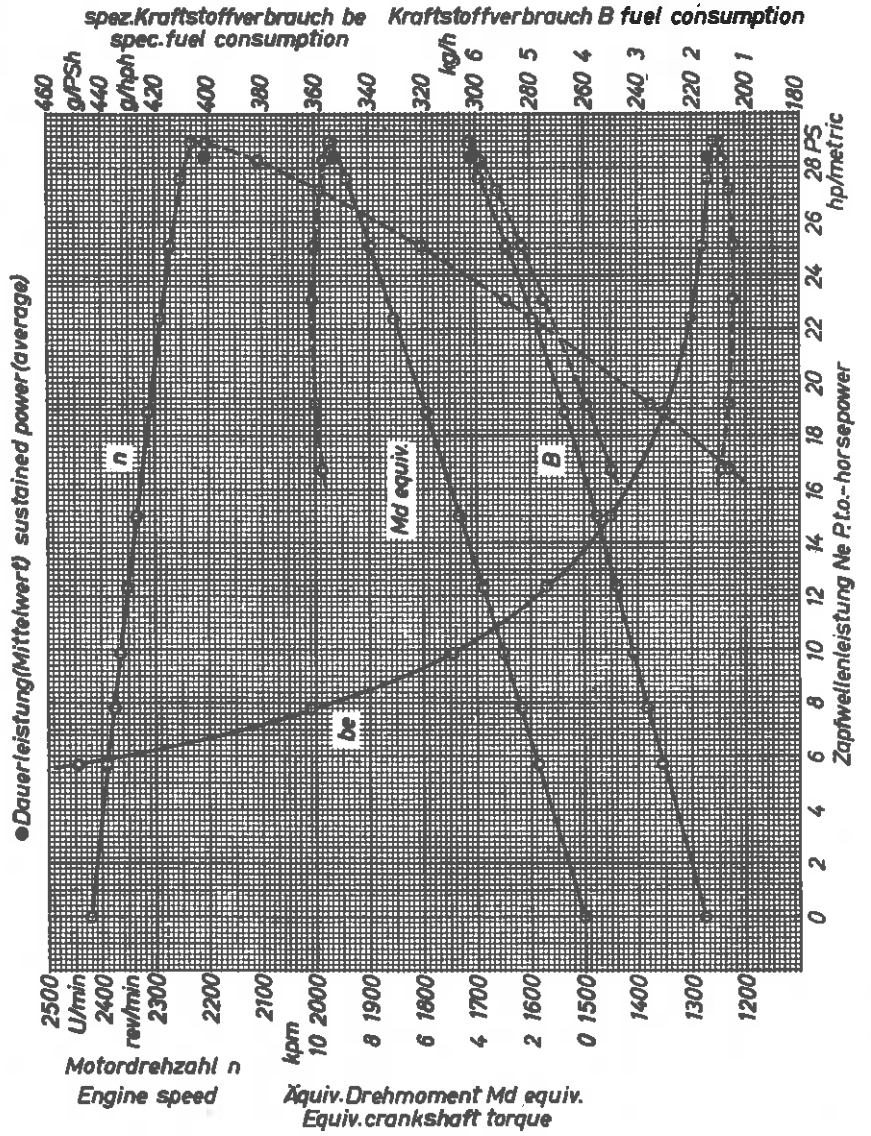


Motor Nr.: 123701	Barometerstand: 748 mm Hg	Kühlwassertemp: 81°C	Versuchstag: 10. 7. 1969	Vers.-Leitung:
Schlepper Nr.: 000389	Lufttemperatur: 19/20°C	Öltemperatur: 105°C	Versuchs Nr.: 91/Za 83	A. Reitler
Kraftstoff: 0,840/15°C	Motoröl: BP Univ. SAE 30	Kraftstofftemp.: 51°C	Kurvenblatt: 1	

BUNDESVERSUCHS- U. PRÜFUNGSANST. FÜR LAND. MASCHINEN U. GERÄTE WIESELBURG AB. ERLAUF PROTOKOLL NR. 022/69

Zapfwellenprüfung
P.t.o.-test

URSUS-Dieseltraktor
Typ C-335
Mot. Typ URSUS S-312C



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Kraftstoff: 0,840/15°C	Motoröl: BP Univ. SAE 30	Kraftstofftemp.: 51°C	Kurvenblatt: 2	

DRAWBAR PERFORMANCE

Date of tests: 23th - 30th July 1969
Type of track: concrete
Height of drawbar above ground: 590 mm with ballast, 720 mm without ballast

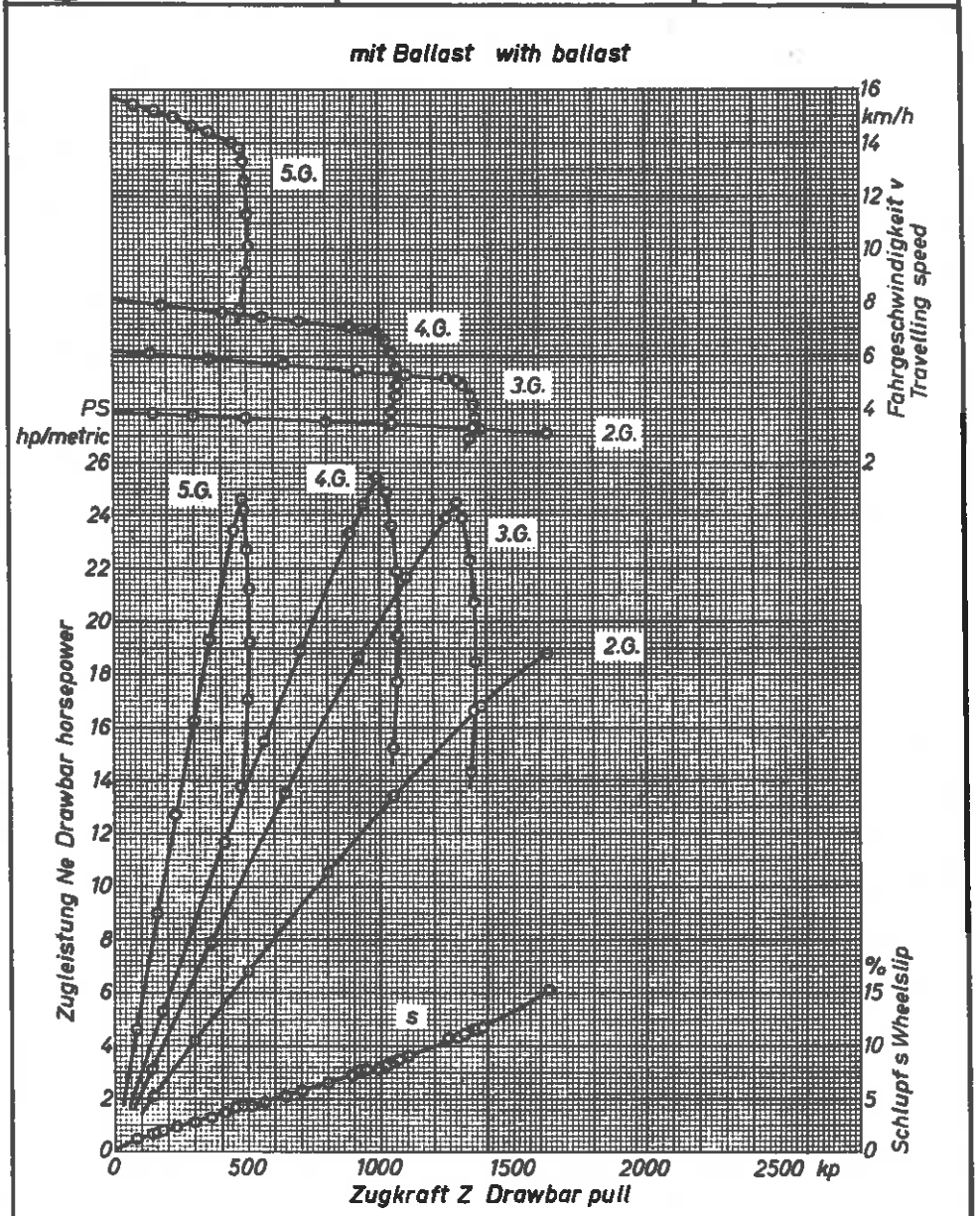
Gear No.	Horse-power (metric) hp	Draw-bar pull kp	Engine speed rev/min	Slip of wheels %	Specific work hph/l	Specific fuel consumpt. g/hph	Temperatures Fuel °C	Coolant °C	Engine oil °C	Atmospheric conditions Tempera-ture °C	Relative humidity %	Press. mm/hg
MAXIMUM POWER (ballasted)												
2.	18,82	1630	2275	15,25	2,875	292	48	85	87	25	54	747
3.	24,50	1290	2220	10,81	3,33	252	47	84	87	27	48	747
4.	25,40	990	2215	7,8	3,44	244	45	80	85	25	55	747
5.	24,60	480	2205	4,3	3,35	250	45	80	84	23	60	747
FIVE HOUR TEST at 75% of pull at maximum power (5,29 km/h												
3.	20,0	1020	2270	8,7	3,0	280	54	96	98	25	58	749
FIVE HOUR TEST at pull corresponding to 15% wheel slip												
2.	18,13	1600	2280	15,2	2,83	297	58	98	98	26	60	749
MAXIMUM POWER (unballasted)												
2.	15,27	1300	2310	15,4	2,785	301	46	83	86	25	60	750
3.	23,20	1270	2220	14,5	3,14	267	46	82	85	26	58	750
4.	24,60	980	2210	10,0	3,34	251	43	80	83	27	56	750
5.	24,20	475	2200	5,1	3,275	256	43	80	82	28	50	750

Total oil consumption during ten hours duration of test = 190 g

BUNDESVERSUCHS- U. PRÜFUNGSAMT FÜR LAND- U. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF
PROTOKOLL NR. 022/69

Zugprüfung
Drawbar-test

URSUS-Dieseltraktor
Typ C-335
Mot. Typ URSUS S-312 C



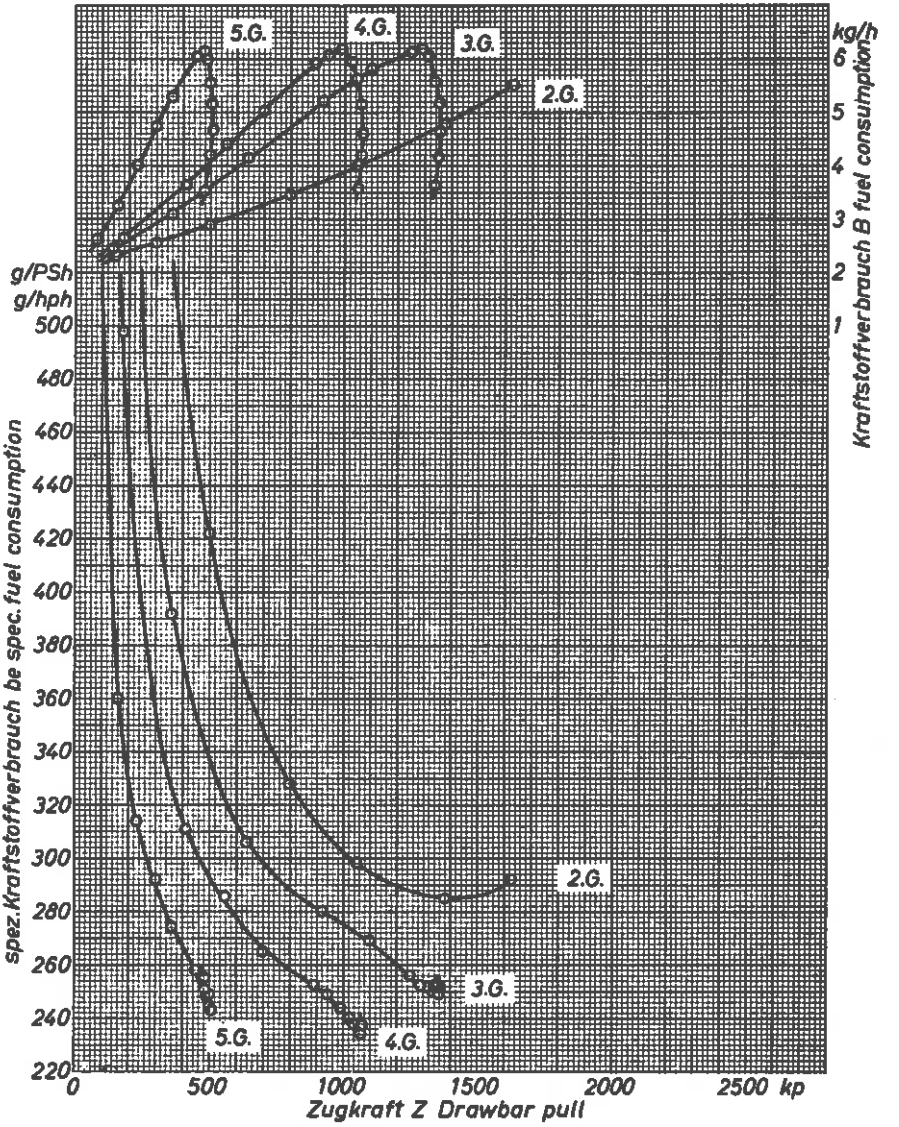
Motor-Nr.: 123701	Barometerstand: 747 mm Hg	Kühlwassertemp: 85°C	Versuchstag: 30.7.1969	Vers.-Leitung:
Schlepper Nr.: 000389	Lufttemperatur: 23-25°C	Öltemperatur: 84-87°C	Versuchs Nr: 91/Zu419-422	A. Reitlinger
Kraftstoff: 0,840/15°C	Motoröl: BP Univ. SAE 30	Kraftstofftemp: 48°C	Kurvenblatt: 3	

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 022/69

Zugprüfung
Drawbar - test

URSUS-Dieseltraktor
Typ C-335
Mot. Typ URSUS S-312 C

mit Ballast with ballast



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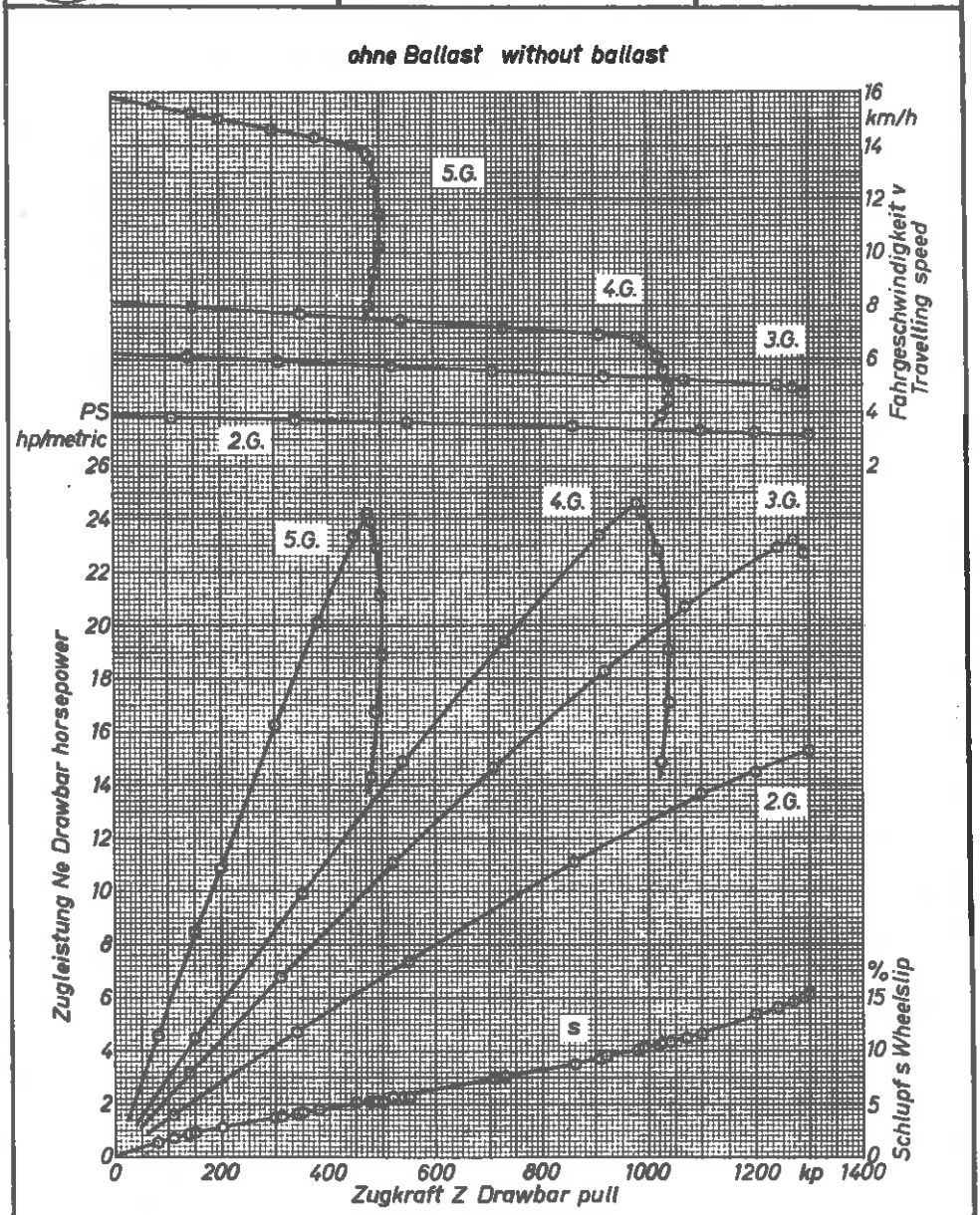
Schlepper Nr.: 000389	Lufttemperatur: 23–25°C	Öltemperatur: 84-87°C	Versuchs Nr.: 91/Zu419	-422	
Kraftstoff: 0,840/15°C	Motoröl: BP Univ. SAE 30	Kraftstofftemp.: 48°C	Kurvenblatt: 4	A. Reither	

BUNDESVERSUCHS- U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 022/69

Zugprüfung
Drawbar-test

URSUS-Dieseltraktor
Typ C-335
Mot. Typ URSUS S-312 C



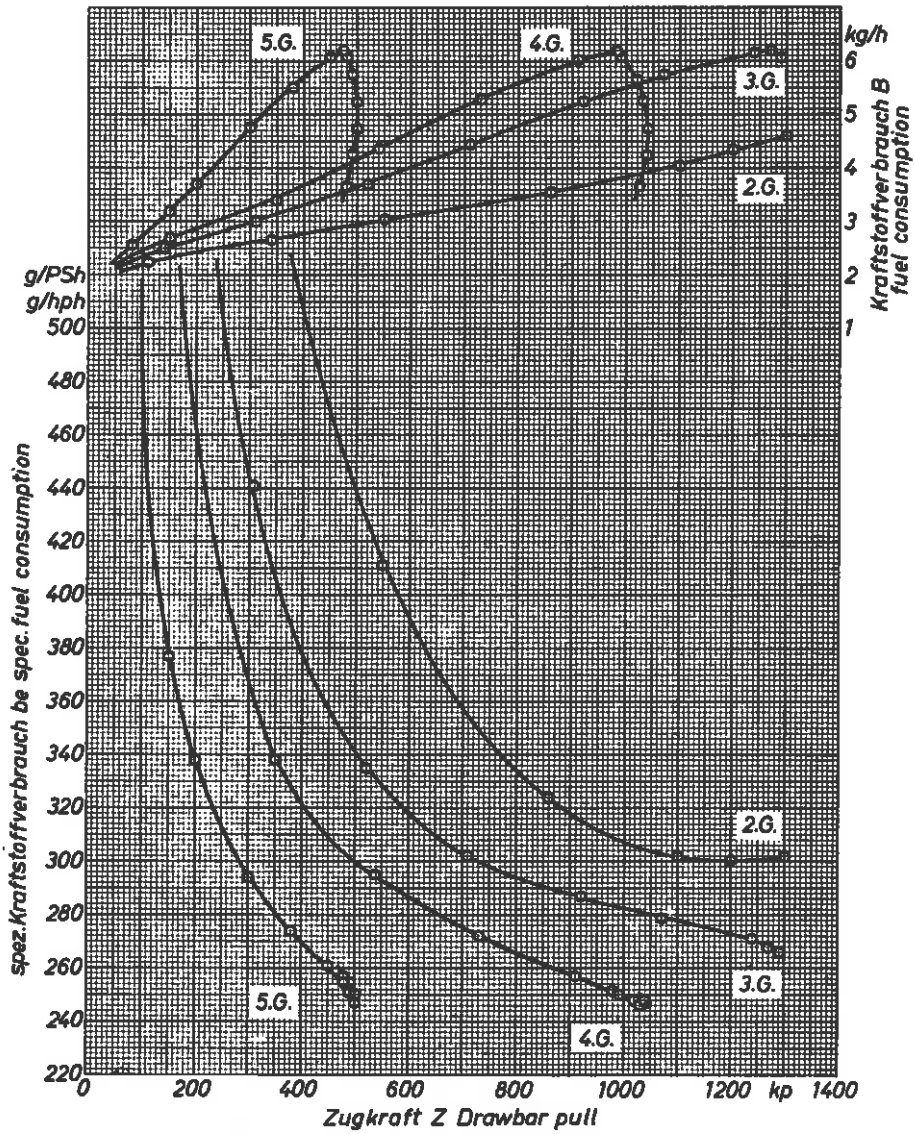
Motor-Nr.: 123701	Barometerstand: 750 mm Hg	Kühlwassertemp: 83°C	Versuchstag: 23.7.1969	Vers.-Leitung:
Schlepper-Nr.: 000389	Lufttemperatur: 25–28°C	Öltemperatur: 82–86°C	Versuchs-Nr.: 91/Zu423–426	A. Reitter
Kraftstoff: 0,840/15°C	Motoröl: BP Univ. SAE 30	Kraftstofftemp.: 46°C	Kurvenblatt: 5	

BUNDESVERSUCHS- U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 022/69

Zugprüfung
Drawbar-test

URSUS-Dieseltraktor
Typ C-335
Mot. Typ URSUS S-312 C

ohne Ballast without ballast



Motor Nr.: 123701	Barometerstand: 750 mmHg	Kühlwassertemp: 83°C	Versuchstag: 23.7.1969	Vers.-Leitung:
Schlepper Nr.: 000389	Lufttemperatur: 25-28°C	Öltemperatur: 82-86°C	Versuchs Nr.: 91/Zu423-426	A. Reitter
Kraftstoff: 0.840/15°C	Motoröl: BP Univ. SAE 30	Kraftstofftemp: 46°C	Kurvenblatt: 6	

TURNING SPACE AND TURNING CIRCLE

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

Track of wheels front: 1350 mm
rear: 1250 mm

	With brakes		Without brakes	
	right-hand	left-hand	right-hand	left-hand
Radius of turning space	3,22 m	3,32 m	3,60 m	3,72 m
Radius of turning circle	3,12 m	3,22 m	3,50 m	3,62 m

LOCATION OF CENTRE OF GRAVITY

Height above ground ..... 710 mm

Distance forward from the vertical plane containing the axis of the rear wheels ..... 678 mm

Distance from the median plane of the tractor ..... 15 mm

BRAKE TESTS

Date of tests: 24th and 31st July 1969
Type of track: concrete
Instrument: Recorder for deceleration and force on pedal MOTO-METER No. 03382, TÜv-Typ-Prüf.-Nr. 04 Stuttgart
Travelling speed of tractor: 23 km/h

Cold brakes

Results		Tractor without ballast	Tractor with ballast
Maximum deceleration	m/s^2	3,4	3,4
Stopping distance	m	8,42	9,44
Force on pedal	kp	69	68

Brake fade characteristics (hot test)

Tractor without ballast:
Deceleration: hot/cold 97 %
Stopping distance: cold/hot 83 %
Force on pedal: cold/hot 94 %

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 present 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 test: 30th July 1969
Type of track: concrete (on open land)
Type of sound level meter: Precisions Sound Level Meter Type 2203, Brüel & Kjäer/Copenhagen

Results of tests:

Gear 6.
Travelling speed: 18 km/h
Sound level: 81 dbA

NOISE MEASUREMENT AT THE DRIVER'S EAR

Date of test: 31st July 1969
Type of track: concrete
Type of sound level meter: Precisions Sound Level Meter Type 2203
Type of octave filter: Octave Filter Set Typ 1613, Brüel & Kjäer/ Copenhagen

Tractor without cab

Results of tests:

Gear	Travelling speed km/h	dbA	sones
2.	3,28	95,5	
3.	5,32	96	
4.	7,16	95,5	92
5.	14,22	95	

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

Sone evolution according to Stevens

POWER LIFT PERFORMANCE

Date and location of test: 11th August 1969
Hydraulic fluid: BP Tractor oil UNIVERSAL SAE 30

	Vertical movement mm	Maximum force exerted through full range kp	pressure kp/cm^2
Linkage giving maximum mechanical advantage: (only one adjusting possible)	580	940	117
At lower hitch points (height above ground in down position) 275 mm on the frame	580	630	117

Type of linkage lock for transport: by oil circuit steering
Oil temperature: 61°C
Relief of front axle: None

Acc. to manufacturers specification:
Working pressure: 100 - 120 kp/cm^2
Pump delivery at 1430 rev/min = 18 l/min (at rated engine speed 2200 rev/min)

Repairs and adjustments during tests: None
Remarks: None

Head of department:
Dipl.Ing.Zehetner

Officer in charge:
A.Reither

The director:
Dipl.Ing.Dr.Scheruga
Hofrat

OPTIONAL TESTS

ENGINE TEST

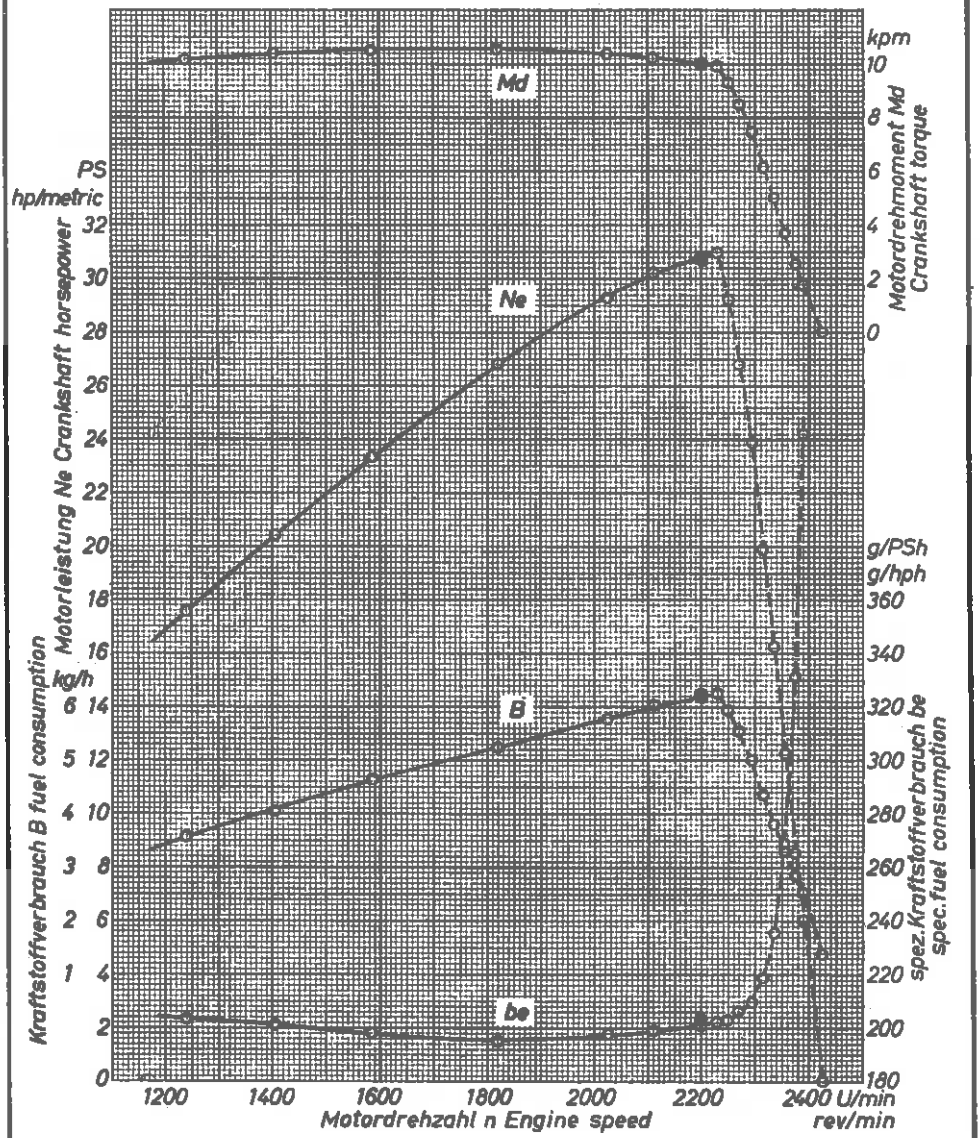
Date and location of tests: 8th July 1969, Wieselburg
Type of dynamometer: Siemens-Schuckert pendulum generator G 273/15

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					
30,70	2202	550	7,42	203	4,135
At standard p.t.o. speed (540 rev/min)					
30,55	2160	540	7,27	200	4,200
At standard belt speed					
30,60	2165	541	7,29	200	4,195
At the speed recommended by the manufacturer for drawbar work					
31,0	2230	558	7,45	202	4,160
Fuel consumption at part loads 85% of torque at maximum power					
26,80	2270	567	6,57	206	4,080
Unloaded					
0	2425	606	2,10	0	-
50% of torque at maximum power					
16,23	2335	584	4,55	235	3,565
Maximum power					
31,0	2230	558	7,45	202	4,160
25% of torque at maximum power					
8,55	2375	594	3,37	331	2,535
75% of torque at maximum power					
23,88	2295	574	5,95	209	4,010

Optimum fuel consumption: 195 g/hph at 26,85 hp and 1820 rev/min
No load maximum engine speed: 2425 rev/min
Torque at maximum power: 9,96 kpm
Maximum torque: 10,56 kpm at 1820 rev/min of the engine
Mean atmospheric conditions: temperature: 18°C (aspiration temp. 25°C)
pressure: 746 mm Hg
relative humidity: 73 %
Maximum temperature: coolant: 83°C
engine oil: 109°C
fuel: 50°C

BUNDESVERSUCHS- U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 022/69	**Motorprüfung** **Engine - test**	URSUS-Dieseltraktor Typ C-335 Mot. Typ URSUS S-312 C

●Dauerleistung(Mittelwert) sustained power(average)

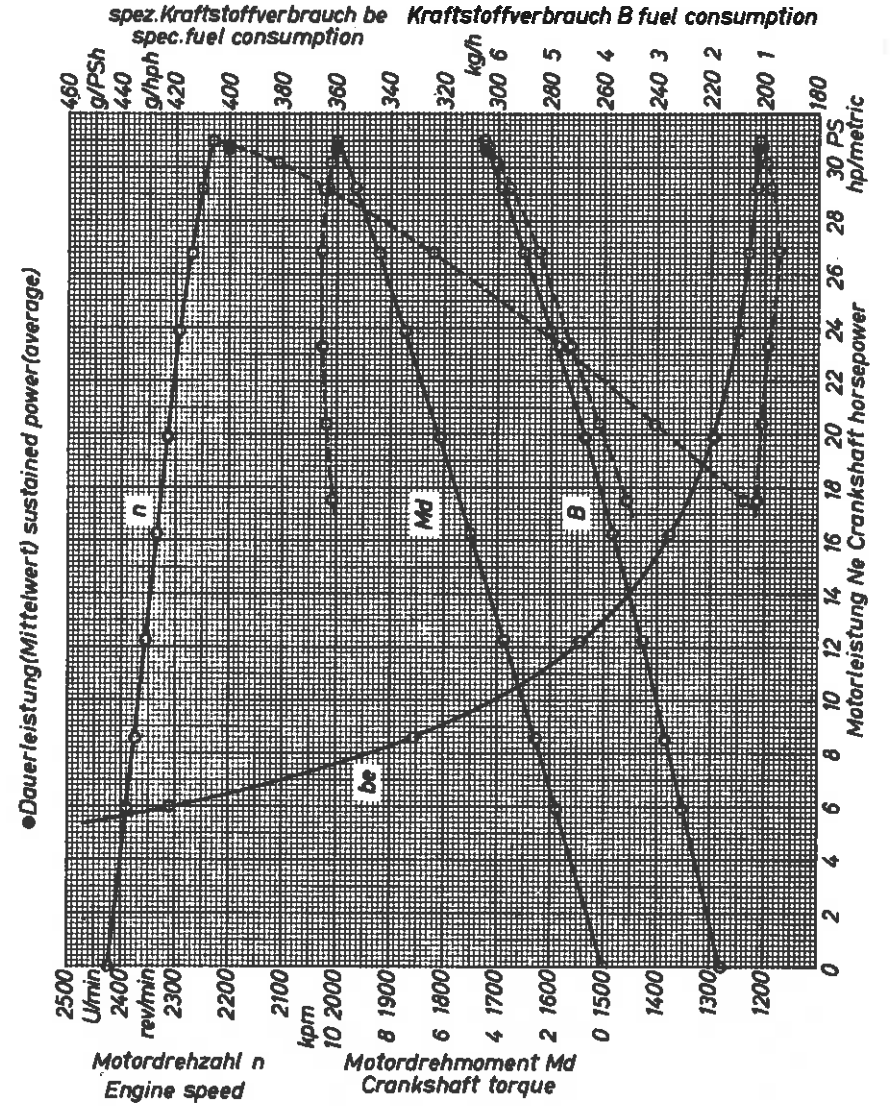


Motor-Nr.: 123701	Barometerstand: 746 mm Hg	Kühlwassertemp.: 80°C	Versuchstag: 8.7.1969	Vers.-Leitung:
Schlepper-Nr.: 000389	Lufttemperatur: 18/19°C	Öltemperatur: 104°C	Versuchs-Nr.: 91/M 120	A. Reitler
Kraftstoff: 0,840/15°C	Motoröl: BP Univ. SAE 30	Kraftstofftemp.: 46°C	Kurvenblatt: 7	

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 022/69

Motorprüfung
Engine - test

URSUS-Dieseltraktor
Typ C-335
Mot. Typ URSUS S-312C



Motor-Nr.: 123701	Barometerstand: 746 mm Hg	Kühlwassertemp: 80°C	Versuchstag: 8.7.1969	Vers.-Leitung:
Schlepper-Nr.: 000389	Lufttemperatur: 18/19°C	Öltemperatur: 104°C	Versuchs-Nr.: 91/M120	A. Reitlun
Kraftstoff: 0.840/15°C	Motoröl: BP Univ. SAE 30	Kraftstofftemp: 46°C	Kurvenblatt: 8	

OPTIONAL TESTS

PERFORMANCE AT THE BELT PULLEY SHAFT

Date and location of tests: 17th July 1969
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					
27,85	2200	550/1375	7,21	217	3,860
At standard p.t.o. speed (540 rev/min)					
27,95	2160	540/1350	7,22	217	3,870
At standard belt speed (1020 m/min)					
28,0	2165	541/1353	7,23	217	3,875
At the speed recommended by the manufacturer for drawbar work					
28,20	2210	552/1382	7,36	219	3,830
Fuel consumption at part loads 85% of torque at maximum power					
24,50	2265	566/1415	6,47	222	3,785
Unloaded					
0	2425	606/1516	2,13	-	-
50% of torque at maximum power					
14,70	2330	582/1456	4,48	256	3,280
Maximum power					
28,25	2228	557/1392	7,40	220	3,815
25% of torque at maximum power					
7,58	2375	594/1485	3,37	373	2,250
75% of torque at maximum power					
21,70	2285	571/1428	5,81	225	3,735

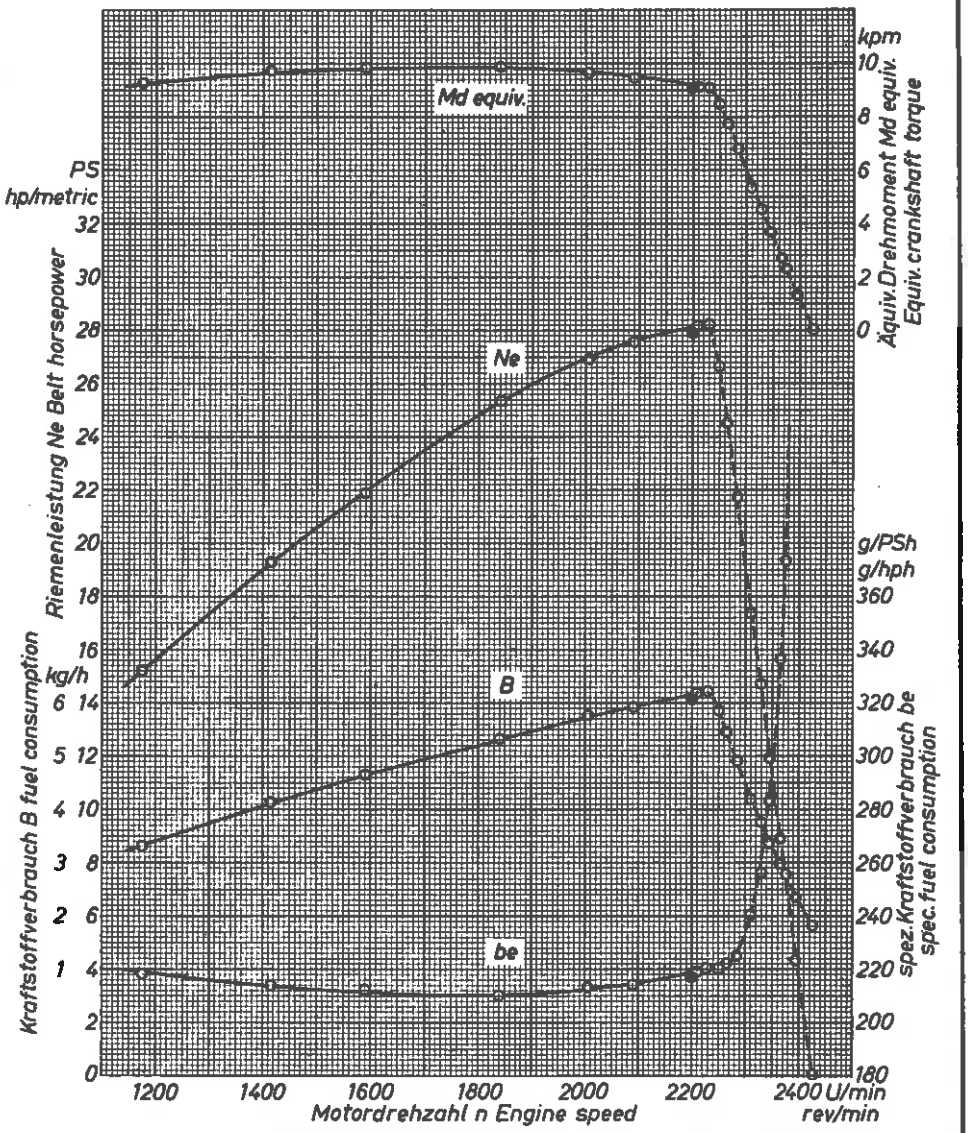
No load maximum engine speed: 2425 rev/min
Equivalent torque at maximum power: 9,08 kpm
Maximum torque: 9,85 kpm at 1840 rev/min of the engine
Mean atmospheric conditions: temperature: 24°C (aspiration temperature 32°C)
pressure: 751 mm Hg
relative humidity: 54 %
Maximum temperature: coolant: 95°C
engine oil: 109°C
fuel: 56°C

BUNDESVERSUCHS-U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF PROTOKOLL NR. 022/69

Riemenleistung
Belt-test

URSUS-Dieseltraktor
Typ C-335
Mot. Typ URSUS S-312C

●Dauerleistung(Mittelwert) sustained power(average)



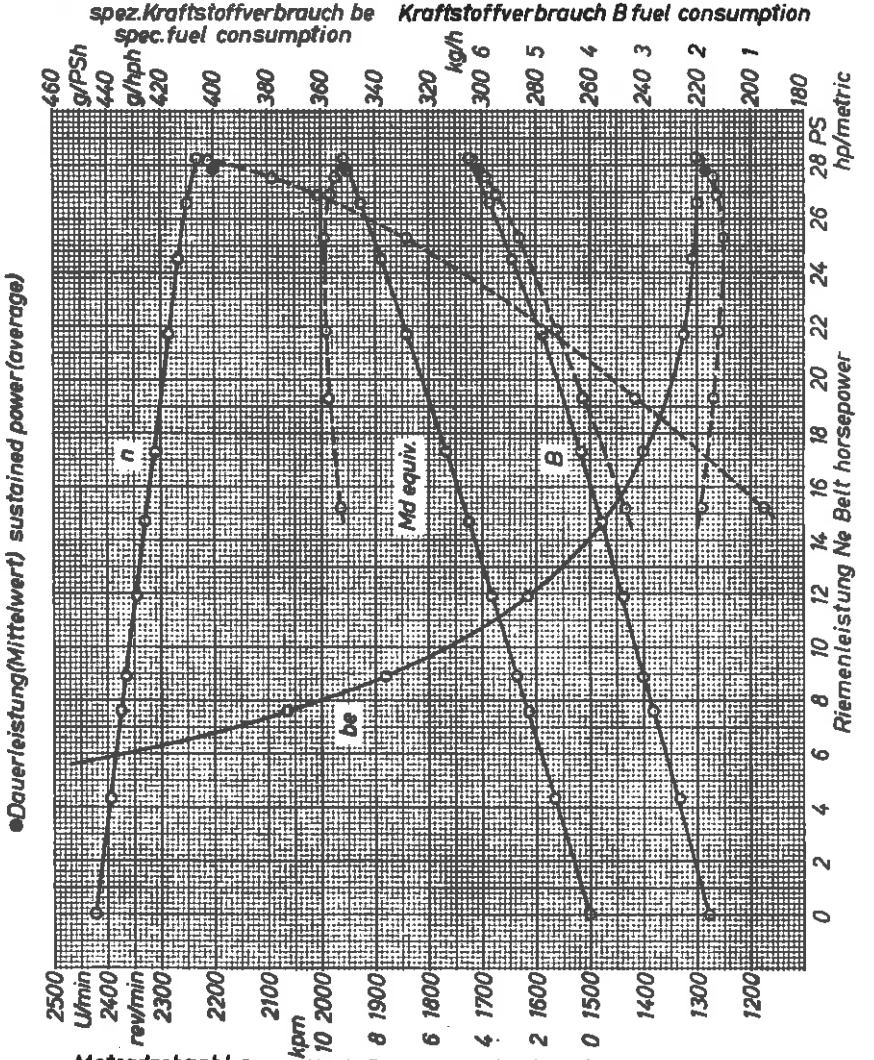
Motor-Nr.: 123701	Barometerstand: 751 mm Hg	Kühlwassertemp.: 91°C	Versuchstag: 17.7.1969	Vers.-Leitung:
Schlepper Nr.: 000389	Lufttemperatur: 24/26°C	Öltemperatur: 102°C	Versuchs Nr.: 91/R20	A. Reitter
Kraftstoff: 0,840/15°C	Motoröl: BP Univ. SAE 30	Kraftstofftemp.: 53°C	Kurvenblatt: 9	

BUNDESVERSUCHS- U. PRÜFUNGSANST. FÜR LANDW. MASCHINEN U. GERÄTE WIESELBURG A.D. ERLAUF

PROTOKOLL NR. 022/69

Riemenleistung
Belt-test

URSUS-Dieseltraktor
Typ C-335
Mot. Typ URSUS S-312C



Motor Nr.: 123701	Barometerstand: 751 mm Hg	Kühlwassertemp.: 91°C	Versuchstag: 17. 7. 1969	Vers.-Leitung:	
Schlepper Nr.: 000389	Lufttemperatur: 24/26°C	Öltemperatur: 102°C	Versuchs Nr.: 91/R 20	A. Reitter	
Kraftstoff: 0,840/15°C	Motoröl: BP Univ. SAE 30	Kraftstofftemp.: 53°C	Kurvenblatt: 10		