O.E.C.D. Report No.: 960

GEPRÜFT

Bundesanstalt für Landtechnik Wieselburg

PRÜF. Nr.

Bundesanstalt für Landtechnik

A-3250 Wieselburg, Austria

Dieseltractor STEYR 337.40

Trade name:

STEYR 8075



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

Bundesanstalt für Landtechnik

A-3250 Wieselburg/Erlauf

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Wieselburg/Erlauf, am 14.4. 19 86

Ihr Zeichen:

Ihre Nachricht:

Unser Zeichen:

Gesch.-Zahl:

Abtlg.:

Betreff:

Correction

In our OECD-test-report no. 960 of the tractor STEYR 8075 (337.40) there was an error on page 2.

The tractor STEYR 8075 (337.40) is rear wheel driven, and not four wheel driven as stated in our test-report.

Bundesanstalt für Landtechnik Wieselburg a. d. Erlauf

The director: For the department:

(Dipl.Ing.Dr. E. Reichmann) (Dipl.Ing. F. Lehner)
Hofrat

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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
Model:	Diesel-tractor STEYR 337.40
Type:	Wheel tractor, four-wheel driven, unit construction
Serial no.:	337.40 - 12768 (first serial number)

4WD

ENGINE:

Make:	Own make
Model:	WD 411.45
Type:	4 stroke diesel engine with direct injection
Serial no.:	411.45 - 12935

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. 9,6 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 tests

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, G 1 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; 2250 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:	
Make:	FICHTEL & SACHS AG. or LUK
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:	F & S DUT 295 - 280 or LUK DT 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

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: 4,745 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, 0)
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:

Make:	Own make
Type:	Steering axle with hydraulic steering cylinder Working cylinder: Bore 58 mm dia, stroke 175 mm, cylinder rod 25 mm diameter STEYR replacement no. 337 00 47 0092 Track width not adjustable

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

Total ratios and speeds:

Gear no.	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 403 mm with test tyre equipment: 13,6/12 - 36 AS and 7,50 - 18 Front

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

Direction of rotation: anticlockwise viewed from the driving end

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, 778 mm above ground, 434 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 driving end
Transmission ratio: 2,03

Version II:
Forward direction, in median plane, 693 mm above ground, 677 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}_{-0} 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:

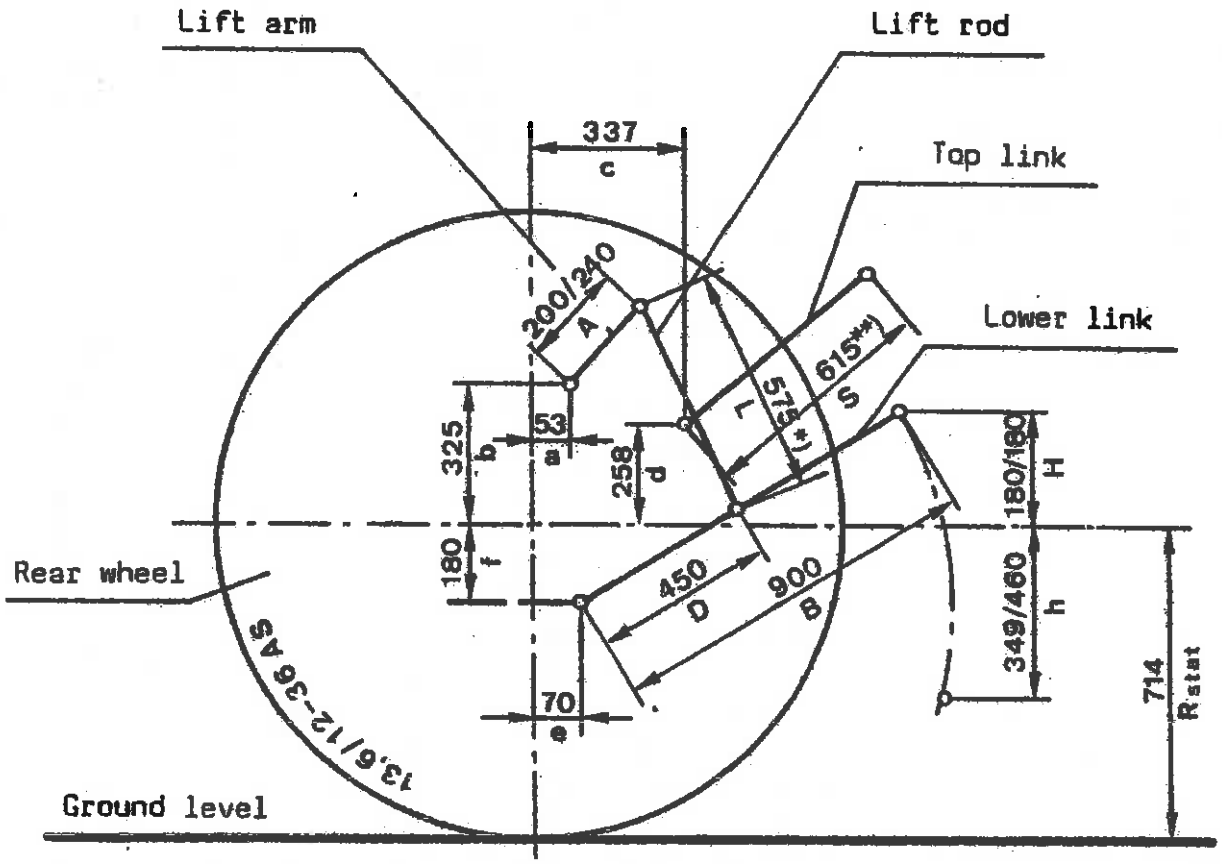
Make:	Own make
Type:	Open center type, draught control with two-stage pull adjustment and upper link sensing, position control, floating position
Type and number of cylinder:	Single acting hydraulic cylinder, stroke and diameter 152/85 mm
Type of linkage lock for transport:	Hydraulically by throttle 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:

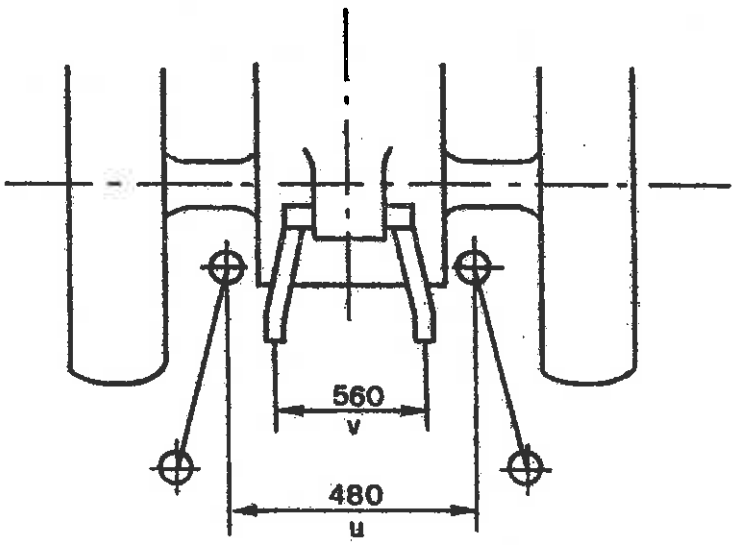
In the rear:	Category I/II, in conformity to ISO 730/1 Changing the categories by changing the holed drawbar and adjustment of the three-point linkage. "STEYR SIMPLEMATIK" standard linkage, double hole lift arms
In the front:	Not on tested tractor Category II

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 479 to 974 mm	from 239 to 804 mm	495/565 mm
Min.mech.advantage Liftarm 240 mm	from 339 to 974 mm	from 99 to 804 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 248 140 BH
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 pint 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 274 RA

Type:	Fork type
Height above ground:	409/488/584/664/714/764/814/864 mm
Distance of hitch point from rear axle axis horizontally:	580 mm
Distance of hitch point from power take-off shaft end:	
vertically:	from 194 mm below to 261 mm above
horizontally:	rearwards 185 mm
Diameter of coupling pin:	30 mm
Maximum vertical permissible load:	15 kN

or

ROCKINGER model 248 RB

Type:	Fork type
Height above ground:	409/488/584/664/714/764/814/864 mm
Distance of hitch point from rear axle axis horizontally:	580 mm
Distance of hitch point from power take-off shaft end:	
vertically:	from 194 mm below to 261 mm above
horizontally:	rearwards 185 mm
Diameter of coupling pin:	30 mm
Maximum vertical permissible load:	15 kN

TOWING HITCH:

Type:	Fork type
Height above grond:	655 mm
Distance from front axle:	frontwards from 500 to 640 mm (dependent from number of front ballast)
Diameter of coupling pin:	31 mm

STEERING:

Method op 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
Type of oil case:	ZF 7633
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, acting on the left steering lever
Acting piston area:	26,4/21,5 cm^2
Number of revolutions of steering wheel for the whole steering lock:	appr. 3,5

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 function
Location:	In front of tractor
Tyres:	Pneumatics, diagonal carcass 7,50 - 18 Front, PR 6; rim: 5,5 F x 18 Maximum permissible load on each tyre: 7945 N (810 kp) at 2,25 bar inflation pressure 11125 N (1134 kp) at 2,8 bar inflation pressure and with speed limit of 8 km/h for front implement working
Track width:	1328 mm
Optional front tyre equipment:	6,50 - 16 AS Front; rim: 4,50 E x 16 6,50 - 20 AS Front; rim: 5,50 F x 20 7,50 - 16 AS Front; rim: 5,50 F x 16 7,5 L - 15 AS Front; rim: 5 1/2 J x 15 7,50 - 20 AS Front; rim: 5,50 F x 20 9,00 - 16 AS Front; rim: 6,00 F x 16

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:	13,6 - 28 AS; rim: W 12 x 28 14,9 - 28 AS; rim: DW 12 x 28 14,9 - 30 AS; rim: W 12 x 30 16,9 - 30 AS; rim: DW 14 x 30 18,4 - 30 AS; rim: W 15 L x 30 9,5 - 36 AS; rim: W 8 x 36 12,4 - 36 AS; rim: W 10 x 36 13,6 - 38 AS; rim: DW 12 x 38 9,5 - 42 AS; rim: W 7 x 42 8,3 - 44 AS; rim: W 7 x 44 9,5 - 44 AS; rim: W 7 x 44

WHEELBASE: 2118 mm

PROTECTIVE STRUCTURE SPECIFICATIONS:

OECD approval number:	CSD 0858/2
Austrian testing number:	Prot.Nr. 028/85
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-1BS1 D88

DRIVER'SEAT:

Make and type:	Klepp Elastomat 1050 S Tested on tractor according to national regulation (Prot.Nr. 031/84)
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	1075	140/75	775
Side lights	1465	90/40	310
Rear lights	1515	90/40	145
Brake lights			
Direction indicators front	1420	90/40	310
Direction indicators rear	1545	90/40	145
Reflectors	1330 730	100/60 80 dia	140 545

*) Measured with stat. tyre radius at rear 714 mm and 403 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: 1328 mm
Rear: 1506 mm

Front wheels: 7,50-18 Front,PR6; rim: 5,5 F x 18
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	3770	1730	1860	2250/2365	2270
Without ballast	3550	1730	1860	2250/2365	2270

*) Measured on the rear wheels **) Measured on the mudgurads

Ground clearance:

Clearance-limiting part:

453 mm under the front axle tie rod
400 mm under the crankshaft case
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	878	1722	2600
With ballast	kg	1070	2338	3408

	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-4652, 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	
Recommended grease:	Lithium soap basis NLGI 2 (multigrade grease)	
Number of lubrication points:	24	

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 I (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

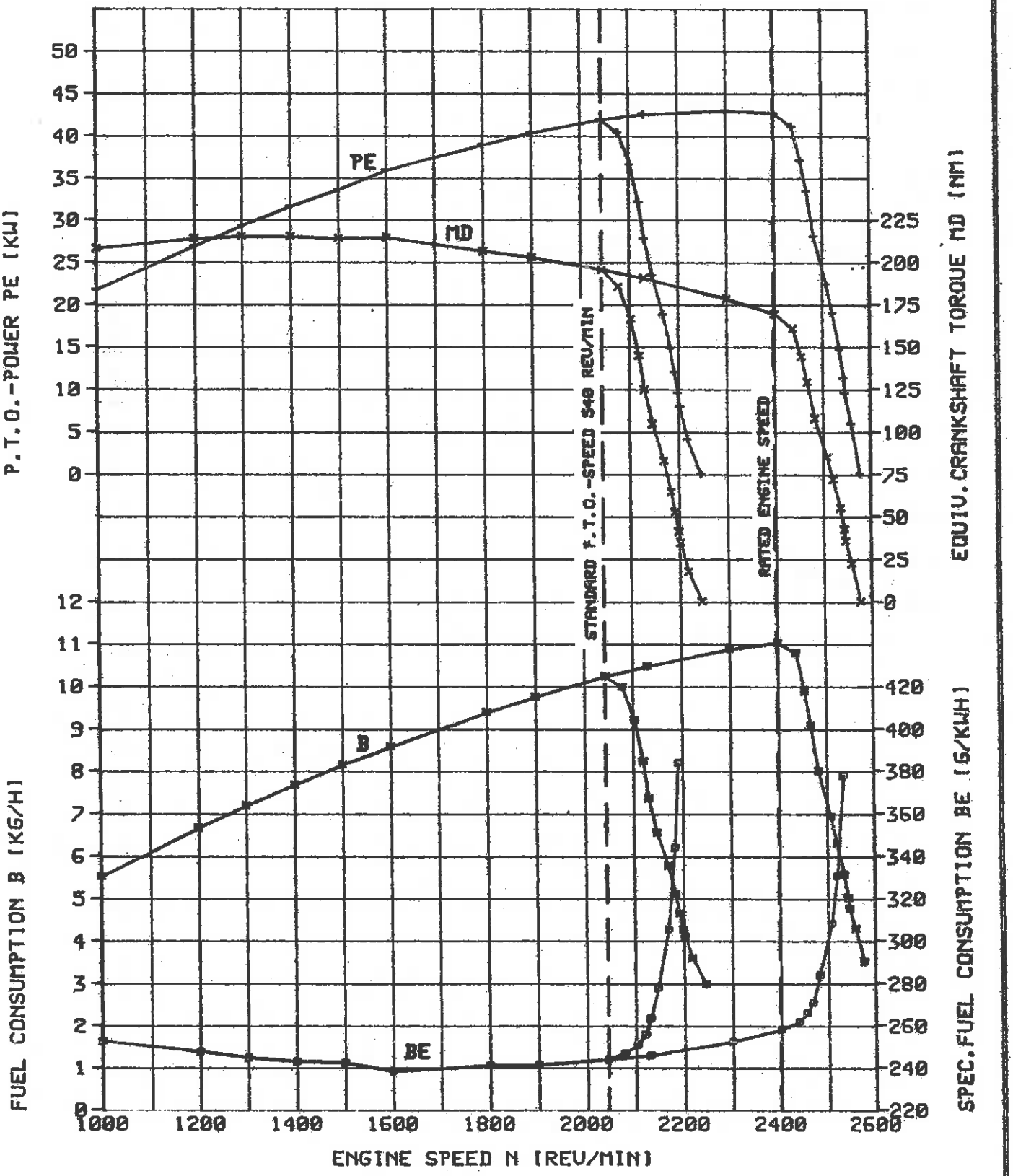
Power	Speed		Fuel consumption		Specific energy
	engine	p.t.o.	hourly	specific	
kW	rev/min	rev/min	kg/h l/h	g/kWh	kWh/l
PART LOADS Governor hand lever in position giving standard p.t.o. speed at full load					
(i) 85 % at torque at standard p.t.o. speed					
36,78	2104	556	9,23 11,02	251	3,337
(ii) unloaded					
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 %

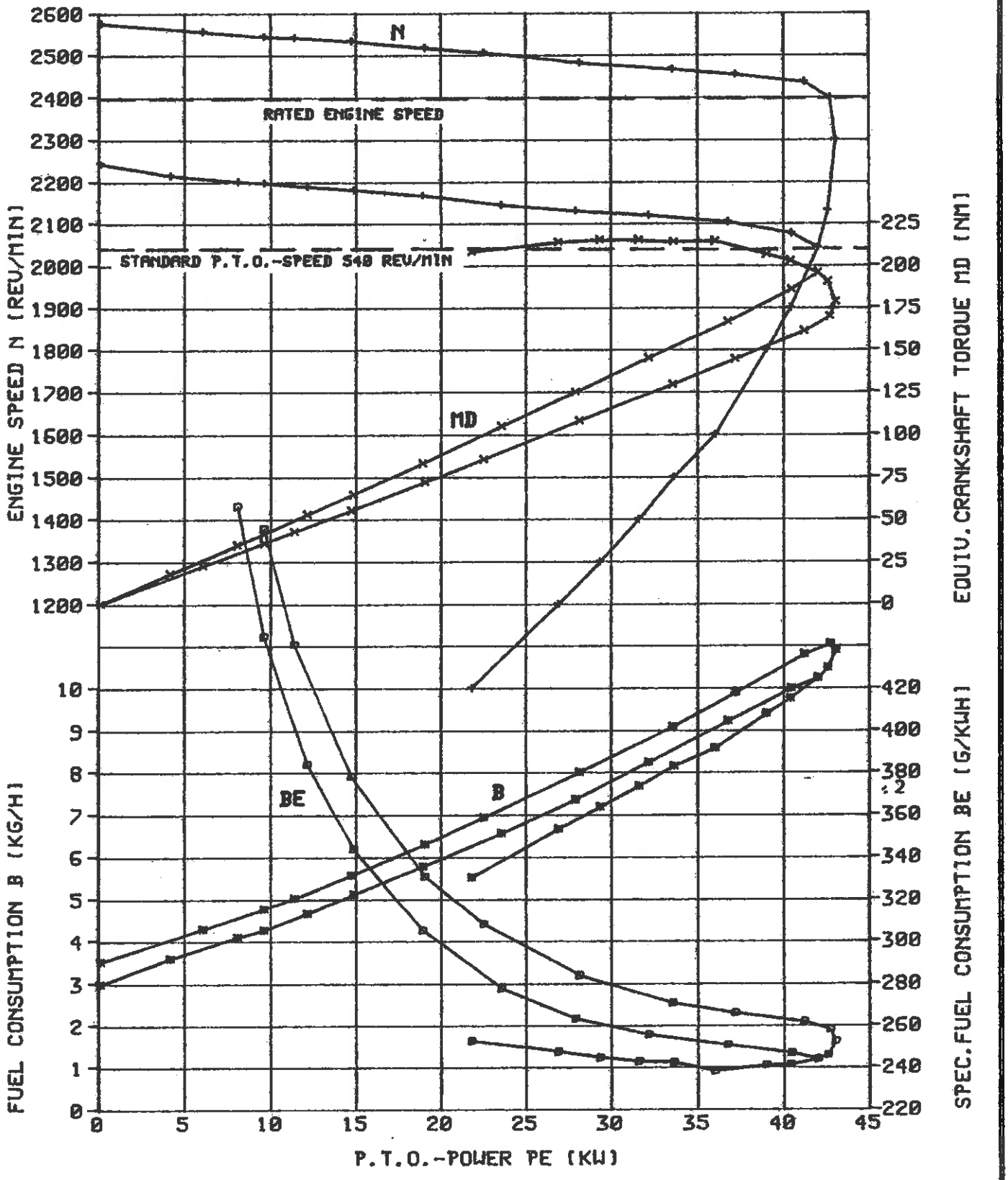
Maximum temperatures: coolant: 90°C
engine oil: 110°C
fuel: 51°C
air intake: 32°C

BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.: 151/85	540 rev/min P.T.O.-TEST	STEYR-DAIMLER-PUCH TYP 337.40 (8075) MOT.TYP WD 411.45



ENGINE SER.NR.: 411.45-12935	ATM.PRESSURE : 998 MBAR	FUEL TEMP.: 51 C	SIGNATURE
TRACTOR SER.NR.: 337.40-12768	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 X 10 W	OIL TEMP. : 110 C	CURVES NO.: 1	REITHER

BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.: 151/85	540 rev/min P.T.O.-TEST	STEYR-DAIMLER-PUCH TYP 337.40 (8075) MOT.TYP WD 411.45



ENGINE SER.NR.: 411.45-12935	ATM.PRESSURE : 998 MBAR	FUEL TEMP.: 51 C	SIGNATURE
TRACTOR SER.NR.: 337.40-12768	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 X 10 W	OIL TEMP. : 110 C	CURVES NO.: 2	REITHER

21-AUG-85 DVR.:01000846-DL003;MKU121;MKL20-21

Drawbar performance:

Date of tests: 3. - 16.4.1985
Type of track: Concrete
Height of drawbar above ground: 570 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 1,0 bar, in the rear 1,1 bar													
VS L3	4,586	31,08	24400	2456	15	331	2,529	49	80	98	14	64	995
VN S1	4,626	31,36	24400	2453	15	330	2,536	49	80	97	13	65	995
VS S1	5,410	35,10	23354	2400	12,3	319	2,624	48	81	96	13	64	995
VN L4	6,887	36,15	18897	2400	8,3	309,5	2,702	47	81	95	15	64	995
VS L4	8,102	36,51	16221	2400	6,9	306,5	2,729	46	81	94	14	64	995
VN S2	9,636	36,59	13672	2400	5,8	306	2,735	44	81	92	15	63	995
VS S2	11,256	36,40	11642	2400	5	307,5	2,721	42	80	91	14	63	995
VN S3	14,583	35,50	8763	2400	4,1	315,5	2,654	48	81	96	15	64	995

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 L4	8,587	28,78	12066	2467	4,4	330,5	2,534	55	83	106	11	68	1002
(iii) Five-hour-test at pull corresponding to 15 % wheelslip in test (ii)													
VN L3	3,932	32,77	30000	2440	15	331	2,530	64	85	110	14	62	994
(iv) Maximum power (ballasted) tyre inflation pressure in the front 1,3 bar, in the rear 1,6 bar													
VN L1	1,435	11,96	30000	2537	15	-	-	49	80	100	16	62	986
VS L1	1,659	13,83	30000	2528	15	-	-	49	81	101	17	62	986
VN L2	2,700	22,50	30000	2482	15	369	2,269	49	82	101	18	61	986
VS L2	3,113	25,95	30000	2470	15	357	2,344	48	81	101	18	60	986
VN L3	3,946	32,88	30000	2439	15	331,5	2,527	48	81	100	16	60	986
VS L3	4,714	35,36	27000	2400	10,9	316,5	2,643	50	81	99	18	60	986
VN S1	4,769	35,50	26798	2400	10,8	315,5	2,654	50	82	99	18	60	986
VS S1	5,680	36,31	23012	2400	8,3	308,5	2,714	49	81	97	16	59	986
VN L4	7,052	36,85	18814	2400	6,5	304	2,755	49	81	96	16	59	986
VS L4	8,257	36,90	16088	2400	5,5	303,5	2,758	49	81	96	16	59	986
VN S2	9,777	36,68	13507	2400	4,8	305	2,742	48	81	94	14	58	986
VS S2	11,396	36,01	11376	2400	4,2	311	2,692	48	81	93	14	57	986
VN S3	14,729	33,91	8288	2400	3,5	330	2,535	48	81	91	14	57	986

Total oil consumption during 10 hours duration of tests (iii) and (iv): 78,5 h/h

TURNING SPACE AND TURNING CIRCLE:

Wheel equipment: front: 7,50-18 Front, PR 6; rim: 5,5 F x 18
rear: 13,6/12-36 AS, PR 6; rim: W 12 x 36

Track of wheel: front: 1328 mm
rear: 1506 mm

Results	With brakes		Without brakes	
	right-hand	left-hand	right-hand	left-hand
	m	m	m	m
Radius of turnig space	3,32	3,20	3,83	3,70
Radius of turning circle	3,20	3,08	3,70	3,57

LOCATION OF CENTRE OF GRAVITY:

	mm
Height above ground	865
Distance forward from the vertical plane containing the axis of the rear wheels	707
Distance from the median plane of the tractor, left-side	1

BRAKING:

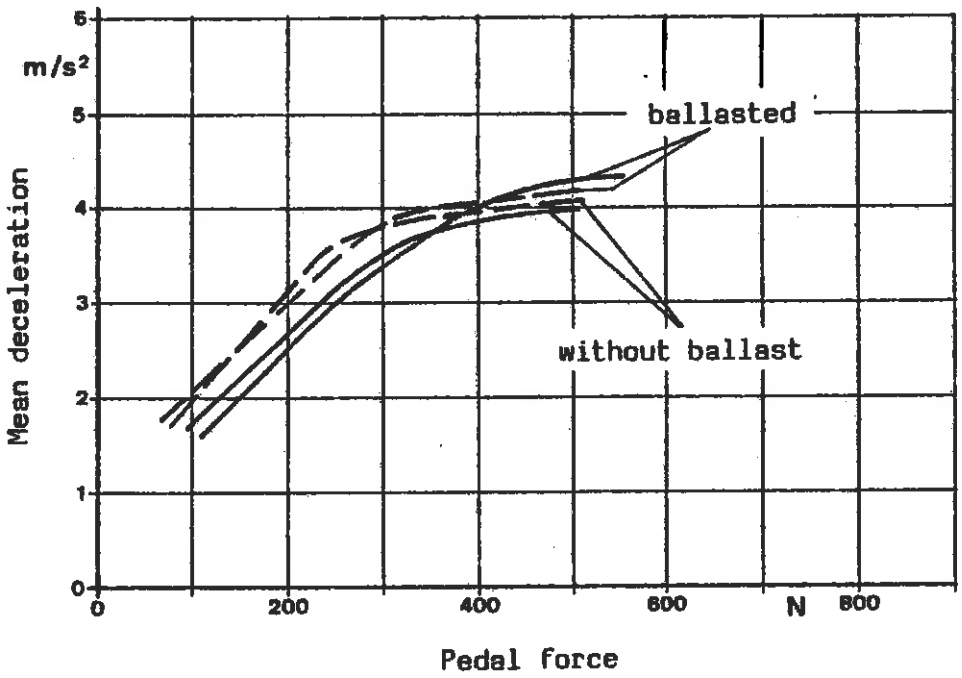
Date of tests: 9.4.1985
Type of track: Concrete
Type of decelerometer: Moto-Meter Nr. 03382 (Kombi-Schreiber)

Tractor mass during brake tests (with driver):

	Front kg	Rear kg	Total kg
Ballasted	1085	2398	3483
Unballasted	893	1782	2675

Service brake:

Type-0-test (cold brakes) ———— , Type-I(fade test) — — — — — —



Speed before application of brakes: 31,3 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 2600 kg	
	up	down	up	down
Braking device control force	110 N	105 N	155 N	155 N

MEASUREMENT OF EXTERNAL NOISE LEVEL:

Date of tests:	23.4.1985
Type of sound level meter:	BRÜEL & KJAER 2200 and 2308
Type of track:	Concrete
Gear number:	VS 4 S
Travelling speed before acceleration:	22,5 km/h
Sound level:	85,5 dB(A)

NOISE MEASUREMENT AT DRIVER'S EAR:

Date of tests:	23.4.1985
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	22,8	1,50	91
VS 1 L	22,8	1,73	92
VN 2 L	23,7	2,82	92
VS 2 L	23,6	3,24	91
VN 3 L	23,5	4,15	91,5
VS 3 L	23,8	4,75	92
VN 1 S	24,0	4,81	91
VS 1 S	22,4	5,61	92,5
VN 4 L	18,6	6,70	92,5
VN 4 L *)	light load (1,5 kN)	7,90	90,5
VS 4 L	9,8	8,62	92,5
VN 2 S	14,0	9,68	91
VS 2 S	11,6	11,26	91
VN 3 S	8,9	14,25	90,5
VS 3 S	7,6	16,95	91,5
VN 4 S	4,7	24,44	91
VS 4 S	light load (3,0 kN)	29,49	91,5

*) 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	22,8	1,50	88,5
VS 1 L	22,8	1,73	89
VN 2 L	23,7	2,82	89
VS 2 L	23,6	3,24	88,5
VN 3 L	23,5	4,15	88,5
VS 3 L	23,8	4,75	89
VN 1 S	24,0	4,81	88,5
VS 1 S	22,4	5,61	89
VN 4 L	18,6	6,70	89
VN 4 L *)	light load (1,5 kN)	7,90	88,5
VS 4 L	9,8	8,62	90,5
VN 2 S	14,0	9,68	90
VS 2 S	11,6	11,26	88,5
VN 3 S	8,9	14,25	88
VS 3 S	7,6	16,95	88,5
VN 4 S	4,7	24,44	89
VS 4 S	light load (3,0 kN)	29,49	90

*) 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	22,8	1,50	94
VS 1 L	22,8	1,73	94
VN 2 L	23,7	2,82	95,5
VS 2 L	23,6	3,24	94
VN 3 L	23,5	4,15	95
VS 3 L	23,8	4,75	94,5
VN 1 S	24,0	4,81	94
VS 1 S	22,4	5,61	95
VN 4 L	18,6	6,70	96
VN 4 L	light load (1,5 kN)	7,90	94,5
VS 4 L	9,8	8,62	96
VN 2 S	14,0	9,68	94,5
VS 2 S	11,6	11,26	96
VN 3 S	8,9	14,25	94
VS 3 S	7,6	16,95	94
VN 4 S	4,7	24,44	94
VS 4 S	light load (3,0 kN)	29,49	95

*) 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	22,8	1,50	90,5
VS 1 L	22,8	1,73	89,5
VN 2 L	23,7	2,82	91,5
VS 2 L	23,6	3,24	91
VN 3 L	23,5	4,15	91
VS 3 L	23,8	4,75	91
VN 1 S	24,0	4,81	90,5
VS 1 S	22,4	5,61	91
VN 4 L	18,6	6,70	92,5
VN 4 L	light load (appr. 1,5 kN)	7,90	90
VS 4 L	9,8	8,62	92
VN 2 S	14,0	9,68	90,5
VS 2 S	11,6	11,26	90,5
VN 3 S	8,9	14,25	90
VS 3 S	7,6	16,95	90
VN 4 S	4,7	24,44	90,5
VS 4 S	light load (appr. 3,0 kN)	29,49	90,5

*) 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 (manufacturer's 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	365/254	529/640	21,6/18,2	16,7 (167 bar)	21,0/17,7	-
On the frame 460 mm mast height	365/254	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	365/254	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):

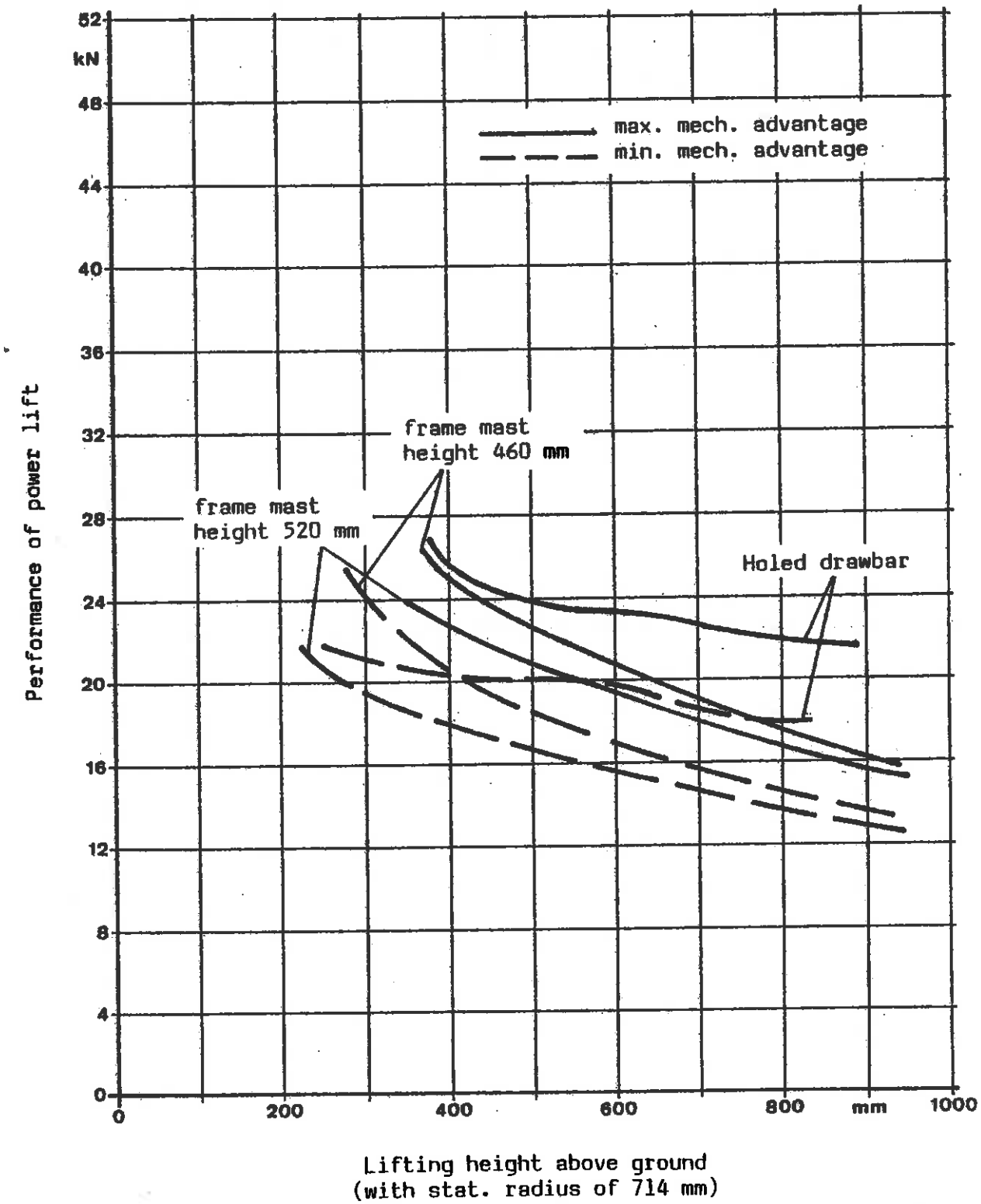
Rear tyres (size 13,6/12-36 AS) stat. radius:		(r)	714 mm
Front tyres (size 7,50-18 Front) stat. radius:		(r')	403 mm
Length of lift arms:		(A)	200/240 mm
Length of lower links:		(B)	900 mm
Distance of lift arm pivot point from rear wheel centre line:	horizontally	(a)	53 mm
	vertically	(b)	325 mm
Horizontal 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)	349/460 mm
- in high position; max.mech./min.mech. relative to the rear wheel centre line, situated 714 mm above the ground level		(H)	180/180 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		-300	-265	-215	-165	-90	-50	0	50	100	175	260	345	410	435
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

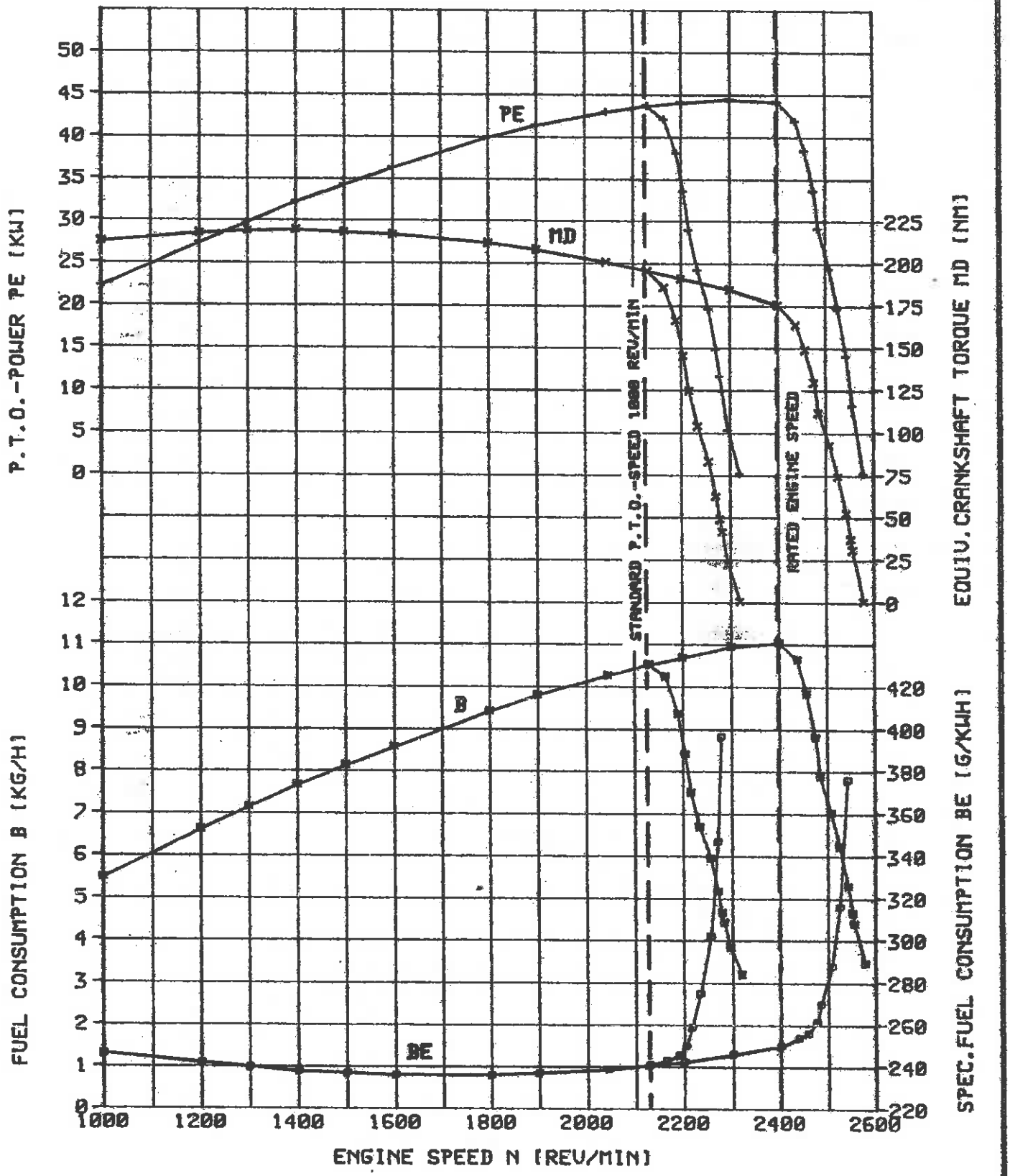
Power	Speed		Fuel consumption		Specific energy
	engine	p.t.o.	hourly	specific	
kW	rev/min	rev/min	kg/h l/h	g/kWh	kWh/l
PART LOADS Governor hand lever in position giving standard p.t.o. speed at full load					
(i) 85 % at torque at standard p.t.o. speed					
38,19	2190	1028	9,38 11,21	245,5	3,407
(ii) 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 %

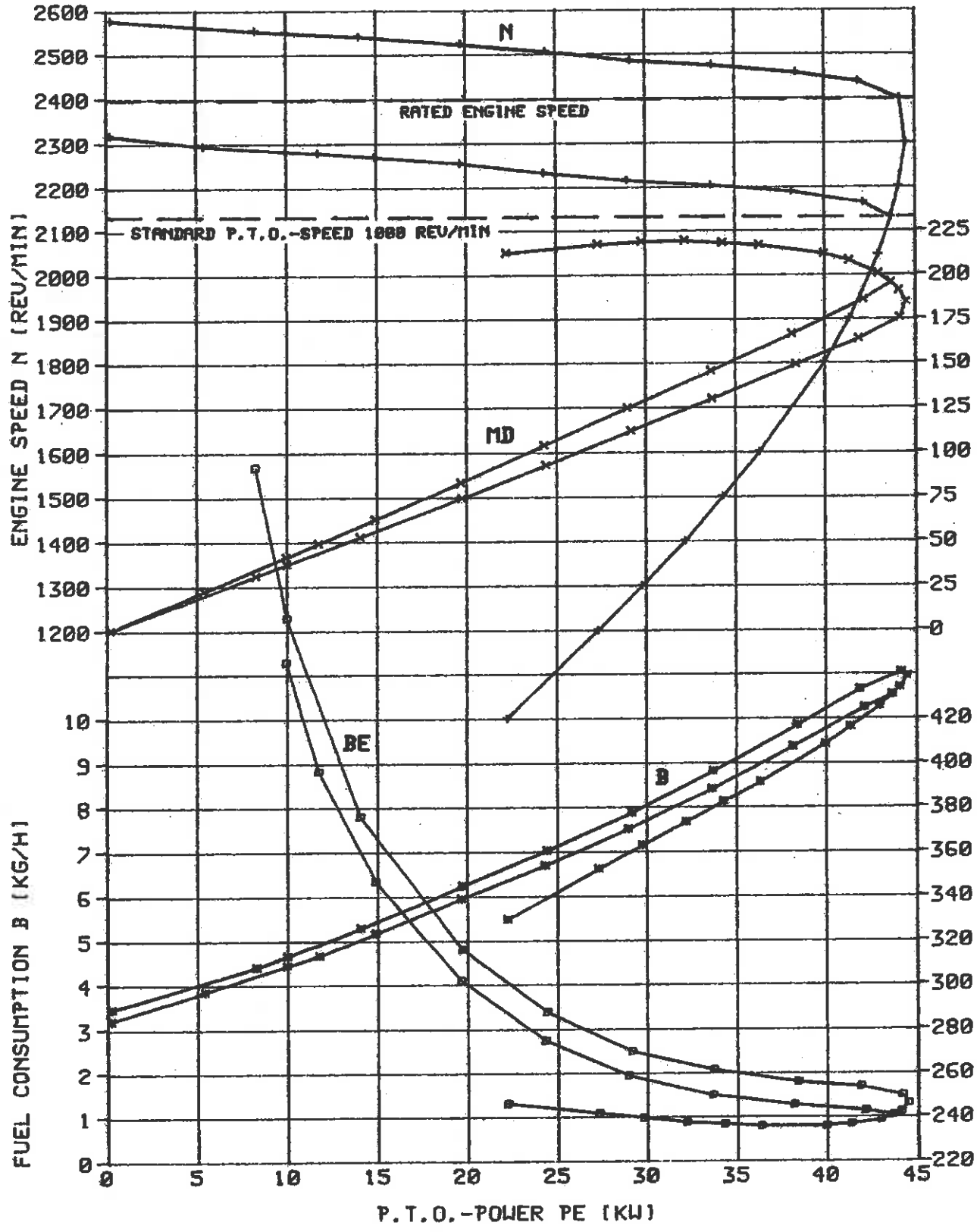
Maximum temperatures: coolant: 90°C
engine oil: 112°C
fuel: 50°C
air intake: 30°C

BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.: 151/85	1000 rev/min P.T.O.-TEST	STEYR-DAIMLER-PUCH TYP 337.40 (8075) MOT.TYP WD 411.45



ENGINE SER.NR.: 411.45-12935	ATM.PRESSURE : 998 MBAR	FUEL TEMP.: 50 C	SIGNATURE
TRACTOR SER.NR.: 337.40-12768	AIR TEMPER. : 15 C	D.OF TESTS: 1984-12-05	
FUEL : B.837/15 C	COOLANT TEMP.: 90 C	TEST NO. : 142/2A139A	
ENGINE OIL : SHELL X 10 W	OIL TEMP. : 112 C	CURVES NO.: 3	REITHER

BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.: 151/85	1000 rev/min P.T.O.-TEST	STEYR-DAIMLER-PUCH TYP 337.40 (8075) MOT.TYP WD 411.45



ENGINE SER.NR.: 411.45-12935	ATM.PRESSURE : 998 MBAR	FUEL TEMP.: 50 C	SIGNATURE
TRACTOR SER.NR.: 337.40-12768	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 X 10 W	OIL TEMP. : 112 C	CURVES NO.: 4	REITHER

21-AUG-85

DUR.:0100846-DL003;MKU121;MKL20-22

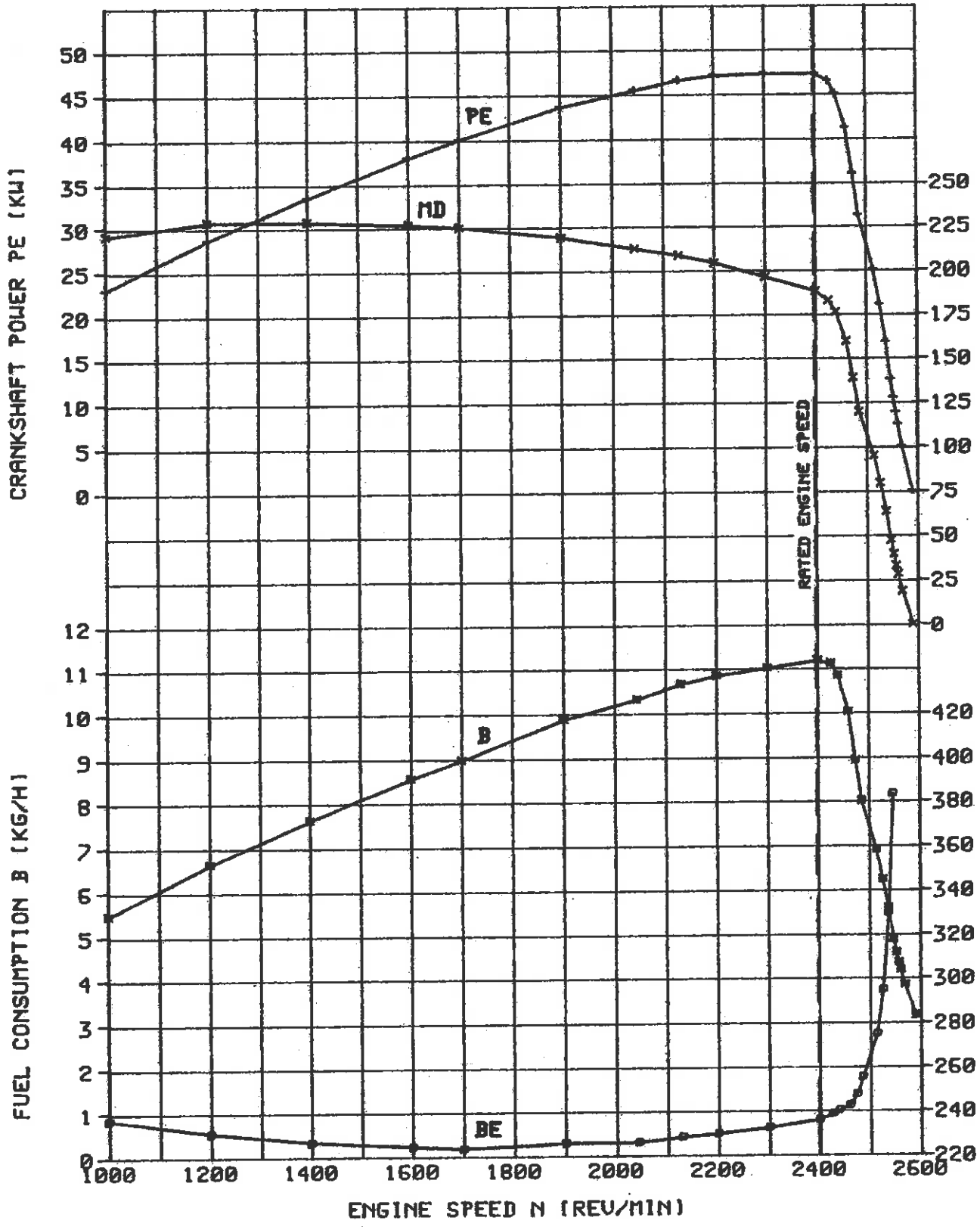
Engine performance

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 manufecturer 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.: 151/85	ENGINE-TEST	STEYR-DAIMLER-PUCH TYP 337.40 (8075) MOT.TYP WD 411.45

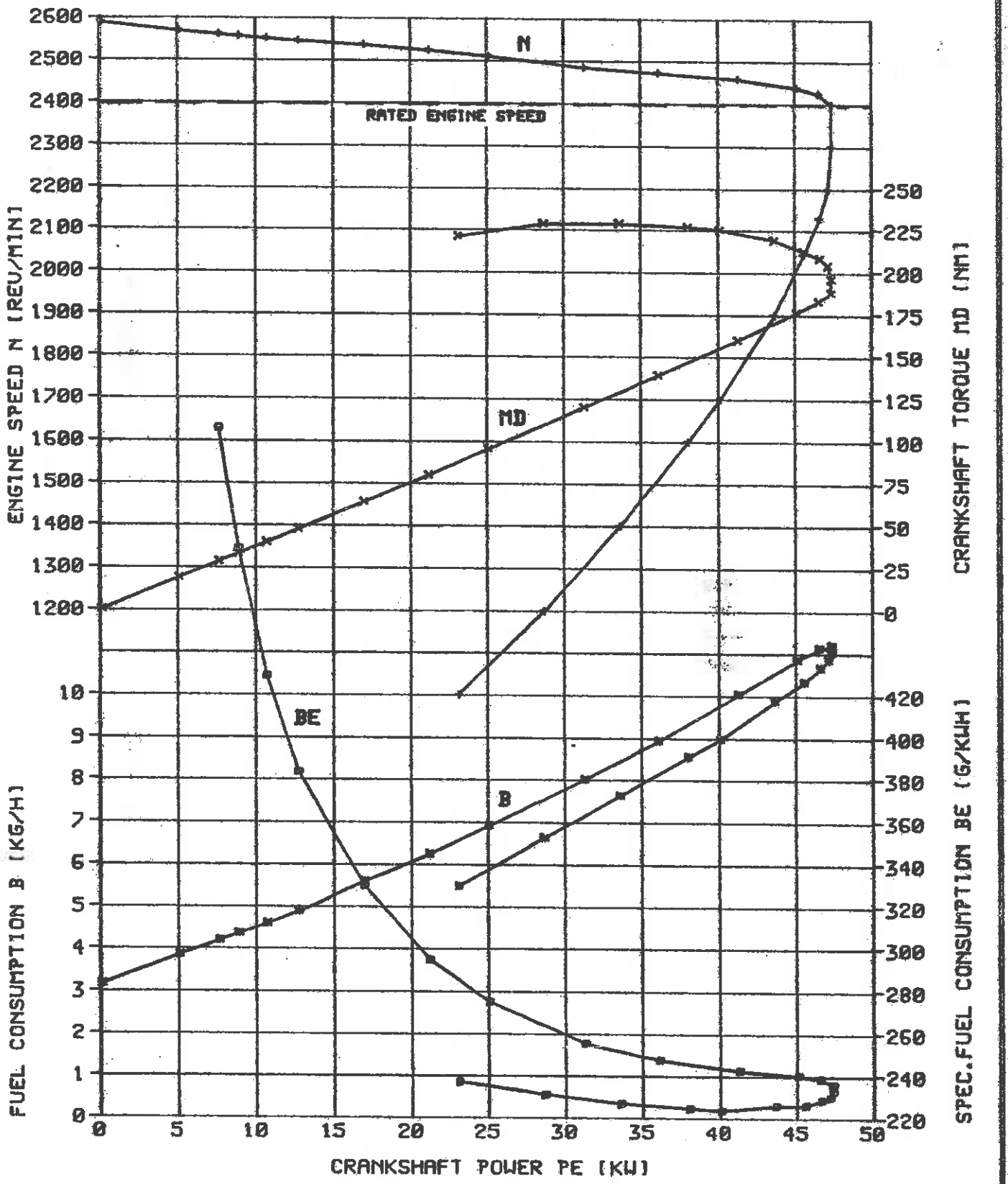


ENGINE SER.NR.: 411.45-12935	ATM.PRESSURE : 997 MBAR	FUEL TEMP.: 38	SIGNATURE
TRACTOR SER.NR.: 337.40-12768	AIR TEMPER. : 15 C	D.OF TESTS: 1984-11-27	
FUEL : 0.832/15 C	COOLANT TEMP.: 90 C	TEST NO. : 142/M186	
ENGINE OIL : SHELL X 10 W	OIL TEMP. : 106 C	CURVES NO.: 5	REITHER

21-AUG-85

DVR.:0100846-DL003;MKU121;MKL20-KW

BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF. AUSTRIA PROT.NR.: 151/85	ENGINE-TEST	STEYR-DAIMLER-PUCH TYP 337.40 (8075) MOT.TYP WD 411.45

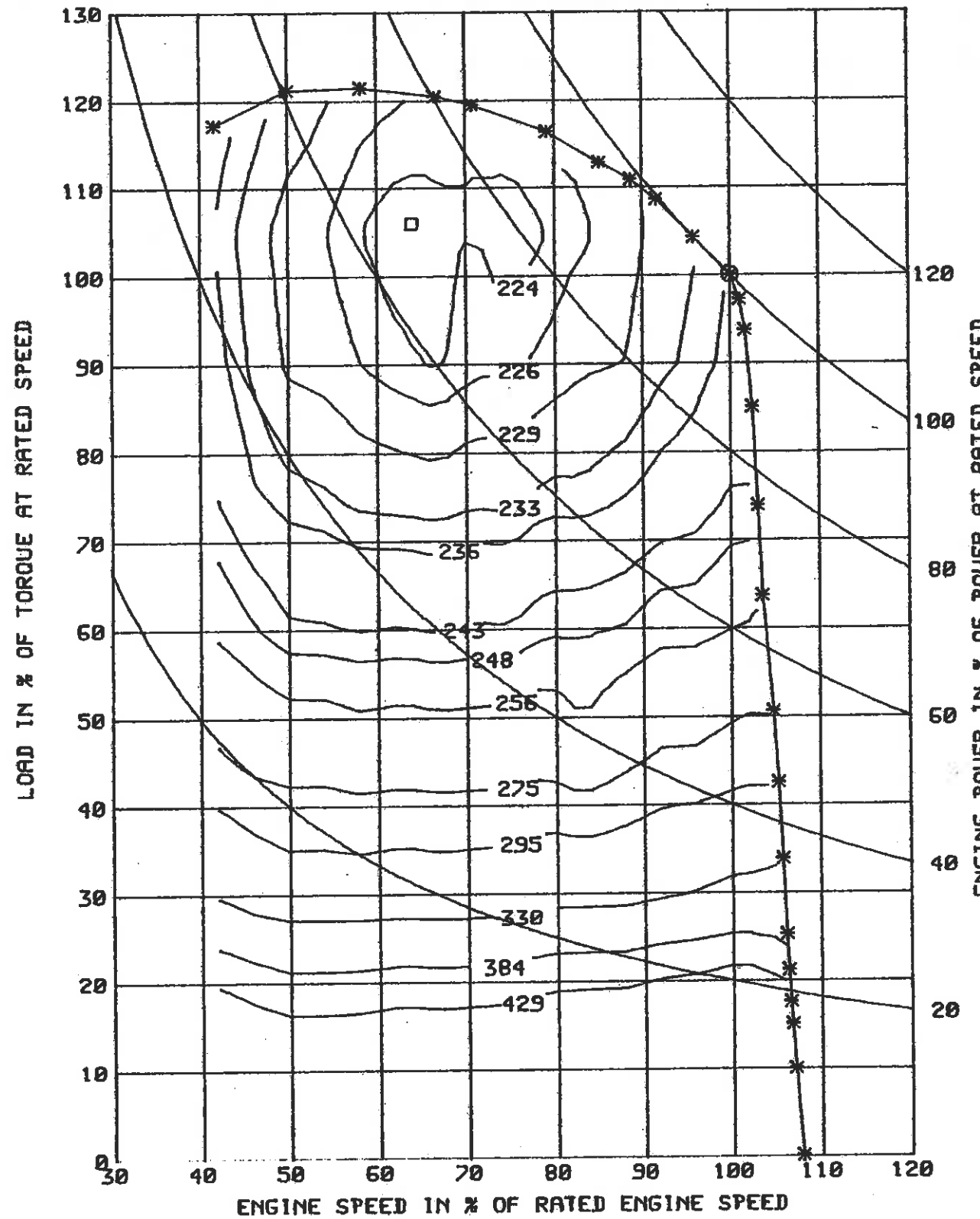


ENGINE SER.NR.: 411.45-12935	ATM.PRESSURE : 997 MBAR	FUEL TEMP.: 38	SIGNATURE
TRACTOR SER.NR.: 337.40-12768	AIR TEMPER. : 15 C	D.OF TESTS: 1984-11-27	
FUEL : 0.837/15 C	COOLANT TEMP.: 90 C	TEST NO. : 142/11186	
ENGINE OIL : SHELL X 10 W	OIL TEMP. : 105 C	CURVES NO.: 5	REITHER

BUNDESANSTALT FUER LANDTECHNIK WIESELBURG/ERLAUF, AUSTRIA PROT.NR.: 151/85	ENGINE PERFORMANCE CHARACTERISTICS	STEYR-DAIMLER-PUCH TYP 337.40 (8075) MOT.TYP WD 411.45

□ ....MIN.FUEL CONS. 222.40 G/KWH AT N = 1535. REV/MIN, MD = 199.91 NM, P = 32.2 KW

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



ENGINE SER.NR.: 411.45-12935	ATM.PRESSURE : 997 MBAR	FUEL TEMP.: 38	SIGNATURE
TRACTOR SER.NR.: 337.40-12768	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 X 10 W	OIL TEMP. : 106 C	CURVES NO.: 7	REITHER

EDV-DL003;MKU121 ;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)

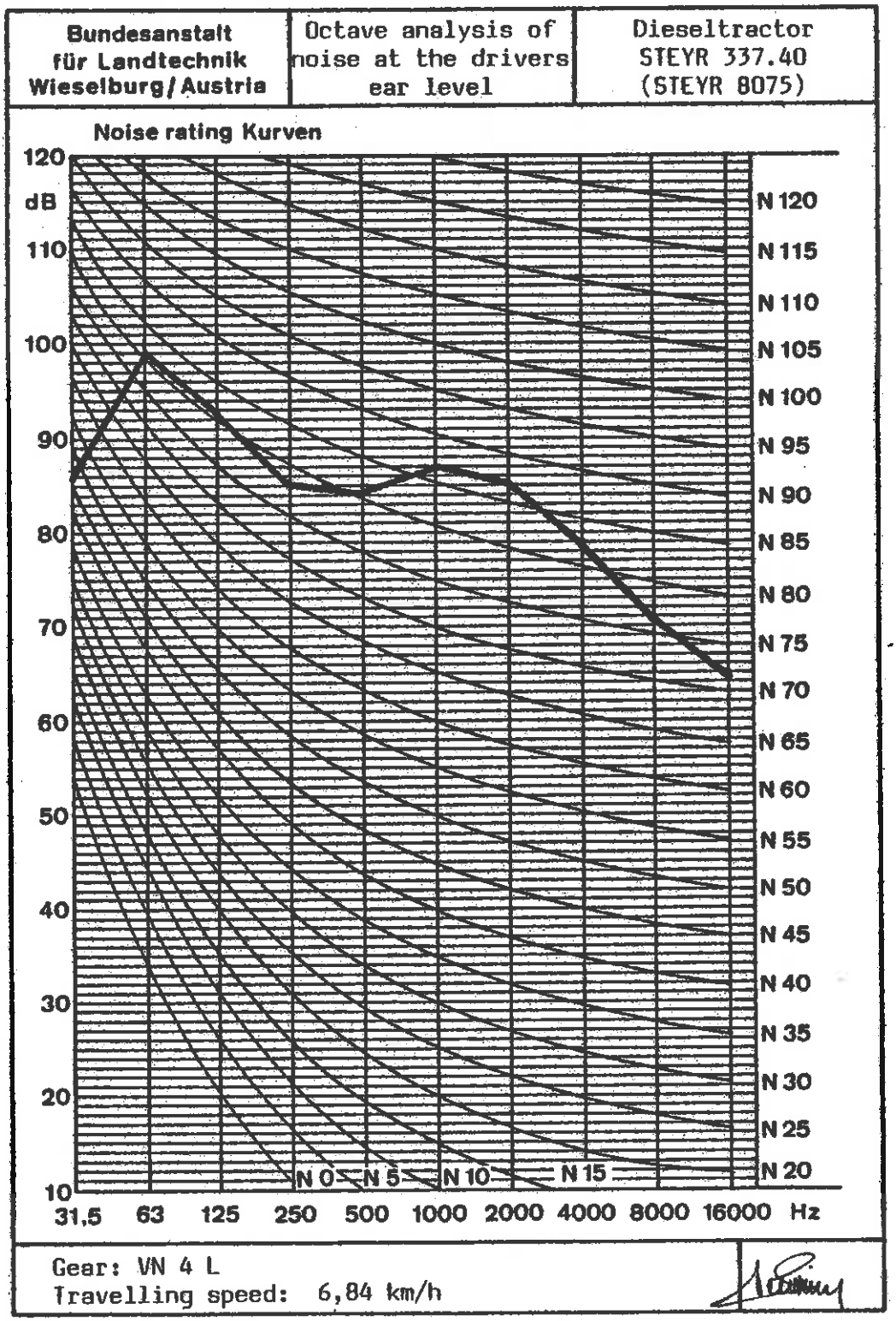
REMARKS: None

ANNEX

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

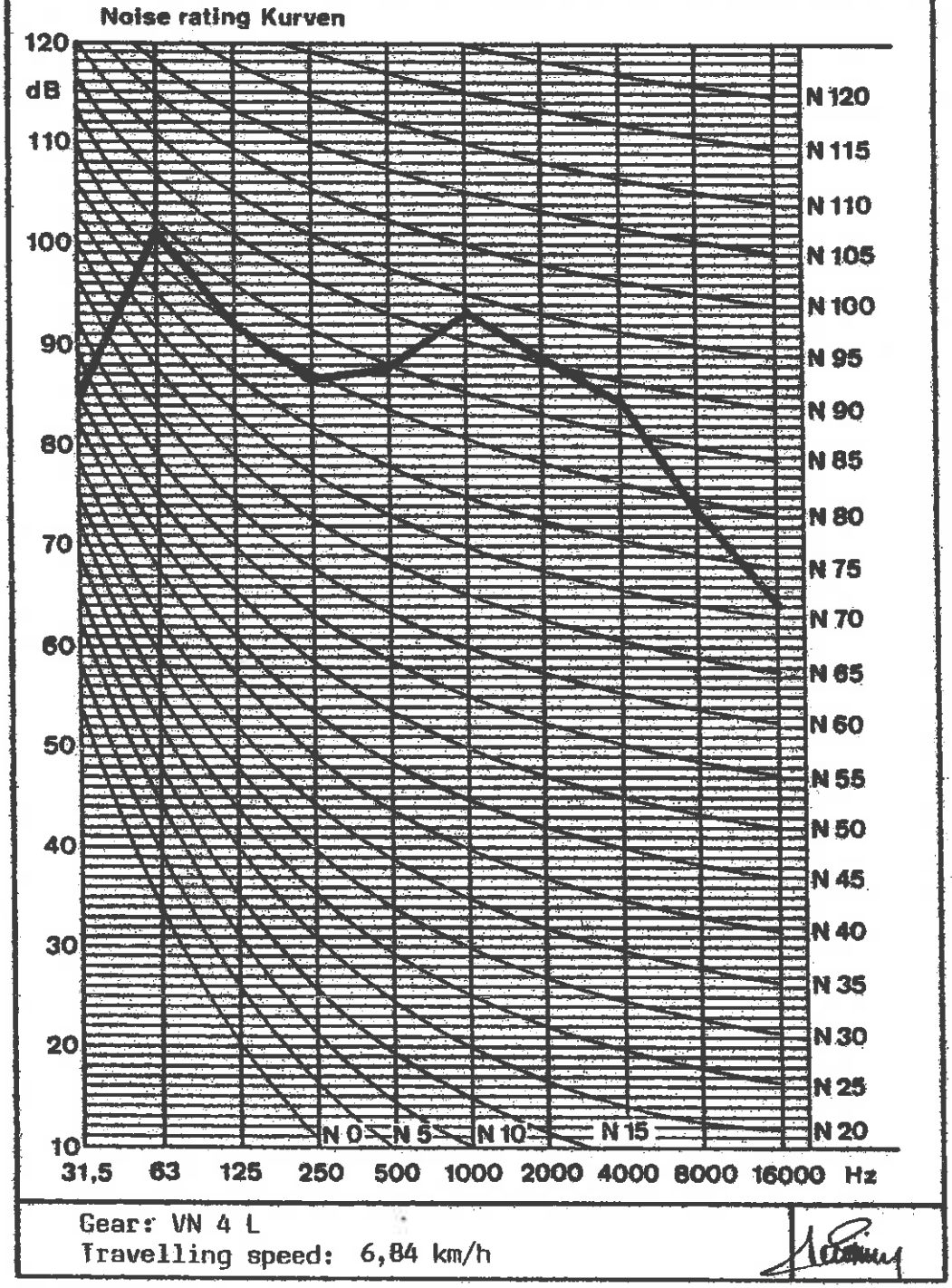
OCTAVE ANALYSIS OF NOISE AT THE DRIVER'S EAR LEVEL:

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



With full closed cab (to page 32)

Bundesanstalt für Landtechnik Wieselburg/Austria	Octave analysis of noise at the drivers ear level	Dieseltractor STEYR 337.40 (STEYR 8075)



Gear: VN 4 L
Travelling speed: 6,84 km/h