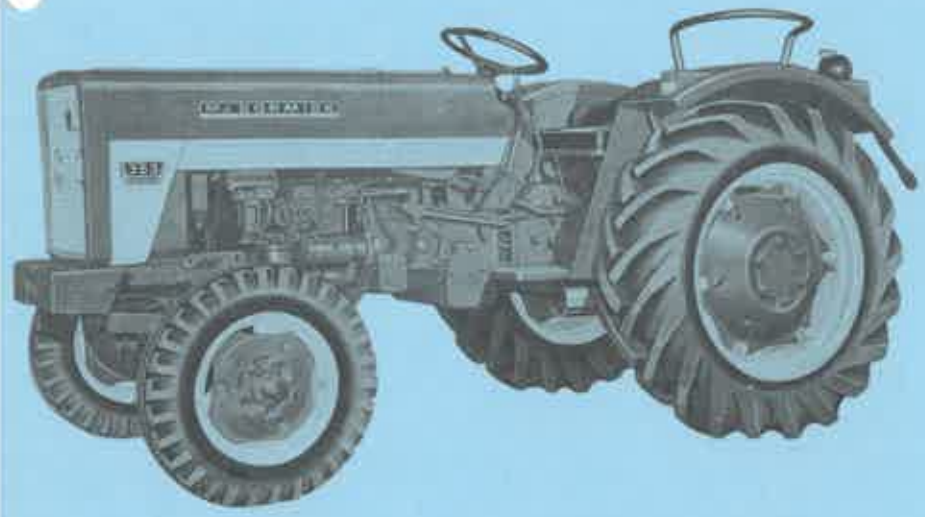
# O.E.C.D. Report No.: 237

Report on test in accordance with
O.E.C.D. Test Code for agricultural tractors

MC. CORMICK DIESEL TRACTOR 353

Manufactured by: INTERNATIONAL HARVESTER COMPANY m.b.H.
404 Neuss am Rhein



Date of Tests: November 1967 - March 1968

This report has been approved by the O.E.C.D.
Co-ordinating Centre (C.N.E.E.M.A.,France) as being
in accordance with the O.E.C.D.-Tractor Test Code.

Date of Approval: 17.May 1968 Serial No.: 237

DEUTSCHE LANDWIRTSCHAFTS-GESELLSCHAFT e.V.
Schlepper-Prüffeld Darmstadt

Darmstadt - Kranichstein

This Bulletin is based on engineering tests 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.

SCHLEPPER-PRÜFFELD
I.H. 353

Test No. 4040/SPF

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Test No.4040/SPF

| | |
|---|---|
| Tractor manufacturer: | INTERNATIONAL HARVESTER COMPANY m.b.H.<br>404 Neuss am Rhein |
| Submitted for test by: | Manufacturer |
| Selected by: | Manufacturer by agreement with Schlepper-Prüffeld Darmstadt |
| Place of running-in: | Neuss and Darmstadt |
| Duration of running-in: | Engine appr. 100 hr, tractor appr. 100 hr |

## SPECIFICATION OF TRACTOR

### Tractor

| | |
|---|---|
| Make: | International Harvester Company,m.b.H.,404 Neuss am Rhein |
| Model: | 353 |
| Type: | Wheel type tractor, unit construction |
| Serial No.: | 1 103 171 |

### Engine

| | |
|---|---|
| Make: | International Harvester Company m.b.H.,404 Neuss am Rhein |
| Model: | D - 155/34 |
| Type: | Direct injection type Diesel, 4-stroke |
| Serial No.: | 12 N 3714 |
| Cylinders: | 3 cylinders,vertical in line, 98,4 mm bore, 111,1 mm stroke; piston displacement 2536 $cm^3$ ; compression ratio 16 : 1 ; wet replaceable cylinder liners |
| Fuel system: | Fuel: commercially available Diesel oil; Bosch type EP/VA 3/100 H 950 AR 43 distributor type injection pump; Bosch vane type fuel feed pump incorporated in injection pump; Boch type DLL 150 S 2640 injection nozzles; injection pressure 213 $kp/cm^2$ ; injection timing 10° before TDC; Bosch star-type cartridge and water trap; capacity of fuel tank appr. 60 l |
| Governor: | Bosch hydralically acting variable speed type governor incorporated in injection pump and automatically acting timing device; governed range of engine speed 550 rev/min to 2100 rev/min; |

rated engine speed

| | |
|---|---|
| for p.t.o. work | 1900 rev/min |
| for field work | 1900 rev/min |
| for transportation work | 1900 rev/min |
| for belt work | 1900 rev/min |

Air cleaner: Main filter
Make: Mann & Hummel, 714 Ludwigsburg;
oil bath cleaner, oil capacity appr. 0,35 l

Pre-cleaner
Make: Mann & Hummel, 714 Ludwigsburg;
cyclone type pre-cleaner.

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**Lubrication system:** Forced feed from gear type pump; suction strainer in sump; fine filter in full flow, make Mann & Hummel, 714 Ludwigsburg; oil capacity 3,5 l; oil change period 200 hours;
recommended oil in winter HD SAE 10W
in summer HD SAE 20W
in tropics HD SAE 30W

**Cooling system:** Pressurised water cooling, impeller assisted and fan with 4 blades 380 mm dia, radiator, thermostat for temperature control; cooling water capacity 13 l.

**Electrical equipment** Voltage 12 Volt, negative earth

**Starting device:** Bosch type JD (R) 12 V 1,8 PS starter motor

**Starting aid:** Bosch heating tube type 12 V 55 A in insuction manifold

**Generator:** Bosch type EH 14 V 11 A 19 generator

**Battery:** Lead acid battery 12 Volt 84 Ah

**Transmission**

**Clutch:** Make: Fichtel & Sachs A.G.,872 Schweinfurt; dry single disc type clutch type G 250; foot pedal operated

**Gearbox:** Make: International Harvester Company m.b.H.
404 Neuss am Rhein;
Agriomatic-transmission including a selecting gear with 4 forward gears and 1 reverse and a group gear with 2 groups, both groups are coupled by a multiple disc type clutch; transmission gives 8 forward speeds and 2 reverse

**Rear axle and final drive:** Make: International Harvester Company m.b.H.
404 Neuss am Rhein;
bevel gear type differential gear with crown wheel and pinion; differential lock fitted, operated by foot pedal

**Oil-capacity:** 34 l; recommended oil-change period 1600 hours

Total ratios and speeds

| Group gear | Gear No. | Number of engine revolutions for one revolution of the driving wheels | Theoretical travelling speed for 1900 rated speed of engine km/h | m/s |
|---|---|---|---|---|
| On the field | 1.L. | 250,91 : 1 | 1,84 | 0,51 |
| | 2.L. | 128,17 : 1 | 3,60 | 1,00 |
| | 3.L. | 80,48 : 1 | 5,73 | 1,59 |
| | 4.L. | 63,97 : 1 | 7,21 | 2,00 |
| On roads | 1.S. | 95,83 : 1 | 4,81 | 1,33 |
| | 2.S. | 48,95 : 1 | 9,42 | 2,62 |
| | 3.S. | 30,74 : 1 | 15,01 | 4,17 |
| | 4.S. | 24,43 : 1 | 18,88 | 5,25 |
| Field road | 1.R. | 150,08 : 1 | 3,07 | 0,85 |
| | 2.R. | 57,32 : 1 | 8,05 | 2,24 |

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| | |
|---|---|
| **Power take-off** | Main p.t.o.: Power take-off, by hand lever engaged; in the speeds of the slow group the p.t.o. may be used as a live p.t.o. by the multiple disc clutch of the group gear |
| Location: | At rear of tractor, 618 mm above ground, in median plane of tractor |
| Dimensions: | 29 x 34,9 x 8,7 mm = 1 3/8", 6 splines (acc.to DIN 9611 Form A; B.S. 1495; ASAE S 203.2) |
| Speed: | 577 rev/min at rated engine speed; 540 rev/min standard p.t.o.speed at 1780 rev/min engine speed, may be checked by tractormeter |
| Direction of rotation: | Clockwise, viewed from tractor rear |
| **Belt pulley** | (Not fitted on tractor tested; figures acc.to manufacturers specification) |
| Location: | At rear of tractor, driving device attached to p.t.o. |
| Dimensions: | 241 mm dia, 162 mm width |
| Speed: | 1441 rev/min at rated engine speed; linear belt speed 18,2 m/s |
| Direction of rotation: | Clockwise, viewed from right hand side of tractor; manually engaged by p.t.o. engaging lever |
| **Power lift** | Make: International Harvester Company m.b.H., 404 Neuss am Rhein<br>IHC type Exact Regelhydraulik with position control, power control and floating position; single acting ram with relief valve, opening pressure 250 kp/cm² (manufacturers figure); Plessey Dynamics type A 18 07 233 gear type pump (optional Bosch gear type pump) directly driven from engine; IH control valve; oil capacity 12,8 l; maximum oil pressure 150 kp/cm²; 3 tappings for remote controlled rams with IH additional control valve for single or dual acting rams |
| **Pull atachment** | |
| Implement linkage: | Three point hitch categorie I (acc.to DIN 9674), hydraul cally controlled by power lift; lifting height above groun from 165 mm to 1000 mm |
| Drawbar: | Fixed on three point implement linkage; central hole and 7 holes with 40 mm distance each apart either side of centre line (acc.toDIN 9676); height above ground may be riged fixed at 450 mm (acc.to DIN 9670)by hinging the lift rods in the brackets; distance of centre hole to the end of p.t.o. 569 mm with lower links in horizontal position. |

| | |
|---|---|
| Trailer hitch: | At rear of tractor; height above ground 715 mm and 840 mm, changed by reversing hitch; distance from rear axle 422 mm |
| Swinging drawbar: | Height above ground 425 mm; distance of hole from end of p.t.o. 530 mm (acc.to DIN 9677) |
| Towing hitch: | At front of tractor; height above ground 660 mm |

**Steering device**

Make: Cam Gears Ltd.
Model: Ross Type 250 Q

**Brakes**

| | |
|---|---|
| Parking brake: | Mechanically operated band brake, acting on brake drum on differential case |
| Foot brake: | Mechanically operated disc brake, acting on brake drums on differential shafts |
| Steering brake: | Brake device and single pedals of foot brake, single pedals latched together for normal use |

**Wheels**

| | |
|---|---|
| Steering wheels: | Two at front; 7,50-16 AS Front 6 ply pneumatic tyres (acc.to DIN 7808); maximum permissible weight on each tyre 710 kp at 2,5 kp/cm$^2$ inflation pressure, 890 kp when transporting mounted implements; rim 5,50 x 16; track changed from 1260 mm to 1760 mm and from 1420 mm to 1820 mm in steps of 100 mm by extending front axle and reversing wheels |
| Driving wheels: | Two at rear; 12,4/11-32 AS 6 ply pneumatic tyres (acc. to DIN 7807); maximum permissible weight on each tyre 1280 kp at 1,5 kp/cm$^2$, 1470 kp when transporting mounted implements; rim W 10 x 32; track from 1235 mm to 1935 mm changed in steps of 100 mm by reversing wheels and offset lug type rim |
| Wheel base: | 1920 mm |

**Weights** With power lift, three-point linkage, full fuel tank and oil, as tested

| | | without driver | with driver |
|---|---|---|---|
| Weight of tractor without ballast: | Front axle load: | 800 kp | 813 kp |
| | Rear axle load : | 1276 kp | 1339 kp |
| | Total: | 2076 kp | 2152 kp |

Ballast front: Non

Ballast rear: 1222 kp, consisting of 8 weights per wheel = 976 kp
and water in tyres = 246 kp

| | | without driver | with driver |
|---|---|---|---|
| Weight of tractor with ballast: | Front axle load: | 800 kp | 813 kp |
| | Rear axle load : | 2498 kp | 2561 kp |
| | Total: | 3298 kp | 3374 kp |

**Seat** Make: Sable, upholstered mould seat and back rest, adjustable spring and shock absorber; height above ground 1180 mm to 1215 mm; in median plane of tractor

**Number of grease points** (whole tractor): 14

**Overall dimensions**

| | |
|---|---|
| Overall length: | 3390 mm with three-point linkage |
| Overall width: | 1650 mm at 1380 mm track, without ballast weights |
| Overall height: | 2180 mm to top of exhaust pipe |
| Maximum ground clearance: | 290 mm above centre line of tractor<br>440 mm apart median plane |

**Lighting equipment:** Electric 12 Volt, acc.to StVZO (German lighting regulation) with main head light beam

| | Height above ground of centre mm | Dimensions of area mm | Distance from outside edge of tractor to centre mm |
|---|---|---|---|
| Head lights | 1040 | 130 ø | 690 |
| Side lights | 1310 | 70 x 38 | 90 |
| Rear lights | 1325 | 70 x 38 | 90 |
| Reflectors | 970 | 75 ø | 60 |

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## FUELS AND LUBRICANTS USED IN TESTS

### Laboratory tests

| | |
|---|---|
| Fuel: | Shell Diesel oil, specific gravity at 15°C : 0,842 kg/l (commercially available quality acc.to DIN 51 601) |
| Engine oil: | Shell Rotella HD 20 |
| Transmission oil: | SAE 90 |

### Track tests

| | |
|---|---|
| Fuel: | Shell Diesel oil, specific gravity at 15°C : 0,842 kg/l (commercially available quality at 15°C : 0,842 kg/l |
| Engine oil: | Shell Rotella HD 20 |
| Transmission oil: | SAE 90 |

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COMPULSORY TESTS

(1) MAIN POWER TAKE-OFF PERFORMANCE

Date and location of tests: 30.11.-1.12.1967

Type of dynamometer: Schenck hydraulic dynamometer

Maximum power

| Horsepower (metric) hp | Speed engine rev/min | Speed p.t.o. rev/min | Fuel consumption total l/h | Fuel consumption specific g/hph | hph/l |
|---|---|---|---|---|---|
| At maximum power - 2 hours test | | | | | |
| 35,6 | 1900 | 577 | 7,48 | 176 | 4,76 |
| At standard p.t.o.speed (540 U/min) | | | | | |
| 34,0 | 1780 | 540 | 7,08 | 176 | 4,80 |
| At the speed recommended by the manufacturer for drawbar work | | | | | |
| 35,6 | 1900 | 577 | 7,48 | 176 | 4,76 |
| Fuel consumption at part loads | | | | | |
| (i) 85% of torque at maximum power | | | | | |
| 31,2 | 1955 | 593 | 6,67 | 180 | 4,68 |
| (ii) unloaded | | | | | |
| - | 2060 | 625 | 2,20 | - | - |
| (iii) 50% of the load defined in (i) | | | | | |
| 16,0 | 2015 | 610 | 4,27 | 224 | 3,75 |
| (iv) maximum power | | | | | |
| 35,6 | 1900 | 577 | 7,48 | 176 | 4,76 |
| (v) 25% of the load defined in (i) | | | | | |
| 8,1 | 2036 | 619 | 3,12 | 325 | 2,60 |
| (vi) 75% of the load defined in (i) | | | | | |
| 23,7 | 1985 | 602 | 5,43 | 193 | 4,36 |

No load maximum engine speed: 2060 rev/min

Torque*) at maximum power: 13,45 kpm

Maximum torque *) 14,40 kpm at 1270 rev/min of the engine

Mean atmospheric conditions: temperature: 18°C
pressure: 760 mm Hg
relative humidity: 45%

Maximum temperatures: coolant: 90°C
engine oil: 95°C
Fuel: 20°C

*) The torque reported is the equivalent crankshaft torque

(2) DRAWBAR PERFORMANCE

Date of tests: 20.-21.3.1968

Type of track: concrete

Height of drawbar above ground: 390 mm

With ballast

| Gear No. and Group | Horse-power (metric) hp | Drawbar pull kp | Engine speed rev/min | Slip of wheels % | Specific work hph/l | Specific fuel consumption g/hph | Temperatures Fuel °C | Ceolant °C | Engine oil °C | Atmospheric conditions Temperature °C | Relative humidity % | Pressure mm Hg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (i) MAXIMUM POWER | | | | | | | | | | | | |
| 1.L. | 18,3 | 3070 | 1990 | 15,3 | 3,33 | 252 | 13 | 75 | 60 | 13 | 86 | 743 |
| 2.L. | 29,5 | 2500 | 1900 | 10,1 | 3,96 | 212 | 12 | 75 | 60 | 12 | 75 | 743 |
| 3.L. | 30,7 | 1550 | 1900 | 5,5 | 4,10 | 205 | 15 | 80 | 65 | 17 | 54 | 743 |
| 4.L. | 31,0 | 1235 | 1896 | 4,2 | 4,13 | 202 | 14 | 80 | 65 | 14 | 62 | 743 |
| 1.S. | 29,6 | 1800 | 1900 | 6,5 | 3,96 | 212 | 10 | 80 | 68 | 10 | 81 | 743 |
| 2.S. | 29,4 | 880 | 1900 | 2,8 | 3,92 | 210 | 15 | 80 | 68 | 15 | 52 | 743 |
| (ii) FIVE-HOUR-TEST AT 75% OF FULL AT MAXIMUM POWER IN 3th GEAR OF L.GROUP | | | | | | | | | | | | |
| 3.L. | 24,3 | 1170 | 1980 | 3,9 | 4,00 | 212 | 5-12 | 80 | 68 | 5-12 | 80 | 755 |
| (iii) FIVE-HOUR-TEST AT PULL CORRESPONDING TO 15% WHEEL SLIP IN TEST (i) | | | | | | | | | | | | |
| 1.L. | 18,3 | 3070 | 1990 | 15,3 | 3,33 | 252 | 13 | 72 | 65 | 13 | 80 | 755 |
| Without ballast | | | | | | | | | | | | |
| (v) MAXIMUM POWER | | | | | | | | | | | | |
| 2.L. | 21,4 | 1808 | 1985 | 14,8 | 3,65 | 231 | 6 | 72 | 60 | 6 | 77 | 741 |
| 3.L. | 30,0 | 1560 | 1905 | 9,9 | 4,02 | 210 | 6 | 75 | 62 | 6 | 75 | 743 |
| 4.L. | 30,9 | 1240 | 1900 | 6,8 | 4,15 | 203 | 5 | 75 | 64 | 5 | 78 | 749 |
| 1.S. | 27,3 | 1808 | 1910 | 15,2 | 3,71 | 228 | 3 | 75 | 64 | 3 | 85 | 743 |
| 2.S. | 29,5 | 892 | 1900 | 4,5 | 3,95 | 214 | 5 | 78 | 65 | 5 | 82 | 743 |

Total oil consumption during ten hours duration of tests (ii) and (iii) : 21,5 g/h

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(3 and 4) TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 7,50-16 AS Front, 6 ply, without ballast
rear: 12,4/11-32 AS, 6 ply, without ballast

Track of wheels front: 1380 mm
rear: 1335 mm

| | With brakes | | Without brakes | |
|---|---|---|---|---|
| | left-hand | right-hand | left-hand | right-hand |
| Radius of turning space | 3,02 m | 3,01 m | 3,27 m | 3,25 m |
| Radius of turning circle | 2,92 m | 2,91 m | 3,17 m | 3,15 m |

(5) LOCATION OF CENTRE OF GRAVITY

| | Without ballast |
|---|---|
| Height above ground | 735 mm |
| Distance forward from the vertical plane containing the axis of the rear wheels | 728 mm |
| Distance from the median plane of the tractor | 0 mm |

## (6) BRAKE TESTS

### A) FOOT BRAKE

Date of test: 15.3.1968

Type of track: concrete

Type of decelerometer: IFK Brake Recorder, August Fischer K.G. 34 Göttingen

Travelling speed of tractor: 19,0 km/h

With cold brakes

| | | Tractor without ballast | Tractor with ballast |
|---|---|---|---|
| maximum Deceleration | $m/s^2$ | 4,9 | 4,7 |
| Stopping distance | m | 6,8 | 5,6 |
| Force on pedal | kp | 31 | 60 |

Brake fade characteristics, hot tests, tractor without ballast

| | | |
|---|---|---|
| Deceleration: | hot/cold | 104% |
| Stopping distance: | cold/hot | 97% |
| Force on pedal: | cold/hot | 82% |

### B) PARKING BRAKE

1) Cold brake

Pull on brake hand lever 40 kp.
No rotation of the rear wheels of the tractor occured when the tractor has been towed.

2) Hot brake

Pull on brake hand lever 40 kp.
One hour after applying the brake no rotation occured when the tractor has been towed.

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(7) MEASUREMENT OF AMBIENT NOISE EMITTED BY THE TRACTOR

Date of test: 12.3.1968

Type of track: concrete

Type of sound level meter: EZGN, Rohde & Schwarz 8 München

Results of test

Speed: 4.S. gear

Travelling speed before acceleration: 14,3 km/h

Sound level: 79,5 dBA

(8) NOISE MEASUREMENT AT THE DRIVERS EAR

Date of test: 25.3.1968

Type of track: concrete

Type of sound level meter: EZGN, Rohde & Schwarz, 8 München

Type of octavfilter: PBO , Rohde & Schwarz, 8 München

No cab fitted on tractor.

Results of tests

| Gear | Travelling speed *) nominal km/h | real km/h | Sone |
|---|---|---|---|
| 4.L. | 7,21 | 7,00 | 108 |
| 2.L. | 3,60 | 3,40 | 105 |

*) The first gear tested corresponds to the travelling speed nearest to 7,25 km/h

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(9) TEST OF POWER LIFT AND HYDRAULIC PUMP PERFORMANCE

Date and location of tests: 22.2.1968, Darmstadt-Kranichstein
Hydraulic fluid: IH - Hydraulicoil

POWER LIFT

| Height above ground in down position hitch point mm | test frame mm | Total vertical movement mm | Maximum force exerted through full lift range kp | Pressure of hydr. oil kp/cm² | Lifting force at front axle load = 0 kp kp |
|---|---|---|---|---|---|
| Measured at the hitch points of lower links | | | | | |
| 165 | - | 834 | 833 | 150 | 1378 |
| Measured at the test frame 610 mm to the rear of the hitch points | | | | | |
| 165 | 161 | 1012 | 832 | 150 | 823 |

Type of linkage look for transport: Mechanically operated shut off valve in cylinder head.
Opening pressure of the cylinder over pressure relief valve: 250 kp/cm² (acc.to manufacturers specification)

PUMP CHARACTERISTICS

(i) opening pressure of relief valve: 155 kp/cm²
sustained pressure by the open relief valve: 150 kp/cm²

Pump delivery rate at external tapping
(ii) at minimum pressure: 27,3 l/min
(iii) at maximum hydraulic power: 26,2 l/min
maximum hydraulic power: 8,6 hp (metric)
delivery pressure: 148 kp/cm²

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OPTIONAL TESTS

(10) ENGINE TEST

Date and location of tests: 27./28.11.1967, Darmstadt-Kranichstein

Type of dynamometer: Schenck hydraulic dynamometer

Maximum power

| Horsepower (metric) hp | Engine speed rev/min | Fuel consumption total l/h | Fuel consumption specific g/hph | hph/l |
|---|---|---|---|---|
| At maximum power - 2 hours test | | | | |
| 36,6 | 1900 | 7,50 | 173 | 4,88 |
| At standard p.t.o.speed (540 rev/min | | | | |
| 35,2 | 1780 | 7,12 | 170 | 4,95 |
| At the speed recommended by the manufacturer for drawbar work | | | | |
| 36,6 | 1900 | 7,50 | 173 | 4,88 |
| Fuel consumption at part loads | | | | |
| (i) 85% of torque at maximum power | | | | |
| 31,8 | 1940 | 6,57 | 174 | 4,84 |
| (ii) unloaded | | | | |
| - | 2045 | 1,97 | - | - |
| (iii) 50% of the load defined in (i) | | | | |
| 16,3 | 1985 | 4,44 | 212 | 3,67 |
| (iv) maximum power | | | | |
| 36,6 | 1900 | 7,50 | 173 | 4,88 |
| (v) 25% of the load defined in (i) | | | | |
| 8,31 | 2027 | 3,01 | 304 | 2,67 |
| (vi) 75% of the lead defined in (i) | | | | |
| 24,1 | 1960 | 5,37 | 188 | 4,48 |

Optimum fuel consumption: 16,9 g/hph at 28,6 hp and 1680 rev/min

Standard fuel consumption 1/2(acc.to DIN 9606) : 3,28/6,36 l/h

No load maximum engine speed: 2045 rev/min

Torque at maximum power: 13,8 kpm

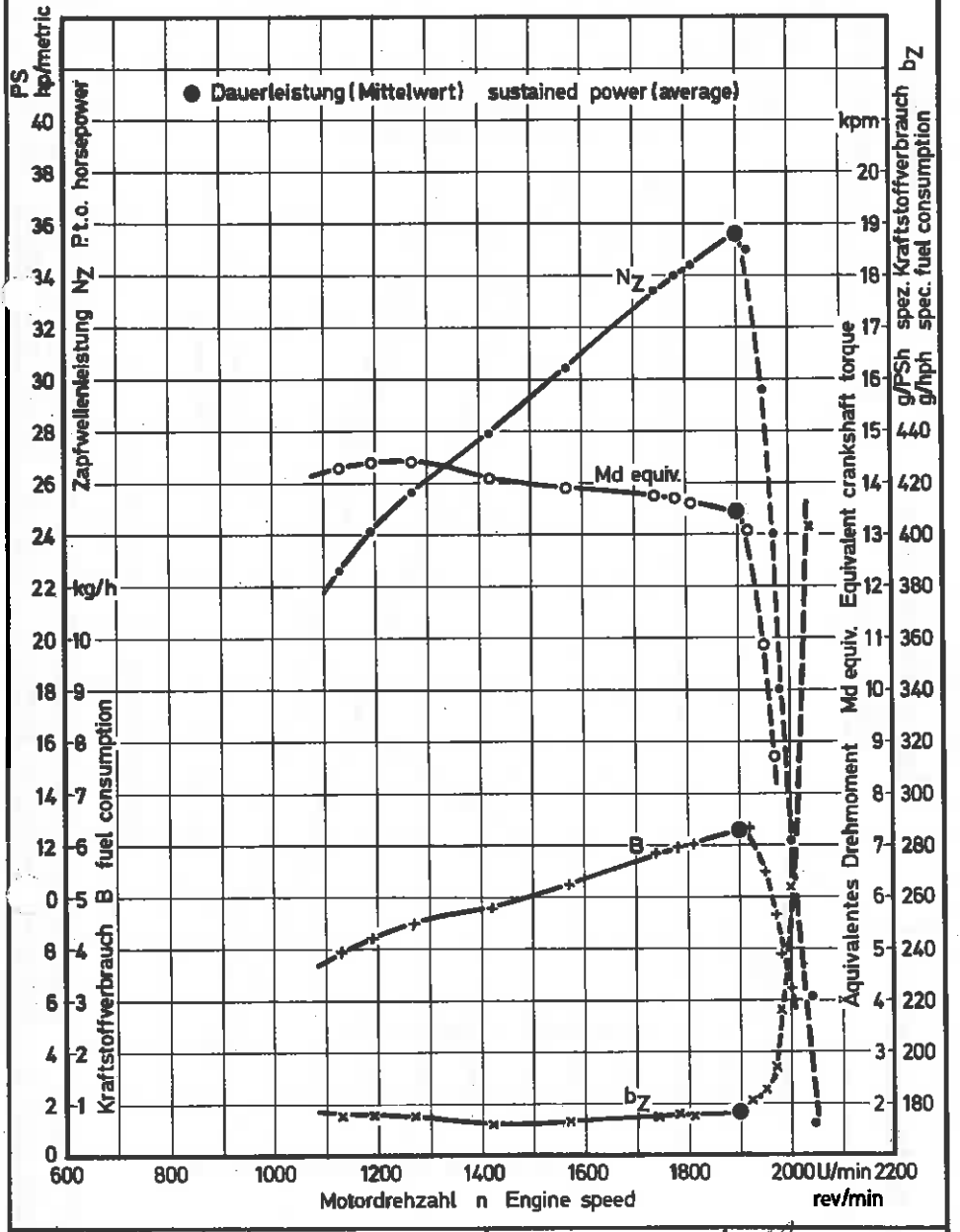
Maximum torque: 14,9 kpm at 1267 rev/min of the engine

Mean atmospheric conditions: temperature: 16°C
pressure: 747 mm Hg
relative humidity: 53%

Maximum temperatures: coolant: 90°C
engine oil: 80°C
fuel: 18°C

| Schlepperprüffeld | Zapfwellenleistung<br>P.t.o. - test | I.H. – Dieselschlepper<br>353<br>I.H. – Dieselmotor D-155/34 |
|---|---|---|

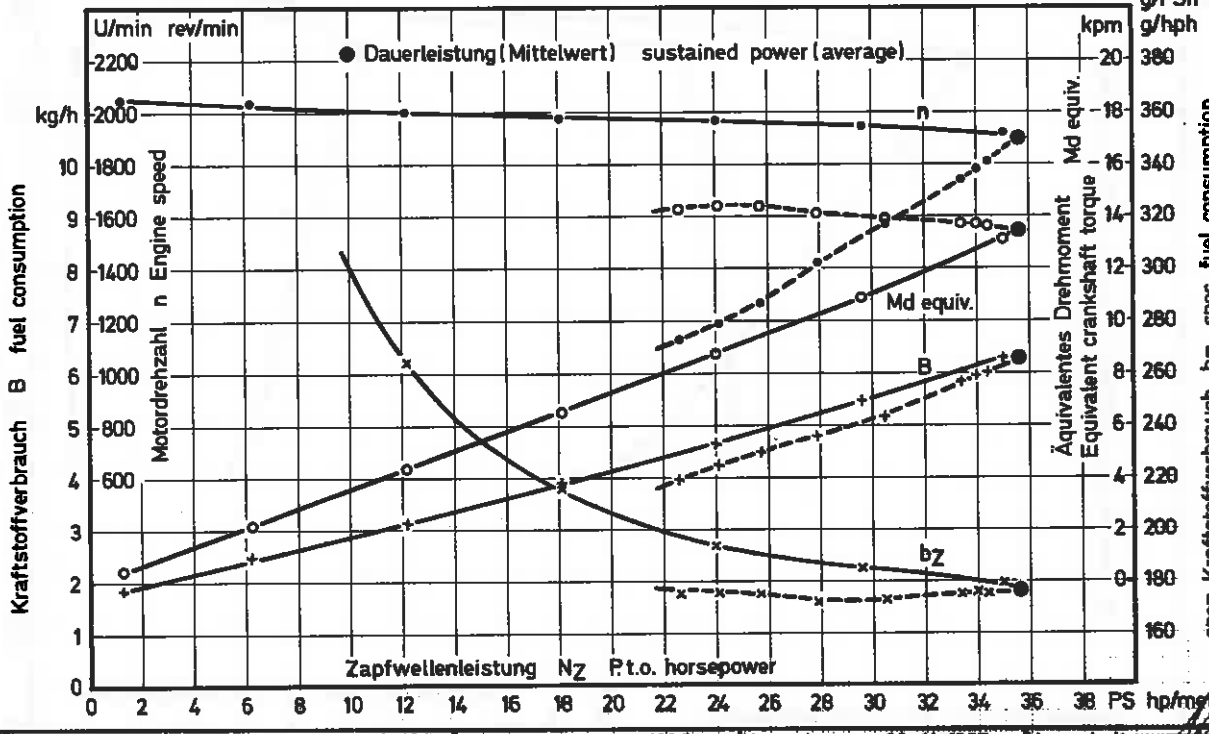
Test Nr.: 4040




| | | | |
|---|---|---|---|
| Motor Nr.: 12 N 3 714 | Motoröl: Shell Rotella HD 20 | Versuchstag: 30. 11. 1967 | Versuchsltg.: |
| Schlepper Nr.: 1 103 171 | Lufttemperatur: 18° C | Versuchs Nr.: 140/4040/67 | |
| Kraftstoff: DK 0,842/15° C | Barom.std.: 756 mm QS | Kurvenblatt: 1 | Fl. |

| Schlepperprüffeld | Zapfwellenleistung<br>P.t.o. - test | I.H. - Dieselschlepper<br>353<br>I.H. - Dieselmotor D-155/34 |
|---|---|---|

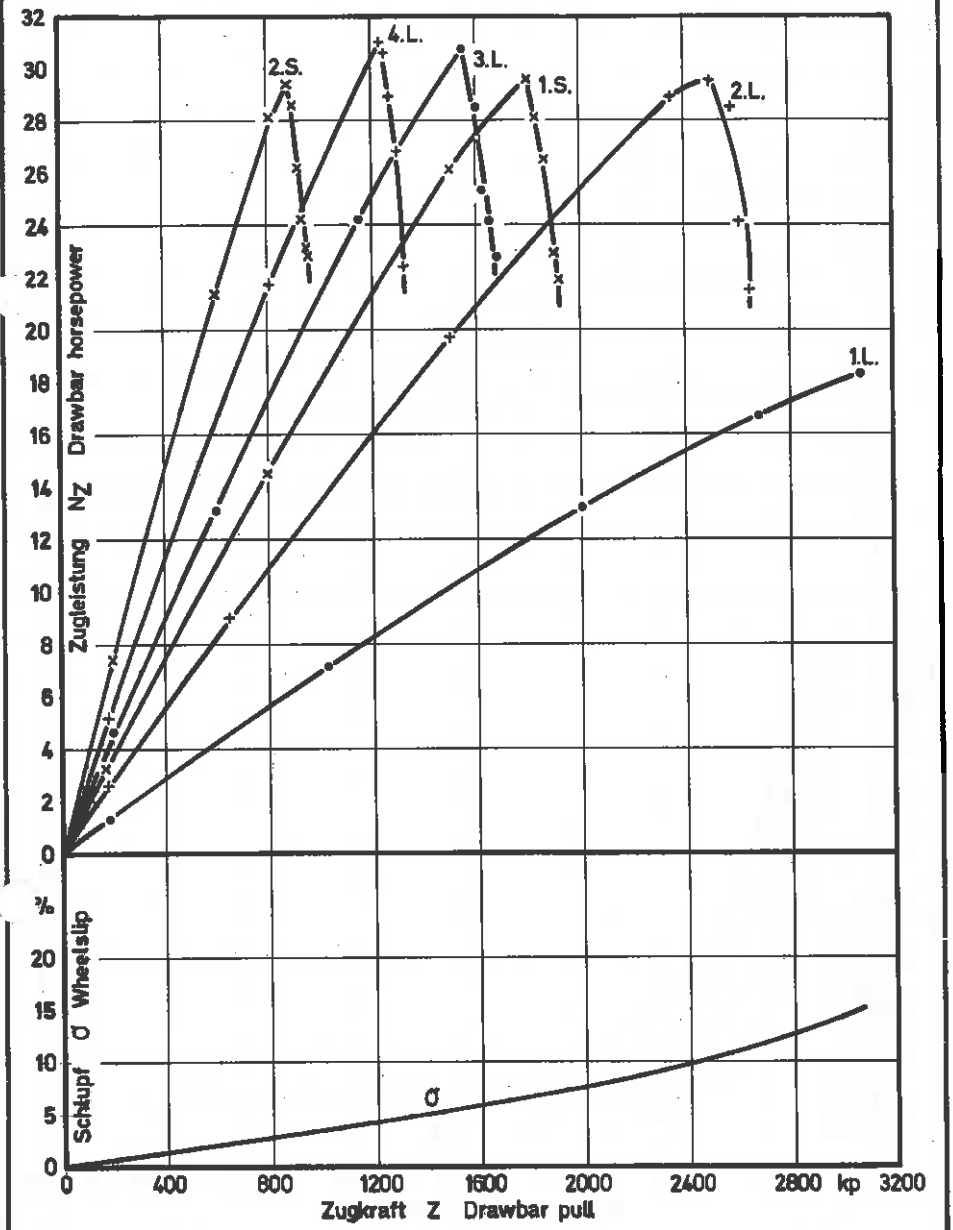
Test Nr.: 4040




| | | | | | |
|---|---|---|---|---|---|
| Motor Nr.: 12 N3 714<br>Schlepper Nr.: 1 103 171 | Kraftstoff: DK 0,842 / 15°C<br>Motoröl: Shell Rotella HD 20 | Lufttemperatur: 18° C<br>Barom.std.: 756 mm QS | Versuchstag: 30. 11. 1967<br>Versuchs Nr.: V 4040/67 | Versuchsltg.:<br>Kurvenblatt: 2 | FL |

| Schlepperprüffeld | Zugprüfung<br>Drawbar - test | I.H.- Dieselschlepper<br>353<br>I.H.- Dieselmotor D-155/34 |
|---|---|---|

PS hp/metric  mit Ballast  with ballast  Test Nr.: 4040

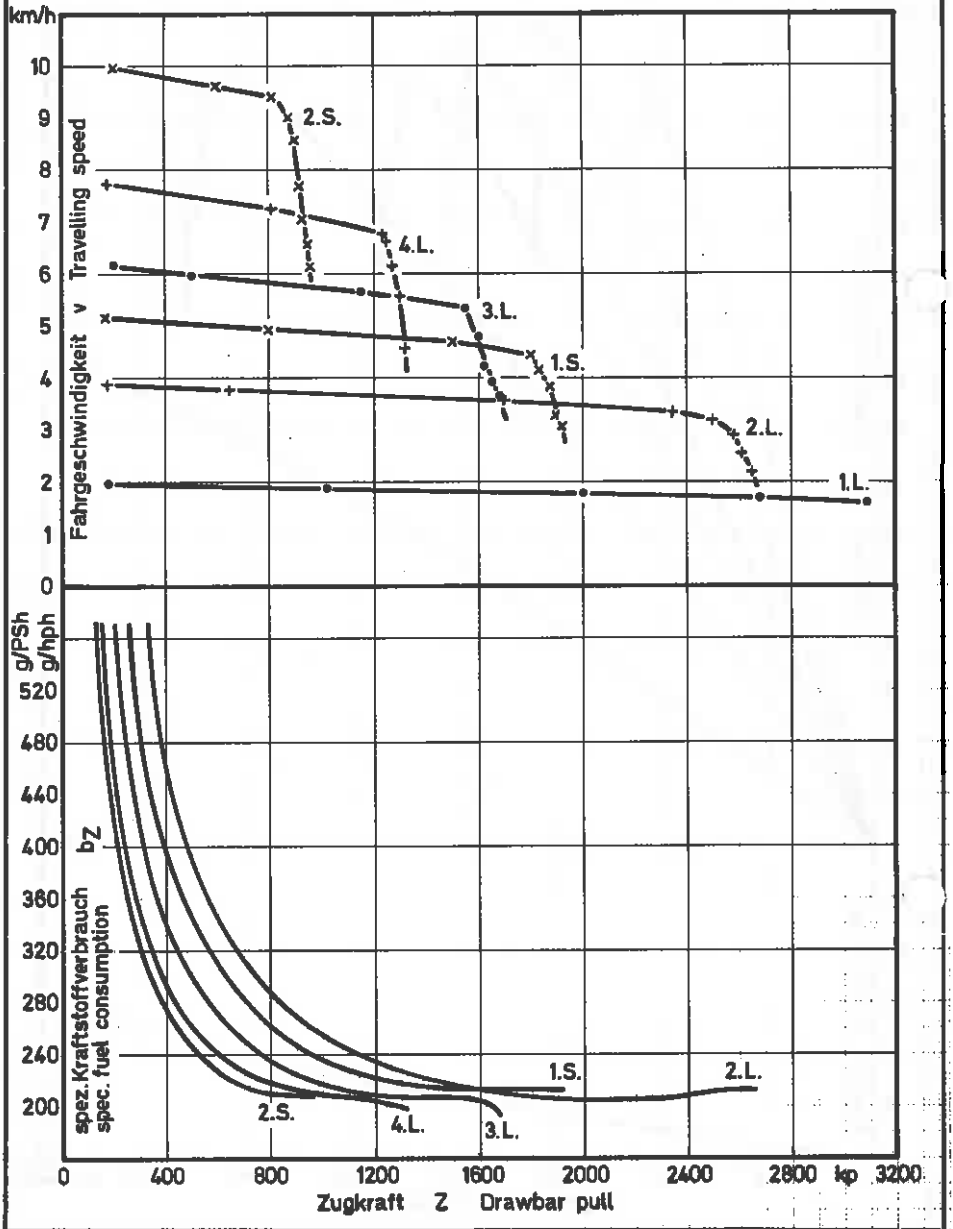



| | | | |
|---|---|---|---|
| Motor Nr.: 12 N3 714 | Motoröl: Shell Rotella HD 20 | Versuchstag: 20. 3. 1968 | Versuchsltg.: |
| Schlepper Nr.: 1 103 171 | Lufttemperatur: 14° C | Versuchs Nr.: 4040/33/68 | |
| Kraftstoff: DK 0,842/15° C | Barom. std.: 743 mm QS | Kurvenblatt: 3 | Fl. |

| Schlepperprüffeld | Zugprüfung<br>Drawbar - test | I.H. - Dieselschlepper 353<br>I.H. - Dieselmotor D-155/34 |
|---|---|---|

mit Ballast with ballast

Test Nr.: 4040

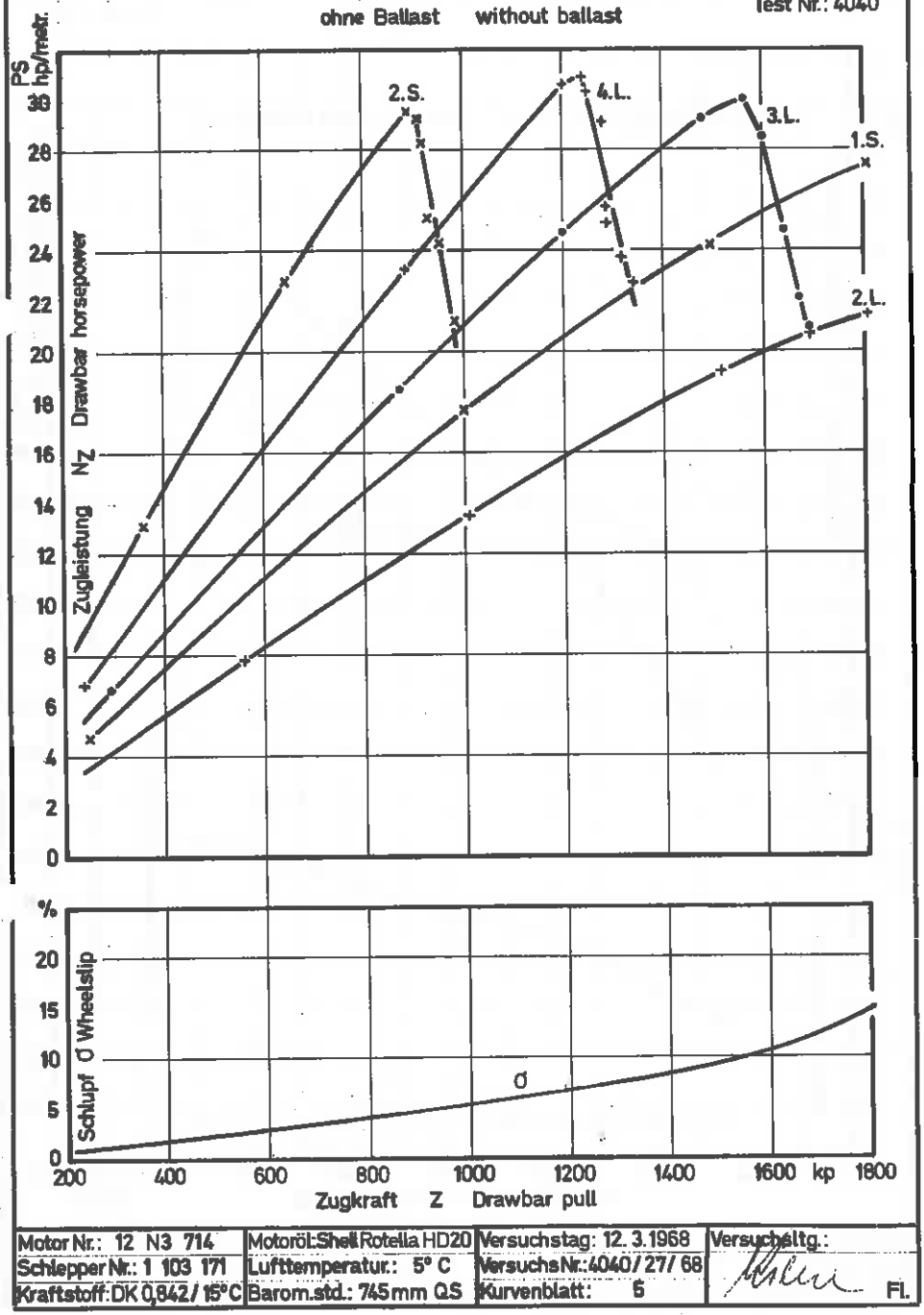



| | | | |
|---|---|---|---|
| Motor Nr.: 12 N3 714 | Motoröl: Shell Rotella HD 20 | Versuchstag: 20. 3. 1968 | Versuchsltg.: |
| Schlepper Nr.: 1 103 171 | Lufttemperatur: 14°C | Versuchs Nr.: 4040/33/68 | |
| Kraftstoff: DK 0,842 / 15°C | Barom.std.: 743 mm QS | Kurvenblatt: 4 | H. |

| Schlepperprüffeld | Zugprüfung<br>Drawbar - test | I. H. - Dieselschlepper<br>353<br>I.H.- Dieselmotor D-155/34 |
|---|---|---|

ohne Ballast without ballast

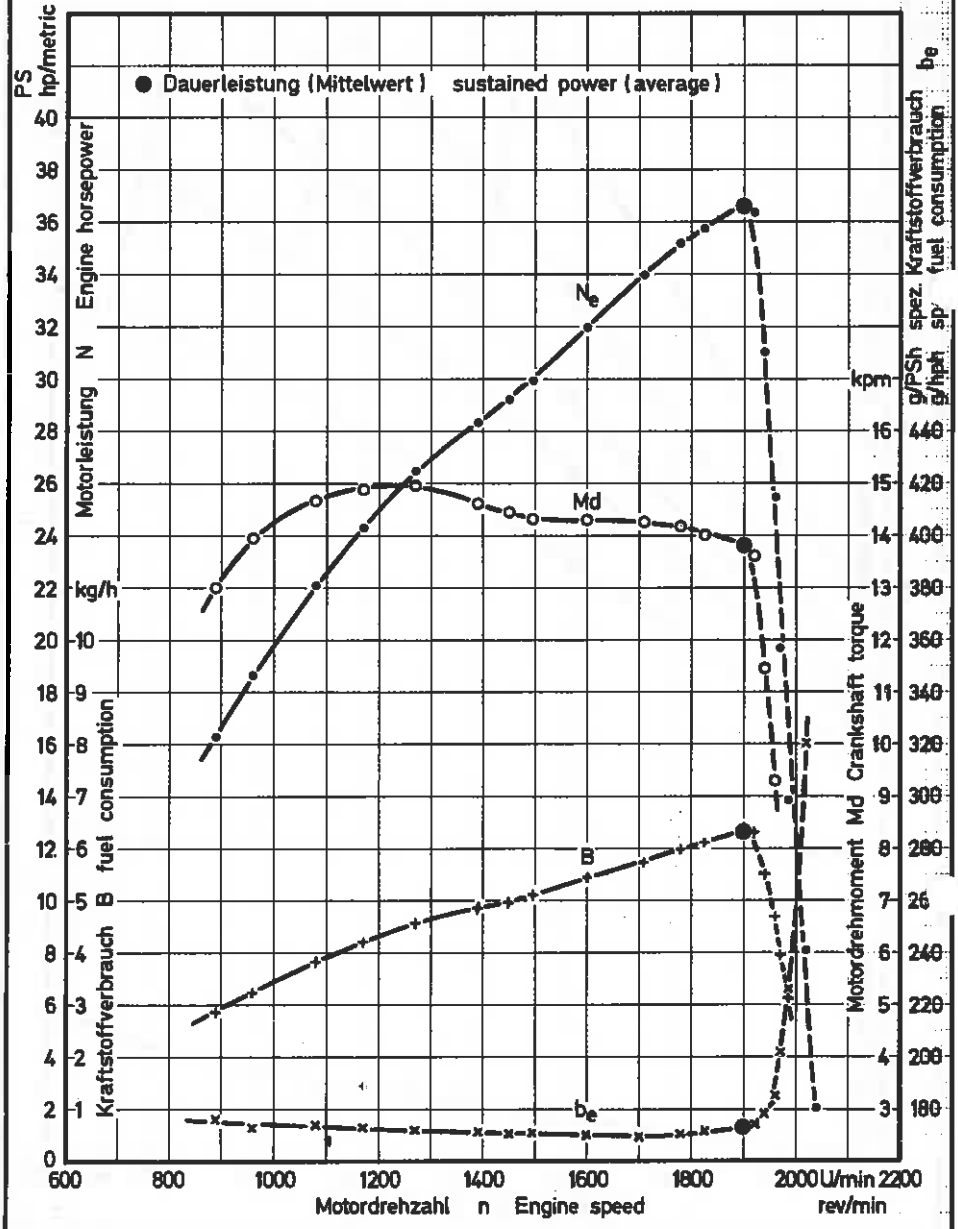
Test Nr.: 4040




| | | | |
|---|---|---|---|
| Motor Nr.: 12 N3 714 | Motoröl: Shell Rotella HD20 | Versuchstag: 12. 3. 1968 | Versuchsltg.: |
| Schlepper Nr.: 1 103 171 | Lufttemperatur: 5° C | Versuchs Nr.: 4040/27/68 | |
| Kraftstoff: DK 0,842/15°C | Barom.std.: 745 mm QS | Kurvenblatt: 6 | Fl. |

| Schlepperprüffeld | Motorleistung<br>Engine - test | I.H. – Dieselschlepper 353<br>I.H. – Dieselmotor D-155/34 |
|---|---|---|

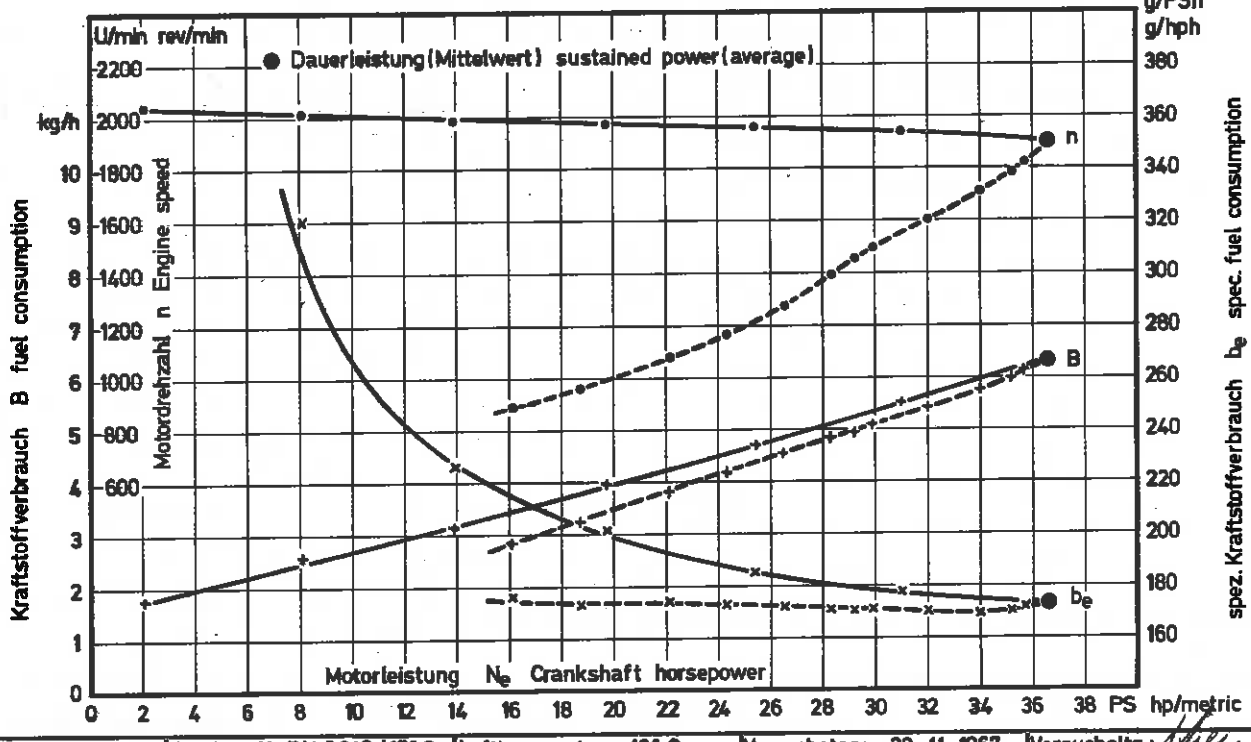
Test Nr.: 4040




| | | | |
|---|---|---|---|
| Motor Nr.: 12 N 3 714 | Motoröl: Shell Rotella HD20 | Versuchstag: 27. 11. 1967 | Versuchsltg.: |
| Schlepper Nr.: 1 103 171 | Lufttemperatur: 12° C | Versuchs Nr.: 140/4040/67 | |
| Kraftstoff: DK 0,842/15°C | Barom.std.: 756 mm QS | Kurvenblatt: 6 | FL |

| Schlepperprüffeld | Motorleistung<br>Engine - test | I.H. – Dieselschlepper<br>353<br>I.H. – Dieselmotor D-155/34 |
|---|---|---|

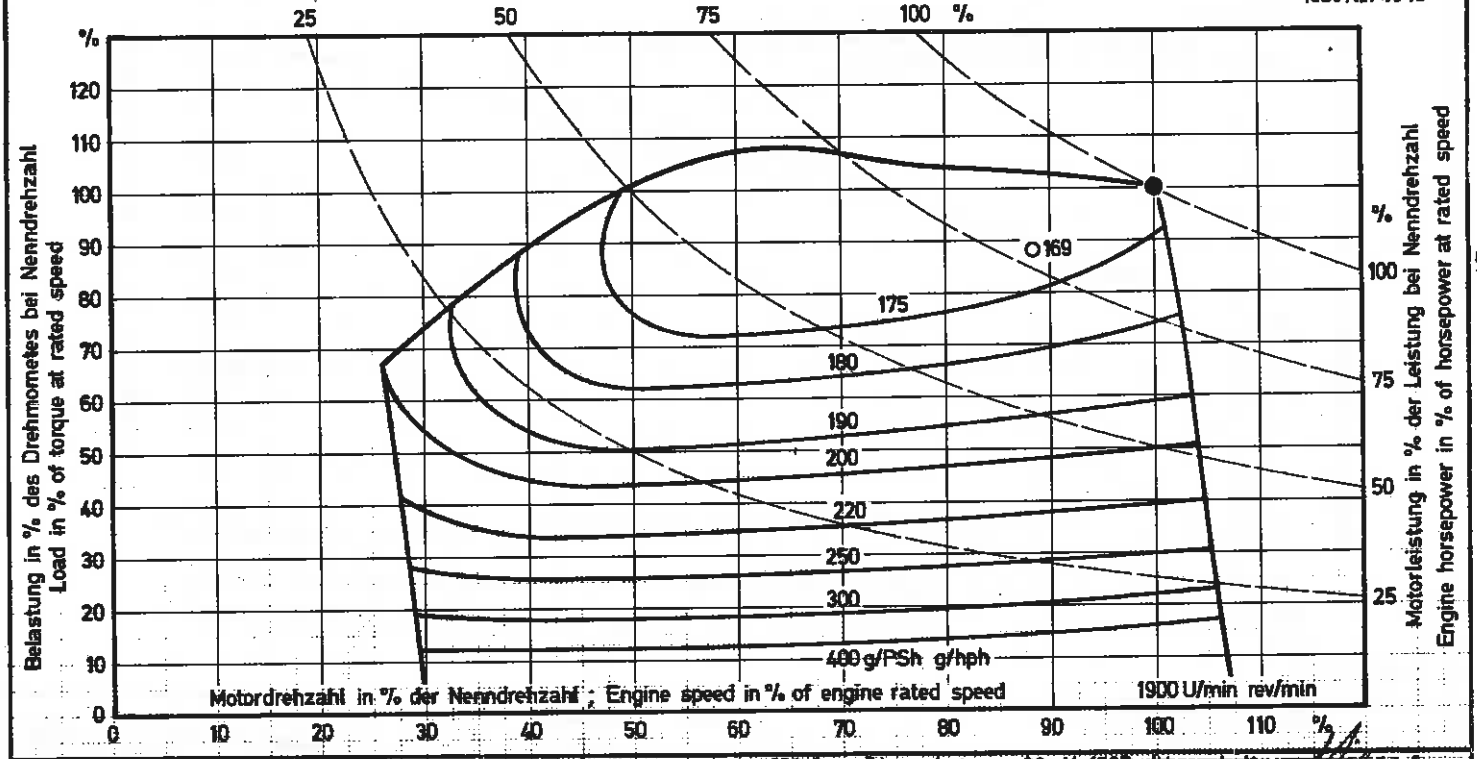
Test Nr.: 4040




| | | | | |
|---|---|---|---|---|
| Motor Nr.: 12 N 3 714<br>Schlepper Nr.: 1 103 171 | Kraftstoff: DK 0,842 / 15° C<br>Motoröl: Shell Rotella HD 20 | Lufttemperatur: 12° C<br>Barom.std.: 756 mm QS | Versuchstag: 22. 11. 1967<br>Versuchs Nr.: 140/4040/67 | Versuchsltg.:<br>Kurvenblatt: 7 Fl. |

| Schlepperprüffeld | Motorkennfeld<br>Engine caracteristic field | I.H. – Dieselschlepper<br>353<br>I.H. – Dieselmotor D – 155 / 34 |
|---|---|---|

Test Nr.: 4040




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Motor Nr.: 12 N 3 714 | Kraftstoff: DK 0,842 / 15° C | Lufttemperatur: 12° C | Versuchstag: 22. 11. 1967 | Versuchsltg.: | | | |
| Schlepper Nr.: 1 103 171 | Motoröl: Sh totella HD 20 | Barom.std.: 756 mm QS | Versuchs Nr.: 1 4040/67 | Kurvenblatt: 8 | Fl. | | |