STÁTNÍ ZKUŠEBNA ZEMĚDĚLSKÝCH,
POTRAVINÁŘSKÝCH
A LESNICKÝCH STROJŮ

163 04 PRAHA 6, ŘEPY

Report on test in accordance with the O. E. C. D. STANDARD CODE
for the Official Testing of Agricultural Tractors

CODE I

Full Code

Date of approval: 29th October 1991

OECD No. 1335



Agricultural Tractor
ZETOR 9520 (2WD)

Manufactured by:
ZETOR s. p.
632 00 Brno, ČSFR

Report No. 9630
Date of test: January-July 1991

TABLE OF CONTENTS

	Page No.
I. SPECIFICATION OF TRACTOR	3
II. TEST CONDITIONS	16
III. TEST RESULTS	19
COMPULSORY TESTS RESULTS	
1. Main power take-off	19
2. Hydraulic power and lifting force	23
3. Drawbar performance	24
4. Turning area and turning circle	27
5. Location of centre of gravity	27
6. Braking	27
7. Measurement of external noise level	29
8. Repairs	29
9. Remarks	29
SUPPLEMENTARY TEST	
10. Measurement of external noise level	29

Tractor manufacturer's name and address:	ZETOR s.p., 632 00 Brno, ČSFR
Location of tractor assembly:	Brno, ČSFR
Submitted for test by:	MOTOKOV a.s. Praha, ČSFR
Selected for test by:	The manufacturer
Place of running-in:	The manufacturer
Duration of running-in:	60 hours
Location of test:	SZZPLS Praha 6 - Řepy, ČSFR

I. SPECIFICATIONS OF TRACTOR

TRACTOR

Make:	ZETOR
Model:	9520
Type:	Wheeled, unit construction, rear wheels drive
Number of driving wheels:	2
Serial No.:	001 001
1st Serial No.:	001 001

ENGINE

Make:	ZBROJOVKA
Model:	Zetor 1001
Type:	4-stroke diesel engine, direct injection, water cooled, turbocharged
Serial No.:	000 103

Cylinders

Number/disposition:	4, in-line, vertical
Bore/stroke:	105 mm/120 mm
Capacity:	4156 cm^3

Compression ratio:	17:1
Arrangement of valves:	Overhead
Cylinder liners:	Wet, replaceable
Supercharging	
Make, model and type:	ČZM, K 272960 U 611, exhaust driven
Pressure:	175±5 kPa
Fuel system	
Fuel feed system:	Lift pump piston-type, integral with fuel injection pump
Make, model and type of fuel filters:	AUTOBRZDY, 443 741 111 001, one-stage with paper cartridge
Capacity of fuel tank:	105 dm^3
Make, model and type of injection pump:	MOTORPAL, PP 4M 10KN 9614.4, in-line
Serial No.:	V 7618
Manufacturer's production setting of injection pump:	
Flow rate (rated engine speed and full load):	19.70±0.48 dm^3/h
Timing:	$23^{o}+1^{o}$ before TDC
Make, model and type of injection:	MOTORPAL, DOP 150 S 428-4104, 4 hole
Injection pressure:	22.0-0.8 MPa
Governor	
Make, model and type:	MOTORPAL, RV 3M 350/1100, centrifugal, variable speed with overpressure corrector
Governed range of engine speed:	700-2460 rev/min
Rated engine speed:	2200 rev/min
Air cleaner	
Make, model and type of pre-cleaner:	SANDRIK, PCH 500, cyclon type

Location of air intake:	Under bonnet forward of radiator
Make, model and type of main cleaner:	SANDRIK, 9450.27, oil bath
Maintenance indicator:	None

Lubrication system

Type of feed pump:	Gear
Type of filter:	Full flow with replaceable paper element
Number:	1

Cooling system

Type of coolant:	Water and anti-freeze
Type of pump:	Centrifugal, belt driven
Specification of fan:	Axial, belt driven
Number of blades:	8
Fan diameter:	480 mm
Coolant capacity:	19 dm^3
Type of temperature control:	Thermostat
Superpressure system:	40±10 kPa

Starting system

Make, model and type:	PAL, 443 115 144 762, electrical, solenoid engaged
Starter motor power rating:	3.5 kW
Cold starting aid:	Intake air heating-up
Safety device:	Gear selector lever to be in neutral position

Electrical system

Voltage:	12 V, negative earth
Generator:	
Make, model and type:	PAL, 443 113 516 653, alternator, belt driven
Power:	770 W
Battery:	
Number:	1
Rating:	180 Ah at 20 hours

Exhaust system

Make, model and type:	ZETOR, 10.014.040, expansion and absorption muffler
Location:	Left-hand side of engine, vertical

TRANSMISSION TO WHEELS

Clutch

Make, model and type:	ZETOR, 78.021.000, dry for transmission only
Number of plates:	1
Diameter of plates:	325 mm
Method of operation:	Hydraulically by pedal

Gear box

Make, model and type:	ZETOR, 78.121.000, mechanical
Arrangement:	Synchromesh gear box with 4 forward and 1 reverse speeds, group gear box with two speed ranges (L and H) and two-speed hydraulic actuated torque multiplier (M1 and M2)
Number of gears:	16 forward and 4 reverse
Available options:	Alternative mounting of torque multiplier, creeper reduction gear or reverser

Rear axle and final drives

Make, model and type:	ZETOR, 78.153.000,crown wheel and bevel pinion differential and planetary final drives
Differential lock:	
Type:	Mechanical
Method of engagement:	Pneumatically by pedal
Method of disengagement:	Self disengaging

Front axle

Make, model and type:	ZETOR, 78.271.000, telescopic with adjustable track

Total ratios and travelling speeds

Gear	Group	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2200 rev/min km/h (*)
1	LM1	277.699	2.37
2		180.963	3.64
3		119.404	5.52
4		82.954	7.95
1	LM2	213.860	3.08
2		139.362	4.73
3		91.955	7.17
4		63.884	10.32
1	HM1	95.498	6.90
2		62.232	10.60
3		41.062	16.06
4		28.527	23.11
1	HM2	73.545	8.97
2		47.925	13.76
3		31.622	20.85
4		21.969	30.01
R	LM1	157.613	4.18
	LM2	121.380	5.43
	HM1	54.202	12.16
	HM2	41.742	15.80

L: Low range, H: High range, M1: Torque multiplier engaged in position 1 (symbol "tortoise"), M2: Torque multiplier engaged in position 2 (symbol "hare")

(*) Calculated with a tyre dynamic radius index of 795 mm (ISO 4251/1-1988).

POWER TAKE-OFF

Main power take-off

Type: Independent

Method of engagement: Hydraulic clutch operated by hand lever, independent of main drive clutch, wet multiplate

Number of shafts: 1

Method of changing power take-off speeds: Manually by shaft turning

Power take-off proportional to engine speed

Location: At rear of tractor

P.T.O.	Diameter of power take-off shaft end mm	Number of splines	In conformity with ISO 500/1979
540	34.9	6	Yes
1000	34.9	21	Yes

Height above ground: 657 mm

Distance from the median plane of tractor: 0 mm

Distance behind rear-wheel axis: 480 mm

P.T.O.	P.T.O. speed rev/min	Engine speed rev/min	Ratio of rotation speeds (engine/P.T.O.)	Power restriction kW
540	540	1913	3.5431	38.0
	621	2200		
1000	1000	1950	1.9500	None
	1128	2200		

Direction of rotation (viewed facing driving end): Clockwise

Power take-off proportional to ground speed

P.T.O. and range		Travelling distance for one revolution of P.T.O. shaft m	Number of P.T.O. shaft revolutions for one revol. of (rear) driving wheels
540	L	0.292	17.1292
	H	0.848	5.8906
1000	L	0.160	31.1231
	H	0.467	10.7030

L: Low range, H: High range

Direction of rotation with forward gear engaged (viewed facing driving end): Clockwise

POWER LIFT

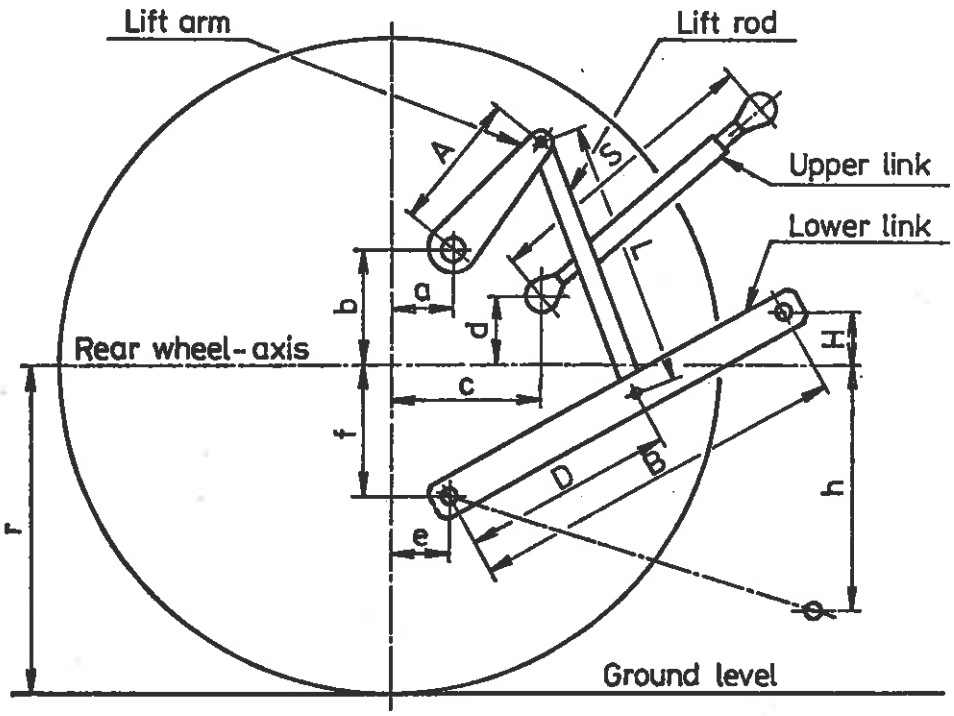
Make, model and type:	ZETOR, 10.940.403, hydraulic with mechanical position, draft or mixed control, top link sensing
Type of hydraulic system:	Open centre
Type and number of cylinders:	1 integral single acting and 1 external single acting
Type of linkage for transport:	Hydraulic
Relief valve pressure setting:	16.0+2.0 MPa
Opening pressure of cylinder safety valve:	21.0+2.0 MPa
Lift pump type:	Gear
Transmission between pump and engine:	Gear driven from gear box
Type and number of filters:	1 magnetic, 1 screen and 1 full flow filter with replaceable paper cartridge in delivery side of pump of gear box
Site of oil reservoir:	Transmission housing

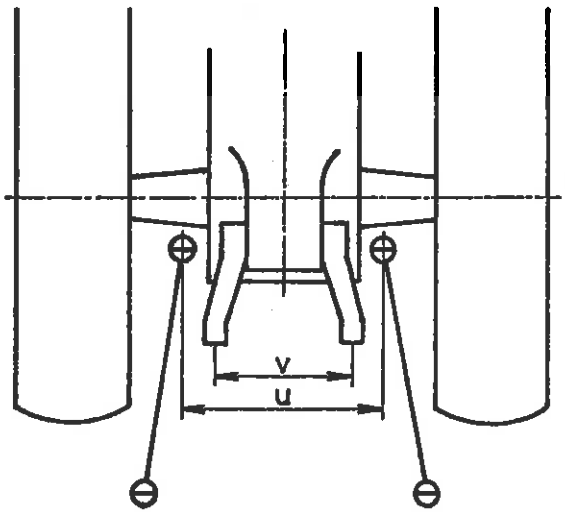
Type, number and location of tapping points:	2 pressure and 1 return, quick release at rear of tractor
Maximum volume of oil available to external cylinders:	10 dm^3

Three-point linkage

Category: 2, in conformity with ISO 730/1-1977

Category adapter: None





Linkage geometry dimensions:

		Dimension or range mm	Settings used in test mm
Lenght of lift arms	(A)	330	330
Length of lower links	(B)	910	910
Distance of lift arm pivot point from :horizontally	(a)	150	150
rear-wheel axis :vertically	(b)	275	275
Horizontal distance between the 2 lower link points	(u)	510	510
Horizontal distance between the 2 lift arm end points	(v)	590	590
Length of upper link	(S)	618 to 870	687
Distance of upper link pivot point from :horizontally	(c)	360	360
rear wheel axis :vertically	(d)	116, 156, 196, 231	156
Distance of lower link pivot point from :horizontally	(e)	144	144
rear wheel axis :vertically	(f)	249	249
Distance of lower link pivot points to lift rod pivot points on lower links	(D)	460, 510	510
Length of lift rods	(L)	555 to 685	645
Height of lower hitch points relative to the rear-wheel axis:			
- in low position	(h)	438 to 809	595
- in high position	(H)	-87 to 222	127
Height above ground of lower hitch points when locked in transport position (*)		Any height within lift range	

(*) Assuming the tyre dynamic radius index r=795 mm of ISO 4251/1-1988

SWINGING DRAWBAR

Type:	Clevis
Height above ground:	
Maximun:	567 mm
Minimum:	372 mm
Type of adjustament:	Inverting drawbar and clevis
Distance of hitch point from rear-wheel axis, horizontally:	873, 877 and 880 mm
Distance of hitch point from power take-off shaft end:	
Vertically:	90, 175, 200 and 285 mm
Horizontally:	393, 397 and 400 mm
Lateral adjustment:	
Right hand:	80 and 160 mm
Left hand:	80 and 160 mm
Distance of pivot point from rear-wheel axis, horizontally:	50 mm to front
Diameter drawbar pin hole:	32 mm
Maximum vertical permissible load:	8 kN

TRAILER HITCH

Type:	Automatic clevis
Hole diameter:	35 mm
Height above ground:	672, 772 and 872 mm
Distance of hitch point from rear-wheel axis, horizontally:	863 mm
Distance of hitch point from power take-off shaft end:	
Vertically:	15, 115 and 215 mm
Horizontally:	383 mm
Maximum vertical permissible load:	10 kN

HOLED DRAWBAR

Number of holes:	7
Distance between holes:	80 mm
Hole diameter:	32 mm

Thickness/width of the drawbar:	2x20 mm/90 mm
Height above ground:	
Maximum:	922 mm
Minimum:	200 mm
Horizontal distance to power take-off shaft end:	574 mm

FRONT TOWING HITCH

Height above ground:	814 mm
Diameter of pin hole:	28 mm

STEERING

Make, model and type:	ORSTA, LAGB 125-1, hydrostatic
Method of operation:	Independent hydraulic circuit for steering
Pump:	Gear, driven from engine
Ram:	Double acting cylinder with a gear in the front axle console
Working pressure:	10.0 MPa

BRAKES

Servis brake

Make, model and type:	ZETOR, 78.227.000, wet disc, multiplate, 5 disc each side
Method of operation:	Hydraulically by pedals, coupled or independent
Trailer braking take-off:	Air brake operated by tractor pedals

Parking brake

Type:	Common with service brake
Method of operation:	Mechanical by hand lever with ratchet

WHEELS

Number:

Front: 2, steering

Rear: 2, driving

Wheelbase: 2375 mm

Track width adjustment:

	Minimum mm	Maximum mm	Adjustment method
Front	1405	1780	By extending of front axle
Rear	1505	1805	Reversing wheels and off-set lug rims

PROTECTIVE STRUCTURE

Make, model and type: ZETOR, BK 7520, cab with integrated safety-frame

Manufacturer's name and address: ZETOR s.p., 623 00 Brno, ČSFR

Protective device: Cab, not tiltable

O.E.C.D. approval number: CSD 1339/4

DRIVER'S SEAT

Make, model and type: MARS, Zetor 5911-5400, upholstered seat

Type of suspension: Parallelogram linkage adjustable for drivers weight

Type of damping: Hydraulic

Range of adjustment:

Longitudinal: 150 mm

Vertical: 60 mm

MISCELLANEOUS

Additional seat:

Location: Left-hand side of driver

Mumber of places: 1

LIGHTING

	Height above ground of centre mm	Size mm	Distance from outside edge of lights to median plane of tractor mm
Headlights	1020	120x120	200
Sidelights	1675	60x65	720
Rearlights	1775	120x40	770
Reflectors	1070	ϕ80	875

II. TEST CONDITIONS

Overall dimensions

	Length mm	Width		Height at top of	
		minimum mm	maximum mm	protective structure mm	exhaust silencer mm
Ballasted	4190	1950	2250	2645	2785
Unballasted	4190	1950	2250	2640	2780

Ground clearence
(unballasted tractor): 279 mm

Clearance-limiting part: Swinging drawbar in lowest position

Tractor mass (with cab)

	Ballasted		Unballasted	
	Without driver kg	With driver kg	Without driver kg	With driver kg
Front	1630	1650	1380	1400
Rear	3285	3340	2320	2375
Total	4915	4990	3700	3775

Ballast

	Weights		Water kg
	Number	Total mass kg	
Front	7	220	-
Rear	12	420	575
Optional	-	-	-

Tyre and track width specications

	Front	Rear
Tyres:		
Make	BARUM	BARUM
Dimensions	7.50-20	16.9-38
Ply rating	6	8
Type	diagonal	diagonal
Maximum load (tyre manufacturer s)	8.75 kN	25.20 kN
Maximum load (tractor manufacturer s)	9.25 kN	20.00 kN
Inflation pressure (tyre manufac.)	300 kPa	200 kPa
Dynamic radius index	430 mm	795 mm
Chosen track width:	1480 mm	1505 mm

Oils and lubrication

Capacity and change interval:

	Capacity dm^3	Oil change h	Filter change h
Engine	10.0	200	200
Gear box	40.0	1800	200
Rear axle Final drive (rear) Hydraulic system	Common with gear box		
Steering	4.5	2400	2400
Air cleaner	2.3	200	-

Specifications:

	Recommended	Used during test
Engine oil: Type Viscosity Classification	 SAE 20W/40 14.0 cSt at 100 °C API SE/CE	As recommended
Transmission oils: Type Viscosity Classification	 SAE 80W 7.5 cSt at 100 °C API GL-4	As recommended
Steering oil: Type Viscosity Classification	 OH-HM 32 18.0 cSt at 50 °C ISO 3448	As recommended

Hydraulic fluid: Same as transmission

Air cleaner filling: Same as engine

Grease:
Number of lubrication points: 16

Fuel

Type: Diesel fuel, in conformity with national standard ČSN 65 6506

Density at 15 °C: 0.833 g/cm^3 for P.T.O. tests
0.829 g/cm^3 for drawbar tests

III. TEST RESULTS

COMPULSORY TESTS RESULTS

1. MAIN POWER TAKE-OFF

Date and location of tests: 23th January 1991, SZZPLS Praha
Type of dynamometer: FROUDE AG 400

Power	Speed		Fuel consumption			Specific energy
	Engine	P.T.O.	Hourly		Specific	
kW	rev/min		kg/h	l/h	g/kWh	kWh/l
1.1 MAXIMUM POWER - TWO-HOUR TEST						
63.9	2200	1128	16.46	19.76	258	3.23
1.2 POWER AT RATED ENGINE SPEED						
63.9	2200	1128	16.46	19.76	258	3.23
1.3 STANDARD POWER TAKE-OFF SPEED 1000 rev/min						
61.6	1950	1000	15.18	18.22	246	3.38
1.4 PART LOADS 1.4.1 the torque corresponding to maximum power at rated engine speed						
63.9	2200	1128	16.46	19.76	258	3.23
1.4.2 85 % of torque obtained in 1.4.1						
56.1	2273	1166	15.09	18.12	269	3.10
1.4.3 75 % of torque defined in 1.4.2						
42.9	2318	1189	12.60	15.13	294	2.84
1.4.4 50 % of torque defined in 1.4.2						
29.0	2351	1206	10.13	12.16	349	2.38
1.4.5 25 % of torque defined in 1.4.2						
14.7	2388	1225	7.76	9.32	528	1.58
1.4.6 unloaded						
0.2	2423	1243	5.23	6.28	-	-

Power	Speed		Fuel consumption			Specific energy
	Engine	P.T.O.	Hourly		Specific	
kW	rev/min		kg/h	l/h	g/kWh	kWh/l
1.5 PART LOADS AT STANDARD POWER TAKE-OFF SPEED 1000 rev/min						
1.5.1 the torque corresponding to maximum power						
61.6	1950	1000	15.18	18.22	246	3.38
1.5.2 85 % of torque obtained in 1.5.1						
54.4	2028	1040	13.86	16.64	255	3.27
1.5.3 75 % of torque defined in 1.5.2						
41.7	2072	1063	11.38	13.66	273	3.05
1.5.4 50 % of torque defined in 1.5.2						
28.4	2117	1086	9.02	10.83	318	2.62
1.5.5 25 % of torque defined in 1.5.2						
14.5	2164	1110	6.41	7.70	442	1.88
1.5.6 unloaded						
0.1	2197	1127	3.52	4.23	-	-

No load maximum engine speed: 2423 rev/min

Torque (equivalent crankshaft) at maximum power: 277.3 Nm

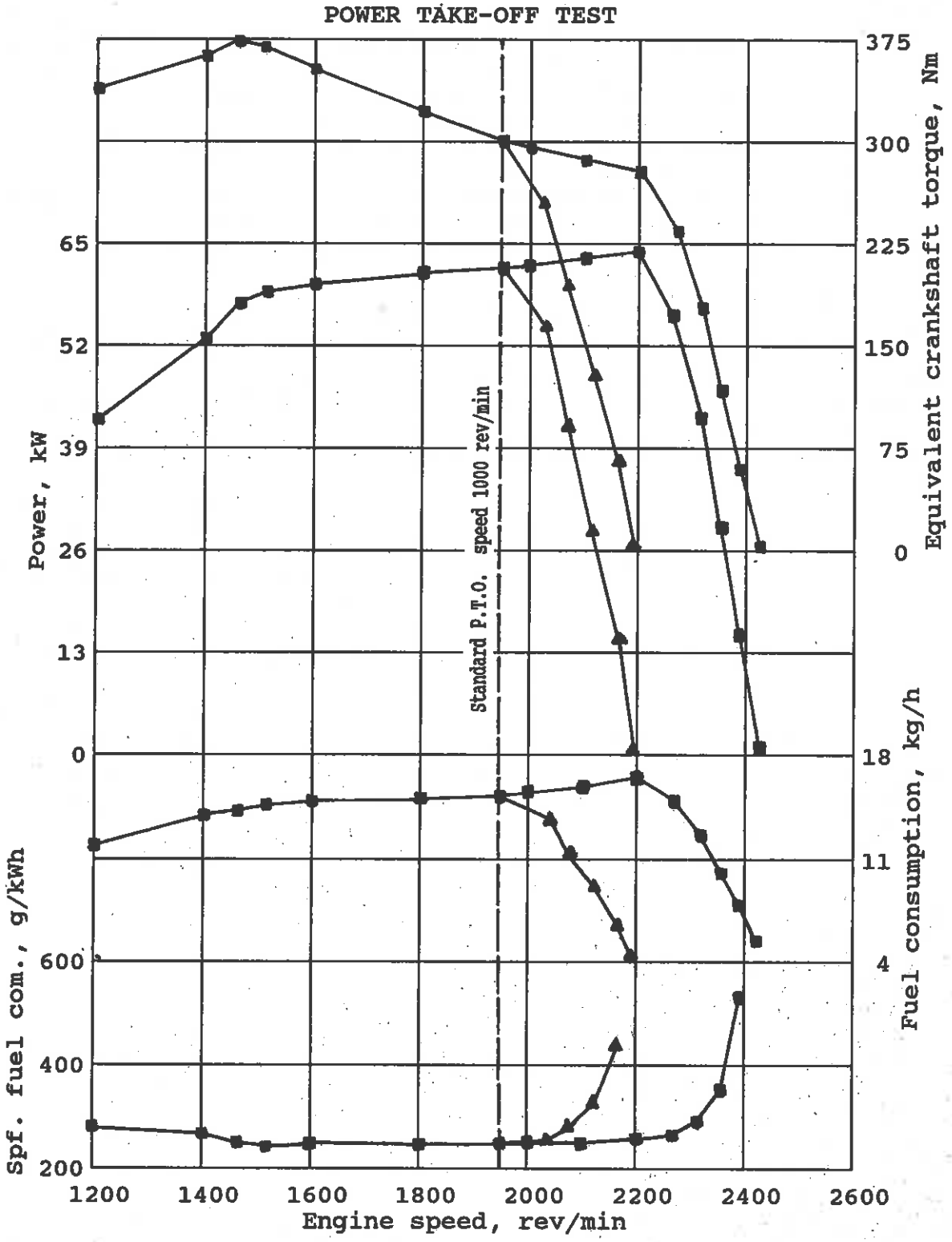
Maximum torque (equivalent crankshaft): 375.5 Nm
(engine speed: 1462 rev/min)

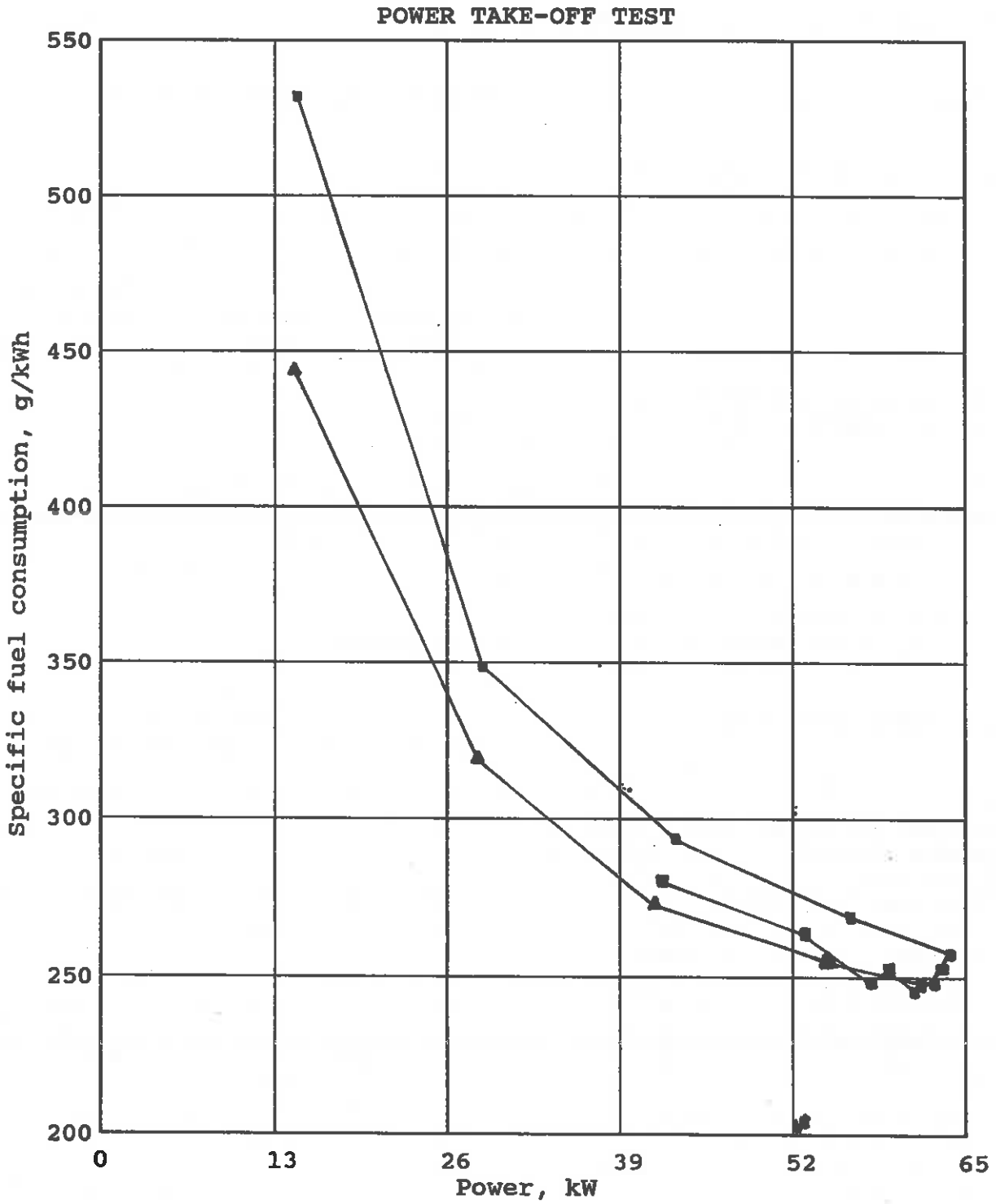
Mean atmospheric conditions:

Temperature: 25 °C
Pressure: 103 kPa
Relative humidity: 49 %

Maximum temperatures:

Coolant: 81 °C
Engine oil: 98 °C
Fuel: 36 °C
Engine air intake: 26 °C


POWER TAKE-OFF TEST
Power, kW
65
52
39
26
13
0
Spf. fuel com., g/kWh
600
400
200
Standard P.T.O. speed 1000 rev/min
Equivalent crankshaft torque, Nm
375
300
225
150
75
0
Fuel consumption, kg/h
18
11
4
1200
1400
1600
1800
2000
2200
2400
2600
Engine speed, rev/min


POWER TAKE-OFF TEST
Specific fuel consumption, g/kWh
550
500
450
400
350
300
250
200
0
13
26
39
52
65
Power, kW

2. HYDRAULIC POWER AND LIFTING FORCE

Date of test: 4th March and 19th June 1991

2.1 HYDRAULIC POWER TEST

Sustained pressure with relief valve open: 17.1 MPa

Pump delivery rate at minimum pressure: 42.9 l/min

	Flow rate l/min	Pressure MPa	Power kW
At 90 % of the actual relief valve pressure setting	40.7	15.4	10.4
At maximum hydraulic power	41.9	15.0	10.5

Tapping point used for test: External tapping

Temperature of hydraulic fluid: 67 °C

Opening and closing pressure of the unloading valve: Not applicable

2.2 POWER LIFT TEST

	At the hitch point	On the frame
Height of lower hitch points above ground in down position	200 mm	200 mm
Vertical movement	674 mm	855 mm
Maximum corrected force exerted through full range	38.2 kN	31.5 kN
Corresponding pressure of hydraulic fluid	15.0 MPa	15.0 MPa
Moment about rear-wheel axis	40.3 kNm	52.4 kNm
Maximum tilt angle of mast from vertical	-	12 degrees

Lifting heights relative to the horizontal plane including the lower link pivot points												
mm	-468	-400	-346	-300	-200	-100	0	+100	+200	+300	+328	+387
Lifting forces at the hitch points, corrected to 15.0 MPa												
kN	-	-	38.2	40.9	43.0	44.3	45.4	46.0	46.4	47.1	47.4	-
Lifting forces at the test frame, corrected to 15.0 MPa												
kN	32.5	33.7	-	35.0	35.3	35.5	34.9	34.4	33.6	32.6	-	31.5

3. DRAWBAR PERFORMANCE

Date of test: 28th June and 3th July 1991

Type of track: Bitumen surface

	Height of drawbar above ground	Tyre inflation pressure	
		Front	Rear
Unballasted	672 mm	250 kPa	110 kPa
Ballasted	677 mm	300 kPa	200 kPa

Gear and group	Power	Drawbar pull	Speed	Engine speed	Slip of wheels	Specific fuel consumption
	kW	kN	km/h	rev/min	%	g/kWh
3.1 MAXIMUM POWER IN TESTED GEARS (unballasted tractor)						
3 LM2	42.2	24.0	6.3	2260	15.0	364
4 LM1	46.4	24.3	6.9	2230	15.0	354
1 HM2	46.7	21.3	7.9	2200	11.8	353
4 LM2	50.0	20.8	8.7	2200	11.6	329
2 HM1	51.1	19.5	9.5	2200	10.6	320
2 HM2	51.0	14.7	12.5	2200	8.4	323
3 HM1	48.8	11.8	14.9	2200	6.8	337
3.2 MAXIMUM POWER IN TESTED GEARS (ballasted tractor)						
1 LM1	19.4	31.7	2.2	2367	15.0	495
1 LM2	24.7	31.7	2.8	2345	15.0	448
2 LM1	29.1	31.7	3.3	2332	15.0	416
2 LM2	37.0	31.7	4.2	2302	15.0	379
3 LM1	43.1	31.7	4.9	2277	15.0	359
1 HM1	47.5	28.5	6.0	2200	12.7	347
3 LM2	47.8	26.9	6.4	2200	11.2	345
4 LM1	48.1	24.4	7.1	2200	10.1	342
1 HM2	49.7	21.8	8.2	2200	8.2	331
4 LM2	50.1	19.0	9.5	2200	7.2	329
2 HM1	49.5	18.2	9.8	2200	7.0	333
2 HM2	49.1	13.6	13.0	2200	5.7	335
3.3.1 FIVE-HOUR TEST at 75 % of pull at maximum power						
4 LM2	38.9	14.3	9.8	2240	5.9	404
3.3.2 FIVE HOUR TEST at pull corresponding to 15 % wheelslip						
3 LM1	41.1	31.5	4.7	2220	-	-

Specific energy	Temperature			Atmospheric conditions		
	Fuel	Coolant	Engine oil	Temperature	Relative humidity	Pressure
kWh/l	°C	°C	°C	°C	%	kPa
2.28	33	82	89	14	82	100.5
2.34	36	85	91	14	82	100.5
2.35	37	83	92	15	72	100.5
2.52	35	82	92	14	72	100.5
2.59	37	82	92	15	72	100.5
2.57	40	83	91	19	72	102.7
2.46	35	81	89	19	72	102.7
1.67	44	82	92	26	47	102.3
1.85	44	82	92	26	47	102.3
1.99	45	84	91	27	47	102.3
2.19	45	84	91	27	47	102.3
2.31	45	81	91	27	45	102.3
2.39	47	83	91	27	45	102.3
2.40	48	82	90	27	45	102.3
2.42	47	84	89	28	44	102.3
2.50	46	84	89	28	44	102.2
2.52	46	82	89	28	44	102.2
2.49	47	83	89	28	44	102.2
2.47	44	80	86	28	43	102.3
2.05	44	82	97	21	81	102.1
-	45	83	100	18	94	102.9

Oil consumption during ten hours duration of tests 3.3.1 and 3.3.2: 107 g/h

4. TURNING AREA AND TURNING CIRCLE

	With brakes		Without brakes	
	Right-hand m	Left-hand m	Right-hand m	Left-hand m
Radius of turning area	3.87	3.76	4.47	4.33
Radius of turning circle	3.60	3.50	4.12	4.01

5. LOCATION OF CENTRE OF GRAVITY

Height above ground: 1036 mm

Distance forward from the vertical plane containing the axis of the rear-wheels: 884 mm

Distance from the median plane of the tractor: 3 mm to left

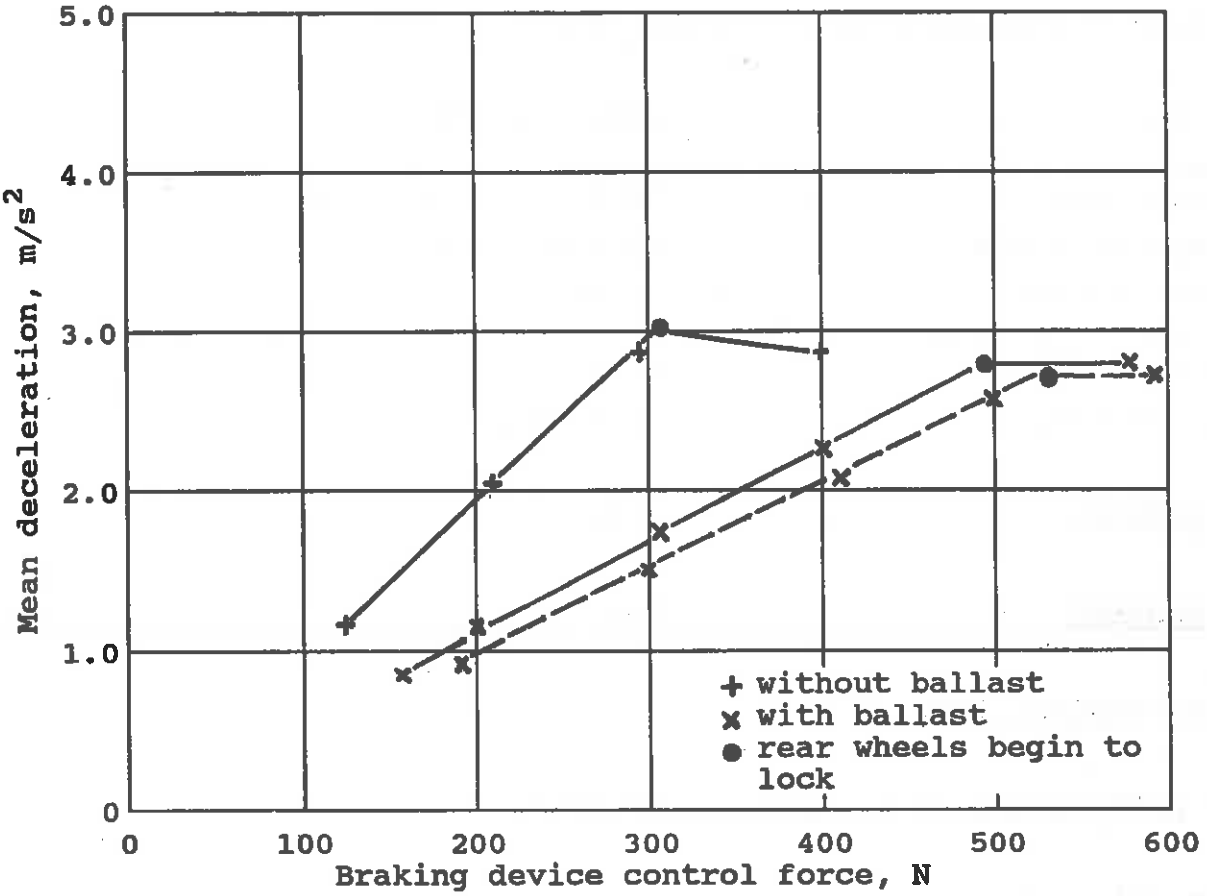
6. BRAKING

Date of test: 14th and 24th May 1991

	Tractor mass (with driver)			Speed before application of brakes
	Front kg	Rear kg	Total kg	km/h
Ballasted	1850	4000	5850	31.6
Unballasted	1400	2375	3775	31.8

6.1 COLD SERVICE BRAKING DEVICE TEST (————————)

6.2 FADE TEST (- - - - - -)



Maximum deviation of tractor from its original course:	Not significant
Abnormal vibration:	None
Brake heating method:	Driven with brakes applied for 1 km at 80 % of maximum speed with a pedal force corresponding to a deceleration of 1 m/s^2

6.3 PARKING BRAKING DEVICE TEST

	Ballasted tractor on 18 % - slope	
	Uphill	Downhill
Braking device control force	220 N	220 N

7. MEASUREMENT OF EXTERNAL NOISE LEVEL

Date of test:	13th May 1991
Make and model of sound level meter:	BRÜEL & KJAER, 2231
Type of track:	Bitumen surface
Gear number:	4 HM2
Travelling speed before acceleration:	22.5 km/h
Sound level:	85.0 dB(A)

8. REPAIRS

None

9. REMARKS

None

SUPPLEMENTARY TEST

10. MEASUREMENT OF EXTERNAL NOISE LEVEL

Exhaust system

Make, model and type:	ZETOR, 10.014.010, exhaust pipe
Location:	Left-hand side of engine, vertical

Test

Date of test:	1st July 1991
Make and model of sound level meter:	BRÜEL & KJAER, 2231
Type of track:	Bitumen surface
Gear number:	4 HM2
Travelling speed before acceleration:	22.5 km/h
Sound level:	88.0 dB(A)

Test carried out by: Dipl. Ing. Peter Pernis

Head of the Tractor Department	Director
Dipl. Ing. Peter Pernis	Dipl. Ing. Vladimír Hanzlík