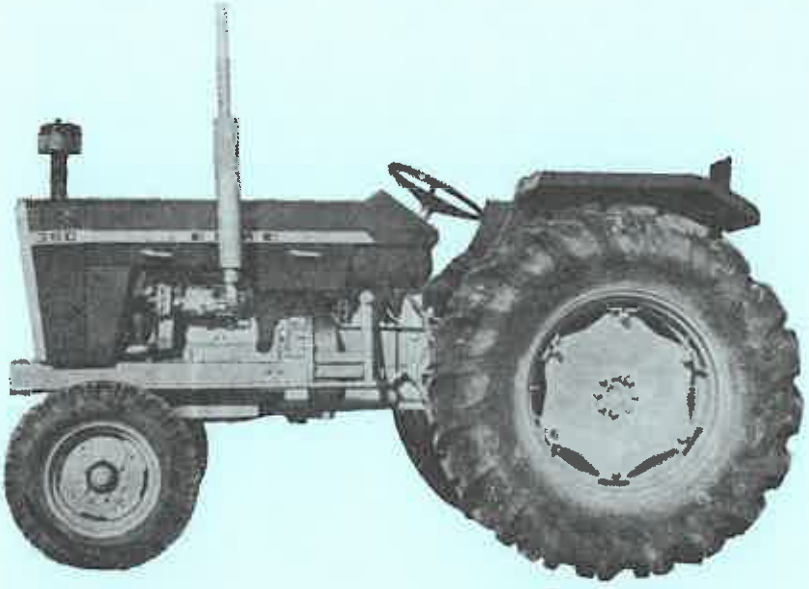
O. E. C. D. approval 591
January 1979

# REPORT ON TEST IN ACCORDANCE WITH O. E. C. D. TEST CODE FOR AGRICULTURAL TRACTORS



*EBRO 350 tractor*

Manufacturer: Motor Ibérica SA, Barcelona, Spain

**DANISH GOVERNMENT FARM MACHINERY TESTING STATION**

Bygholm 8700 Horsens Denmark

This Bulletin is based on engineering tests in accordance with O. E. C. D. standard Code for Official Testing of Agricultural Tractors. It does not contain an evaluation of the performance of the tractor on practical work.

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## SPECIFICATION OF TRACTOR

| | |
|---|---|
| Tractor manufacturer's name and address: | Motor Ibérica SA, Barcelona, Spain |
| Submitted for test by: | Motor Ibérica SA, Barcelona, Spain |
| Selected by: | Manufacturer in agreement with the Testing Station |
| Place of running in: | At Testing Station (Bygholm) |
| Duration of running in: | 1oo hours appr. |

### Tractor

| | |
|---|---|
| Make: | Motor Ibérica SA |
| Model: | Ebro 35o |
| Type: | Rear wheel driven |
| Serial No.: | 67 x 166oo5 |

### Engine

| | |
|---|---|
| Make: | Perkins |
| Model | AD 3.152 |
| Type: | Water cooled 4-stroke diesel engine |
| Serial No.: | 152 EA 29936 D |
| Cylinders: | 3 cylinders vertical in-line, 91,44 mm bore, 127 mm stroke, capacity 25oo $cm^3$, compression ratio 18,5:1, overhead valves |
| Fuel system: | Fuel feed, IMSA mechanical diaphragm pump, CAV-CONDIESEL single paper fuel filter, CAV-CONDIESEL, injection pump type 323o F 35o, injection pressure 175 $kg/cm^2$, 11 $cm^3$ for 2oo stroke by 5oo rev/min |
| Governor: | Perkins governor incorporated in injection pump governed range of speed 49o rev/min to 2412 rev/min, rated speed 225o rev/min |
| Air cleaner: | Mann oil bath, oil capacity o,75 liter, situated forward of radiator, pre-cleaner of cyclone type |

| | |
|---|---|
| Exhaust silencer: | Absorption type, 8o mm diameter, 4oo mm long, on left hand side of the engine, mouth of exhaust showing upwards, exhaust pipe 68o mm long |
| Lubrication system: | Forced feed from eccentric rotor-pump, replaceable cartridge oil filter, oil capacity 6,5 liters, oil and filter changing 25o hours, recommended oil viscosity: SAE 2o W/4o Multigrade |
| Cooling system: | Pressurized water cooling with thermostatic temperatur control, assisted with 412 mm diameter belt driven 4-blade fan, cooling water capacity 15 liters, over-pressure relief: 49 kPa (o,49 kp/cm$^2$) |

Electrical system

| | |
|---|---|
| Voltage: | 12 Volt, negative earth |
| Starting device: | Bosch screw-push starter motor type: JF 12, 2,5 kW |
| Cold starting device: | Flame glow plug in intake manifold |
| Generator: | Bosch alternator type G1, 3oo W |
| Battery: | Ebro 6x2 Volt batteries, 125 Ah at 2o-hour rating |

Transmission

| | |
|---|---|
| Clutch: | Dry dual disc clutch, both discs are operated with the same pedal, tractor drive disc 28o mm diameter, p.t.o.-drive disc 28o mm diameter |
| Gearbox: | Selective gear with 8 forward and 2 reverse speeds, comprising 4 forward and 1 reverse speed gearbox with high-low range selector |
| Rear-axle and final drive: | Crown wheel and pinion with differential and reduction gear final driven, pedaloperated differential lock on rear axle |
| Oil capacity: | Gearbox and rear axle drive 26,5 liters, recommended oil changing period looo hours, recommended oil viscosity: CS 2 |

Total ratios and speeds

| Group of gear | Gear No. | Number of engine rev. for one rev. of driving wheel | x) Theoretical travelling speed at rated engine speed 2250 rev/min m/s | (km/h) |
|---|---|---|---|---|
| | | Forward speeds | | |
| Low | 1 | 310,0 | 0,471 | (1,70) |
| | 2 | 205,4 | 0,711 | (2,56) |
| | 3 | 128,0 | 1,141 | (4,11) |
| | 4 | 101,9 | 1,433 | (5,16) |
| High | 1 | 77,1 | 1,895 | (6,82) |
| | 2 | 50,9 | 2,870 | (10,33) |
| | 3 | 31,8 | 4,594 | (16,54) |
| | 4 | 25,5 | 5,729 | (20,62) |
| | | Reverse speeds | | |
| Low | R | 286,5 | 0,510 | (1,84) |
| High | R | 71,4 | 2,046 | (7,37) |

x) calculated with tyre rolling radius of 620 mm

Power take-off

| | |
|---|---|
| Main: | P.t.o.-speed proportional to engine speed, driven through second disc of the dual clutch, manually operated by hand-lever |
| Location: | At rear of tractor in vertical centre plan, 630 mm above ground |
| Dimensions: | Splined shaft 34,8x27,9x8 mm (1 3/8 inch), 6 splines, ISO-standard |
| Speeds: | 550 rev/min at 2250 rev/min rated speed, standard p.t.o.-speed 540 rev/min at 2208 rev/min engine speed |
| Direction of rotation: | Clockwise viewed from tractor rear |
| Belt pulley | Not fitted on tractor tested |
| Power lift | Live hydraulic system with draft control by lower links, position control, floating position, single acting ram, Rouguet gear-pump driven from engine, oil capacity 26,5 liters from gearbox and rear axle, external tapping for remote equipment |

| | |
|---|---|
| Pull attachment | |
| Implement linkage | Three-point category II linkage, lift rods adjustable 260-460 mm above ground, 2 holes for adjustment of top link, distance from centerline to rear axle 790 mm, distance from centerline to end of p.t.o.-shaft 400 mm |
| Holed bar: | Not fitted on tractor tested |
| Swinging drawbar: | Height adjustable 310-460 mm above ground, hole diameter 27 mm, distance from hole to rear axle centre 790 mm. distance from hole to end of p.t o.-shaft 400 mm, lateral adjustment 300 mm to each side of median plane, pivot of the bar is located 120 mm forward to rear axle centre under the tractor body |
| Hitch: | Not fitted on tractor tested |
| Steering device | Mechanical type, worm and sector |
| Brakes | |
| Foot brake: | Girling double disc-brakes mounted on differential shafts, operated by food-pedal single or interlocked |
| Parking brake: | Mechanically acting on left foot-brake and on both footbrakes by interlocking, operated by hand-lever with ratchet |
| Wheels | |
| Steerings wheels: | Two at front, Firestone "Ribbed Tractor", cross-ply 6.00-16 tyres, 4-ply rating, maximum permissible mass on each tyre 450 kg at 230 kPa inflation pressure, track width 1270 mm in 50 mm steps to 1770 mm, changeable by telescope axle |
| Driving wheels: | Two at rear, Michelin "Bibagrip 3", cross-ply 13.6-28 tyres, 6-ply rating, maximum mass on each tyre 1430 kg at 160 kPa inflation pressure, track width 1190-1590 mm and 1500-1800 mm in 100 mm steps, changes by reversing wheels and offset lug rims |
| Wheelbase: | 1830 mm, lowest ground clearance is 320 mm at the pivot of the swinging drawbar |

Lighting

| | Height above ground of centre mm | Dimensions mm | Distance from outside edge of tractor to centre mm |
|---|---|---|---|
| Head lights x) | 98o | 12o diam. | 65o |
| Side lights | 136o | 6o x 7o | 17o |
| Rear lights | 133o | 6o x 7o | 25o |

x) Unrestricted beam angle of headlights in plan view o,158 rad (9°) by driving-light and o,133 rad (7,6°) by meeting-light

Number of grease points

Whole tractor: 11

## CONDITIONS DURING TEST

Masses

Tractor (without driver but with tanks full)

| | On front wheels kg | On rear wheels kg | Total kg |
|---|---|---|---|
| Without ballast | 718 | 1249 | 1967 |
| With ballast | 1o4o | 142o | 246o |

Ballast

| | Number of weights | Total weight (excluding water) kg | Water kg |
|---|---|---|---|
| Front wheel | 2 | 66 | - |
| Rear wheel | - | - | 235 |
| Additional on front | 8 | 192 | - |

Track setting during test

Front: 147o mm

Rear: 139o mm

Overall dimensions

| | Length m | Width m | Height m |
|---|---|---|---|
| With ballast | 3,50[1)] | 2,18 | 2,42[2)] |
| Without ballast | 3,29 | 2,18 | 2,42 |

1) with three-point linkage
2) to top of exhaust pipe

Seat — Upholstered seat with back rest, springs with hydraulic shock absorber

Adjustments: — Adjustable according to driver's weight, longitudinal adjustment 60 mm, height above footrest 500 mm with 936 N (75 kp) load on seat

## FUELS AND LUBRICANTS USED IN TEST

Laboratory and track tests

| | |
|---|---|
| Fuel: | Esso diesel oil, specific gravity at 15°C: 0,825 kg/l |
| Engine oil: | SAE 20/30 HD |
| Transmission oil: | Esso tractor hydraulic oil,H 44 |
| Hydraulic oil: | Esso tractor hydraulic oil,H 44 |

## COMPULSORY TESTS

### MAIN POWER TAKE-OFF PERFORMANCE

Date and location of test: 22/7-1977 and 1o/7-1978, Bygholm, Horsens

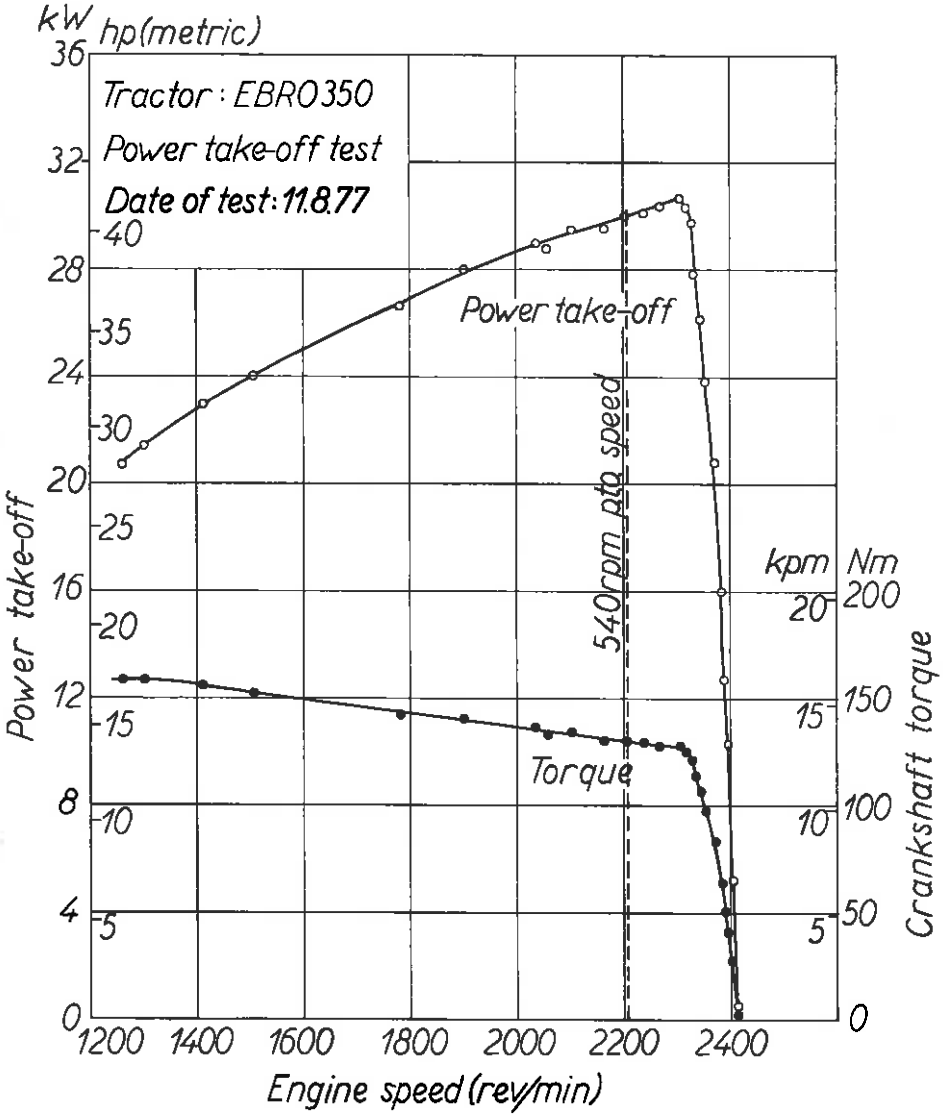
Type of dynamometer: Schenck U 2-3o

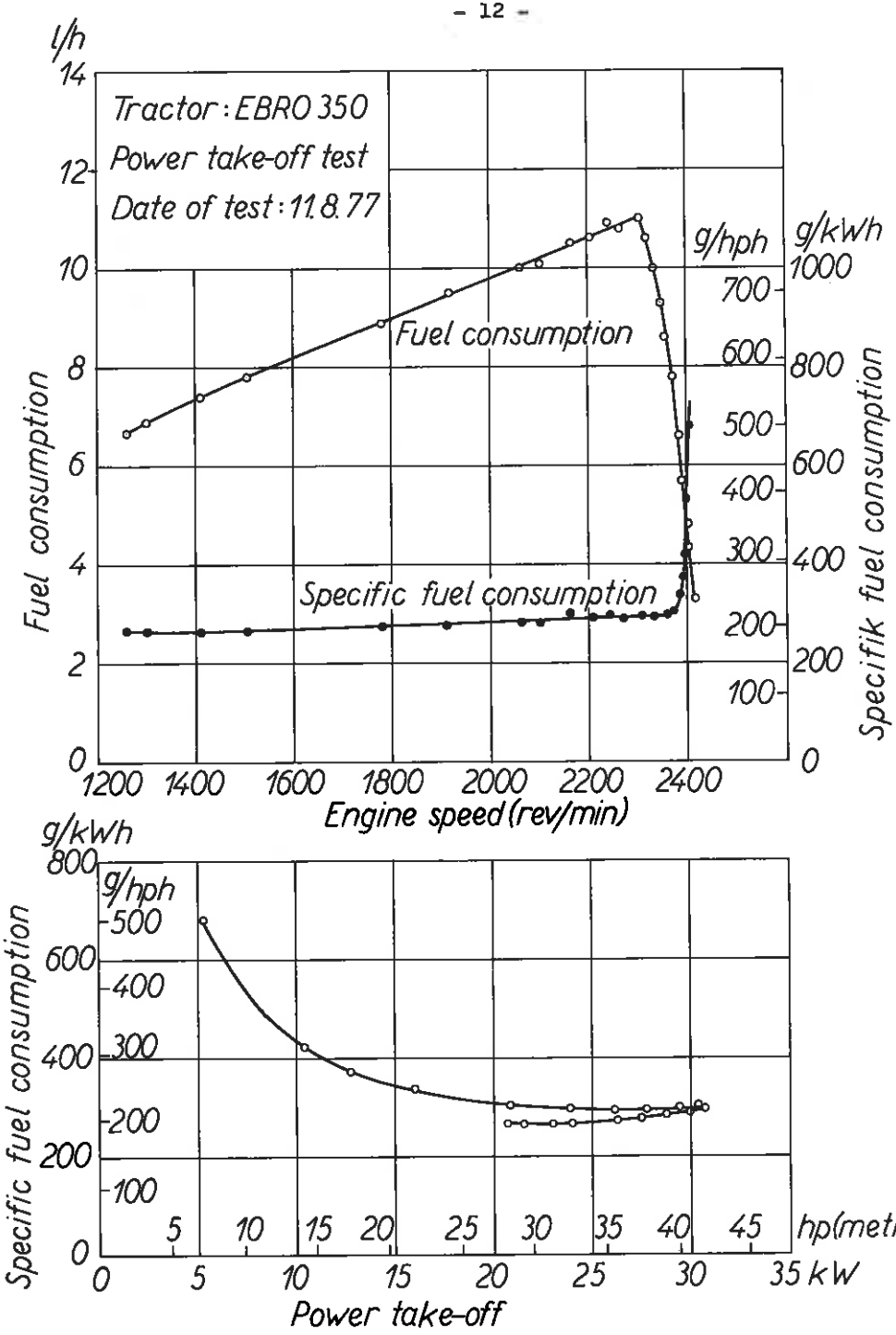
| Power | Speed | | Fuel consumption | | |
|---|---|---|---|---|---|
| | engine | p.t.o. | kg/h | g/kWh | kWh/l |
| kW (metric hp) | rev/s (rev/min) | rev/s (rev/min) | (l/h) | (g/hph) | (hph/l) |
| **At maximum power - 2 hours test** | | | | | |
| 3o,8 (41,9) | 38,43 (23o6) | 9,4o (564) | 9,1o (11,o) | 295 (217) | 2,8o (3,81) |
| **At standard p.t.o. speed 9,o rev/s (54o rev/min)** | | | | | |
| 3o,2 (41,o) | 36,8o (22o8) | 9,oo (54o) | 8,75 (1o,6) | 29o (213) | 2,85 (3,87) |
| **At the speed recommended by the manufacturer for drawbar work** | | | | | |
| 3o,5 (41,5) | 37,5o (225o) | 9,17 (55o) | 8,91 (1o,8) | 292 (215) | 2,82 (3,84) |
| **At part loads** | | | | | |
| **(i) 85 % of torque at maximum power** | | | | | |
| 26,7 (36,3) | 39,oo (234o) | 9,53 (572) | 8,oo (9,7) | 3oo (22o) | 2,75 (3,74) |
| **(ii) unloaded** | | | | | |
| - - | 4o,2o (2412) | 9,83 (59o) | 2,7o (3,3) | - - | - - |
| **(iii) 5o % at the load defined in (i)** | | | | | |
| 13,8 (18,7) | 39,83 (239o) | 9,75 (585) | 4,79 (5,8) | 347 (256) | 2,38 (3,22) |
| **(iv) maximum power** | | | | | |
| 3o,8 (41,9) | 38,43 (23o6) | 9,4o (564) | 9,1o (11,o) | 295 (217) | 2,8o (3,81) |
| **(v) 25 % of the load defined in (i)** | | | | | |
| 6,9 ( 9,4) | 4o,o3 (24o2) | 9,78 (587) | 3,98 (4,7) | 562 (413) | 1,47 (2,oo) |
| **(vi) 75 % of the load defined in (i)** | | | | | |
| 2o,4 (27,8) | 39,52 (2371) | 9,67 (58o) | 6,35 (7,7) | 311 (229) | 2,65 (3,61) |

No load maximum engine speed: 4o,2 rev/s (2412 rev/min)
Torque at maximum power: 128 N (13,o kpm)
Maximum torque: 158 Nm at 21,67 rev/s (16,1 kpm at 13oo rev/min)

Mean atmospheric conditions:
- temperature 2o°C
- pressure lol,3 kPa(76o mm Hg
- relative humidity 6o %

Maximum temperatures:
- coolant 85°C
- engine oil 85°C
- fuel 23°C


kW
hp(metric)
Tractor : EBRO 350
Power take-off test
Date of test: 11.8.77
Power take-off
Torque
540 rpm pto speed
Power take-off
Crankshaft torque
kpm
Nm
Engine speed (rev/min)
36
32
28
24
20
16
12
8
4
0
40
35
30
25
20
15
10
5
200
150
100
50
0
1200
1400
1600
1800
2000
2200
2400


l/h
14
12
10
8
6
4
2
0
Tractor: EBRO 350
Power take-off test
Date of test: 11.8.77
Fuel consumption
Specific fuel consumption
g/hph
700
600
500
400
300
200
100
0
g/kWh
1000
800
600
400
200
0
Specifik fuel consumption
Fuel consumption
1200 1400 1600 1800 2000 2200 2400
Engine speed (rev/min)
g/kWh
800
600
400
200
0
g/hph
500
400
300
200
100
Specific fuel consumption
5 10 15 20 25 30 35 40 45 hp(metric)
0 5 10 15 20 25 30 35 kW
Power take-off

## DRAWBAR PERFORMANCE

Date of test: 3/1o - 12/1o 1977 and 13/7 1978

Type of track: Tarmacadam

Height of drawbar without ballast above ground: 67o mm
Height of drawbar with ballast above ground: 5o2 mm

| Gear number and group | Speed | Power | Drawbar pull | Engine speed | Slip of wheels | Fuel consumption | | Temperatures fuel | coolant | engine oil | Atmospheric conditions temperature | relative humidity | pressure |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m/s (km/h) | kW (metric hp) | N (kp) | rev/s (rev/min) | % | kWh/l (hph/l) | g/kwh (g/hph) | °C | °C | °C | °C | % | kPa (mm Hg) |
| | | | | (i) Maximum power (with ballast) | | | | | | | | | |
| 1. Low | o,41 (1,48) | 7,1 (9,7) | 174o7 (1775) | 39,17 (235o) | 15 | 1,42 (1,94) | 581 (425) | 2o | 85 | 8o | 11 | 72 | lol,2 (759) |
| 2. Low | o,62 (2,23) | 1o,8 (14,7) | 174o7 (1775) | 39.oo (234o) | 15 | 1,76 (2,39) | 47o (345) | 2o | 85 | 81 | 11 | 72 | lol,2 (759) |
| 3. Low | o,98 (3,53) | 17,1 (23,2) | 174o7 (1775) | 38,83 (233o) | 15 | 2,o6 (2,8o) | 4oo (295) | 22 | 86 | 83 | 11 | 72 | lol,2 (759) |
| 4. Low | 1,21 (4,36) | 21,o (28,6) | 174o7 (1775) | 38,75 (2325) | 15 | 2,13 (2,9o) | 354 (26o) | 23 | 86 | 89 | 12 | 72 | lol,2 (759) |
| 1. High | 1,62 (5,83) | 24,6 (33,5) | 152oo (155o) | 38,33 (23oo) | 11 | 2,31 (3,15) | 357 (262) | 15 | 85 | 83 | 9 | 73 | lol,1 (758) |
| 2. High | 2,44 (8,78) | 24,5 (33,3) | 1oo52 (1o25) | 38,o8 (2285) | 7 | 2,36 (3,2o | 35o (258) | 16 | 86 | 85 | 9 | 73 | lol,1 (758) |
| 3 High | 3,83 (13,79) | 22,5 (3o,6) | 5884 (6oo) | 34,17 (2o5o) | 4 | 2,25 (3,o6) | 367 (27o) | 18 | 86 | 88 | 9 | 73 | lol,1 (758) |
| 4. High | 4,95 (17,82) | 23,1 (31,4) | 4658 (475) | 35,oo (21oo) | 3 | 2,35 (3,19) | 352 (259) | 18 | 87 | 91 | 9 | 73 | lol,1 (758) |
| | | | | (ii) Five hour test at 75 % of pull at maximum power (with ballast) | | | | | | | | | |
| 1. High | 1,74 (6,26) | 19,6 (26,7) | 11278 (115o) | 38 ,33 (23oo) | 8 | 2,43 (3,32) | 339 (249) | 25 | 87 | 97 | 15 | 65 | lol,7 (763) |

(iii) Five hour test at pull corresponding to 15 % wheelslip in test(with ballast)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | Low | 1,21 (4,36) | 21,o (28,6) | 174o7 (1775) | 38,75 (2325) | 15 | 2,13 (2,9o) | 354 (26o) | 27 | 87 | 97 | 13 | 63 | 1o2,o (765) |

(iv) Maximum power (without ballast)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Low | o,42 (1,51 | 6,o (8,1) | 1422o (145o) | 39,17 (235o) | 15 | 1,29 (1,74) | 639 (474) | 12 | 85 | 8o | 7 | 66 | 1o2,3 (767) |
| 2. | Low | o,63 (2,27) | 9,o (12,2) | 1422o (145o) | 38,5o (231o) | 15 | 1,65 (2,24) | 5oo (369) | 15 | 86 | 82 | 8 | 66 | 1o2,3 (767) |
| 3. | Low | 1,o2 (3,67) | 14,5 (19,7) | 1422o (145o) | 39,17 (235o) | 15 | 2,o3 (2,76) | 4o7 (299) | 16 | 86 | 85 | 8 | 66 | 1o2,3 (767) |
| 4 | Low | 1,25 (4,5o) | 17,8 (24,2) | 1422o (145o) | 38,67 (232o) | 15 | 2,11 (2,86) | 392 (288) | 15 | 86 | 88 | 9 | 66 | 1o2,3 (767) |
| 1. | High | 1,63 (5,87) | 23,2 (31,5) | 1422o (145o) | 38,33 (23oo) | 15 | 2,19 (2,97) | 377 (278) | 2o | 85 | 83 | 12 | 66 | 1o2,3 (767) |
| 2. | High | 2,58 (9,29) | 26,o (35,3) | 1oo52 (1o25) | 38,17 (229o) | 7 | 2,42 (3,28) | 347 (257) | 22 | 86 | 85 | 12 | 65 | 1o2,4 (768) |
| 3 | High | 4,o5 (14,58) | 23,8 (32,4) | 5884 (6oo) | 36,oo (216o) | 5 | 2,27 (3,o9) | 364 (267) | 24 | 86 | 91 | 12 | 65 | 1o2,4 (768) |
| 4. | High | 5,11 (18,4o) | 22,6 (3o,7) | 4413 (45o) | 35,oo (21oo) | 4 | 2,33 (3,16) | 354 (261) | 24 | 86 | 94 | 12 | 65 | 1o2,4 (768) |

Total oil consumption during ten hours duration of tests (ii) and (iii) 62 g/h

TURNING SPACE AND TURNING CIRCLE

| | |
|---|---|
| Wheel equipment front: | 6,oo - 16 |
| Wheel equipment rear: | 13,6 - 28 |
| Wheel track front: | 147o mm |
| Wheel track rear: | 139o mm |

| | With brakes | | Without brakes | |
|---|---|---|---|---|
| | right hand m | left hand m | right hand m | left hand m |
| Radius of turning space | 3,17 | 3,16 | 3,84 | 3,66 |
| Radius of turning circle | 3,o8 | 3,o6 | 3,74 | 3,62 |

LOCATION OF CENTRE OF GRAVITY

| | |
|---|---|
| Height above ground: | 74o mm |
| Distance forward from the vertical plane containing the axis of the rear wheels: | 718 mm |
| Distance from the median place: | o mm |

BRAKING

| | |
|---|---|
| Date of test: | 7/4 - 11/4 1978 |
| Type of track: | Tarmacadam |
| Type of decelerometer: | Tapley brake testing meter |
| **Weight of maximum ballasted tractor** | **3o33 kg** |

COLD BRAKES

| | Tractor with maximum ballast | Tractor with ballast |
|---|---|---|
| Travelling speed m/s (km/h) | 5,94 (21,4) | 6,25 (22,5) |
| Deceleration $m/s^2$ | 3,2 | 3,3 |
| Stopping distance m | 6,o | 7,o |
| Force on pedal N (kp) | 147 (15,5) | 1o8 (11) |
| Force on pedal to achieve a deceleration of 2,5 $m/s^2$ N (kp) | 1o8 (11) | 74 (7,5) |
| **Brake fade characteristics** | | |
| Decelaration hot/cold % | 1o9 | 1oo |
| Stopping distance cold/hot % | 1o3 | 1oo |
| Force on pedal cold/hot % | 84 | 96 |

PARKING BRAKE (with ballast)

| | |
|---|---|
| Tractor facing up slope of 16 %: | Pull on hand brake 216 N (22 kp) tractor does not roll |
| Tractor facing down slope of 16 %: | Pull on hand brake 216 N (22 kp) tractor does not roll |

AMBIENT NOISE EMITTED BY THE TRACTOR

| | |
|---|---|
| Date of test: | 1o/1o-1977 |
| Type of sound level meter: | Brüel & Kjær, type 22o9 |
| Type of track: | Tarmacadam |

Result of test

| | |
|---|---|
| Gear: | 4. High |
| Travelling speed before acceleration: | 4,61 m/s (16,6 km/h) |
| Sound level: | 86,5 dB(A) |

NOISE MEASUREMENT AT THE DRIVERS EAR LEVEL

| | |
|---|---|
| Date of test: | 29/3-1978 |
| Type of sound level meter: | Brüel & Kjær, type 22o9 |
| Type of track: | Tarmacadam |

Result of test

| Gear | Drawbar pull at which the tractor develops the maximal sound level N | (kp) | Travelling speed m/s | (km/h) | Sound level dB(A) |
|---|---|---|---|---|---|
| 1. High x) | 123oo | (1254) | 1,78 | (6,4) | 1oo,o |
| 2. High | 93oo | (948) | 2,86 | (1o,3) | 1o1,o |
| 4. High | Light load | | 5,97 | (21,5) | 97,5 |

x) The first gear tested corresponds to the travelling speed nearest to 2,o8 m/s (7,5 km/h)

## POWER LIFT AND HYDRAULIC PUMP PERFORMANCE

| | |
|---|---|
| Date and location of test: | 2/3-1978, Bygholm, Horsens |

### Hydraulic fluid

| | |
|---|---|
| Make and type: | Esso tractor hydraulic oil H 44 |
| Viscosity: | SAE 2o/3o |
| Type of linkage lock for transport: | hydraulic |

### Pump characteristics

| | | |
|---|---|---|
| (i) | Opening pressure of the relief valve: | 14,2 MPa (145 kg /cm$^2$) |
| | Sustained pressure by the open relief valve: | 14,o MPa (143 kg/cm$^2$) |
| (ii) | Pump delivery at minimum pressure and rated engine speed: | 2o/5 l/min |
| (iii) | Pump delivery rate: | 21,9 l/min |
| | Delivery pressure: | 13,1 MPa (134 kg/cm$^2$) |
| | Power: | 4,8 kW (6,5 metric hp) |

Linkage geometry when connected to the standard frame

| | | Maximum mechanical advantage | Minimum mechanical advantage |
|---|---|---|---|
| Projected length in side view | | | |
| lower links | mm | 787 | 787 |
| lift arms | mm | 250 | 250 |
| lift rods | mm | 694 | 574 |
| top link | mm | 780 | 539 |
| Distance of lift rod connection point from pivot point of lower link | mm | 364 | 415 |
| The following dimensions are given relative to the rear wheel centre line, situated 620 mm above the ground level | | | |
| lower link pivot point | mm | 150 behind 173 below | 150 behind 173 below |
| top link pivot point | mm | 338 behind 247 above | 338 behind 172 above |
| lift arm pivot point | mm | 155 behind 425 above | 155 behind 425 above |
| maximum and minimum height of lower link hitch point | mm | 152 above 523 below | 137 above 438 below |
| height of lower link hitch points when locked in transport position | | Any height within lift range | Any height within lift range |

## POWER LIFT PERFORMANCE

| Lifting height in relation to a horizontal line through the lower link pivoting point | mm | ÷420 | ÷350 | ÷270 | ÷265 | ÷200 | ÷100 | 0 | +100 | +200 | +310 | +325 | +370 | +465 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lifting force with the pressure at maximum hydraulic power** | | | | | | | | | | | | | | |
| **At the hitch points** | | | | | | | | | | | | | | |
| max. mech. advantage | N | | 20496 | 17358 | 17260 | 15887 | 14367 | 13435 | 12749 | 12356 | 12307 x) | 12356 | | |
| | (kp) | | (2090) | (1770) | (1760) | (1620) | (1465) | (1370) | (1300) | (1260) | (1255) | (1260) | | |
| | | | | | xx) | | | | | x) | | | | |
| min. mech. advantage | N | | | | 23046 | 20251 | 17456 | 15789 | 14563 | 13827 | 13925 | | | |
| | (kp) | | | | (2350) | (2065) | (1780) | (1610) | (1485) | (1410) | (1420) | | | |
| **On the frame** | | | | | | | | | | | | | | |
| | | xx) | xx) | xx) | xx) | xx) | | | | | | | | x) |
| max mech. advantage | N | 15887 | 13729 | 12798 | 12749 | 12553 | 11376 | 10297 | 9512 | 8777 | 8041 | 7943 | 7649 | 7061 |
| | (kp) | (1620) | (1400) | (1305) | (1300) | (1280) | (1160) | (1050) | (970) | (895) | (820) | (810) | (780) | (720) |
| | | | | xx) | xx) | xx) | xx) | xx) | xx) | | | | x) | |
| min. mech. advantage | N | | | 20251 | 20153 | 16966 | 14220 | 12847 | 12258 | 11376 | 10297 | 10150 | 9807 | |
| | (kp) | | | (2065) | (2055) | (1730) | (1450) | (1310) | (1250) | (1160) | (1050) | (1035) | (1000) | |

x) Maximum force exerted troughout whole range

xx) Force at which front of tractor does lift

REPAIRS, ADJUSTMENTS AND REMARKS

Foot-brake has been adjusted,
and hydraulic distributor valv
was replaced

Date: January 1979

KANDRUP & WUNSCH - KØBENH