Report No. 4006/OECD

Report on test in accordance with O.E.C.D. Test Code for agricultural Tractors No. 36

MASSEY - FERGUSON - DIESEL Tractor MF 25
with type A 4 107 4-cylinder engine

Manufactured by: Massey-Ferguson S.A., Beauvais, France



Date of Test: August 1961/March 1962

SCHLEPPER - PRÜFFELD DARMSTADT

Darmstadt - Kranichstein

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Darmstadt - Kranichstein

# SCHLEPPER-PRÜFFELD

**KURATORIUM FÜR TECHNIK IN DER LANDWIRTSCHAFT**

REPORT ON TEST No. 4006/ O E C D

Massey-Ferguson Model M F 25

Standard-Diesel-Tractor

Manufacturer : Massey-Ferguson S A, Beauvais, France

Test requested by : Massey-Ferguson GmbH., Eschwege, Germany

Date of Test : August 1961/ March 1962

This report has been approved by the
OECD Coordinating Centre ( C. N. E. E. M. A., France )
as beeing in accordance with the
O E C D Tractor Test Code

It does not contain an evaluation of
the performance of the tractor on practical farm
work.

Date of Approval : 14. March 1963

Number of Approval : 0 3 6

Darmstadt, 28. February 1963

## CONTENTS OF APPENDIX

Page

LABORATORY TESTS

Compulsory tests at the main power take off

Curves of main p.t.o. horse-power, equivalent crankshaft torque and specific fuel consumption versus engine speed — 17

Curves of engine speed, equivalent crankshaft torque and specific fuel consumption versus p.t.o. horse power — 18

DRAWBAR TESTS WITH BALLAST

Curves of drawbar horse-power and wheel-slip versus drawbar pull — 19-20

Curves of specific fuel consumption versus draw-bar pull — 21

DRAWBAR TESTS WITHOUT BALLAST

Curves of drawbar horse-power and wheel-slip versus drawbar pull — 22

**SCHLEPPER-PRÜFFELD**
Massey-Ferguson MF 25

Test Nr. 4006/OECD

Air Cleaner : Oil bath type. Oil Capacity 0,55 l.

Oiling System : Forced feed from gear type pump.
Recommended oil SAE 10 for winter and SAE 20 for summer.
Full flow replaceable paper cartridge element oil filter
Recommended oil change period 80 h.
Oil capacity: engine sump 4,7 l.

Cooling System : Pressurised water cooled, 0,5 kp/sq cm, impeller assisted with belt driven fan, thermostat for temperature control.
Cooling water capacity 8 l.

Transmission: Own make, with final drive epicyclic gear reduction on differential half shafts.

Clutch : Dual clutch, two plates 229 mm and 279 mm dia. for P.T.O. shaft and gearbox drive respectively dry, foot-pedal operated (Single dry clutch with 279 mm dia. plate available).

Gearbox : 8 forward speeds and 2 reverse, comprising 4 speed gearbox with two bottom gears of sliding type and two top gears of synchromesh type, and dual range sliding gear type reduction at output end.

Differential: Spiral bevel gear type, crownwheel and pinion differential and foot pedal operated differential lock.
Oil capacities; transmission 19 and 21 l without and with middle mounted mower drive respectively; final drives 0,35 l each.

| Gear No. | Number of engine revolutions for one revolution of driving wheel. | Theoretical travelling speed km/h for rated engine speeds of: 2000 rev/min | 2200 rev/min |
|---|---|---|---|
| 1st | 255,0 | 1,69 | 1,86 |
| 2nd | 191,5 | 2,24 | 2,46 |
| 3rd | 124,0 | 3,45 | 3,80 |
| 4th | 86,0 | 4,90 | 5,39 |
| 5th | 70,6 | 6,09 | 6,70 |
| 6th | 53,1 | 8,10 | 8,91 |
| 7th | 34,4 | 12,50 | 13,75 |
| 8th | 24,0 | 17,94 | 19,72 |
| 1st rev | 230,0 | 1,92 | 2,11 |
| 2nd rev | 63,8 | 6,94 | 7,63 |

(expressed in rounded numbers)

Steering device: Worm and sector type with single drag link; made by Gemmer_Steering, France or Cam Gear, England.

Brakes: Foot brakes-internal contracting mechanical wedge type on differential half shaft.
Independent or combined foot-pedal operated, pedal's interlock and ratchet on foot-pedals for parking.
Hand-brakes - mechanical internal expanding type on final rear axle output shafts (optional).

Wheels:

Steering Wheels: Two at front. Tyres 5,50 - 16 AS 4ply pneumatic.
Track: 1220 - 1320 - 1420 -1525 - 1625 - 1725 - 1830 - 1930 - 2030 mm changed by extending front axle and reversing wheels.
Maximum permissible weight on each tyre: in accordance with DIN 7808 450 kg at 2,0 kp/sq cm and 675 kg at 2,5 kp/sq cm with towed and mounted implements respectively. In accordance with International Tyre Manufacturer's Association 400 kg and 535 kg at 2,25 kp/sq cm with towed and mounted implements respectively.

Driving Wheels: Two at rear. Tyres 10 - 28 AS 6ply pneumatic.
Track: 1220 - 1320 - 1420 - 1525 - 1625 - 1725 - 1830 - 1930 - 2030 mm, changed by reversing wheel centre and offset lugs on rims.
Maximum permissible weight on each tyre: 800 kg at 1,0 kp/sq cm and 1200 kg at 1,5 kp/sq cm with mounted implements only, in accordance with DIN 7807 and International Tyre Manufacturer's Association.

Wheel Base: 1830 mm

Belt Pulley:

Location: At rear of tractor in three alternative positions; right, left or downward; P.T.O. driven.

Diameter x Width: 229 x 165 mm and optional 289 x 165 mm.

Speeds: 1144 rev/min at 2200 rev/min engine rated speed: giving 13,7 m/s standard belt linear speed in accordane with B.S. 1495 and 17,3 m/s in accordance with DIN 9630, with 269 mm and 289 mm dia. pulleys respectively.
Direction of rotation: Optional, related to position of unit.

Power take off

Main P.T.O.: Manually engaged proportinal engine speed and proportional ground speed.
At the rear of tractor, in centre plane and 475 mm above ground (in accordance with DIN 9670),
6 splines, 29 x 34,9 x 8,7 mm (in accordance with DIN 9611, form A and B.S.1495)

a) Proportional Engine Speed

Speeds : 629 rev/min at 2200 rev/min engine rated speed.
572 rev/min at 2000 rev/min engine rated speed.
540 rev/min at 1890 rev/min engine speed, control by tractometer (in accordance with DIN 9611, B.S.1495).

Direction of Rotation : Clockwise, viewed from tractor rear.
Independent of main clutch (with dual clutch only)

b) Proportional Ground Speed

Speeds : 1 revolution of P.T.O. for approximately 485 mm of travel ( 10 - 28 tyres ).

Direction of Rotation : Clockwise, viewed from tractor rear in forward gear.

Middle Mounted P.T.O. Proportional engine speed, under transmission housing, geared from the front end of main power take-off shaft, 1,25 m forward to rear axle, (not fitted).

Speed : 1057 rev/min at 2000 rev/min engine rated speed for Mower.

Direction of Rotation : Clockwise viewed from Tractor front for Mower.

Electrical Equipment:

| | |
|---|---|
| Voltage : | 12V. |
| Generator : | Paris - Rhone, type G.10.R.29, made in France. |
| Battery : | 12V lead acid. 80 amp/hours capacity at 20 hours rating. |
| Starting Device: | Paris - Rhone 12 volts, type D.15 E.85 solenoid engaged starter motor. C.A.V. inlet manifold flame type cold starting aid. (Alternative electrical equipment by Lucas Ltd. England). |

Overall Dimensions :

| | |
|---|---|
| Overall Length : | 3,095 m with three point linkage and towing hitch. |
| Overall Width : | 1,635 m at 1220 mm track, no ballast weights. |
| Overall height : | 1,48 m to top of driver's seat back rest. |
| Minimum ground clearance : | 365 mm in centre line of tractor under rear axle. |

Weights: As tested, with full fuel tank, oil, cooling water, but no driver; equipped with power lift and implement linkage.

| | WITHOUT BALLAST kg | WITH BALLAST kg |
|---|---|---|
| On front wheels | 525 | 804 |
| On rear wheels | 901 | 2116 |
| Total | 1426 | 2920 |

Remarks: None.

**SCHLEPPER-PRÜFFELD**
Massey-Ferguson MF 25

Test Nr.4006/OECD

## P A R T II

## LABORATORY TESTS

1. COMPULSORY TESTS: Main Power Take - off Test.

Date and location of test: 30.8.1961, Schlepper-Prüffeld, Darmstadt-Kranichstein.

Type of dynamometer: Water brake, Schenck.

Position of governor control: As for the required engine rated speeds.

Fuel: Shell diesel-fuel, density 0,830 kg/l at 15°C, commercial, in accordance with DIN 51 601.

Engine oil: BP - Energol - Diesel D, HD 20

Transmission oil: 10 W 30, multi - purpose.

(1) Sustained Power Tests

| Duration of Test h | Horse Power Metric hp | Engine Speed rev/min | Equiv. torque kpm | Spec. Fuel Cons. g/hph | Mean Temperatures Fuel °C | Oil °C | Coolant °C | Air °C | Atm. Pressure mm Hg |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Power | | | | | | | | | |
| 2 | 27,0 | 2200 | 8,8 | 202 | 22 | 85 | 82 | 28 | 750 |
| Power at 85 % of engine speed at maximum torque | | | | | | | | | |
| 1 | 13,6 | 1040 | 9,4 | 204 | 23 | 80 | 80 | 28 | 749 |

(2) Varying Speed Tests

| Horse Power Metric hp | Engine Speed rev/min | Fuel Consumption l/h | hph/l | g/hph | Mean Temperatures Fuel °C | Oil °C | Coolant °C | Air °C | Atm. Pressure mm Hg |
|---|---|---|---|---|---|---|---|---|---|
| Power at rated engine speed for road transport work | | | | | | | | | |
| 27,0 | 2200 | 6,57 | 4,11 | 202 | 22 | 85 | 82 | 28 | 750 |
| Power at rated engine speed for: field work and belt work at belt standard linear speeds (in accordance with DIN 9630 and B.S.1495) | | | | | | | | | |
| 25,8 | 2000 | 5,94 | 4,34 | 191 | 22 | 82 | 80 | 27 | 749 |
| Power at engine speed for: P.T.O. work with P.T.O. standard speed: 540 rev/min ( in accordance with DIN 9611 and BS1495 ) | | | | | | | | | |
| 24,3 | 1890 | 5,58 | 4,35 | 191 | 23 | 82 | 81 | 28 | 749 |
| Maximum no load speed with governor set for full load at 2200 rev/min engine rated speed | | | | | | | | | |
| - | 2340 | 1,93 | - | - | 27 | 78 | 77 | 28 | 750 |
| Maximum no load speed with governor set for full load at 2000 rev/min engine rated speed | | | | | | | | | |
| - | 2140 | 1,81 | - | - | 23 | 76 | 75 | 28 | 749 |

## II. SUPPLEMENTARY TESTS:

### a) Engine test

Date and location of test: 10.,15.,17.8.1961
Schlepper-Prüffeld, Darmstadt-Kranichstein

Type of dynamometer: Water brake - Schenck

Position of governor control: As for required engine rated speed

Fuel: Shell diesel-fuel, density 0,830 kg/l at 15°C,
commercial, in accordance with DIN 51 601.

Engine oil: BP Energol - diesel, D HD 20

(1) Sustained Power Tests

| Duration of test h | Horse Power Metric hp | Engine Speed rev/min | Equiv. torque kpm | Spec. Fuel Cons. g/hph | Mean Temperatures Fuel °C | Oil °C | Coolant °C | Air °C | Atm. Press. mm Hg |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Power | | | | | | | | | |
| 2 | 29,9 | 2200 | 9,7 | 188 | 19 | 88 | 85 | 18 | 747 |
| Power at 85 % of engine speed at maximum torque | | | | | | | | | |
| 1 | 14,2 | 990 | 10,3 | 195 | 17 | 80 | 94 | 17 | 746 |

(2) Varying Speed Tests

| Horse Power Metric hp | Engine Speed rev/min | Fuel Consumption l/h | hph/l | g/hph | Mean Temperatures Fuel °C | Oil °C | Coolant °C | Air °C | Atm. Press mm Hg |
|---|---|---|---|---|---|---|---|---|---|
| Power at rated engine speed for road transport work | | | | | | | | | |
| 29,9 | 2200 | 6,77 | 4,42 | 188 | 19 | 88 | 85 | 18 | 747 |
| Power at rated engine speed for field work and belt work at standard belt speed (in accordance with DIN 9630 andBS 1495) | | | | | | | | | |
| 27,4 | 2000 | 6,09 | 4,50 | 185 | 20 | 87 | 85 | 19 | 746 |
| Power at engine speed for P.T.O. work with P.T.O.standard speed: 540 rev/min (in accordance with:DIN 9611 and BS 1495) | | | | | | | | | |
| 26,2 | 1891 | 5,77 | 4,53 | 183 | 21 | 92 | 90 | 20 | 746 |
| Maximum no load speed with governor set for full load at 2200 rev/min engine rated speed | | | | | | | | | |
| - | 2340 | 1,75 | - | - | 19 | 82 | 70 | 20 | 747 |
| Maximum no load speed with governor set for full load at 2000 rev/min engine rated speed | | | | | | | | | |
| - | 2180 | 1,59 | - | - | 19 | 80 | 70 | 19 | 747 |

b) Belt test

Date and location of test: 31.8.1961, Schlepper-Prüffeld, Da.-Kranichstein

Type of dynamometer : Water brake - Schenck

Position of governor control: As for required engine rated speed

Fuel : Shell diesel-fuel, density 0,830 kg/l at 15°C, commercial in accordance with DIN 51 601.

Engine oil : BP Energol - Diesel, D HD 20

Transmission oil : 10W30, multi - purpose

(1) Sustained Power Tests

| Duration of Test h | Horse Power Metric hp | Engine Speed rev/min | Equiv. Torque kpm | Spec. Fuel Cons. g/hph | Mean Temperatures Fuel °C | Oil °C | Coolant °C | Air °C | Atm. Press. mm Hg. |
|---|---|---|---|---|---|---|---|---|---|
| Maximum power at rated engine speed | | | | | | | | | |
| 2 | 26,5 | 2198 | 8,7 | 197 | 26 | 76 | 78 | 29 | 752 |
| Maximum power at rated engine speed | | | | | | | | | |
| 2 | 24,3 | 2000 | 8,7 | 199 | 27 | 85 | 90 | 30 | 752 |
| Power at 85 % of engine speed at maximum torque | | | | | | | | | |
| 1 | 10,7 | 978 | 7,8 | 211 | 27 | 83 | 88 | 30 | 752 |

(2) Varying Speed Tests

| Horse Power Metric hp | Engine Speed rev/min | Fuel Consumption l/h | hph/l | g/hph | Mean Temperatures Fuel °C | Oil °C | Coolant °C | Air °C | Atm. Press. mm Hg. |
|---|---|---|---|---|---|---|---|---|---|
| Power at rated engine speed for road transport work | | | | | | | | | |
| 26,6 | 2194 | 6,44 | 4,13 | 201 | 24 | 80 | 82 | 26 | 751 |
| Power at Standard linear belt speed 16,7m/s and 15,7m/s with 289mm and 269mm dia. pulleys respectively-in accordance with DIN 9630 and BS 1495 | | | | | | | | | |
| 24,3 | 2000 | 5,84 | 4,16 | 199 | 27 | 85 | 96 | 27 | 752 |
| Maximum no load speed with governor set for full load at 2200 rev/min engine rated speed | | | | | | | | | |
| - | 2335 | 1,72 | - | - | 26 | 80 | 82 | 26 | 751 |
| Maximum no load speed with governor set for full load at 2000 rev/min engine rated speed | | | | | | | | | |
| - | 2150 | 1,75 | - | - | 27 | 82 | 78 | 28 | 752 |

# P A R T III

## DRAWBAR TESTS IN ARTIFICIAL TRACK

Date of tests : 23.9. - 12.10.1961

Type of track : Concrete.

Position of governor control: As set for full power at engine rated speeds: 2200 rev/min and 2000 rev/min

Type of tyres : Rear: 10 - 28 AS, 6ply pneumatic, straight bar open centre, Dunlop T 32

Front: 5,50 - 16 AS Front, 4ply pneumatic.

Fuel: Shell diesel - oil, density 0,830 kg/l at 15°C, commercial, in accordance with DIN 51 601.

Engine oil: BP Energol - diesel D, HD 20

Transmission oil: 10 W 30, multi - purpose.

### A. Tests with ballast

| Weight of tractor, | without driver: | with driver: |
|---|---|---|
| Weight without ballast - | Front 525 kg | Front 540 kg |
| | Rear 901 kg | Rear 968 kg |
| | Total1426 kg | Total1508 kg |

Ballast - Front: 6 - 18 kg each front frame weights - 108 kg
1 - 38 kg weight per wheel - 76 kg
Rear : 10 - 58 kg weight each per wheel -1160 kg

Water ballast - Front: nil
Rear : 77 kg per each tyre - 154 kg

Weight with full ballast - Front: 804 kg
Rear : 2116 kg
Total: 2920 kg

Tyre Pressure - Front: 2,0 kp/sq cm
Rear : 1,5 kp/sq cm

Height of drawbar above ground: 400 mm.

**SCHLEPPER-PRÜFFELD**
Massey-Ferguson MF 25

Test Nr.4006/OECD

# P A R T III

## DRAWBAR TESTS ON ARTIFICIAL TRACK

### 1. COMPULSORY TEST

Rated engine speed 2000 rev/min

1) Maximum powers and pulls

| Gear No. | Maximum Powers | | | | | | | | Maximum Pulls | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Horse Power Metric hp | Corresponding Pull kp | Wheel Slip % | Engine Speed rev/min | Speed km/h | Temperature Coolant °C | Air °C | Atm. Press. mm Hg. | Pull kp | Reason for stall |
| 1 | 15,3 | 3045 | 19,3 | 2080 | 1,36 | 83 | 4 | 752 | 3170 | Wheel spin |
| 2 | 19,7 | 2950 | 17,1 | 2008 | 1,80 | 81 | 2 | 752 | 3165 | Wheel spin |
| 3 | 21,2 | 1880 | 9,9 | 2000 | 3,04 | 85 | 17 | 752 | 2040 | Engine stall |
| 4 | 21,5 | 1275 | 6,3 | 2003 | 4,55 | 85 | 16 | 752 | 1406 | Engine stall |
| 5 | 21,9 | 1050 | 5,1 | 2000 | 5,68 | 85 | 24 | 752 | 1140 | Engine stall |
| 6 | 22,1 | 782 | 3,5 | 2000 | 7,64 | 85 | 24 | 752 | 852 | Engine stall |

2) Fuel consumption

| Gear No. | Optimum fuel consumption | | | Range of pull kp over which specific fuel consumption does not exceed optimum consumption by more than 10% |
|---|---|---|---|---|
| | Specific fuel consumption g/metric hph | Drawbar metric hph/l | Corresponding pull kp | |
| 3 | 244 | 3,40 | 1938 | 1400 - 2040 kp |
| 4 | 236 | 3,51 | 1342 | 1020 - 1406 kp |
| 5 | 237 | 3,49 | 1056 | 730 - 1140 kp |
| 6 | 230 | 3,61 | 800 | 735 - 852 kp |

### 2. SUPPLEMENTARY TEST

Rated engine speed 2200 rev/min

Maximum powers and pulls

| Gear No. | Maximum Powers | | | | | | | | Maximum Pulls | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Horse Power Metric hp | Corresponding Pull kp | Wheel Slip % | Engine Speed rev/min | Speed km/h | Temperature Coolant °C | Air °C | Atm. Press. mm Hg. | Pull kp | Reason for stall |
| 1 | 16,3 | 2900 | 16,0 | 2245 | 1,52 | 84 | 2 | 753 | 3160 | Wheel spin |
| 2 | 21,4 | 2905 | 15,4 | 2193 | 1,99 | 84 | 1 | 753 | 3155 | Wheel spin |
| 3 | 22,8 | 1850 | 9,9 | 2200 | 3,33 | 83 | 21 | 750 | 1995 | Engine stall |
| 4 | 23,3 | 1270 | 6,7 | 2200 | 4,95 | 83 | 18 | 752 | 1400 | Engine stall |
| 5 | 23,8 | 1050 | 5,4 | 2170 | 6,10 | 83 | 16 | 752 | 1160 | Engine stall |
| 6 | 23,7 | 758 | 3,5 | 2200 | 8,39 | 83 | 21 | 750 | 846 | Engine stall |

B. Tests without ballast

| | | without driver: | with driver: |
|---|---|---|---|
| Weight of tractor | Front | 525 kg | 540 kg |
| Weight: | Rear | 901 kg | 968 kg |
| | Total | 1426 kg | 1508 kg |
| Tyre pressure: | Front | 2,0 kp/sq cm | |
| | Rear | 1,5 kp/sq cm | |

Height of drawbar above ground 400 mm

1. COMPULSORY TEST

Rated engine speed 2000 rev/min

1) Maximum powers and pulls

| Gear No. | Maximum Powers | | | | | | | | Maximum Pulls | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Horse Power Metric hp | Corresponding Pull kp | Wheel Slip % | Engine Speed rev/min | Speed km/h | Temperature Coolant °C | Air °C | Atm. Press. mm Hg. | Pull kp | Reason for stall |
| 3 | 14,6 | 1410 | 20,9 | 2062 | 2,79 | 85 | 26 | 744 | 1450 | Wheel spin |
| 4 | 20,4 | 1300 | 13,2 | 2000 | 4,23 | 85 | 24 | 744 | 1400 | Engine stall |
| 5 | 21,8 | 1075 | 8,8 | 2002 | 5,48 | 85 | 24 | 747 | 1155 | Engine stall |
| 6 | 22,1 | 788 | 6,0 | 2005 | 7,58 | 85 | 27 | 747 | 850 | Engine stall |

2. SUPPLEMENTARY TEST

Rated engine speed 2200 rev/min

Maximum powers and pulls

| Gear No. | Maximum Powers | | | | | | | | Maximum Pulls | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Horse Power Metric hp | Corresponding Pull kp | Wheel Slip % | Engine Speed rev/min | Speed km/h | Temperature Coolant °C | Air °C | Atm. Press. mm Hg. | Pull kp | Reason for stall |
| 3 | 17,0 | 1375 | 12,5 | 2240 | 3,34 | 85 | 24 | 744 | 1450 | Wheel spin |
| 4 | 23,0 | 1290 | 11,1 | 2188 | 4,80 | 85 | 21 | 744 | 1390 | Engine stall |
| 5 | 24,2 | 1065 | 8,0 | 2198 | 6,15 | 85 | 17 | 744 | 1125 | Engine stall |
| 6 | 24,0 | 776 | 5,1 | 2198 | 8,35 | 85 | 15 | 744 | 844 | Engine stall |

**SCHLEPPER-PRÜFFELD**
Massey-Ferguson MF 25

Test Nr.4006/0363

## P A R T IV

1. Location of Centre of Gravity

Fuel tank, engine sump, radiator and transmission filled, weight of 75 kg placed on the drivers seat.

Test a) With ballast as for test Part III Test A.

Test b) Without ballast as for test Part III Test B.

| | TEST (a) BALLASTED | TEST (b) UNBALLASTED |
|---|---|---|
| Height above ground. | 543 mm | 628 mm |
| Distance forward from the vertical plane containing the axis of the rear wheels. | 492 mm | 655 mm |
| Distance from the medium plane parallel to the longitudinal axis of the tractor bisecting the track. | 0 | 0 |

2. Turning space and turning radius

Tractor weight and wheel equipment as for drawbar test Part III, Test A.

Wheel track: Front - 1220 mm
Rear - 1235 mm

| | With Brakes | | Without Brakes | |
|---|---|---|---|---|
| | Right-hand | Left-hand | Right-hand | Left-hand |
| Radius of turning space | 3,25m | 3,35m | 3,65m | 3,65m |
| Turning radius | 3,15m | 3,15m | 3,55m | 3,55m |

## P A R T V

1. Repairs and adjustments during tests: none
2. Remarks: none.

Darmstadt, am 8. April 1963

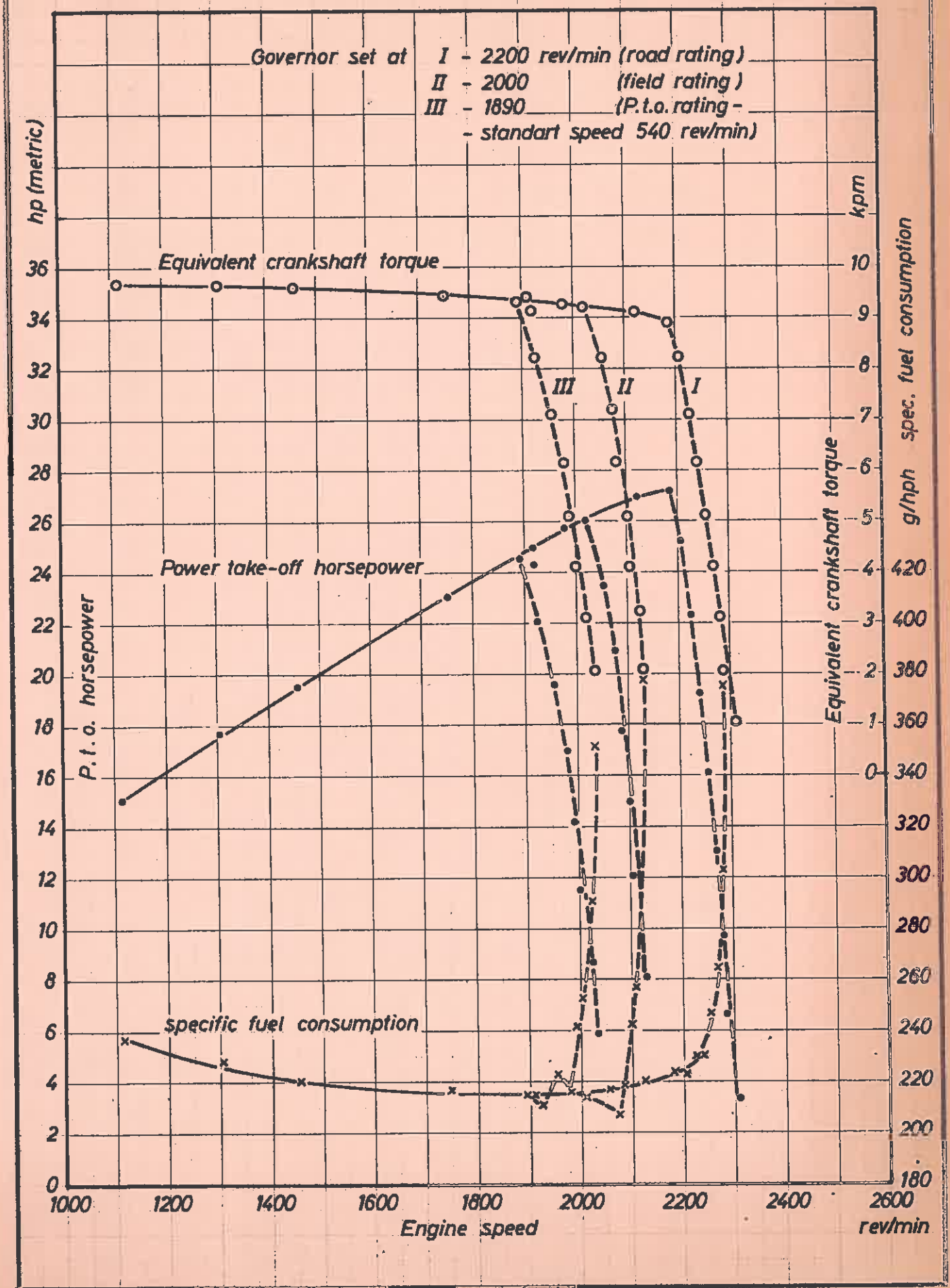
**Schlepperprüffeld Darmstadt**

# Power take-off test

Massey-Ferguson - MF 25

Engine: Perkins - A.4.107

Test Nr: 4006



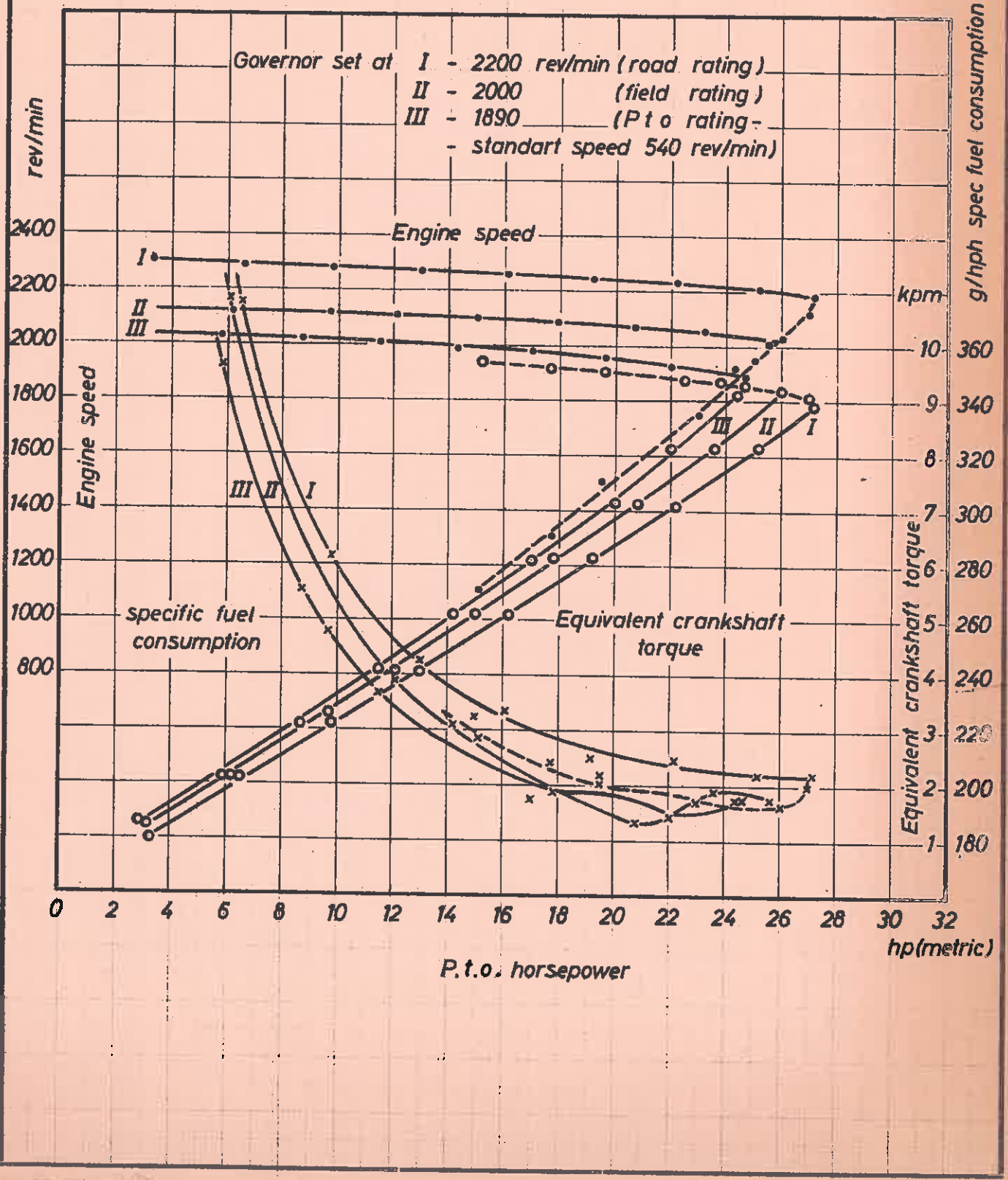
Schlepperprüffeld Darmstadt

# Power take-off test

Massey-Ferguson - MF 25

Engine: Perkins - A . 4 . 107

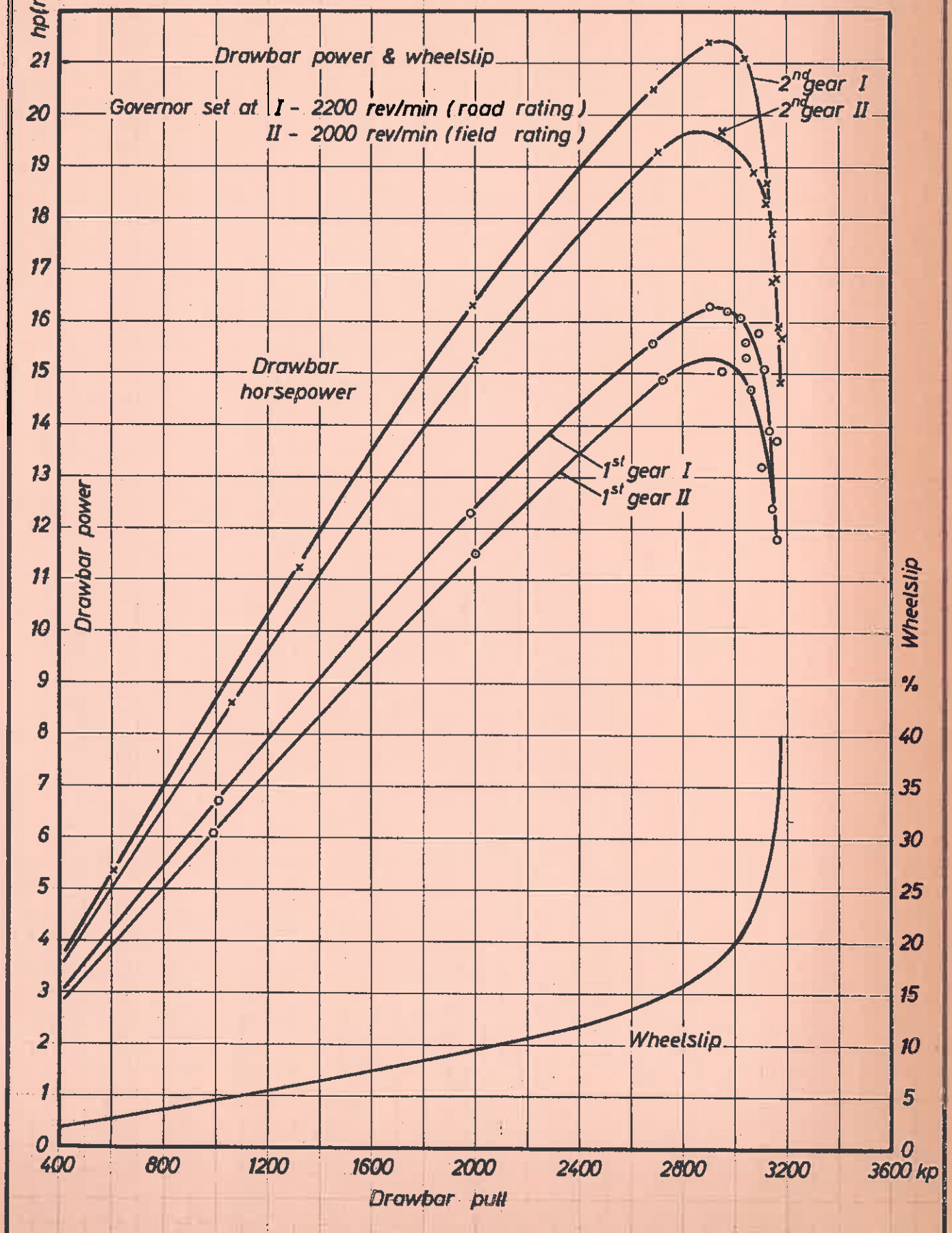
Test Nr.: 4006



| Schlepperprüffeld Darmstadt | Drawbar test with Ballast | Massey-Ferguson - MF 25<br>Engine: Perkins - A.4.107 |
|---|---|---|

Test Nr.: 4006

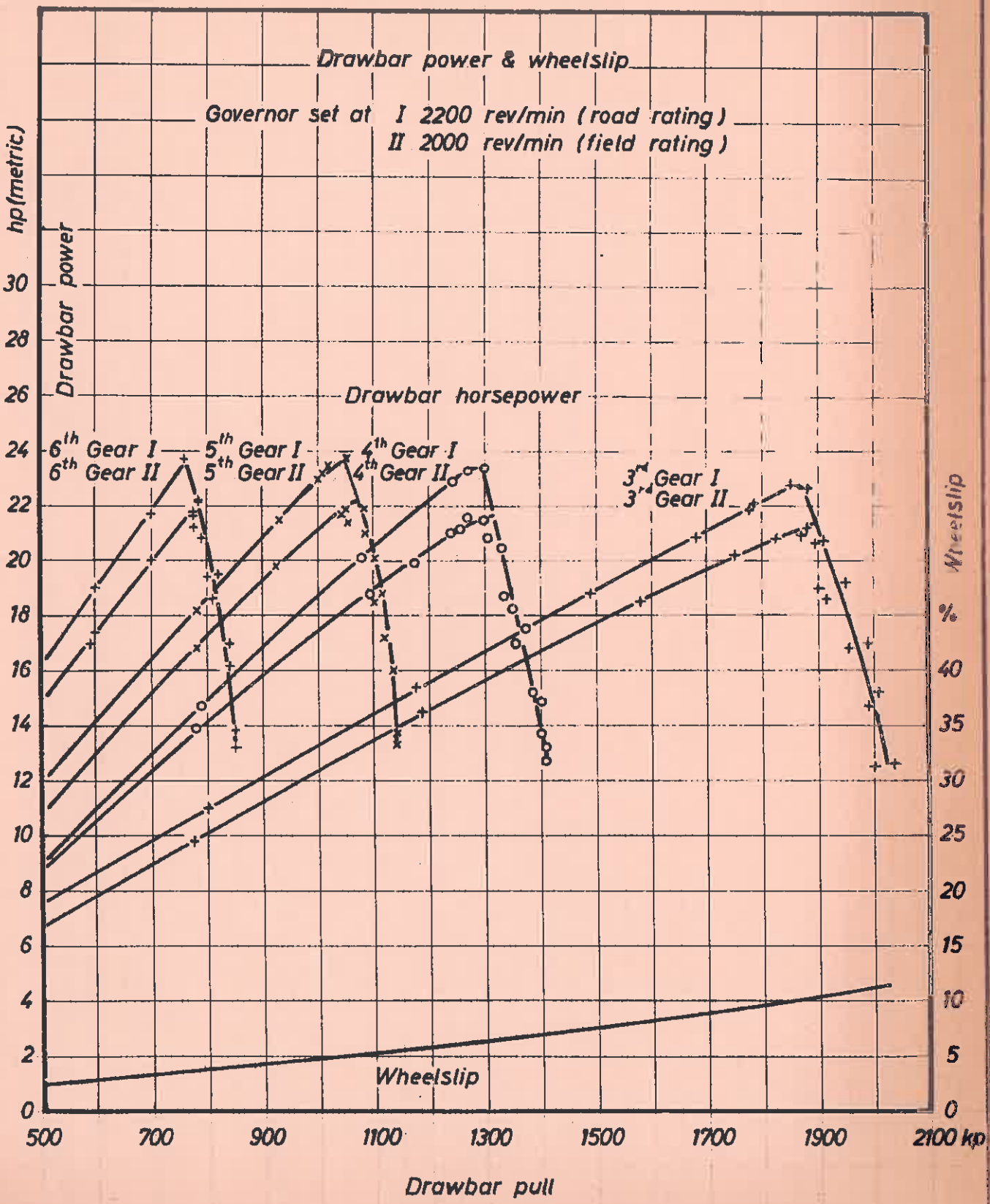
Concrete track



| Schlepperprüffeld Darmstadt | Drawbar Test with Ballast | Massey-Ferguson - MF 25<br>Engine: Perkins - A.4.107 |
|---|---|---|

Test Nr.: 4006

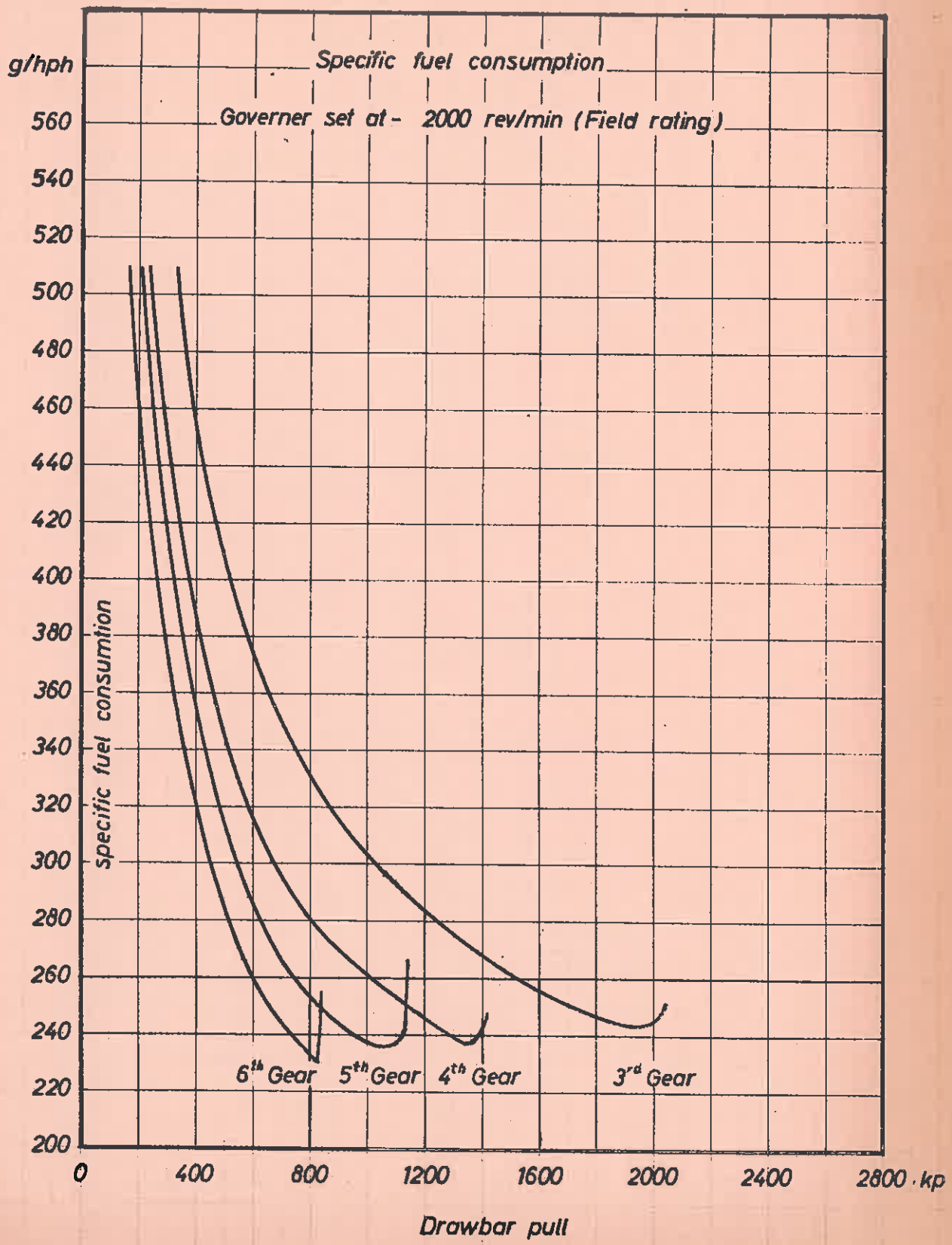
Concrete track



| Schlepperprüffeld Darmstadt | Drawbar Test with Ballast | Massey-Ferguson - MF 25<br>Engine: Perkins - A.4.107 |
|---|---|---|

Test Nr.: 4006

Concrete track



| Schlepperprüffeld Darmstadt | Drawbar Test without Ballast | Massey-Ferguson - MF 25<br>Engine: Perkins - A 4 107 |
|---|---|---|

Test Nr.: 4006

Concrete track

