

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



SAME AGRICULTURAL TRACTOR LEOPARD 85 EXPORT VDT

Manufactured by: Same Trattori S.p.A. TREVIGLIO (Bg) ITALY

Date of approval O.E.C.D.: 2th July 1981

ISTITUTO DI INGEGNERIA AGRARIA DELL'UNIVERSITÀ DI MILANO
Via Celoria, 2 - 20133 MILANO - ITALY



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



SAME AGRICULTURAL TRACTOR LEOPARD 85 EXPORT VDT

Manufactured by: Same Trattori S.p.A. TREVIGLIO (Bg) ITALY

Date of approval O.E.C.D.: 2th July 1981

ISTITUTO DI INGEGNERIA AGRARIA DELL'UNIVERSITÀ DI MILANO
Via Celoria, 2 - 20133 MILANO - ITALY

TABLE OF CONTENTS

| | page |
|---|----------|
| Specification of tractor | 3 to 9 |
| Fuel and lubricants used in test | 9 |
| Compulsory tests | |
| (1) Power take-off performance | 10 to 13 |
| (2) Drawbar performance on concrete track | 14 |
| (3) Turning space and turning circle | 15 |
| (4) Location of centre of gravity | 15 |
| (5) Braking performance | 15 to 16 |
| (6) Ambient noise emitted by the tractor | 16 |
| (7) Noise at the driver's ear level | 16 |
| (8) Power lift and hydraulic pump performance | 17 to 19 |

Date of tests December 1979 till July 1980

Tractor manufacturer: Same Trattori S.p.A. Treviglio (Bg) Italy
Submitted for tests by: Manufacturer
Selected by: Manufacturer with agreement by I.I.A.
Place of running in: Treviglio
Duration of running in: 50 hours

SPECIFICATION OF TRACTOR

Tractor

Make: Same Trattori S.p.A.
Model: Leopard 85 Export VDT
Type: Wheel tractor unit construction, 4 wheel drive
Serial No. 10211

Engine

Make: Same Trattori S.p.A.
Model: 1054 P
Type: Four-stroke Diesel engine, direct injection, air cooled;
Serial No. 23098;
Cylinders: 4 cylinders, vertical in-line, bore 105 mm, stroke 120 mm., capacity 4156 cm³, compression ratio 17:1, without liners;

Valves: Overhead

Fuel system: AC Corona fuel feed pump
Bosch distributor injecting pump PFR 4 K 80 A 419/2, manufacturers, s production setting 60 mm³/stroke at rated engine speed, injection timing 24° before TDC
Bosch multihole injection nozzles DLLA 160 S 255, injection pressure 196 bar
CAV filter with replaceable cartridge capacity of fuel tank 120 l;

Governor: Own make
centrifugal variable speed governor
governed range of engine speed: from 650 to 2450 rev/min; rated engine speed: 2270 rev/min.

Air cleaner: Donaldson
dry paper element filter, without preclener

Exhaust silencer: Own make
5 chambers reflection absorption type, octagonal 125 mm width 745 mm long, on the right hand side of engine cowling, mouth shwing upward;

| | |
|----------------------------|--|
| Lubrication system | Forced feed from gear pump, FIAMM oil filter in full flow with replaceable paper cartridge, change period 250 hours recommended oil Agip F 1 Rotra MP/S SAE 20-40 W API CC GL/3 Oil capacity 10.2 l, change period 125 Hours; |
| Cooling system: | Air cooling with axial blower, V-belt driven, fan dia 275 mm, 3340 m ³ /h delivery at rated engine speed; |
| Starting system: | Electrical Marelli screw push starter motor MT 68 P, 3KW; |
| Electrical system: | 12 V., negative earth Marelli 3-phase alternator 33 A AA 118, 14 V, 33 A, 1 battery, Marelli lead acid type 6 ATP 21, capacity 110 Ah at 20 hours rating |
| Transmission | |
| Clutch: | Own make 320 mm. dia, Single plate dry clutch, pedal operated for travel drive only |
| Gearbox: | Own make synchromesh speed change gear with 4 speed forward and 1 speed reverse groupgear with 3 groups: slow, normal and fast total 12 speed forward and 3 speed reverse |
| Rear axle and final drive: | Bevel gear drive with crown wheel and pinion bevel gear differential with lock, pedal ope- rated, self disengaging, epicyclic final; |
| Driven front axle | Own make driven by shaft situated in tractor's median plane, engageable and disengageable by sliding gear not in motion hand lever ope- rated, bevel gear drive with crown wheel and pinion, bevel gear type differential without lock, epicyclic final drive; |
| Oil capacity: | Gearbox in common with rear axle differen- tial and rear axle final drive: 72.5 l front axle differential : 6.5 l front axle final drive: 5.2 l |
| Oil change period: | Gearbox rear and front drive 3000 hours |
| Recommended oil: | Gearbox rear and front drive Agip F1 Rotra MP/S SAE 80 W API GL/5; |

Total ratio and speed (Tyres 16.9-34)

| Group | Gear | Number of engine revolutions for one revolution wheel | (°) Nominal travelling speed for the rated speed of engine Km/h |
|-----------------------|------|---|---|
| Forward speed | | | |
| slow | 1 | 385.802 | 1.65 |
| | 2 | 276.021 | 2.31 |
| | 3 | 213.694 | 2.98 |
| | 4 | 171.527 | 3.72 |
| normal | 1 | 135.552 | 4.70 |
| | 2 | 96.980 | 6.57 |
| | 3 | 75.082 | 8.49 |
| | 4 | 60.266 | 10.58 |
| fast | 1 | 47.626 | 13.39 |
| | 2 | 34.074 | 18.71 |
| | 3 | 26.380 | 24.17 |
| | 4 | 21.175 | 30.11 |
| Reverse speeds | | | |
| slow | R | 240.405 | 2.65 |
| normal | R | 84.467 | 7.55 |
| fast | R | 29.677 | 21.48 |

(°) calculated with the radius index 745 mm as per E.T.R.T.O. Norm

- Power take-off:** Independent p.t.o., at rear of tractor, in tractor's median plane engaged and disengaged through hand lever hydraulically operated wet multidisc clutch, ISO standard 500-1979
780 mm above ground
34.9 mm dia, 6 splines SAE 6B standard 1 p.t.o. shaft for 540 rev/min and 1000 rev/min p.t.o. speeds
540 rev/min p.t.o.
626 rev/min at rated engine speed, standard p.t.o. speed at 1957 rev/min engine speed
1000 rev/min p.t.o.
1068 rev/min at rated engine speed, standard p.t.o. speed at 2125 rev/min engine speed
direction of rotation clockwise viewed from driving end
- Power lift:** Own make
Hydraulic rotary piston pump driven from p.t.o. shaft, independent of clutch, delivery 37,5 l/min at rated engine speed, metallic net oil filter cylinder in power lift unit with 120 mm bore, 150 mm stroke
1 relief valve on delivery circuit, opening pressure 181 bar
1 relief valve antishock in the cylinder's head oil capacity 20 l.
recommended oil Agip F1 Rotra MP/S SAE 80 W API GL 5. Same control valve for lifting, lowering, draft control, position control and floating position maximum working pressure 196 bar;
- Additional oil tap:** 1 ancillary double effect four-way distributor on the cover cap of power lift
amount of oil which can be taken out without provoking damage 8 : 10 l.
- Implement linkage:** Three point linkage category II
2 hole in the lower links for fitting the lift rods:
hole 1 at 415 mm
distance of pivot point of lower links
hole 2 at 450 mm

- Holed bar:** Optional, fitted on clevis of lower links, length between the joint balls 925 mm, width 80 mm, thickness 30 mm, 7 holes, hole dia 28.5 mm distance of hole centre line with lower links horizontal position: from rear axle 1030 mm; from p.t.o. shaft end 570 mm height above ground 255 mm min, 975 mm max
- Trailer hitch:** Own make height above ground adjustable by shifting from 530 mm to 700 mm hitch hole 30 mm, distance of hitch hole centre to rear axle centre 670 mm permissible vertical load 1500 Kg;
- Swinging drawbar:** Height above ground 530 mm hitch hole dia 33 mm distance of hitch hole centre: from p.t.o. shaft end 250 mm below, 330 mm behind from rear axle 1120 mm lateral adjustment 250 mm pivot point 20 mm behind rear axle
- Steering:** Danfoss hydrostatic steering model OSP 100, own oil circuit Bosch hydraulic gear pump HY/ZFR 1/8 CL 101, delivery 18 l/min at rated engine speed, driven from engine shaft, 1 ram acting directly on front axle, bore 48 mm, stroke 250 mm oil capacity 2 l specified oil Agip F1 ATF DEXTRON oil change period 1000 hours
- Brakes**
- Parking brake:** Band brake mechanical hand lever acting on front wheel drive propeller shaft
- Service brake:** Hydraulically acting oil single oil bath disc type brake, disc dia 302 mm, mounted on rear differential half shafts, pedal operated, independently or together
- Wheels**
- Steering wheels** 2 at front 14.9 -24 radial tyre, 6 ply rating maximum permissible weight on each tyre 1500 Kg. at 1.4 bar trackwidth: 1500-1600-1700-1800 mm changed by turning wheels

- Driving wheels:** At front and at rear
specification of driving front wheels (see at steering wheels)
driving rear wheels: 2; 16.9-34 radial tyre, 6 plies, maximum permissible weight on each tyre 2000 kg. at 1.3 bar
track width: from 1530 to 2130 mm in steps of 100 mm each, changed by turning wheels, rim size DW 12x34"
- Wheelbase:** 2370 mm
- Cab:** Own make
safety cab model C 20 OECD tested approval No. CSD 0138/8-a (C)
lower structure is made by welded square tubes 50x50x3 mm, 40x40x3 mm; stiffened with sheet steel 1.5 mm
fastened to the tractor frame through four rubber shock absorbers
constraint assured by two U bent plates, by two shaped flanges and by bolts
upper structure made by square tubes 50x50x3 mm stiffened at the corners with steel plates, welded to two steel plates fixed to the lower structure with bolts M 14x1.5
all windows tiltable, inside of cab covered with noise damping materials, doors on both side of the cab, each entry with two steps, lower step 560 mm upper step 790 mm above ground, heater and ventilator Borletti T 3;
- Seat:** Bostrom MX 4
upholstered seat with back rest, adjustable spring with shock absorber
height of unloaded seat above platform from 500 mm to 600 mm, fore-and-aft adjustable about 150 mm
- Number of grease points:** 20
- Track setting during tests:** front axle 1700 mm, rear axle 1730 mm

Overall dimensions
 total length 4200 mm with ballast
 4080 mm without ballast
 total width 2520 mm max
 2020 mm min
 total height 2800 mm to top of the cab
 ground clearance 420 mm below swinging
 drawbar pivot

Weights

tractor without driver but with full tanks and safety cab
 without ballast: front 1410 Kg
 rear 2370 Kg
 total 3780 Kg
 with ballast: front 1610 kg
 rear 2570 Kg
 total 4180 Kg
 ballast: front 4, total weight 200 Kg
 rear 4, total weight 200 kg

Lighting

Lighting system in accordance with CEE 78/933

| | Height above of centre mm | Dimensions mm | Distance from outside edge of tractor to centre mm |
|-------------|---------------------------------|------------------|---|
| Head lights | 990 | 110x160 | 1090 |
| Side lights | 1670 | 180x 60 | 460 |
| Red tail l. | 1670 | 90x 60 | 350 |
| Reflectors | 1310 | Ø 55 | 580 |

Fuel and lubricants used in tests

laboratory and track tests

fuel: Diesel fuel, specific gravity at
 15°C 0,825 Kg/dm³ at p.t.o.
 test, 0,830 Kg/dm³ at drawbar
 test; Cetane No. 48
 engine oil: Agip F1 ROTRA MP/S SAE
 20-40 W API CC GL/3
 transmission and rear axle: Agip F1 ROTRA MP/S SAE
 80 W API GL/5
 power lift: Agip F1 ROTRA MP/S SAE
 80 W API GL/5
 front axle differential: Agip F1 ROTRA MP/S SAE
 80 W API GL/5
 steering: Agip F1 ATF DEXTRON

Same Leopard 85 Export VDT

COMPULSORY TESTS

(1) POWER TAKE-OFF PERFORMANCE (1000 rev/min)

Date and location of test: 12th June 1980 Treviso

Type of dynamometer: Borghi & Saveri magnetoelectric dynamometer

| Power KW | Speed | | Fuel consumption | | Specific energy kWh/l |
|--|-------------------|-------------------|------------------|-------------------|--------------------------|
| | Engine rev/min | p.t.o. rev/min | hourly l/h. | specific g/kWh | |
| MAXIMUM POWER - 2 hour test | | | | | |
| 55.96 | 2270 | 1068 | 16.384 | 243 | 3.41 |
| SPEED RECOMMENDED BY MANUFACTURER FOR DRAWBAR WORK | | | | | |
| 55.96 | 2270 | 1068 | 16.384 | 243 | 341 |
| PART LOADS - MAXIMUM POWER | | | | | |
| (i) 85% of the torque obtained at maximum power | | | | | |
| 48.72 | 2325 | 1094 | 13.889 | 237 | 3.51 |
| (ii) unloaded | | | | | |
| — | 2444 | 1150 | 4.323 | — | — |
| (iii) half the load defined in (i) | | | | | |
| 25.03 | 2388 | 1124 | 8.721 | 289 | 2.87 |
| (iv) a load corresponding to maximum power | | | | | |
| 55.96 | 2270 | 1068 | 16.384 | 243 | 341 |
| (v) one quarter of the load defined in (i) | | | | | |
| 12.65 | 2414 | 1136 | 6.250 | 410 | 2.02 |
| (vi) three quarters of the load defined in (i) | | | | | |
| 37.07 | 2359 | 1110 | 9.302 | 251 | 3.98 |

| Power KW | Speed | | Fuel consumption | | Specific energy kWh/l |
|---|-------------------|-------------------|------------------|-------------------|--------------------------|
| | Engine rev/min | p.t.o. rev/min | hourly l/h. | specific g/kWh | |
| PART LOADS - STANDARD SPEED OF THE P.T.O. | | | | | |
| (i) 85% of the torque obtained at maximum power | | | | | |
| 46.45 | 2157 | 1015 | 12.820 | 229 | 3.62 |
| (ii) unloaded | | | | | |
| — | 2282 | 1074 | 3.778 | — | — |
| (iii) half of the load defined in (i) | | | | | |
| 23.91 | 2221 | 1045 | 8.021 | 279 | 2.98 |
| (iv) a load corresponding to maximum power | | | | | |
| 53.84 | 2125 | 1000 | 15.625 | 241 | 3.44 |
| (v) one quarter of the load defined in (i) | | | | | |
| 12.12 | 2252 | 1060 | 5.747 | 394 | 2.11 |
| (vi) three quarter of the load defined in (i) | | | | | |
| 35.42 | 2193 | 1032 | 10.489 | 246 | 3.38 |

STANDARD SPECIFIC FUEL CONSUMPTION: 237/289/229/279 g/kwh

No load maximum engine speed: 2444 rev/min

Torque at maximum power (°): 235.47 Nm

(°) Maximum torque: 267.07 Nm at 1381 rev/min of the engine

Mean atmospheric conditions: temperature: 22°C;

pressure: 1005 mbar

relative humidity: 76%

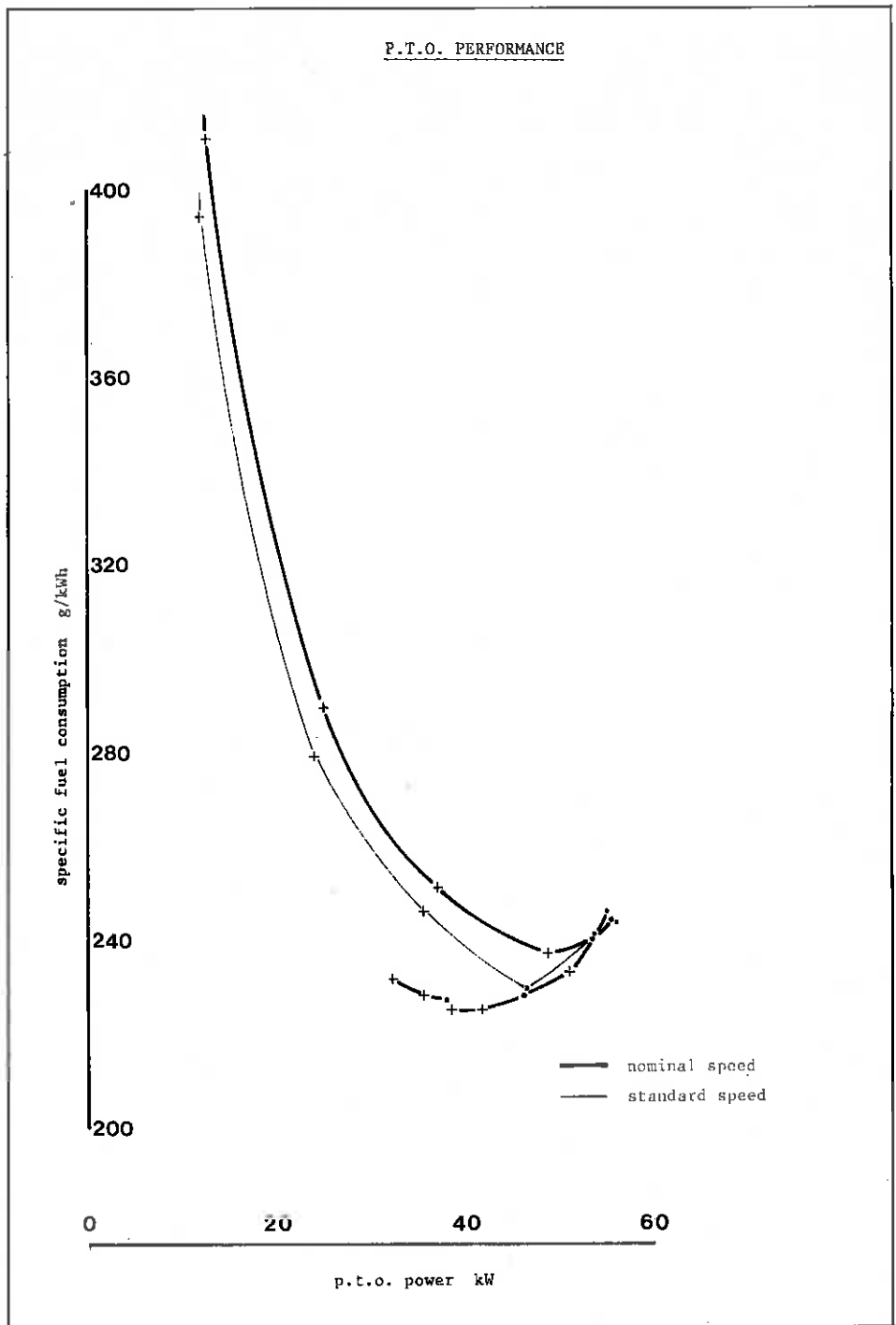
Maximum temperatures: coolant: 60°C;

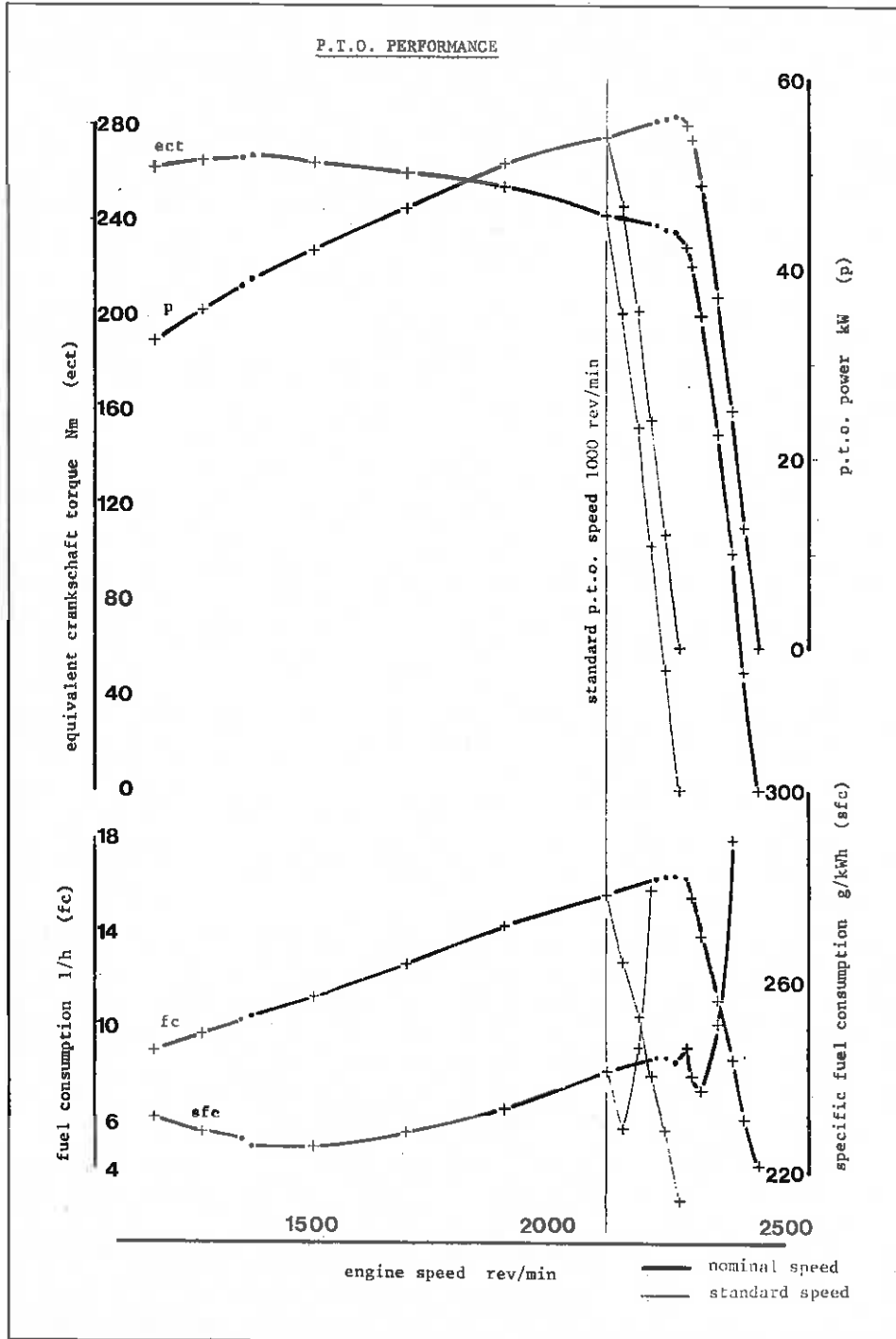
engine oil: 115°C;

fuel: 26°C;

engine air intake: 29°C;

(°) The torque is the equivalent crankshaft torque





(2) DRAWBAR PERFORMANCE

Date of test: 23th June till 4th July 1980

Type of trake: concrete

Height of drawbar above ground for both test series: 700 mm

| Gear | Speed km/h | Power KW | Drawbar pull daN | Engine speed rev/min | Slip of wheels % | Specific fuel con- sumption g/KWh | Specific energy kwh/l | Temperatures | | | Atmospheric conditions | | |
|---|---------------|-------------|------------------------|----------------------------|------------------------|--|-----------------------------|--------------|---------------|---------------------|------------------------|---------------------------|------------------|
| | | | | | | | | fuel °C | coolant °C | engine oil °C | tempera- ture °C | relative humidity % | pressure mbar |
| (i) MAXIMUM POWER (ballasted) | | | | | | | | | | | | | |
| 1 slow | 1.53 | 12.84 | 3020 | 2411 | 14.9 | 505 | 1.65 | 24 | 41 | 82 | 22 | 76 | 1011 |
| 2 slow | 2.08 | 17.85 | 3090 | 2396 | 14.9 | 416 | 2.01 | 24 | 43 | 81 | 22 | 76 | 1011 |
| 3 slow | 2.69 | 22.57 | 3020 | 2384 | 14.9 | 362 | 2.30 | 24 | 42 | 81 | 22 | 76 | 1011 |
| 4 slow | 3.39 | 28.63 | 3040 | 2368 | 14.9 | 335 | 2.49 | 24 | 41 | 80 | 22 | 76 | 1011 |
| 1 normal | 4.21 | 36.12 | 3090 | 2347 | 14.9 | 305 | 2.73 | 24 | 45 | 82 | 22 | 76 | 1011 |
| 2 normal | 5.71 | 48.22 | 3040 | 2274 | 14.9 | 281 | 2.97 | 25 | 47 | 82 | 23 | 76 | 1011 |
| 3 normal | 7.77 | 48.25 | 2240 | 2272 | 9.5 | 282 | 2.96 | 25 | 49 | 85 | 23 | 76 | 1011 |
| 4 normal | 9.90 | 50.05 | 1820 | 2278 | 7.5 | 272 | 3.07 | 26 | 46 | 82 | 24 | 77 | 1011 |
| (ii) FIVE HOUR TEST at 75% of pull at maximum power in 2nd normal gear | | | | | | | | | | | | | |
| 2 normal | 6.06 | 38.29 | 2280 | 2330 | 9.5 | 306 | 2.73 | 26 | 52 | 98 | 24 | 77 | 1004 |
| (iii) FIVE HOUR TEST at pull corresponding to 15% wheel slip in test (i) | | | | | | | | | | | | | |
| 1 normal | 4.30 | 36.90 | 3090 | — | — | — | — | 27 | 60 | 112 | 24 | 77 | 1011 |
| (iv) MAXIMUM POWER (without ballast) | | | | | | | | | | | | | |
| 1 slow | 1.50 | 12.38 | 2970 | 2416 | 14.9 | 523 | 1.59 | 24 | 42 | 82 | 22 | 76 | 1011 |
| 2 slow | 2.10 | 17.16 | 2940 | 2402 | 14.9 | 415 | 2.01 | 24 | 42 | 82 | 22 | 76 | 1011 |
| 3 slow | 2.70 | 22.06 | 2940 | 2390 | 14.9 | 356 | 2.34 | 24 | 43 | 82 | 22 | 76 | 1011 |
| 4 slow | 3.32 | 26.86 | 2910 | 2375 | 14.9 | 337 | 2.47 | 24 | 43 | 82 | 22 | 76 | 1011 |
| 1 normal | 4.20 | 33.41 | 2860 | 2361 | 14.9 | 347 | 2.40 | 25 | 44 | 82 | 23 | 76 | 1011 |
| 2 normal | 5.78 | 40.78 | 2540 | 2314 | 14.9 | 312 | 2.68 | 25 | 44 | 82 | 23 | 76 | 1011 |
| 3 normal | 7.79 | 44.35 | 2050 | 2271 | 9.5 | 306 | 2.72 | 25 | 45 | 82 | 23 | 76 | 1011 |
| 4 normal | 9.91 | 46.43 | 1690 | 2272 | 8.3 | 293 | 2.85 | 25 | 45 | 82 | 23 | 76 | 1011 |
| 1 fast | 12.99 | 46.35 | 1280 | 2279 | 6.5 | 294 | 2.84 | 26 | 46 | 83 | 24 | 76 | 1011 |

Total oil consumption during ten hours duration of tests (ii) and (iii): 130 g/h

Tyre size - front size: 14.9-24 6 ply rating - rear: 16.9-34 6 ply rating

Type inflation pressure for both test series: front 1.4 bar; rear 1.3 bar;

Test (iii) was carried out with additional ballast, the figures not quoted are therefore irrelevant.

(3) TURNING SPACE AND TURNING CIRCLE

Wheel equipment: front 14.9-24 6 ply rating; rear 16.9-34 6 ply rating

Front axle engaged: Track: front 1700 mm
 rear 1730 mm

| | With brakes | | Without brakes | |
|--------------------------|-----------------|----------------|-----------------|----------------|
| | right-hand m | left-hand m | right-hand m | left-hand m |
| Radius of turning space | 4.080 | 4.220 | 5.100 | 5.150 |
| Radius of turning circle | 4.240 | 4.390 | 5.300 | 5.350 |

(4) LOCATION OF CENTRE OF GRAVITY

| | mm |
|---|-----|
| Height above ground | 807 |
| Distance forward from the vertical plane containing the axis of the rear wheels | 890 |
| Distance from the median plane | 0 |

(5) BRAKING

Date of test: 16th June 1980

Type of track: concrete

Type of decelerometer: Motometer

Mass of ballasted tractor with driver: 4250 Kg.

| Cold brakes | Ballasted | Without ballast |
|---|-----------|-----------------|
| Travelling speed of the tractor km/h | 25.0 | 25.0 |
| (i) Deceleration m/s ² | 3.0 | 3.3 |
| (ii) Stopping distance m | 8.4 | 7.9 |
| (iii) Force exerted on the brake pedal daN | 64.0 | 59.0 |
| (iv) Force exerted on the brake pedal to achieve a deceleration of 2.5 m/s ² daN | 34.0 | 33.0 |

Brake fade characteristics (hot test)

| | Ballasted | Without ballast |
|--|-----------|-----------------|
| Deceleration, hot/deceleration, cold x 100 | 96 | 90 |
| Stopping distance, cold/stopping distance, hot x 100 | 98 | 96 |
| Force on pedal, cold/force on pedal, hot x 100 | 100 | 100 |

Parking brake

Efficacy of handbrake/parking latch, facing up 16% slope:
tractor does not roll
down 16% slope:
tractor does not roll

Pull on handbrake: 29 daN

(6) MESUREMENT OF AMBIENT NOISE

Date of test: December 1979

Type of sound level meter and octave filter: Brüel & Kjaer 2209-1613

Type of track: concrete

Results of tests: gear 4 fast

Travelling speed before acceleration 22.5 Km/h

sound level 87.5 dB (A)

(7) NOISE MESUREMENT AT THE DRIVER'S EAR SOUND (°)

Date of tests: December 1979

Type of Sound level meter and octave filter: Brüel & Kjaer 2209-1613

Type of track: concrete

Type of frequency analyzer: Brüel & Kjaer 1613

Tractor fitted with Same C 20 safety cab

Results of test:

| Gear | (+) Travelling speed km/h | dB (A) |
|----------|------------------------------|--------|
| 1 normal | 4.3 | 85.5 |
| 3 normal | 7.6 | 85.0 |
| 4 fast | 26.2 | 84.0 |

(°) Data taken from O.E.C.D. test report No. CSD 0138/8-a (C)

(+) The second gear tested corresponds to the nominal travelling speed nearest to 7.5 Km/h.

(8) POWER LIFT AND HYDRAULIC PUMP PERFORMANCE

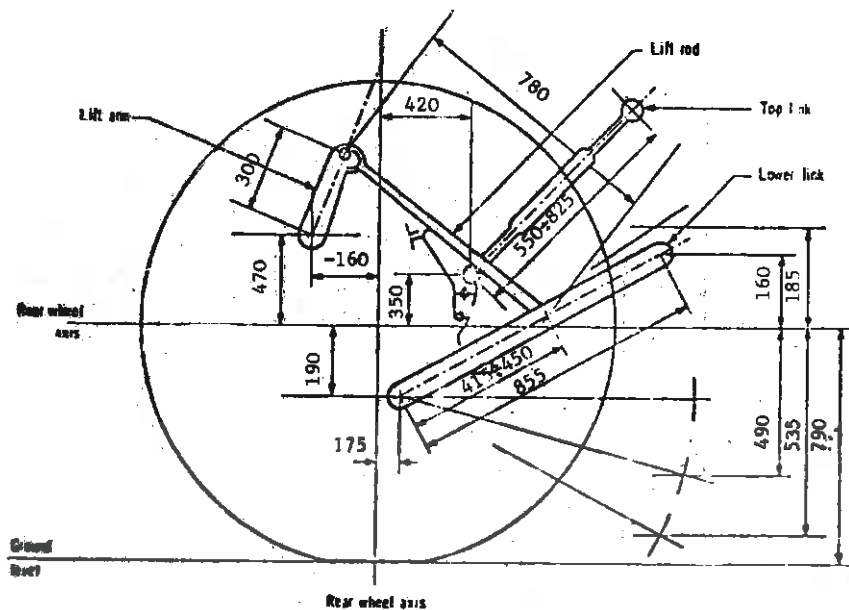
Date and location of test: 31th July - Treviglio

Pump characteristics:

- (i) opening pressure of the relief valve 181 bar,
sustained pressure by the opened relief valve 196 bar
- (ii) pump delivery rate at minimum pressure and
rated engine speed 40 l/m
- (iii) pump delivery rate at maximum hydraulic power 37.5 l/m
corresponding delivery pressure 172 bar, power 10.72 kW.

Power lift

Dimension of linkage geometry for the table on page 17.



All dimensions in mm

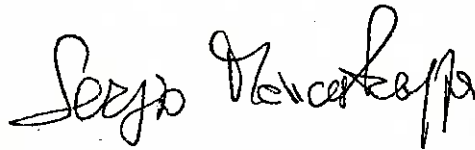
Linkage geometry when connected to the standard frame

| | Maximum mechanical advantage | Minimum mechanical advantage |
|--|---|---|
| <p>Projected length in side view lower links, mm lift arms, mm lift rods, mm top link, mm Distance of lift rod connection point from pivot of lower link, mm</p> <p>The following dimensions are given relative to the rear wheel centre line, situated 790 mm above the ground level: lower link pivot point top link pivot point lift arm pivot point Maximum and minimum height of lower link hitch points Height of lower link hitch point when locked in transport position</p> | <p>855 300 780 550 + 825</p> <p>450</p> <p>175 mm behind, 420 mm behind, 160 mm behind, 160 mm above, 160 mm above</p> | <p>855 300 780 550 + 825</p> <p>415</p> <p>175 mm behind, 420 mm behind, 185 mm behind, 185 mm above, 185 mm above</p> <p>190 mm below 350 mm above 470 mm above 535 mm below</p> |

Lifting heights in relation to a horizontal line through the lower link pivoting point

| | | min. | 345 | 300 | 250 | 200 | 150 | 100 | 50 | 0 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 375 | |
|--|--------------------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|---|
| Lifting force with the pressure at maximum hydraulic power 172 bar calculated from measurements made at the maximum pressure 177 bar | At the hitch point | max. mech. advantage | - | 2800 | 2890 | 3040 | 3260 | 3730 | 3950 | 4150 | 4240 | 4330 | 4330 | 4430 | 4670 | 4250 | - | - | - |
| | At the hitch point | min. mech. advantage | 3850 | 2940 | 3180 | 3180 | 3330 | 3390 | 3710 | 3710 | 3740 | 3820 | 4040 | 4120 | 4290 | 4370 | 3970 | - | - |
| | daN | Maximum force exerted throughout whole range 2800/2940 daN Force at which front of tractor is calculated to lift with maximum allowable front ballast 3723 daN | | | | | | | | | | | | | | | | | |
| Lifting force with the pressure at maximum hydraulic power 172 bar calculated from measurements made at the maximum pressure 177 bar | On the frame | max. mech. advantage | - | - | - | - | - | 4360 | 4100 | 4020 | 3950 | 3880 | 3340 | 3660 | 3190 | 2710 | - | - | - |
| | On the frame | min. mech. advantage | - | - | - | - | - | 4187 | 4070 | 3820 | 3750 | 3610 | 3330 | 3040 | 2730 | 1670 | - | - | - |
| | daN | Maximum force exerted throughout whole range 2710/1670 daN Force at which front of tractor is calculated to lift with maximum allowable front ballast 2340 daN | | | | | | | | | | | | | | | | | |

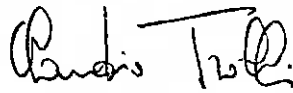
Test Officers



(Sergio Mancastroppa)



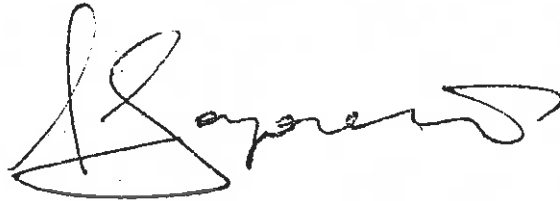
(Luigi Viola)



(Claudio Trolli)



Officer in charge
(Pierluigi Febbo)



Head of I.I.A.
(Ettore Gasparetto)



