O.E.C.D. Report No.: 950

ORDNER VOLLSTÄNDIG

Bundesanstalt für Landtechnik

A-3250 Wieselburg, Austria

Dieseltractor STEYR 337.45

Trade name:

STEYR 8075a



Date of approval: 1985 09 25

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

TABLE OF CONTENTS

	Page
SPECIFICATIONS OF TRACTOR	2
Tractor	2
Engine	2
Transmission	5
Power take-off	7
Power lift	9
Three-point-linkage	10
Holed drawbar	12
Trailer hitch	12
Towing hitch	14
Steering	15
Brakes	15
Steering wheels	16
Driving wheels	16
Wheelbase	16
Protective structure specifications	17
Driver's seat	17
Lighting	18
TEST CONDITIONS	19
TEST RESULTS	21
Main power take-off performance - 540 rev/min	21
Drawbar performance	25
Turning space and turning circle	27
Location of centre of gravity	27
Braking	27
Measurement of external noise level	29
Noise measurement at driver's ear	29
Lifting force and hydraulic power test results	34
Performance of power lift	37
OPTIONAL TESTS	39
Main power take-off performance - 1000 rev/min	39
Engine performance	43
Reduction of power data to standard conditions	47
Remarks	47
ANNEX	48
Octave analysis of noise at the driver's ear level	48

Tractor manufacturer's name and address:	STEYR-DAIMLER-PUCH AG., Steyr, Austria STEYR-HELLAS ABE., Sindos, Greece
Submitted for test by:	Manufacturer
Selected for test by:	Manufacturer by agreement with BLT-Wieselburg
Place of running-in:	Steyr, Austria
Duration of running-in:	120 hours

SPECIFICATIONS OF TRACTOR

TRACTOR:

Make:	STEYR-DAIMLER-PUCH AG.
Trade name:	STEYR 8075 a
Model:	Diesel-tractor STEYR 337.45
Type:	Wheel tractor, four-wheel driven, unit construction
Serial no.:	337.45 - 12771 (first serial number 337.45-12770)

ENGINE:

Make:	Own make
Model:	WD 411.46
Type:	4 stroke diesel engine with direct injection
Serial no.:	411.46 - 7845

Cylinders:

Number/disposition:	4, vertical in line
Bore/stroke:	100/110 mm
Capacity:	3456 cm^3
Compression ratio:	16,2/1
Arrangement of valves:	Overhead valves
Cylinder liners:	Wet liners

Fuel system:

Capacity of fuel tank:	60 l
Fuel feed system:	Fuel feed by gravity
Make, type and model of fuel filter:	PUROLATOR PFC-233 Filter with water trap and changeable element, filter cartridge (PER 247-F)
Service interval:	500 hours changing interval of filter
Make, type, model and serial number of injection pump:	BOSCH distributor injection pump, VE 4/R 94-2 0 460 414 014

Manufacturer's production setting of injection pump, flow rate and timing:	47^{+0}_{-2} mm^3/stroke at 2400 rev/min and full load 12^{+0}_{-2} before TDC at 1 mm pump stroke
Make, type and model of injectors:	FRIEDMANN & MAIER or BOSCH Multi hole injection nozzles FRIEDMANN & MAIER D 1 LMK 150/54 BOSCH DLLA 150 S 798
Injection pressure:	$21{,}6^{+0{,}5}_{-0}$ MPa (216^{+5}_{-0} bar)

Governor:

Make:	BOSCH
Type:	Variable speed governor, hydraulically acting, incorporated in injection pump
Governed range of engine speed:	From 600 to 2580^{+30}_{-0} rev/min engine speed

Rated engine speed: 2400 rev/min

Air cleaner:

Pre-cleaner:	
Location:	Integrated in the main cleaner housing
Location of air intake:	Inside the bonnet above the water cooler
Main cleaner:	
Make:	MANN & HUMMEL or PUROLATOR
Type:	Dry type with integrated cyclonic pre-cleaner, with dust-drain valve and changeable filter-paper insert and additional safety cartridge.
Model:	MANN & HUMMEL 45.114.92.634 PUROLATOR LVPO 045 S/7
Location:	About the motor, inside the bonnet
Main filter paper insert:	MANN & HUMMEL, model C 13 114/4 PUROLATOR, model PM 1096 KNECHT, model AG 73
Optional:	Additional safety element (paper insert) MANN & HUMMEL model CF 600 PUROLATOR model AF 3098 KNECHT model SE 045
Service intervals:	
Main cleaner paper insert:	Cleaning interval: when control-lamp indication Changing interval: 2000 hours or 1 year
Safety element:	Changing interval: after 5 main-cleaner paper inserts, 2 years, or if main-cleaner was defect
Maintenance indicator:	Electric lamp indication, -65 mbar for indication, PUROLATOR LES 065 IP

Lubrication system:

Type of feed pump:	EATON pump forced lubrication
Total oil capacity including filter:	appr. 9 l
Oil change period:	250 hours
Type of filter:	One paper filter cartridge in full flow MANN W 940 or PUROLATOR PC 31 or KNECHT FO 371/12
Filter change period:	250 hours
Recommended oil:	See paragraph: Fuel and lubricants used in test

Cooling system:

Type of coolant:	Water with longtime frost protection down to -20°C in a cooling system with a tubular radiator
Specification of pump:	Centrifugal pump with double circuit water cooling
Type:	Own make, centrifugal pump, 2 driving belts
Model:	-
Specification of fan:	4 blade fan (dia 460 mm, 2 belts driven)
Coolant capacity:	15,5 l
Type of temperature control:	Thermostat control with electrical cooling water thermometer
Superpressure system:	max. 50 kPa (0,5 bar)

Starting system:

Safety device:	Optional
Make:	Own make
Type:	Electrically starting block system by engaged gear
Model and starter motor power rating:	BOSCH, solenoid engaged starter motor 12 V, 2,7 kW, 0 001 367 011
Cold starting aid:	Electrically, 2 glow plugs in intake pipe BERU model 184 G (0 102 024 402 11 V) BOSCH model A 250 00 1088

Electrical system:

Voltage:	12 V, negativ earth
Generator:	Make: BOSCH 0120 339 526 Type: three phase type Power: 14 V, 28 A = 392 W
Battery:	1 with 12 V, lead acid type Rating: 120 Ah at 20 hours rating

Exhaust system:

Make:	EBERSPÄCHER
Type:	Absorptions-reflexion type
Model:	EBERSPÄCHER 16.47.283.01.000 STEYR replacement no.: 33700540041
Location:	375 mm left side of the engine; mouth upwards; 2410 mm above ground
Dimensions of silencer body:	720 mm length, max. diameter of silencer 110 mm, diameter of exhaust pipe 45 mm

TRANSMISSION:

Clutch:

Main clutch and p.t.o. clutch:	For travel and p.t.o.
Make:	FICHTEL & SACHS AG.
Type:	Dry double clutch with 2 plates included in the same clutch pressure plate but independent operated, the one acting for the power take-off and the other for the gear box.
Model:	DUT 295 - 280
Number of plates:	2
Diameter of main-clutch plate:	295 mm
Diameter of p.t.o.-clutch plate:	280 mm
Method of operation:	Main clutch operated by pedal, p.t.o. clutch operated by hand lever
Front wheel drive clutch:	Wet multi-plate clutch, 135 mm dia, mechanically acting, hand lever operated

Gearbox:

Make:	Own make
Type:	Mechanically acting gear box
Model:	TW 337
Basis model:	(optional) Reversing gear (FORWARD - REVERSE) combined with 4 speed change gear and reduction gear (ROAD - FIELD) Total: 8 forward and 8 reverse speeds
Normal model:	(as tested) 2 forward and 1 reverse group gear (FORWARD FAST, FORWARD NORMAL, REVERSE) combined with 4 speed change gear and reduction gear (ROAD - FIELD) Total: 16 forward and 8 reverse speeds

Super crawler gear model:	(optional) Basis model with crawler gear reduction Reduction ratio: 3,398 Total: 16 forward and 16 reverse speeds
Arrangement:	1 lever for group gear (VS, VN, R) 1 lever for super crawler group 1 lever for the 4 speed gear (1 - 4) 1 handle for the reduction gear (ROAD, FIELD, O)
Available options:	Synchronised helical 4 speed change gear top speed 25 km/h or 30 km/h (as tested). 25 km/h model gear No. 4 not switchable

Rear axle and final drives:

Make:	Own make
Type:	Central axle; pinion and bevel gear, lockable bevel gear differential, acting by planetary gears on rear wheels
Model:	337
Differential lock:	Type:mechanically acting from half axle to differential housing Method of engagement: foot lever operated, lockable and preselectable Method of disengagement: selfdisengaging

Front axle and final drives:

Make:	ZF-PASSAU or SIGE-MAILAND
Type:	Steering and driving axle, central type, integrated steering cylinder. Driving shaft, pinion and bevel gear, bevel gear differential,half shafts, universal joints, planetary gears in wheel hubs. Front wheel drive: mechanically engaged, hand lever operated
Model:	ZF-APL 325 as tested or SIGE 001
Optional:	Automatically locking differential ZF-PASSAU: multi-plate-clutch-type SIGE MAILAND: no-spin-type

Transmission oils:

Capacity:	
Gear box, rear axle and hydraulic:	24 l, MIL-L-2105, SAE 80 W, API GL-4
Oil changing period:	1000 hours or 2 years
Final drives:	2 x 2,8 l, MIL-L-2105, SAE 80 W, API GL-4
Oil changing period:	1000 hours or 2 years

Front axle:

Front axle differential: appr. 4,5 l
MIL-L-2105 B/C, SAE 90, 85 W 90, API GL-5

Front axle final drives: 2 x 0,8 l
MIL-L-2105 B/C, SAE 90, 85 W 90, API GL-5

Oil changing period: 1000 hours or 2 years

Total ratios and speeds:

Gear nr.	Group	Number of engine revolutions for one revolution of driving wheels		Nominal travelling speed at rated engine speed of 2400 rev/min *) km/h	
-	-	field L	road S	field L	road S
1	forward normal VN	402,16	120,34	1,61	5,38
2		209,35	62,64	3,09	10,33
3		140,82	42,14	4,59	15,35
4		85,31	25,53	7,58	25,34
1	forward fast VS	347,15	103,88	1,86	6,23
2		180,72	54,08	3,58	11,96
3		121,56	36,38	5,32	17,78
4		73,64	22,04	8,79	29,36
1	reverse R	355,66	106,43	1,82	6,08
2		185,14	55,40	3,49	11,68
3		124,54	37,27	5,19	17,36
4		75,44	22,58	8,57	28,66

*) Calculated with index radius of 715 mm and 515 mm with test tyre equipment: 13,6/12 - 36 AS and 11,2/10 - 24 AS

POWER TAKE-OFF: One p.t.o. shaft, at rear of tractor, in median plane, 395 mm behind rear axle, 603 mm above ground (714 mm stat. tyre radius)
Dimension: ISO R 500, Typ I (35 mm, 6 splines)

Proportional to engine speed (independent) p.t.o.: Driven by p.t.o. clutch (dry plate type), speed selector, p.t.o. shaft

Speeds:
540/ 634 rev/min at 2044/2400 rev/min engine speed
1000/1126 rev/min at 2130/2400 rev/min engine speed

Transmission ratio: 3,79 resp. 2,13

Optional:

Not on tested tractor
Additional speeds of the proportional to engine speed (independent) p.t.o.:
540/ 810 rev/min at 1600/2400 rev/min engine speed
1000/1440 rev/min at 1666/2400 rev/min engine speed

Transmission ratio: 2,96 resp. 1,67

Engine speed resp. p.t.o. speed indication by needle instrument
Direction of rotation: clockwise viewed from driving end

Proportional to ground speed p.t.o.:

Same p.t.o. shaft as proportional to engine speed p.t.o.

Only engageable when reduction gear is on 0 (NEUTRAL = stationary) or L (FIELD) position. Driven by main clutch (dry plate type), group gear, 4 speed change gear, reduction gear (only in position 0 or L (FIELD)), sliding gear, p.t.o. shaft.

Driving mode (reduction gear in L position):
Travelling distance for 1 revolution of p.t.o.: 0,115 m calculated with tyre index radius 715 mm
Number of p.t.o. revolutions for 1 revolution of driving wheel: 38,95

Stationary mode (reduction gear on 0 position, tractor not driving):

Speeds at 2400 rev/min rated engine speed (rev/min):

30 km/h model as tested:

Group gear	VN	VS	R
Gear no.: 1	232	269	263
2	447	517	505
3	664	769	751
4	1095	1269	1239
Direction of rotation	clock-wise	clock-wise	anticlock-wise
	viewed from driving end		

Middle p.t.o.:

Optional, not on tested tractor
Rearward direction, on the left side of the gear box, 186,5 mm left hand of median plane of tractor, 625 mm below median plane of rear axle, 651 mm before rear axle
Dimension: ISO R 500, Type I (35 mm, 6 splines)
No power restriction
Driven by p.t.o. clutch

Speed:
1000/1183 rev/min at 2029/2400 rev/min engine speed

Front p.t.o.: Optional, not on tested tractor

Version I:
Forward direction, on the left side of the tractor, 310 mm left hand of median plane, 742 mm above ground, 407 mm before front axle.
Driven by middle p.t.o. and propeller shaft with intermediate bearing
No power restriction
1183 rev/min at 2400 rev/min rated engine speed
Direction of rotation: anticlockwise viewed from the driving end
Transmission ratio: 2,03

Version II:
Forward direction, in median plane, 657 mm above ground, 650 mm before front axle
Driven directly from the engine by a propeller shaft, hydraulically activated wet multiplate clutch (dia 132 mm) and spur gear transmission

When tractor is fitted with torque amplifier group a separate hydraulic circuit with 18^{+2}_{-6} bar is switching the clutch.
1158 rev/min at 2400 rev/min rated engine speed
Direction of rotation: anticlockwise viewed from the driving end

Transmission ratio: 2,07

Belt pulley: Optional, not on tested tractor
At rear of tractor, perpendicular transmission on rear p.t.o., all speeds of rear p.t.o. engageable
Dimensions: 250 mm dia, 160 mm width
Number of pulley revolutions for 1 revolution of p.t.o.: 2,23

POWER LIFT:

In the rear:

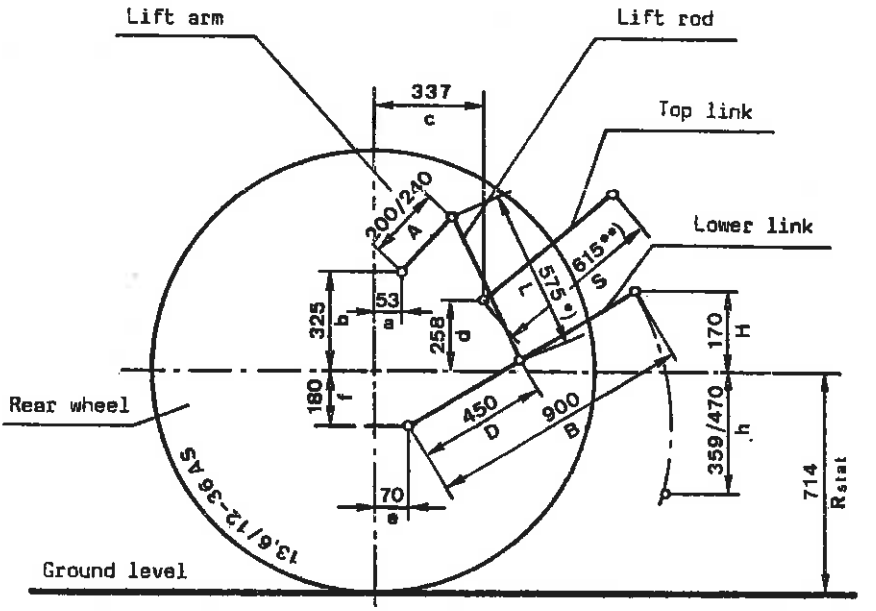
Make:	Own make
Type:	Open center type, draught control with two-stage pull adjustment and upper link sensing, position control, floating position
Type and number of cylinder:	Single acting hydraulic cylinder, stroke and diameter 152/85 mm
Type of linkage lock for transport:	Hydraulically by throttle valve
Relief valve pressure setting:	17,5 MPa (175 bar)
Opening pressure of cylinder safety valve:	24,5 MPa (245 bar)
Lift pump type:	Gear type pump
Pump delivery rate at minimum pressure:	42 l/min at 2400 rev/min engine speed

Transmission between pump and engine:	Pump directly driven by engine by gear transmissions
Type and number of filters:	One filter in the suction part (common filter with the gearbox)
Time between oil changes:	1000 hours
Time between filter changes:	1000 hours
Oil capacity:	Common oil with gearbox and rear axle
Site of oil reservoir:	Gearbox and rear axle
Type and number of tapping points:	Up to 6 tapping points (3 independent oil circuits for double acting cylinders)
Location of tapping points:	400 mm behind rear axle, 240 - 420 mm about rear axle, 150 mm right of median plane In accordance to ISO/DIS 5675
Maximum volume of oil available to external cylinders:	17 l in stationary mode 10 l in driving mode
Recommended oil:	SAE 80 W, MIL-L-2105, API GL-4
In the front:	Not on tested tractor Three point linkage, category II, open system, hydraulic power lift, disintegrated construction. Oil supply from own control unit and common oil supply with power lift in the rear. Single acting cylinder, bore/stroke: 60/250 mm

THREE-POINT-LINKAGE:

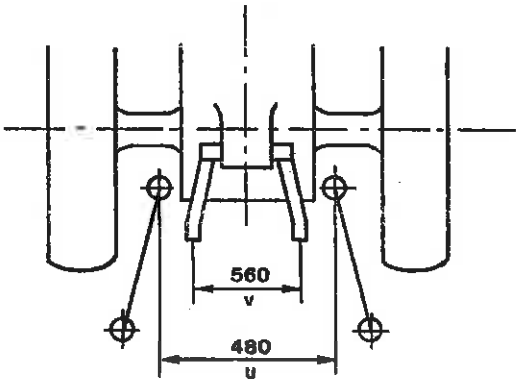
In the rear:	Category I/II, in conformity to ISO 730/1 Changing the categories by changing the holed drawbar and adjustment of the three-point linkage "STEYR SIMPLEMATIK" standard linkage, double hole lift arms
In the front:	Not on tested tractor Category II

Figures of power lift:



*) Left lift rod adjustable from 530 mm to 620 mm length by a thread, right lift rod adjustable from 515 mm to 625 mm length by gear and thread.

**) Top link length adjustable from 520 mm to 760 mm.



HOLED DRAWBAR: Fitted in the clevis of the lower links of the three point linkage, category I or II

Height above ground *)	Min.lift rod length (530 mm)	Max.lift rod length (620 mm)	Vertical movement
Max.mech.advantage Liftarm 200 mm	from 469 to 964 mm	from 229 to 794 mm	495/565 mm
Min.mech.advantage Liftarm 240 mm	from 329 to 964 mm	from 89 to 794 mm	635/705 mm

*) Calculated with stat. tyre radius of 714 mm

Dimensions		Category I	Category II
Length	mm	683	825
Width	mm	80	80
Thickness	mm	30	30
Number of holes (with central hole)		5	7
Hole diameter	mm	33	33
Distance between holes	mm	130	115

Method of changing: By power lift, lift rod length and changing the lift rod - lift arm coupling point

Distance to rear axle: 970 mm (lower links (900 mm) horizontally)

Horizontal distance to power take-off shaft end (rear): 575 mm

TRAILER HITCH:

Type: Fork type

Height above ground: 432/460/765/793 mm

Distance of hitch point from rear axle axis horizontally: 447 mm

Distance of hitch point from power take-off shaft end:	
vertically:	below 173/145 mm; about 160/188 mm
horizontally:	rearwards 52 mm
Diameter of coupling pin:	31 mm
Maximum vertical permissible load:	15 kN

or

	ROCKINGER model 248 U14 08W
Type:	Fork type
Height above ground:	773/785 mm
Distance of hitch point from rear axle axis horizontally:	469 mm
Distance of hitch point from power take-off shaft end:	
vertically:	about 168/180 mm
horizontally:	rearwards 74 mm
Diameter of coupling pin:	30 mm
Maximum vertical permissible load:	15 kN

or

	Own make (italian equipment)
Type:	Fork type
Height above ground:	408/428/769/789 mm
Distance of hitch point from rear axle axis horizontally:	407 mm
Distance of hitch point from power take-off shaft end:	
vertically:	below 197/177 mm; about 164/184 mm
horizontally:	rearwards 12 mm
Diameter of coupling pin:	28 mm
Maximum vertical permissible load:	15 kN

or

	ROCKINGER model 273 J
Type:	Fork type
Height above ground:	773/785 mm
Distance of hitch point from rear axle axis horizontally:	469 mm
Distance of hitch point from power take-off shaft end:	
vertically:	about 168/180 mm
horizontally:	rearwards 74 mm
Diameter of coupling pin:	31 mm
Maximum vertical permissible load:	15 kN

or

	ROCKINGER model 248 JB
Type:	Fork type
Height above ground:	652/703/735/786 mm
Distance of hitch point from rear axle axis horizontally:	462 mm
Distance of hitch point from power take-off shaft end:	
vertically:	about 47/98/130/181 mm
horizontally:	rearwards 67 mm
Diameter of coupling pin:	30 mm
Maximum vertical permissible load:	15 kN

TOWING HITCH:

Type:	Fork type
Height above ground:	700 mm
Distance from front axle:	frontwards from 420 to 560 mm (dependent from number of front ballast)
Diameter of coupling pin:	31 mm

STEERING:

Method of operation:	Steering wheel acting on front wheels
Make:	DANFOSS or ZF-SCHWÄBISCH GMÜND
Type:	Hydrostatic steering
Model:	DANFOSS OSPC 125 OR or ZF 8492
Working pressure:	10,0 MPa (100 bar)
Oil capacity:	2,6 l
Capacity of oil case:	1,2 l and 0,15 l volume for distress
Oil change period:	-
Filter:	STEYR 397 47 07 18, ZF 763 314 11 10
Filter change period:	1000 hours
Recommended oil:	ATF Dexron D
Pump delivery rate at rated engine speed (2400 rev/min):	34,5 l/min
Steering cylinder:	One double acting cylinder, integrated in block of front axle, formed as a part of the steering connection rod
Acting piston area:	SIGE 001: 20,6 cm^2 ZF APL-325: 20,2 cm^2
Number of revolutions of steering wheel for the whole steering lock:	appr. 3,2

BRAKES:

Service brake:

Make:	Own make
Type:	Simplex drum brakes 230 mm diameter, 60 mm width
Method of operation:	Pedal operated, mechanically transmission
Trailer braking take-off:	Optional, not on tested tractor In conformity with national regulations
	Pressure air system: High pressure air system, one or one and two (three) line system, air compressor V-belt driven Storage pressure: $1,8^{+0,2}_{-0}$ MPa (18^{+2}_{-0} bar) Storage volume: 20 l Working pressure: 0,72 MPa (7,2 bar)

Parking brake:

Type:	Mechanically acting on the same drum brakes as service brake
Optional:	Separate mechanically transmission
Method of operation:	Hand lever with ratchet

Steering assistance brake:	Operated by divided pedal of service brake, pedals disconnectable by a flap

STEERING WHEELS:

Number:	2, steering and driving function
Location:	In front of tractor
Tyres:	Pneumatics, radial or diagonal carcass 11,2/10 - 24 AS, PR 6; rim: W 10 x 24 Maximum permissible load on each tyre: 10250 N (1045 kp) at 1,8 bar inflation pressure 14350 N (1460 kp) at 2,25 bar inflation pressure and with speed limit of 8 km/h for front implement working
Track widths:	1532 mm (1612 mm by reversed wheels)
Optional front tyre equipment:	8,3 - 24 AS, rim: W 7 x 24 8,3 - 28 AS, rim: W 7 x 28 9,5 - 24 AS, rim: W 7 x 24 9,5 - 28 AS, rim: W 8 x 28 10,5 - 20 AS/MPT, rim: 9 x 20 14,5 - 20 AS/MPT, rim: 11 x 20

DRIVING WHEELS:

Number:	2, driving function
Location:	In the rear of tractor
Tyres:	Pneumatics, radial or diagonal carcass 13,6/12 - 36 AS, PR 6; rim: W 12 x 36 Maximum permissible load on each tyre: 15845 N (1615 kp) at 1,6 bar inflation pressure 22180 N (2260 kp) at 2,0 bar inflation pressure and with speed limit of 8 km/h
Track widths:	1506 mm (1350 mm by reversed wheels)
Optional rear tyre equipment:	8,3 - 44 AS; rim: W 7 x 44 9,5 - 36 AS; rim: W 8 x 36 9,5 - 42 AS; rim: W 8 x 42 9,5 - 44 AS; rim: W 8 x 44 12,4 - 32 AS; rim: W 10 x 32 12,4 - 36 AS; rim: W 10 x 36 12,4 - 38 AS; rim: W 10 x 38 13,6 - 38 AS; rim: DW 12 x 38 14,9 - 28 AS; rim: DW 12 x 28 14,9 - 30 AS; rim: W 12 x 30 16,9 - 30 AS; rim: W 15 L x 30

WHEELBASE: 2145 mm

PROTECTIVE STRUCTURE SPECIFICATIONS:

OECD approval number:	CSD 0811/1
Austrian testing number:	Prot.Nr. 036/84
Trade name:	Model STEYR 100.02
Manufacturer's name and address:	STEYR-DAIMLER-PUCH AG., Steyr, Austria
Protective device:	Frame, completeable to full closed cab, not tilting Strength tested to national legislation (identical to OECD-Code)

Material used in the construction and dimensions:

Main frame:	Welded and screwed profile steel tube construction with pressed sheet metal roof and windscreen
Mounting:	Rubber mounted, in front on consoles, in the rear on the rear axle
Cladding:	Protective structure is fitted only with the front windscreen. When completed to a cab the side claddings are glassdoors with a metal frame and turnable full glass side windows. The rear cladding is a transparent plastic windscreen which can be rolled up and fixed.
Roof:	Sheet metal roof, integrated in the protective structure
Padding:	Floor: rubber mat Roof: cladding with synthetic foam material
Assembly and mounting bolts:	24 M 8 (8.8 ZN) 14 M 10 (8.8 ZN) 8 M 12 (8.8 ZN) 16 M 14 (8.8 ZN) 4 M 16 (8.8 ZN)
Type of windscreen:	SEKURIT ESGH DURO-GLAS-1851 D08

DRIVER'S SEAT:

Make and type:	Klepp Elastomat 1050 S Tested on tractor according to national regulation (Prot.Nr. 032/84)
Type of suspension:	2 parallel levers with a column-guiding and 2 tensions springs Adjustable to driver's weight
Type of damping:	Hydraulically damping
Range of adjustment, longitudinal: vertical:	 120 mm Combined with the longitudinal adjustment (12° inclination of the mounting plate)

LIGHTING: Unrestricted beam angle of head light in plane view: 227 mrad (13°)

	*) Height above ground of centre mm	Size mm	**) Distance from outside edge of tractor to centre mm
Head lights	1125	140/75	775
Side lights	1500	90/40	310
Rear lights	1510	90/40	145
Brake lights			
Direction indicators front	1435	90/40	310
Direction indicators rear	1555	90/40	145
Reflectors	1325 730	100/60 80 dia	140 545

*) Measured with stat. tyre radius at rear 714 mm and 515 mm at front
**) With overall width of 1860 mm (measured on the outside edge of the rear wheels)

TEST CONDITIONS

Track setting and tyre equipment:

Front: 1532 mm
Rear: 1506 mm

Front wheels: 11,2/10-24 AS, PR 6; rim: W 10 x 24
Rear wheels: 13,6/12-36 AS, PR 6; rim: W 12 x 36

Overall dimensions:

	Length	Width		Height at top of	
		min. **)	max. *)	exhaust silencer	protective structure
	mm	mm	mm	mm	mm
With ballast	3785	1795	1860	2410/2285	2320
Without ballast	3695	1795	1860	2410/2285	2320

*) Measured on the rear wheels **) Measured on the front axle

Ground clearance:

Clearance-limiting part:

410 mm under the front axle mounting console
425 mm under the crankshaft case
410 mm under the four-wheel drive output
385 mm under the trailer hitch mounting console

Tractor mass and ballasting:

(without driver but with tanks full, with protective structure)

		Front	Rear	Total
Without ballast	kg	1147	1685	2832
With ballast	kg	1320	2320	3640

Ballast:

	Weights		Water kg
	Number	Total mass kg	
Front	5	153	-
Rear	4 + 2	295	2 x 180
Additional	-	-	-

Fuel and lubricants used in tests:

Fuel:	Diesel fuel	
Type:	ELAN, according to DIN 51601	
Specific gravity at 15°C:	0,837 kg/l	

Oils:

	Recommended	Used during test:
Engine oil:	One range viscosity oil	
Type:	API CC, MIL-L-46152, B MIL-L-2104 B	SHELL RIMULA X 10 W
Viscosity:	SAE 30 summer SAE 20 W / 20 winter	
Transmission oils:		
Type:	API GL-4 MIL-L-2105	SHELL SPIRAX EP 80
Viscosity:	SAE 80 W	
Hydraulic fluid:		
Type:	Common oil circuits with transmission	
Steering oil:	Automatic Transmission Fluid	SHELL ATF Dexron II
Type:	ATF Dexron or ATF M 2 C 33 E/F	
Transmission oil of front axle:		
Type:	API GL-5, MIL-L-2105 B	SHELL SPIRAX EP 90
Viscosity:	SAE 90 W	
Recommended grease:	Lithium soap basis NLGI 2 (multigrade grease)	
Number of lubrication points:	18	

TEST RESULTS

COMPULSORY TEST:

Main power take-off performance

Date and location of tests: 5.12.1984, Wieselburg, Austria
Type of dynamometer: SCHENK eddy-current brake Typ W 780

Main test on: ISO R 550, Typ 1 (DIN 9611) - 540 rev/min p.t.o.

Power	Speed		Fuel consumption		Specific energy
	engine	p.t.o.	hourly	specific	
kW	rev/min	rev/min	kg/h 1/h	g/kWh	kWh/l
MAXIMUM POWER					
Maximum power - 2 hours test					
42,80	2400	635	11,04 13,19	258	3,244
Standard p.t.o. speed					
42,01	2044	540	10,25 12,25	244	3,430
The speed recommended by the manufacturer for drawbar work					
42,80	2400	635	11,04 13,19	258	3,244
PART LOADS Governor hand lever in position giving maximum power					
(i) 85 % of torque at maximum power					
37,19	2456	649	9,89 11,82	266	3,146
(ii) unloaded					
0	2578	681	3,52 4,21	-	-
(iii) 50 % of the load defined in (i)					
19,08	2521	666	6,31 7,54	331	2,530
(iv) maximum power					
42,80	2400	635	11,04 13,19	258	3,244
(v) 25 % of the load defined in (i)					
9,62	2547	673	4,77 5,70	496	1,688
(vi) 75 % of the load defined in (i)					
28,18	2483	656	8,01 9,56	284	2,946

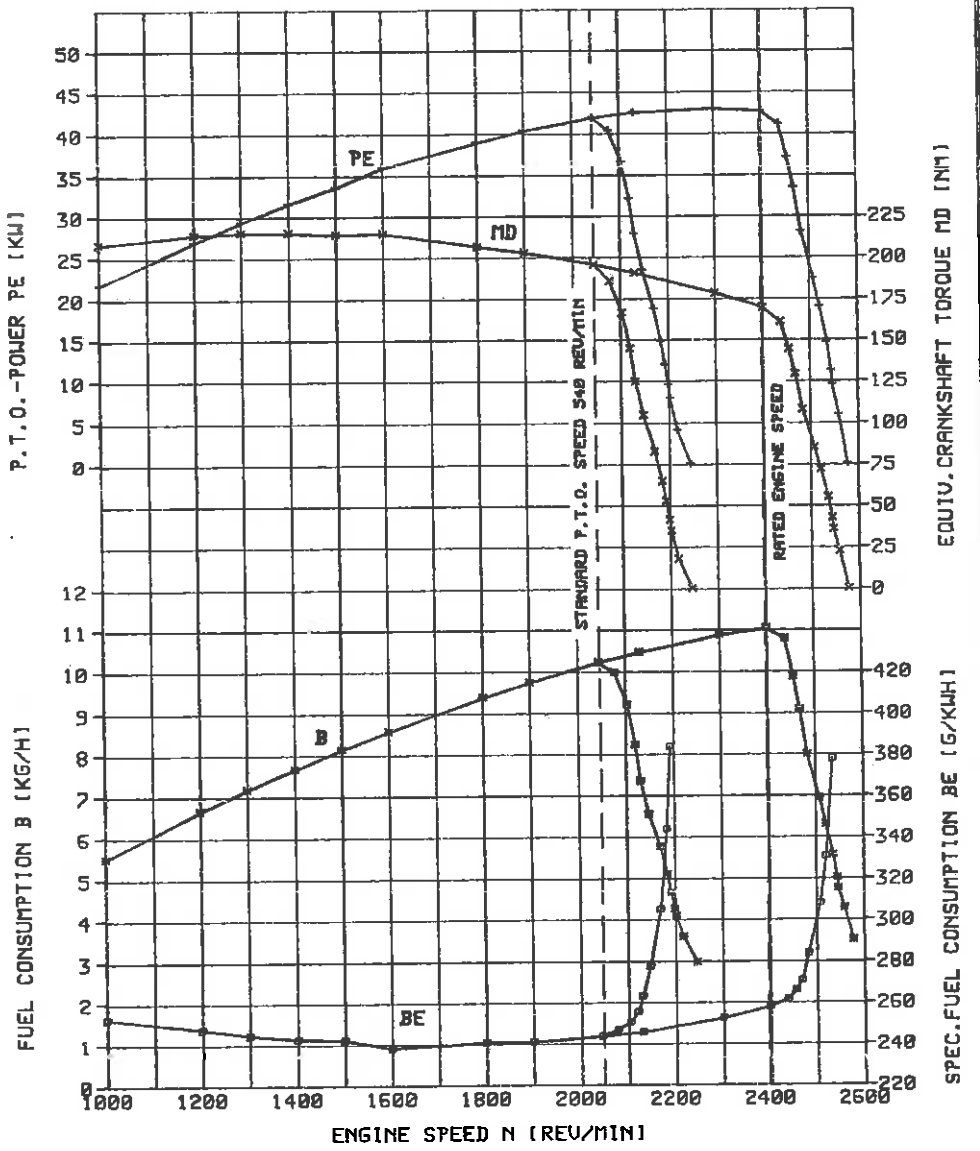
Power	Speed		Fuel consumption		Specific energy
	engine	p.t.o.	hourly	specific	
kW	rev/min	rev/min	kg/h l/h	g/kWh	kWh/l
PART LOADS Governor hand lever in position giving standard p.t.o. speed at full load					
(i) 85 % at torque at standard p.t.o. speed					
36,78	2104	556	9,23 11,02	251	3,337
(ii) unloaded					
0	2245	593	3,00 3,58	-	-
(iii) 50 % of the load defined in (i)					
18,94	2169	573	5,79 6,91	305,5	2,740
(iv) maximum power at standard p.t.o. speed					
42,01	2044	540	10,25 12,25	244	3,430
(v) 25 % of the load defined in (i)					
9,62	2199	581	4,27 5,11	444	1,884
(vi) 75 % of the load defined in (i)					
27,92	2131	563	7,36 8,80	263,5	3,174
STANDARD SPECIFIC FUEL CONSUMPTION: 266/331 - 251/305,5 g/kWh					

No load maximum engine speed: 2578 rev/min
Equivalent crankshaft torque
at maximum power: 170,3 Nm
Maximum equivalent crankshaft torque: 216 Nm at 1300 rev/min of engine

Mean atmospheric conditions: temperature: 15°C
pressure: 998 mbar
humidity: 85 %

Maximum temperatures: coolant: 90°C
engine oil: 110°C
fuel: 51°C
air intake: 32°C

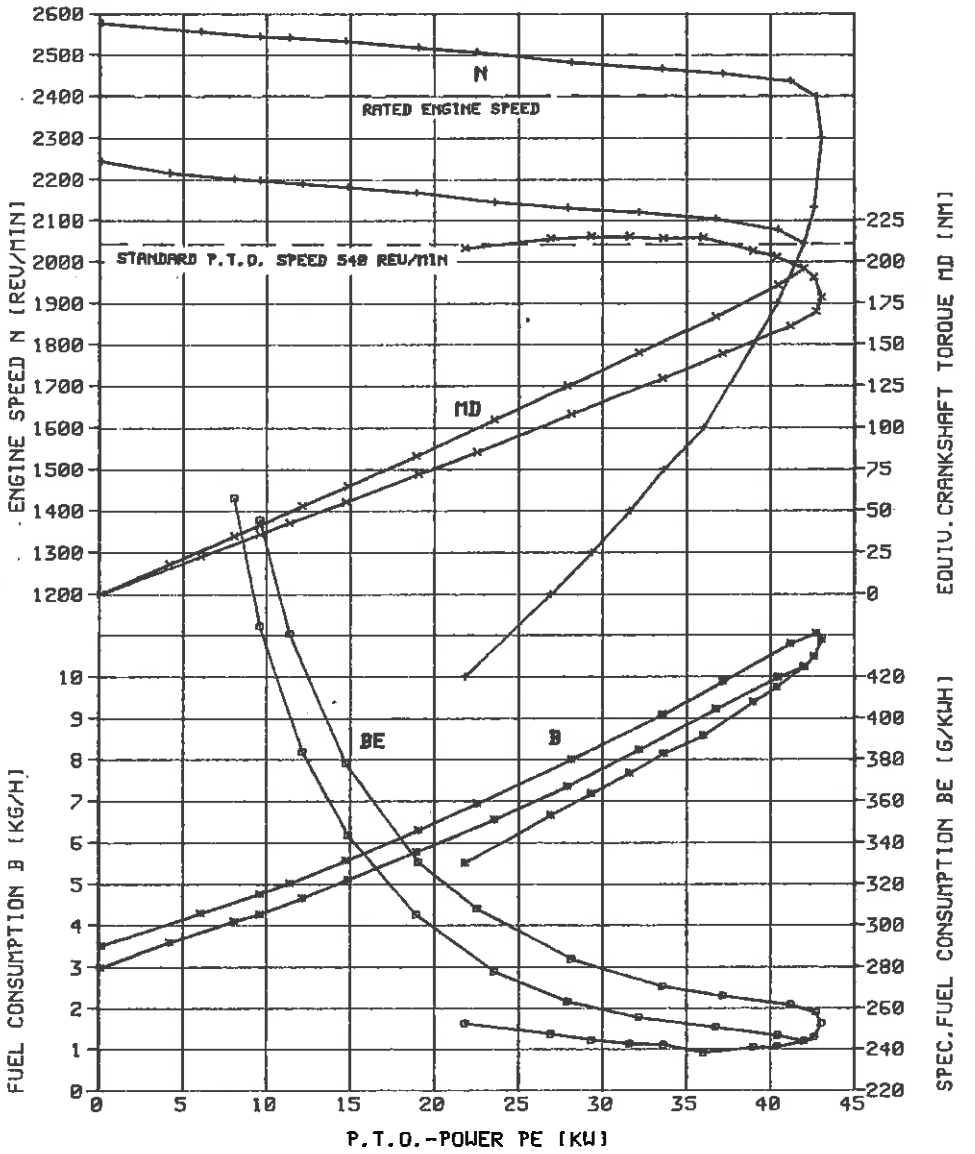
BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.: 097/85	540 rev/min P.T.O.-TEST	STEYR-DAIMLER-PUCH TYP 337.45 (8075A) MOT.TYP WD 411.46



ENGINE SER.NR.: 411.46-7845	ATM.PRESSURE : 998 MBAR	FUEL TEMP.: 51 C	SIGNATURE
TRACTOR SER.NR.: 337.45-12771	AIR TEMPER. : 15 C	D.OF TESTS: 1984-12-05	
FUEL : 0.837/15 C	COOLANT TEMP.: 98 C	TEST NO. : 142/ZA139A	
ENGINE OIL : SHELL RIMULA X 10W	OIL TEMP. : 110 C	CURVES NO.: 1	REITHER

14-JUN-85 DUR.:0100846-DL003;MKU115;MKL28-21

BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.: 097/85	540 rev/min P.T.O.-TEST	STEYR-DAIMLER-PUCH TYP 337.45 (8075A) MOT.TYP WD 411.46



ENGINE SER.NR.: 411.46-7845	ATM.PRESSURE : 998 MBAR	FUEL TEMP.: 51 C	SIGNATURE
TRACTOR SER.NR.: 337.45-12771	AIR TEMPER. : 15 C	D.OF TESTS: 1984-12-05	
FUEL : 0.837/15 C	COOLANT TEMP.: 90 C	TEST NO. : 142/ZA139A	
ENGINE OIL : SHELL RIMULA X 10W	OIL TEMP. : 110 C	CURVES NO.: 2	REITHER

Drawbar performance

Date of tests: 4.1. and 5.3.1985
Type of track: Concrete
Height of drawbar above ground: 400 mm ballasted and unballasted

Gear No.	Speed	Power	Drawbar pull	Engine speed	Slip of wheels	Specific fuel consumption	Specific energy	Temperatures			Atmosph. conditions		
								Fuel	Coolant	Engine oil	Temperature	rel.humidity	Pressure
	km/h	kW	N	rev/min	%	g/kWh	kWh/l	°C	°C	°C	°C	%	mbar
(i) Maximum power (unballasted) tyre inflation pressure in the front 1 bar, in the rear 1,1 bar													
VN L3	3,970	31,98	28998	2446	15	328	2,550	54	83	104	17	56	992
VS L3	4,673	36,35	28002	2400	12	307	2,726	51	82	103	18	55	992
VN S1	4,757	36,45	27584	2400	11,3	306	2,734	48	83	102	17	55	992
VS S1	5,734	36,80	23101	2400	7,7	303	2,760	50	83	102	16	56	992
VN L4	7,127	36,90	18637	2400	5,8	302,5	2,768	49	83	101	18	56	992
VS L4	8,339	36,65	15821	2400	4,8	304,5	2,749	50	82	100	17	56	992
VN S2	9,880	36,28	13221	2400	4,1	307,5	2,721	49	83	100	18	55	992
VS S2	11,508	35,70	11167	2400	3,5	312,5	2,678	50	83	97	17	55	992

Gear No.	Speed	Power	Drawbar pull	Engine speed	Slip of wheels	Specific fuel consumption	Specific energy	Temperatures			Atmosph.conditions		
								Fuel	Coolant	Engine oil	Temperature	rel.humidity	Pressure
	km/h	kW	N	rev/min	%	g/kWh	kWh/l	°C	°C	°C	°C	%	mbar
(ii) Five-hour-test at 75 % of pull at maximum power													
VS S1	6,040	29,81	17767	2464	4,7	324,5	2,580	55	81	105	5	76	997
(iii) Five-hour-test at pull corresponding to 15 % wheelslip in test (ii)													
VS L2	3,093	30,93	36000	2458	15	326	2,569	52	82	106	4	81	1001
(iv) Maximum power (ballasted) tyre inflation pressure in the front 1 bar, in the rear 1,5 bar													
VN L1	1,427	14,27	35995	2526	15	-	-	41	81	98	3	85	994
VS LI	1,647	16,47	35997	2516	15	-	-	41	81	98	3	85	994
VN L2	2,678	26,77	35997	2467	15	351,5	2,381	42	81	98	4	84	994
VS L2	3,086	30,86	36002	2456	15	327,5	2,555	42	81	98	4	86	994
VN L3	4,109	36,71	32162	2400	9,8	304	2,753	38	81	96	3	86	994
VS L3	4,858	37,90	28085	2400	7,9	294,5	2,843	38	80	95	3	86	994
VN S1	4,913	38,00	27844	2400	7,8	293,5	2,850	37	80	94	3	86	994
VS S1	5,784	38,07	23691	2400	6,3	293	2,855	37	80	93	3	86	994
VN L4	7,143	37,61	18954	2400	5	296,5	2,821	36	79	93	3	87	994
VS L4	8,335	37,04	15999	2400	4,3	301	2,778	36	79	93	3	86	994
VN S2	9,869	36,00	13132	2400	3,6	310	2,700	35	79	90	3	85	994

Total oil consumption during 10 hours duration of tests (ii) and (iii): 68 g/h

TURNING SPACE AND TURNING CIRCLE:

Wheel equipment: front: 11,2/10-24 AS, PR 6; rim: W 10 x 24
rear: 13,6/12-36 AS, PR 6; rim: W 12 x 36

Track of wheel: front: 1532 mm
rear: 1506 mm

Results *)	With brakes		Without brakes	
	right-hand	left-hand	right-hand	left-hand
	m	m	m	m
Radius of turning space	3,82/3,90*)	3,82/3,90*)	4,85/4,55*)	4,90/4,55*)
Radius of turning circle	3,68/3,75*)	3,68/3,75*)	4,71/4,40*)	4,75/4,40*)

*) Four-wheel-drive switched: ON/OFF

LOCATION OF CENTRE OF GRAVITY:

	mm
Height above ground	795
Distance forward from the vertical plane containing the axis of the rear wheels	850
Distance from the median plane of the tractor, left-side	2

BRAKING:

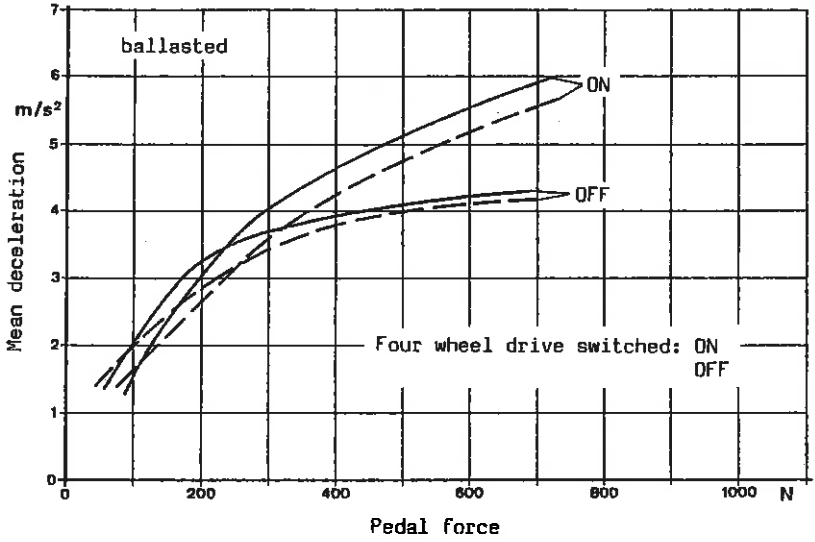
Date of tests: 14.3.1985
Type of track: concrete
Type of decelerometer: Moto-Meter Nr. 03382 (Kombi-Schreiber)

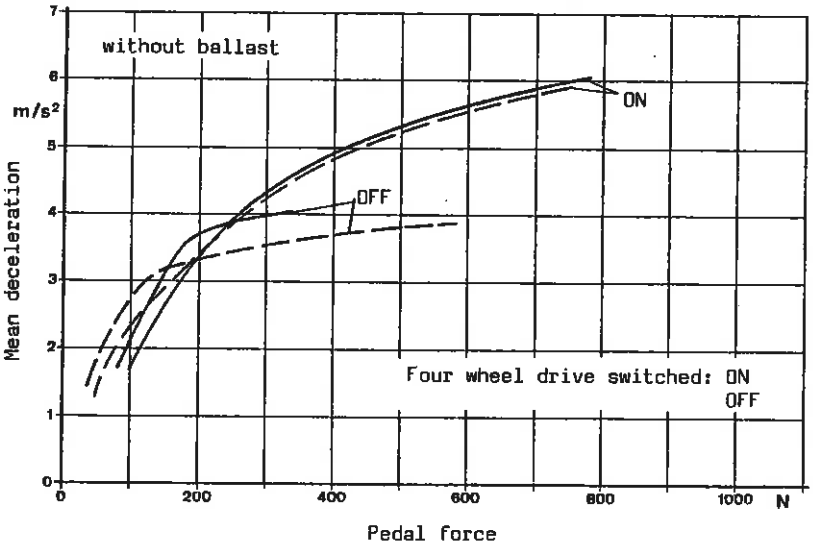
Tractor mass during brake tests (with driver):

	Front kg	Rear kg	Total kg
Ballasted	1335	2380	3715
Unballasted	1162	1745	2907

Service brake:

Four-wheel-drive switched ON and OFF
Type-0-test (cold brakes) ————, Type-I(fade test) — — — — — —





Speed before application of brakes: 30,7 km/h
The tractor brakes were heated by towing of the tractor for 1 km.

Maximum deviation of tractor from its original course: None

Abnormale vibration: None

Parking brake device test:

	Ballasted tractor on 18 %-slope		Unballasted tractor on 12 %-slope with trailer of 2832 kg	
	up	down	up	down
Braking device control force	120 N	115 N	165 N	165 N

MEASUREMENT OF EXTERNAL NOISE LEVEL:

Date of tests: 22.5.1985

Type of sound level meter: BRÜEL & KJAER 2200 and 2308

Type of track: Concrete

Gear number: VS 4S

Travelling speed before acceleration: 22,5 km/h

Sound level: 87 dB(A)

NOISE MEASUREMENT AT DRIVER'S EAR:

Date of tests: 22.5.1985

Type of sound level meter: BRÜEL & KJAER 2200 and 2308

Type of track: Concrete

Gear	Drawbar pull at which the tractor develops the max. sound level	Measured travelling speed	Sound level
-	kN	km/h	dB(A)
Frame with roof and front glass			
VN 1 L	28,4	1,44	92
VS 1 L	28,5	1,69	92
VN 2 L	28,0	2,78	92,5
VS 2 L	28,5	3,12	92
VN 3 L	27,1	4,13	92,5
VS 3 L	15,6	5,21	92
VN 1 S	14,8	5,30	91,5
VS 1 S	11,8	6,20	92,5
VN 4 L	16,4	7,28	93
VN 4 L *)	light load (1,7 kN)	7,92	92,5
VS 4 L	14,6	8,36	93,5
VN 2 S	12,9	9,83	93
VS 2 S	10,8	11,46	92,5
VN 3 S	8,0	14,76	93
VS 3 S	6,7	17,10	92,5
VN 4 S	4,1	25,26	93
VS 4 S	light load (3,0 kN)	28,57	92

*) The VN 4 L gear corresponds to the nominal travelling speed nearest to 7,5 km/h.

Optional: With additional noise damping equipment

Gear	Drawbar pull at which the tractor develops the max. sound level	Measured travelling speed	Sound level
-	kN	km/h	dB(A)
Frame with roof and front glass with additional damping equipment			
VN 1 L	28,4	1,44	88,5
VS 1 L	28,5	1,69	90
VN 2 L	28,0	2,78	91
VS 2 L	28,5	3,12	89
VN 3 L	27,1	4,13	89,5
VS 3 L	15,6	5,21	89
VN 1 S	14,8	5,30	89
VS 1 S	11,8	6,20	91
VN 4 L	16,4	7,28	90,5
VN 4 L *)	light load (1,7 kN)	7,92	90,0
VS 4 L	14,6	8,36	90,5
VN 2 S	12,9	9,83	91
VS 2 S	10,8	11,46	89,5
VN 3 S	8,0	14,76	89,5
VS 3 S	6,7	17,10	89
VN 4 S	4,1	25,26	89,5
VS 4 S	light load (3,0 kN)	28,57	89

*) The VN 4 L gear corresponds to the nominal travelling speed nearest to 7,5 km/h.

With full closed safety cab

Gear	Drawbar pull at which the tractor develops the max. sound level	Measured travelling speed	Sound level
-	kN	km/h	dB(A)
All openings closed (tractor fitted with full closed safety cab)			
VN 1 L	28,4	1,44	94
VS 1 L	28,5	1,69	95
VN 2 L	28,0	2,78	96
VS 2 L	28,5	3,12	96
VN 3 L	27,1	4,13	95
VS 3 L	15,6	5,21	96
VN 1 S	14,8	5,30	94,5
VS 1 S	11,8	6,20	95,5
VN 4 L	16,4	7,28	96,5
VN 4 L	light load (1,7 kN)	7,92	95
VS 4 L	14,6	8,36	98
VN 2 S	12,9	9,83	96
VS 2 S	10,8	11,46	96,5
VN 3 S	8,0	14,76	95,5
VS 3 S	6,7	17,10	96
VN 4 S	4,1	25,26	95
VS 4 S	light load (3,9 kN)	28,57	95,5

*) The VN 4 L gear corresponds to the nominal travelling speed nearest to 7,5 km/h.

Optional: With full closed safety cab and additional noise damping equipment

Gear	Drawbar pull at which the tractor develops the max. sound level	Measured travelling speed	Sound level
-	kN	km/h	dB(A)
All openings closed (tractor fitted with full closed and additional damped safety cab)			
VN 1 L	29,0	1,26	90,5
VS 1 L	29,0	1,45	91
VN 2 L	28,8	2,76	91,5
VS 2 L	28,3	3,23	91
VN 3 L	28,7	4,08	91
VS 3 L	8,6	5,44	91,5
VN 1 S	27,0	4,75	90
VS 1 S	23,2	5,72	90,5
VN 4 L	17,7	7,18	91,5
VN 4 L	light load (appr. 1,7 kN)	7,97	91
VS 4 L	15,5	8,26	92
VN 2 S	12,8	10,05	91,5
VS 2 S	11,2	11,43	91,5
VN 3 S	8,2	14,76	91
VS 3 S	6,7	17,36	91
VN 4 S	4,1	24,80	91
VS 4 S	light load (appr. 3,0 kN)	30,00	91

*) The VN 4 L gear corresponds to the nominal travelling speed nearest to 7,5 km/h.

LIFTING FORCE AND HYDRAULIC POWER TEST RESULTS:

Date and location of test: 23.1.1985, Wieselburg, Austria

Hydraulic fluid:

Make and type: SHELL SPIRAX EP 80

Viscosity: at 40°C 80 mm^2/s (cSt), at 100°C 9,2 mm^2/s (cSt)

Viscosity index: SAE 80 W, API GL-4, MIL-L-2105

Type of hydraulic system: Open center type

Hydraulic fluid temperature at beginning of test: 60°C

Type of linkage lock for transport: Hydraulically by throttle valve

Opening pressure of the cylinder overpressure safety valve (manufacturers specification): 24,5 MPa (245 bar)

Power lift:

	*) Height of lower hitch point above ground in down position mm	*) Vertical movement (lift rod length 575 mm) mm	Max.force exerted through full range kN	Corresponding pressure of hydraulic fluid MPa	*) Moment about rear axle kNm	Max.tilt angle of mast over range of lift (+) degrees
At hitch points	355/244	529/640	21,6/18,2	16,7 (167 bar)	21,0/17,7	-
On the frame 460 mm mast height	355/244	529/640	15,7/13,4	16,7 (167 bar)	24,8/21,2	from +5° to 0° and to +8°
On the frame 520 mm mast height	355/244	529/640	15,0/12,2	16,7 (167 bar)	23,7/19,3	from +3° to 0° and to +12°

*) Max./min. mechanical advantage

Hydraulic power:

Sustained pressure with relief valve open:	18,0 MPa (180 bar)
Opening pressure of relief valve:	18,5 MPa (185 bar)
Pump delivery rate at minimum pressure:	42 l/min at 2400 rev/min
Flow rate corresponding to a hydraulic pressure equivalent to 90 % of the actual relief valve pressure setting and corresponding hydraulic power:	Flow rate: 40 l/min at 2400 rev/min Pressure: 16,7 MPa (167 bar) Power: 11,1 kW
Flow rate and hydraulic pressure corresponding to maximum hydraulic power:	Flow rate: 40,5 l/min at 2400 rev/min Pressure: 17,5 MPa (175 bar) Power: 11,8 kW
Tapping points used for test:	At rear of tractor
Temperature of hydraulic fluid:	60°C

Linkage geometry (projected lengths):

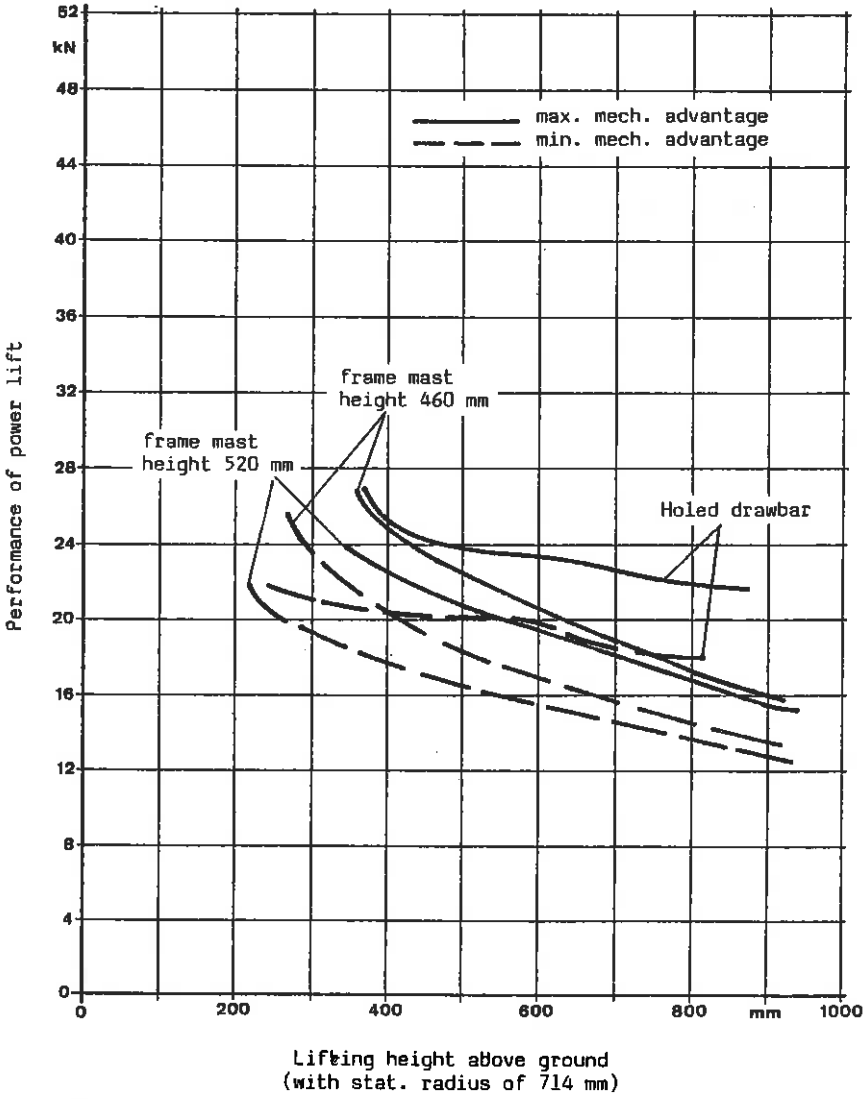
Rear tyres (size 13,6/12-36 AS) stat. radius:		(r)	714 mm
Front tyres (size 11,2/10-24 AS) stat. radius:		(r')	515 mm
Length of lift arms:		(A)	200/240 mm
Length of lower links:		(B)	900 mm
Distance of lift arm pivot point from rear wheel centre line:	horizontally	(a)	53 mm
	vertically	(b)	325 mm
Horizontal distance between the 2 lower link points:		(u)	480 mm
Horizontal distance between the 2 lift arm end points:		(v)	560 mm
Length of upper link:		(S)	from 520 to 760 mm
Distance of upper link pivot point from rear wheel centre line:	horizontally	(c)	337 mm
	vertically	(d)	258 mm
Distance of lower link pivot point from rear wheel centre:	horizontally	(e)	70 mm
	vertically	(f)	180 mm
Distance of lower link pivot points to lift rod pivot points on lower links:		(D)	450 mm
Length of lift rods:	right:	(L)	from 515 to 625 mm
	left:		from 530 to 620 mm
Length of lift rods during test:			575 mm
Height of lower hitch points during test:*)			
- in low position; max.mech./min.mech.		(h)	359/470 mm
- in high position; max.mech./min.mech. relative to the rear wheel centre line, situated 714 mm above the ground level		(H)	170/170 mm
Height of lower hitch points when locked in transport position:			Any height within lift range

*) These data are valid for unloaded power lift.

Performance of power lift

Lifting heights in relation to a horizontal line through the lower link pivot point mm		-310	-275	-225	-175	-100	-50	0	50	100	175	250	335	400	425
Lifting force at the hitch-points kN (Values for the pressure, calculated with 90 % of sustained oil pressure)	max.mech. advantage					24,4	23,7	23,6	23,5	23,4	22,6	21,8	21,6		
	min.mech. advantage		21,4	20,8	20,6	20,2	20,0	20,0	19,8	19,2	18,4	18,2			
	Maximum force exerted through whole range: 21,6/18,2 kN (2200/1855 kp)														
	Calculated oil pressure: 16,7 MPa (167 bar)														
Lifting force at the standard frame 460 mm mast height, 610 mm behind lower links hitch-points kN (Values for the pressure, calculated with 90 % of sustained oil pressure)	max.mech. advantage				26,9	24,0	23,0	22,1	21,2	20,3	19,0	17,6	16,4	15,7	
	min.mech. advantage			23,1	21,6	20,0	19,1	18,3	17,6	16,9	15,8	14,8	13,9	13,4	
	Maximum force exerted through whole range: 15,7/13,4 kN (1600/1365 kp)														
	Calculated oil pressure: 16,7 MPa (167 bar)														
Lifting force at the frame with 520 mm mast height and 610 mm behind lower links hitch-points kN	max.mech. advantage				23,4	21,8	21,2	20,4	19,8	19,0	18,0	17,0	15,8	15,2	15,0
	min.mech. advantage	21,8	20,2	19,2	18,5	17,6	16,9	16,4	15,9	15,4	14,7	13,9	13,0	12,4	12,2
	Maximum force exerted through whole range: 15,0/12,2 kN (1530/1245 kp)														
	Calculated oil pressure: 16,7 MPa (167 bar)														

Performance of power lift:



OPTIONAL TESTS

Main power take-off performance

Date and location of tests: 5.12.1984, Wieselburg, Austria
Type of dynamometer: SCHENK eddy-current brake Typ W 780

Main test on: ISO R 500, Typ 2 (DIN 9611) - 1000 rev/min p.t.o.

Power	Speed		Fuel consumption		Specific energy
	engine	p.t.o.	hourly	specific	
kW	rev/min	rev/min	kg/h 1/h	g/kWh	kWh/l
MAXIMUM POWER					
Maximum power - 2 hours test					
44,18	2400	1127	11,05 13,20	250	3,347
Standard p.t.o. speed					
43,70	2130	1000	10,53 12,58	241	3,473
The speed recommended by the manufacturer for drawbar work					
44,18	2400	1127	11,05 13,20	250	3,347
PART LOADS Governor hand lever in position giving maximum power					
(i) 85 % of torque at maximum power					
38,45	2458	1154	9,84 11,76	256	3,269
(ii) unloaded					
0	2579	1211	3,47 4,15	-	-
(iii) 50 % of the load defined in (i)					
19,75	2526	1186	6,24 7,46	316	2,648
(iv) maximum power					
44,18	2400	1127	11,05 13,20	250	3,347
(v) 25 % of the load defined in (i)					
10,00	2552	1198	4,66 5,57	466	1,796
(vi) 75 % of the load defined in (i)					
29,18	2486	1167	7,88 9,41	270	3,099

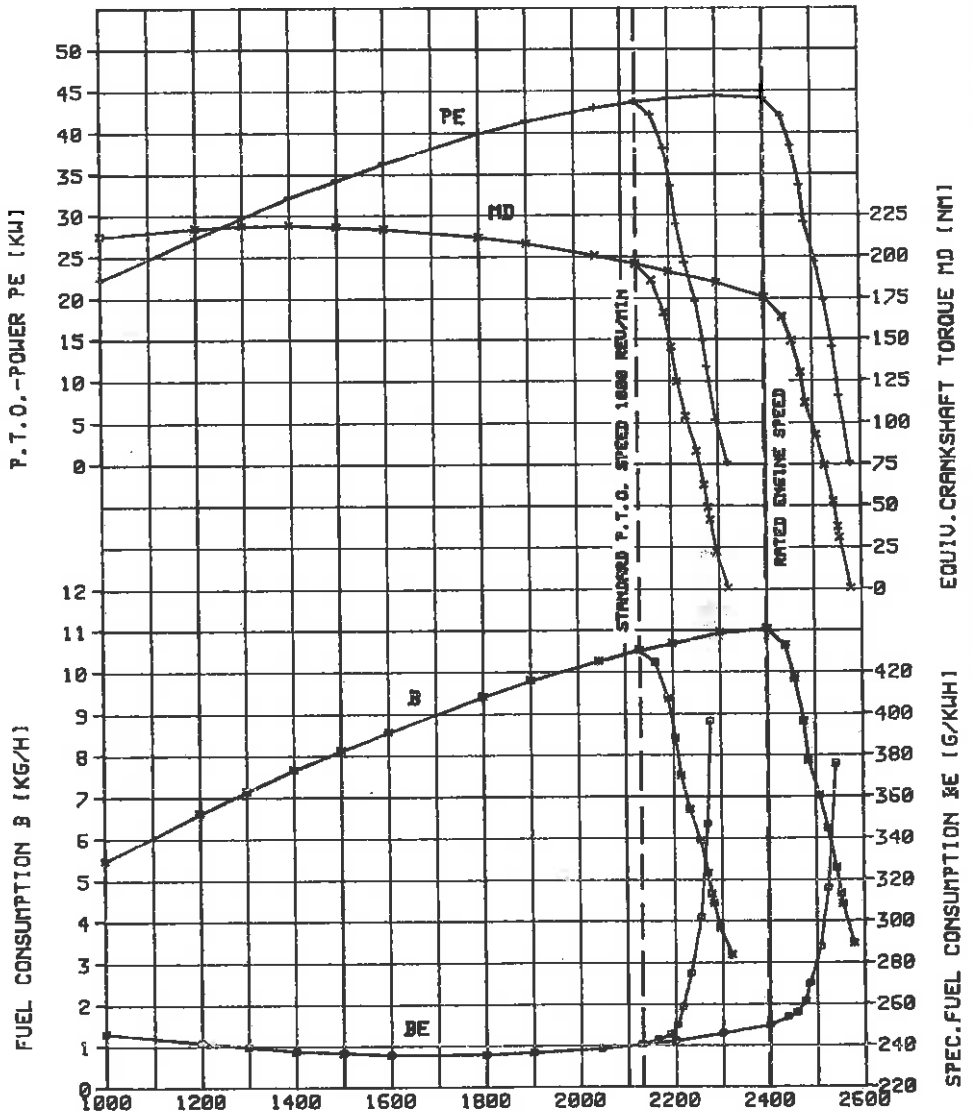
Power	Speed		Fuel consumption		Specific energy
	engine	p.t.o.	hourly	specific	
kW	rev/min	rev/min	kg/h l/h	g/kWh	kWh/l
PART LOADS Governor hand lever in position giving standard p.t.o. speed at full load					
(i) 85 % at torque at standard p.t.o. speed					
38,19	2190	1028	9,38 11,21	245,5	3,407
(ii) unloaded					
0	2320	1089	3,20 3,82	-	-
(iii) 50 % of the load defined in (i)					
19,70	2256	1059	5,95 7,11	302	2,770
(iv) maximum power at standard p.t.o. speed					
43,70	2130	1000	10,53 12,58	241	3,473
(v) 25 % of the load defined in (i)					
9,97	2283	1072	4,44 5,31	446	1,877
(vi) 75 % of the load defined in (i)					
28,99	2217	1041	7,51 8,97	259	3,232
STANDARD SPECIFIC FUEL CONSUMPTION: 256/316 - 245,5/302 g/kWh					

No load maximum engine speed: 2579 rev/min
Equivalent crankshaft torque
at maximum power: 175,8 Nm
Maximum equivalent crankshaft torque: 219,6 Nm at 1400 rev/min of engine

Mean atmospheric conditions: temperature: 15°C
pressure: 998 mbar
humidity: 87 %

Maximum temperatures: coolant: 90°C
engine oil: 112°C
fuel: 50°C
air intake: 30°C

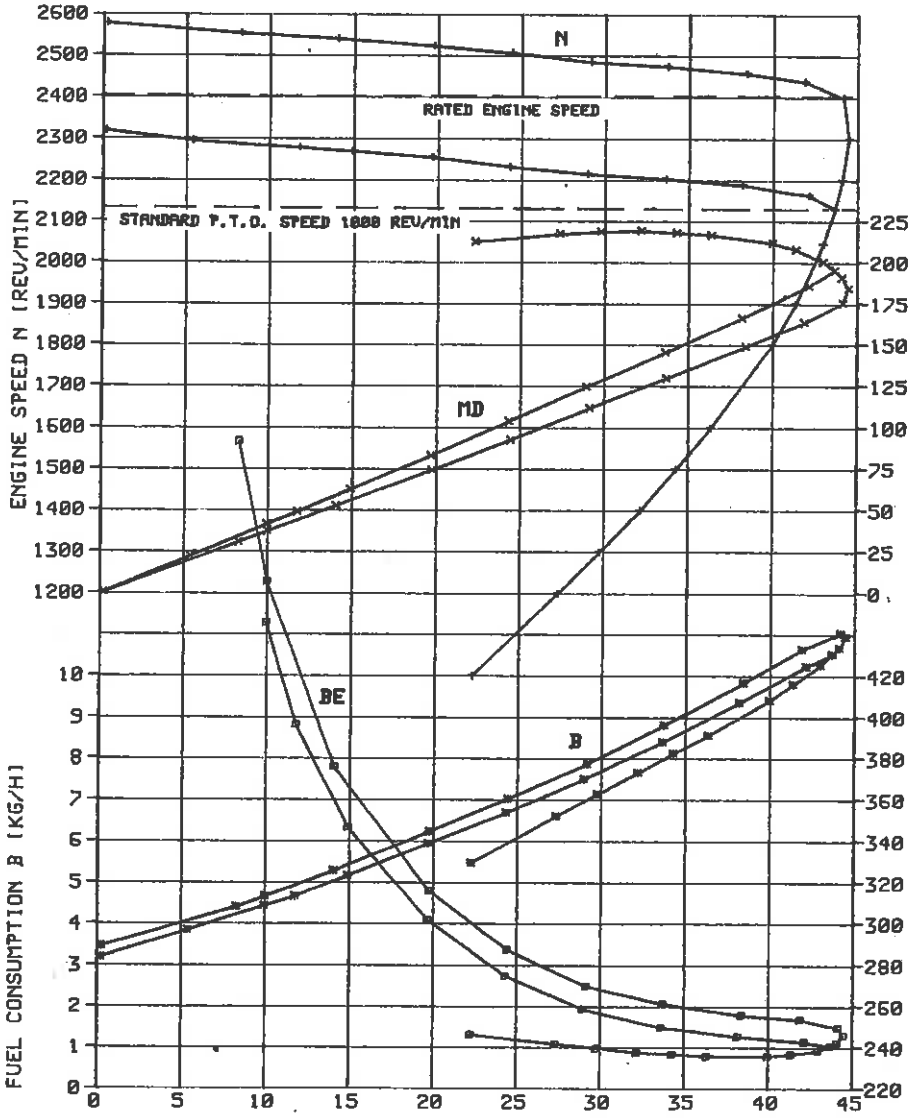
BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.: 097/85	1000 rev/min P.T.O.-TEST	STEYR-DAIMLER-PUCH TYP 337.45 (8075A) MOT.TYP WD 411.46



ENGINE SER.NR.: 411.46-7845	ATM.PRESSURE : 990 MBAR	FUEL TEMP.: 50 C	SIGNATURE
TRACTOR SER.NR.: 337.45-12771	AIR TEMPER. : 15 C	D.OF TESTS: 1984-12-05	
FUEL : B.037/15 C	COOLANT TEMP.: 90 C	TEST NO. : 142/2A139A	
ENGINE OIL : SHELL RIMULA X 10W	OIL TEMP. : 112 C	CURVES NO.: 3	REITHER

14-JUN-85 DUR.:0100846-DL003;MKU115;MKL28-22

BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.:097/85	1000 rev/min P.T.O.-TEST	STEYR-DAIMLER-PUCH TYP 337.45 (8075A) MOT.TYP WD 411.46



ENGINE SER.NR.: 411.46-7845	ATM.PRESSURE : 998 MBAR	FUEL TEMP.: 50 C	SIGNATURE
TRACTOR SER.NR.: 337.45-12771	AIR TEMPER. : 15 C	D.OF TESTS: 1984-12-05	
FUEL : 0.837/15 C	COOLANT TEMP.: 90 C	TEST NO. : 142/2A139A	
ENGINE OIL : SHELL RIMULA X 15W	OIL TEMP. : 112 C	CURVES NO.: 4	REITHER

14-JUN-85 DUR.:101000846-DL003.MKU115;MKL20-22

Engine performance

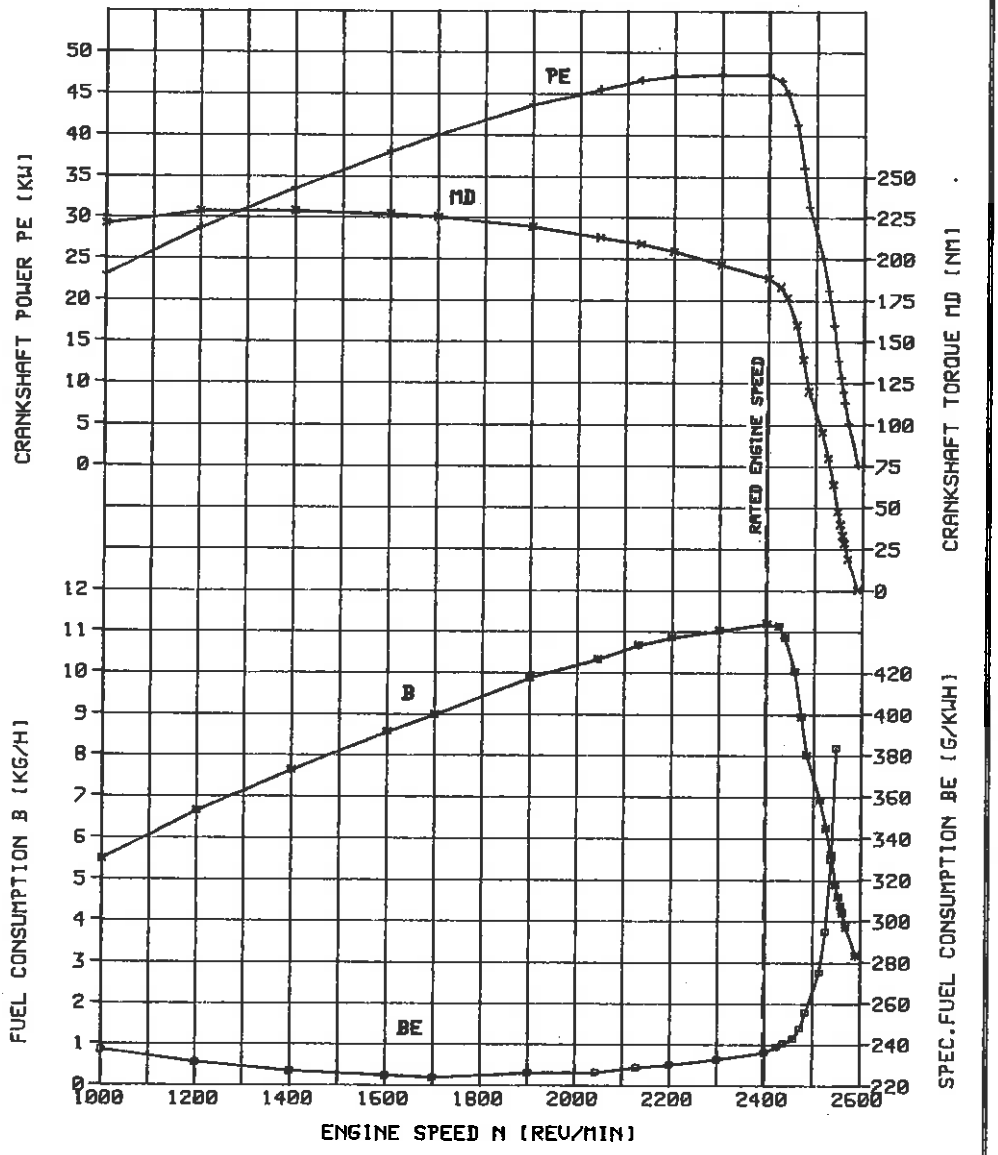
Date and location of test: 27.11.1984, Wieselburg, Austria
Type of dynamometer: SCHENK eddy-current brake Typ W 150

Power	Engine speed	Fuel consumption		Specific energy
		hourly	specific	
kW	rev/min	kg/h l/h	g/kWh	kWh/l
Maximum power - 2 hours test				
47,40	2400	11,21 13,39	236,5	3,539
Standard p.t.o. speed - 1000/540 rev/min				
46,65	2130	10,68 12,76	229	3,655
45,58	2044	10,33 12,34	226,5	3,693
The speed recommended by the manufacturer for drawbar work				
47,40	2400	11,21 13,39	236,5	3,539
Part loads				
(i) 85 % of torque at maximum power				
41,33	2460	10,04 12,00	243	3,444
(ii) unloaded				
0	2590	3,18 3,80	-	-
(iii) 50 % of the load defined in (i)				
21,23	2527	6,26 7,48	295	2,837
(iv) maximum power				
47,40	2400	11,21 13,39	236,5	3,539
(v) 25 % of the load defined in (i)				
10,72	2553	4,60 5,50	429	1,950
(vi) 75 % of the load defined in (i)				
31,32	2486	8,02 9,58	256	3,270

Optimum fuel consumption: 222,5 g/kWh at 31,5 kW and 1500 rev/min
No load maximum engine speed: 2590 rev/min
Torque at maximum power: 188,6 Nm
Maximum torque: 229,2 Nm at 1400 rev/min of engine

Mean atmospheric conditions:	temperature:	15°C
	pressure:	997 mbar
	relative humidity:	78 %
Maximum temperatures:	coolant:	90°C
	engine oil:	106°C
	fuel:	38°C
	engine air intake:	21°C

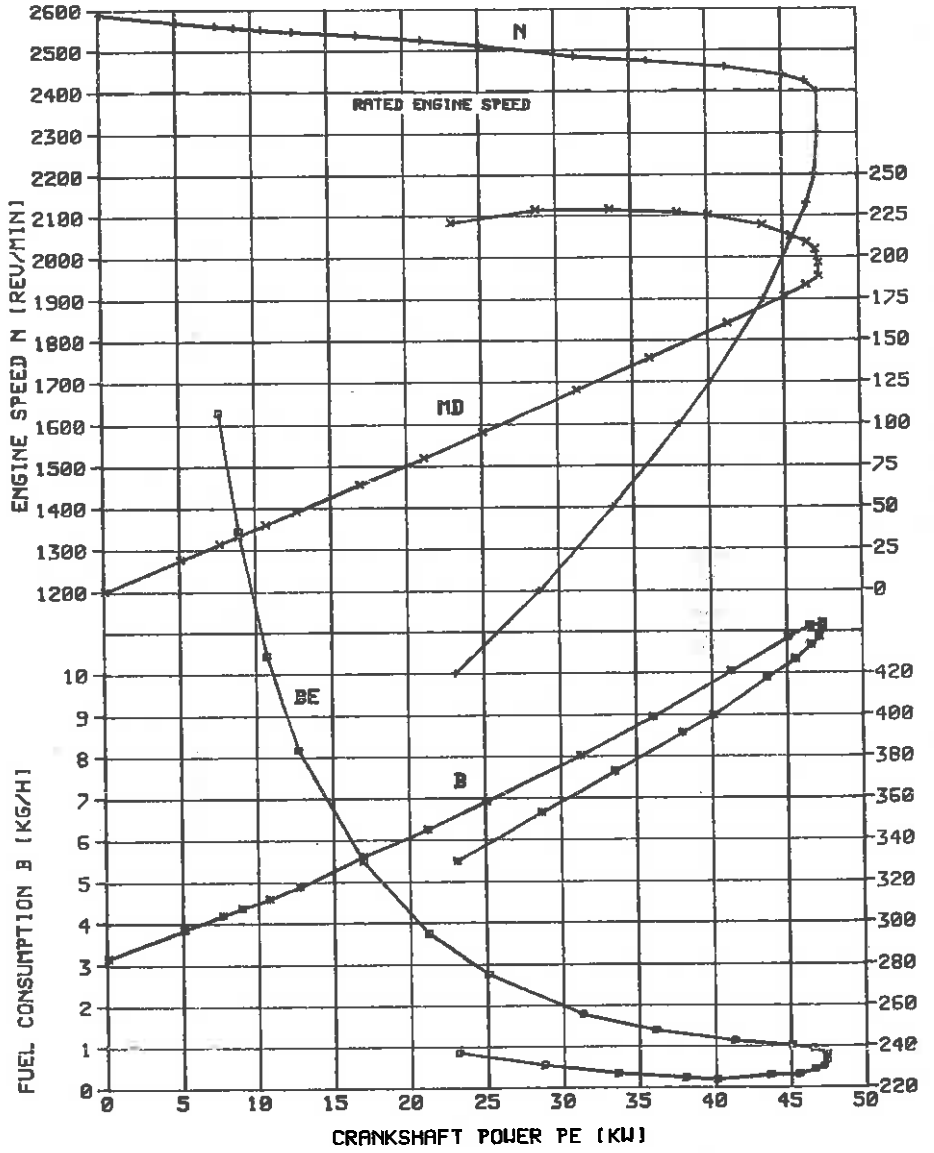
BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.:097/85	ENGINE-TEST	STEYR-DAIMLER-PUCH TYP 337.45 (8075A) MOT.TYP WD 411.46



ENGINE SER.NR.: 411.46-7845	ATM.PRESSURE : 997 MBAR	FUEL TEMP.: 38	SIGNATURE
TRACTOR SER.NR.: 337.45-12771	AIR TEMPER. : 15 C	D.OF TESTS: 1984-11-27	
FUEL : 0.837/15 C	COOLANT TEMP.: 90 C	TEST NO. : 142/M186	
ENGINE OIL : SHELL RIMULA X 15W40	OIL TEMP. : 106 C	CURVES NO.: 5	REITHER

14-JUN-85 DUR.:B100846-DL003.MKU119.MKL28-KU

BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.:097/85	ENGINE-TEST	STEYR-DAIMLER-PUCH TYP 337.45 (8075A) MOT.TYP WD 411.46



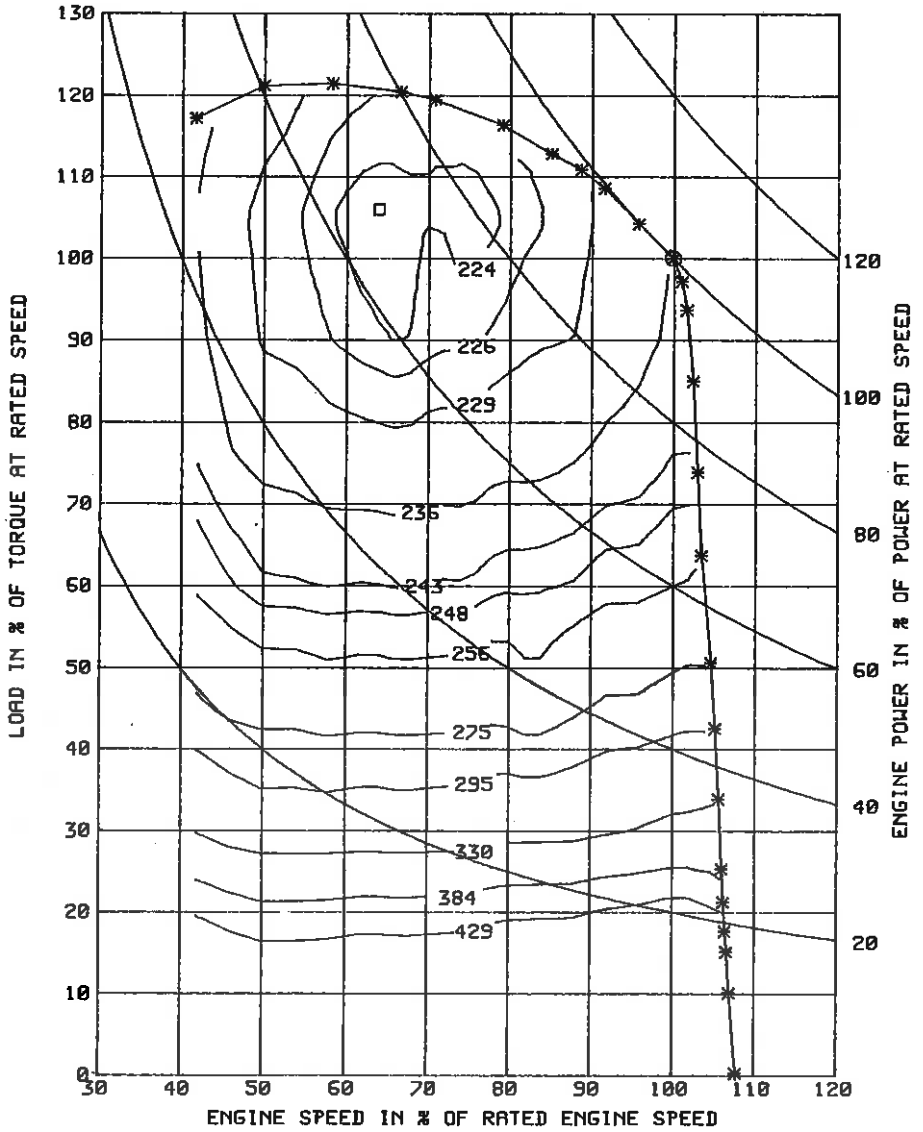
ENGINE SER.NR.: 411.46-7845	ATM.PRESSURE : 997 MBAR	FUEL TEMP.: 38	SIGNATURE
TRACTOR SER.NR.: 337.45-12771	AIR TEMPER. : 15 C	D.OF TESTS: 1984-11-27	
FUEL : 0.837/15 C	COOLANT TEMP.: 90 C	TEST NO. : 142/M186	
ENGINE OIL : SHELL RIMULA X 10W	OIL TEMP. : 106 C	CURVES NO.: 6	REITHER

14-JUN-85 DOR.:0100846-DL003.MRU115.MKL20-KU

BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.:097/85	ENGINE PERFORMANCE CHARACTERISTICS	STEYR-DAIMLER-PUCH TYP 337.45 (8075A) MOT.TYP WD 411.46

□ ....MIN.FUEL CONS. 222.40 G/KWH AT N = 1536. REV/MIN, MD = 199.91 NM, P = 32.2 KW

⊛ ....N = 2400. REV/MIN, MD = 189. NM, P = 47.4 KW



ENGINE SER.NR.: 411.46-7845	ATM.PRESSURE : 957 MBAR	FUEL TEMP.: 38	SIGNATURE
TRAKTOR SER.NR.: 337.45-12771	AIR TEMPER. : 15 C	D.OF TESTS: 1984-11-27	
FUEL : 0.837/15 C	COOLANT TEMP.: 90 C	TEST NO. : 142/M186	
ENGINE OIL : SHELL RIMULA X 10W	OIL TEMP. : 106 C	CURVES NO.: 7	REITHER

EDV-DL003;MKU119 ;MKL10AU

REDUCTION OF POWER DATA TO STANDARD CONDITIONS:

According to:

Austrian Standard Ö-Norm V - 5003
German Standard DIN 70020 Teil 6

$$P_{RED} = P_{OECD} \cdot k; \quad \text{where } k = \frac{1013}{B} \cdot \sqrt{\frac{273 + t}{293}}$$

P_{RED} = Reduced power to standard conditions
P_{OECD} = Power according to OECD
k = Reduction coefficient, resulting from the formula above

MAIN POWER TAKE OFF PERFORMANCE (page 21, 22 and 39, 40)
ENGINE PERFORMANCE (page 43)

Test conditions:

		540 p.t.o.	1000 p.t.o.	2400 engine
Intake air temperature (°C)	t	15	15	15
Atmospheric pressure	B	998 mbar	998 mbar	997 mbar
Resulting reduction coefficient	k	1,0063	1,0063	1,0073

	P_{OECD}	P_{RED}
MAXIMUM POWER 540 rev/min p.t.o.	42,80 kW (58,21 mHP)	43,07 KW (58,57 mHP)
MAXIMUM POWER 1000 rev/min p.t.o.	44,18 kW (60,08 mHP)	44,46 kW (60,46 mHP)
MAXIMUM POWER 2400 rev/min engine speed	47,40 kW (64,46 mHP)	47,75 kW (64,93 mHP)

REMARKS: None

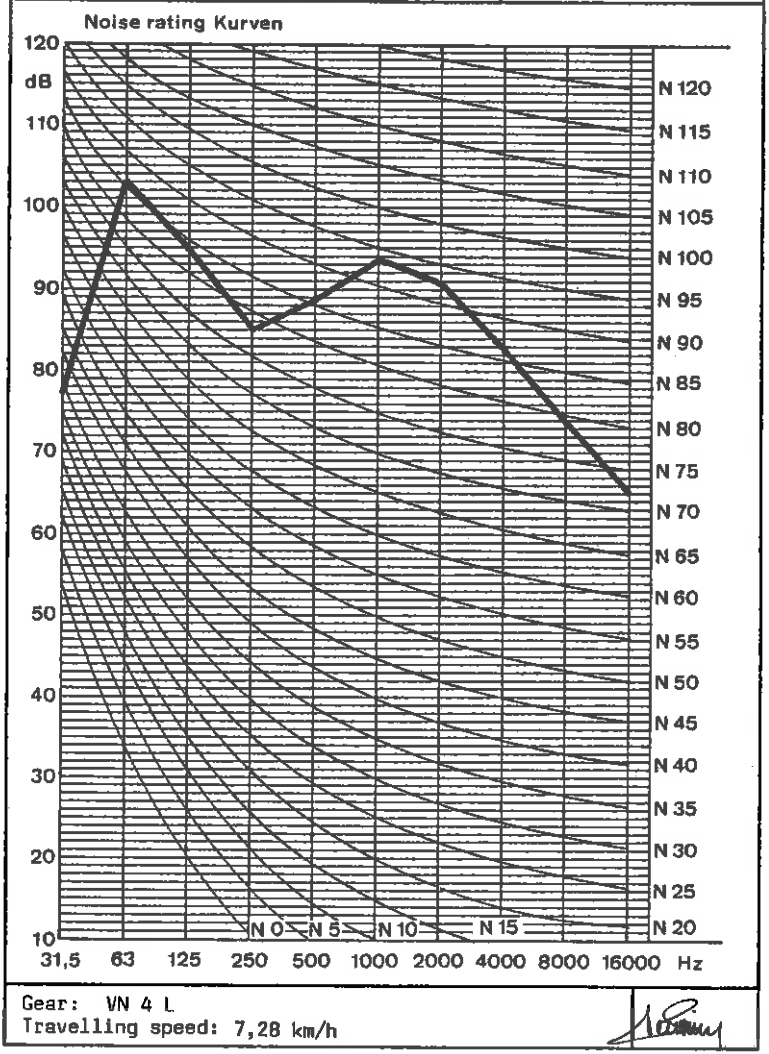
ANNEX

Out of the OECD-Code under responsibility of the Austrian Testing Station

OCTAVE ANALYSIS OF NOISE AT THE DRIVERS' EAR LEVEL:

With full closed safety cab (to page 32)

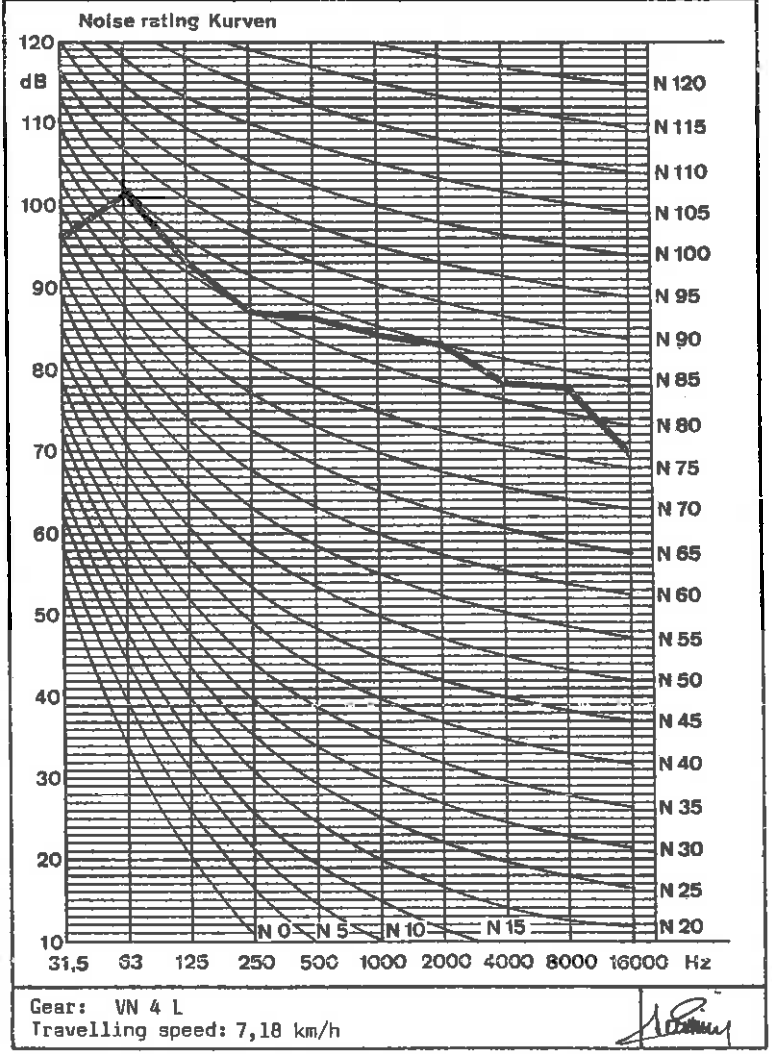
Bundesanstalt für Landtechnik Wieselburg/Austria	Octave analysis of noise at the drivers ear level	Dieseltractor STEYR 337.45 (STEYR 8075 a)



Gear: VN 4 L
Travelling speed: 7,28 km/h

With full closed safety cab and additional noise damping equipment
(to page 33)

Bundesanstalt für Landtechnik Wieselburg/Austria	Octave analysis of noise at the drivers ear level	Dieseltractor STEYR 337.45 (STEYR 8075 a)



Gear: VN 4 L
Travelling speed: 7,18 km/h