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CENTRE NATIONAL
DU MACHINISME AGRICOLE
DU GÉNIE RURAL
DES EAUX ET DES FORÊTS

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Division Tracteurs et Travail du Sol

TEST REPORT N° 7762 DATE 17th April 1990

OECD TEST OF AN AGRICULTURAL TRACTOR (RESTRICTED CODE) 50.12

Reference texts : O.E.C.D code II

OECD Approval
N° 1253 Restricted Code
Date 10th April 1990



Tested equipment

Nature	: **TRACTOR**
Make	: **MASSEY FERGUSON**
Model	: B 101/2
Trade name	: 3125 (3140 for NAO)
Number of driving wheels	: 2
Type	: standard

Submitted for tests by

Name : **MASSEY FERGUSON S.A.**
Address : avenue Blaise Pascal
BP 307
60026 BEAUVAIS CEDEX

Tel : 44.89.33.33 **Telex** : 140396 f

This test report may only be duplicated as a whole

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RALITIES

or manufacturer's name and address : MASSEY FERGUSON S.A, BP 307 avenue Blaise Pascal 60026 BEAUVAIS

tted for tests by : MASSEY FERGUSON S.A.

ted for tests by the manufacturer with the agreement of CEMAGREF

of arrival of the equipment in CEMAGREF : 31st october 1989

of running in : BEAUVAIS

ion of running in : 20 h

FICATIONS

ested tractor

: MASSEY FERGUSON
: B 101/2
name : 3125
er of driving wheels : 2
: standard
al number : N 104 005
serial number : N 104 005

Engine

2.2.1 Identification

Make : PERKINS
Model : 1006-6 T 7
Type : 4 strokes, direct injection diesel
Serial number : YB 31228 U 505951

2.2.2 Cylinders

Number : 6
Disposition : vertical, in line
Bore/stroke : 100/127 mm
Capacity : 5985 cm^3
Compression ratio : 16/1
Arrangement of valves : overhead
Cylinders liners : dry

2.2.3 Supercharging

Make : SCHWITZER
Model : turbo-compressor
Type : S2B17622AE/1.00D9
Supercharging pressure : 0,74 bar

2.2.4 Fuel system

Fuel feed system : diaphragm fuel feed pump
Make, type and model of fuel filter : CAV 2 FAS 58488130, dual element with water trap
Capacity of fuel tank : 230 l
Make, type and model of injection pump : CAV, DPA 937, rotative
Serial number : 28266 DGG
Manufacturer's setting of injection pump : 63 ±2 mm^3/stroke (at rated engine speed and full load)
Injection pump timing : 18° before T.D.C.
Make, type and model of injectors : CAV, LRB, 670 3206
Injection pressure : 250 bars

2.2.5 Governor

Make : CAV
Type : mechanical, incorporated into fuel injection pump
Model : DPA
Governed range of engine speed : 850 - 2310 rev/min

2.2.6 Rated engine speed : 2200 rev/min

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2.2.7 Air cleaner

Pre-cleaner : . Make : DONALDSON
. Type and model : cyclone incorporated into main
. Location : under bonnet

Main : . Make : DONALDSON
. Type and model : dry, FLB 10 - 007
. Location : under bonnet

Maintenance indicator : Lamp on desk board

2.2.8 Lubrication system

Type of feed pump : gear
Total oil capacity including filter : 19 l
Oil change period : 400 h
Type and number of filter : 2 cartridges
Filter change period : 400 h
Recommended oil : see "fuel and lubricants used in test"

2.2.9 Cooling system

Type of coolant : water or water anti-freeze mixture
Type of pump : centrifugal
Description of fan
. Puller
. Number of fan blades : 7
. Fan diameter : 504 mm
Coolant capacity : 25 l
Type of temperature control : thermostatic
Surpressure system : 0,5 bar

2.2.10 Starting system

Safety device : electrical switch under clutch pedal
Make : LUCAS
Type and model : pre-engaged M 127
Power : 2,8 kW
Cold starting aid : safety switch on clutch pedal

2.2.11 Electrical system

Voltage : 12 V
Generator :
. Make : MOTOROLA
. Type and model : alternator, 70 AMS
. Power : 840 W
Batteries
. Number : 2
. Rating : 80 Ah at 20 hours
. Cold starting capacity : 420 A for 60 s at -18 °C

2.2.12 Exhaust system

Make : LUCHAIRE
Type : perforated
Model : 107
Location : under hood
Height of outlet above ground : 2869 mm

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2.3 Steering wheels

Number : 2
Location : front axle
Tyres :
- . Size : 11.00 - 16
- . Ply rating : 8
- . Type of casing : cross ply
- . Maximum permissible load on each tyre : 13,1 kN (with inflation pressure 250 kPa)

Track width : 1543 - 1622 - 1644 - 1724 - 1746 - 1826 - 1848 - 1927 - 1949 - 2028 - 2051 - 2130
2153 - 2231 - 2254 - 2333 mm
Method of adjustment : telescopic

2.4 Driving wheels

Number : 2
Location : rear axle
Tyres :
- . Size : 20.8 - 38
- . Ply rating : 8
- . Type of casing : cross ply
- . Maximum permissible load on each tyre : 30 kN (with inflation pressure 130 kPa)

Track width : 1588 - 1680 - 1780 - 1880 - 1980 - 2080 - 2180 mm
Method of adjustment : lugs

2.5 Wheelbase : 2696 mm

2.6 Transmission

2.6.1 Clutch (travel and power take-off)

Mak : VALEO
Type : dry, single plate clutch, pulled type
Number of plates : 1
Diameter of plates : 330 mm
Method of operation (for travel) : foot pedal

2.6.2 Gear box

Make : MASSEY FERGUSON
Type and model : basic gearbox to be manual (4 x 2 speeds)
Arrangement : mechanically operated gear shift, speedshift as an option
Number of speeds : 8 (8x2 with speedshift)
Available option : creeper

2.6.3 Rear axle and final drives

Make : MASSEY FERGUSON
Type and model : crown wheel and pinion and inboard epicyclic reduction
Differential lock :
- . Type and model : mechanical hydraulically actuated
- . Method of engagement : electrical switch
- . Method of disengagement : when brake pedal is depressed

2.6.4 Front axle

Make : MASSEY FERGUSON
Type and model : not driven, telescopically adjustable

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2.6.5 Transmission oils

Capacity :

. Gear box :)
. Hydraulic system :) 64 l
. Rear axle final drives :)

Change period : 1200 h

Filter change period : 600 h

Type of oil filter : removable cartridge in metallic filter elements

Recommanded oils : see "fuel and lubricants used in tests"

2.6.6 Total ratios and travelling speeds

Group	Gear	Number of engine revolutions for one revolution of driving wheels	Nominal travelling speed(*) at rated engine speed of 2200 rev/min (km/h)
T	1	278,260	2,548
	2	184,214	3,849
	3	133,126	5,327
	4	91,951	7,712
T (rear)	1	279,897	2,534
	2	185,297	3,827
	3	133,909	5,296
	4	92,491	7,667
T + S	1	220,162	3,221
	2	145,752	4,865
	3	105,331	6,732
	4	72,752	9,747
T + S (rear)	1	221,457	3,202
	2	146,609	4,837
	3	105,950	6,693
	4	73,180	9,690
R	1	69,387	10,220
	2	45,936	15,437
	3	33,196	21,361
	4	22,929	33,092
R (rear)	1	69,795	10,160
	2	46,206	15,347
	3	33,392	21,236
	4	23,064	30,746
R + S	1	54,900	12,917
	2	36,345	19,511
	3	26,265	26,998
	4	/	/
R + S (rear)	1	55,223	12,841
	2	36,558	19,397
	3	26,420	26,840
	4	/	/

T : Turtle - R : Rabbit - S : Speedshift
(*) Calculated with a tyre dynamic index of 855 mm (ISO 4251/1 - 1984)

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2.7 Main power take-off

2.7.1 General specifications

Independant

Hydraulic multiplate wet clutch

Engagement by lever with electrical switch located at the middle of the upper RH side console

Number of shafts : 1

Method of changing power take-off speed : speed and spline change achieved by physically replacing the 540 rev/min shaft by the 1000 rev/min and vice-versa

2.7.2 Power take-off proportional to engine speed

540 rev/min

Location : at the rear of the tractor on vertical center plane
Diameter of power take-off shaft : 34,9 mm
Number of splines : 6 (in accordance with ISO R 500 - 1979)
Height above ground : 812 mm with tyres 20.8-38
Distance from the median plane of the tractor : 0 mm
Distance behind rear axle : 450 mm

Power take-off speed : 600 rev/min
for rated engine speed : 2200 rev/min

Engine speed : 1980 rev/min
for standard power take-off speed : 540 rev/min

Engine to power take-off ratio : 3,666
Power restriction : none
Direction of rotation (viewed facing driving end) : clockwise

1000 rev/min

Location : at the rear of the tractor on vertical center plane
Diameter of power take-off shaft : 34,9 mm
Number of splines : 21 (in accordance with ISO R 500 - 1979)
Height above ground : 812 mm with tyres 20.8-38
Distance from the median plane of the tractor : 0 mm
Distance behind rear axle : 450 mm

Power take-off speed : 1100 rev/min
for rated engine speed : 2200 rev/min

Engine speed : 2000 rev/min
for standard power take-off speed : 1000 rev/min

Engine to power take-off ratio : 2,00
Power restriction : none
Direction of rotation (viewed facing driving end) : clockwise

2.7.3 Power take-off proportional to ground speed :

Speed of shaft : both 540 and 1000 rev/min
Size of tyre : 20.8 - 38
Travelling distance for one revolution of power take-off shaft : 0,879(540), 0,480(1000)
Number of power take-off shaft revolutions for one revolution of rear wheels : 5,6(540), 10,3(1000)
Direction of rotation with forward gear engaged : clockwise

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2.8 Power lift

Make : MASSEY FERGUSON
Type : top link, electronic position, draft or mixed control
Type hydraulic system : open centre system
Type and number of cylinders : 2, single acting, diameter 73 mm
Type of linkage lock for transport : hydraulic lock
Relief valve pressure setting : 188 bars
Opening pressure of cylinder safety valve : 200 bars
Lift pump type : gears
Transmission between pump and engine : mechanical
Make and number of filters : 1 - PUROLATOR
Time between oil changes : 1200 h
Time between filter changes : 600 h
Oil capacity : 64 l
Site of oil tank : transmission housing
Type and number of tapping points : 2 - on lift cover
Maximum volume of oil available to external cylinders : 25 l
Recommended oil : see "fuel and lubricants used in test"

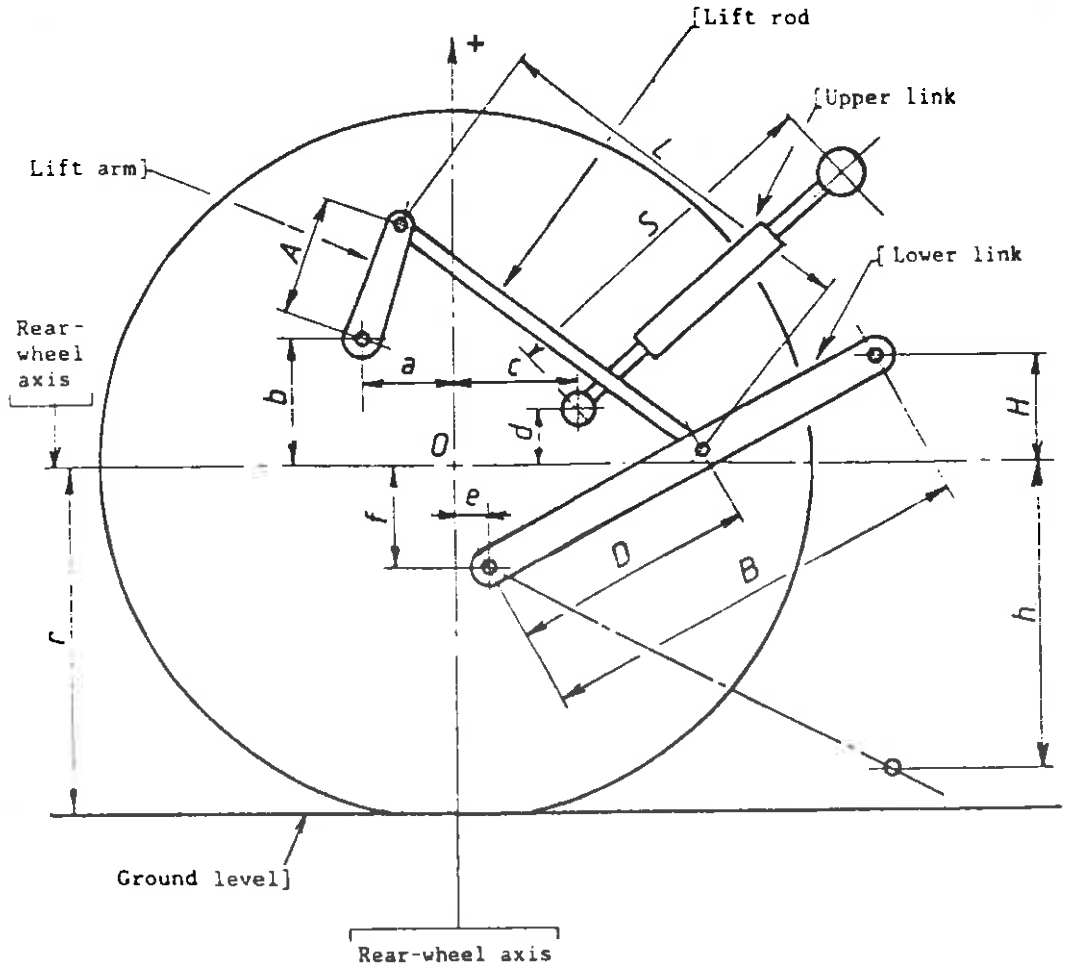
2.9 Three-point linkage

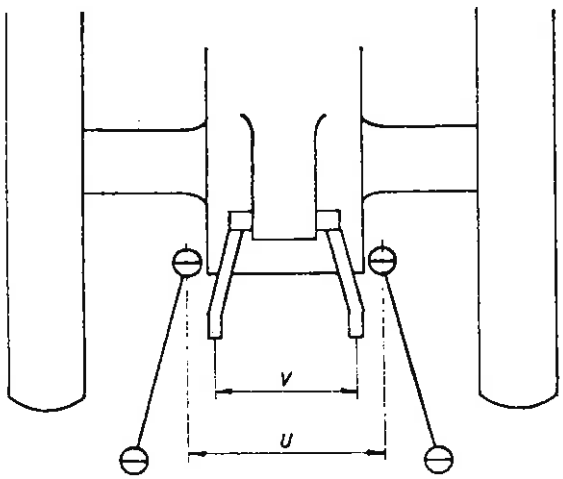
Category : II - III (in accordance with ISO 730/I - 1977)
Category adapter : yes
Controls : Position control by linear sensor measuring the rockshaft position
Draft control by pin sensors at each lower link

Linkage dimensions (mm)				Settings used for test
Rear tyres : dynamic index radius		(r) *	855	
Front tyres : dynamic index radius		(r') *	450	
Length of lift arms		(A)	295	
Length of lower links		(B)	940	
Distance of lift arm pivot point from rear wheels centre line	horizontally	(a)	128	
	vertically	(b)	330	
Horizontal distance between the two lower link points		(u)	610	
Horizontal distance between the two lift arm end points		(v)	604	
Length of upper link		(S)	from 679 to 802	720
Distance of upper link pivot point from rear wheels centre	horizontally	(c)	382	
	vertically	(d)	120|160|200	200
Distance of lower link pivot point from rear wheels centre	horizontally	(e)	161	
	vertically	(f)	-280	
Distance of lower link points to lift rod pivot points on lower link		(D)	550/650	650
Length of lift rods		(L)	from 595 to 827	827
Height of lower hitch points relative to the rear wheels centre - in low position		(h)	from 174 to 800	650
- in high position		(H)	from-140 to 225	-87
Height of lower hitch points when locked in transport position			from 857 to1185	/

* Assuming (r) : tyre dynamic index radius of ISO 4251/1-1984

2.10 Linkage geometry





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2.11 Swinging drawbar

Height above ground : . maximum : 578 mm
. minimum : 578 mm
Type of adjustment : none
Distance of hitch point from rear axle centre, horizontally : 876 mm to rear
Distance of hitch point from power take-off shaft end : . vertically : 234 mm
. horizontally : 201/401 mm
Maximim permissible load : .vertically : 30 kN
.horizontally : 100 kN
Lateral adjustment : 283 mm (left and right hand)
Distance of pivot point from rear axle horizontally : 106 mm to rear
Diameter drawbar pin hole : 33 mm

2.12 Trailer hitch

Height above ground : . maximum : 1078 mm
. minimum : 649 mm
Distance of hitch point from rear axle centre, horizontally : 619 mm
Distance of hitch point from power take-off shaft end :
. vertically : from -163 to 223 mm
. horizontally : 144 mm
Maximum vertical permissible load : 30 kN (static load)
Diameter of pin hole : 30 mm

2.13 Linkage drawbar

Height above ground : . maximum : 880 mm
. minimum : 55 mm
Horizontal distance to power take-off shaft end : 629 mm
Number of holes : 9
Distance between holes : 80 mm
Hole diameter : 24 mm
Thickness and width of drawbar : 30/80 mm

2.14 Front towing hitch

Vertical height at centre of clevis : 890 mm
Width of clevis : 80 mm
Diameter of pin hole : 32 mm

2.15 Steering

Method of operation : hydrostatic steering system, gearbox housing mounted on gear pump
Make : DANFOSS steering unit
Model : OSPC - ON
Type : open center type with integral system relief valves, anti-shock end and anti-cavitation valves
Working pressure : 15,7 to 16,2 MPa
Oil capacity : 64 l
Oil change period : 1200 h
Filter change period : 600 h
Recommended oil : see "fuels and lubricants used in test"

2.16 Brakes

2.16.1 Service brake

Make : MASSEY FERGUSON and GIRLING
Model : oil-immersed, 652 cm² friction area on each brake
Type : single disk brake, hydraulic actuated Girling hydraulic master cylinder
MF hydraulic slave annular piston.
Method of operation : independant or dependant operation of twin pedals (which can be latched)

2.16.2 Parking brake

Make and Type : SIRMAC - HUSCO
Method of operation : hand lever - cable and rod

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2.16.3 Trailer brake

Make : BOSCH
Type : hydraulically actuated valve to regulate oil flow and pressure to the trailer brakes proportional and progressive trailer/tractor braking effort is achieved by linking their services together via a sensive valve
Method of operation : automatic, as the right hand side tractor brake pedal is depressed
Maximum braking pressure : 130-150 bars
Maximum flow : 15 l/min

2.17 Protective structure specifications

2.17.1 Specifications

Manufacturer's name : MASSEY FERGUSON S.A.
Trade name : 3000 - E
Type of structure : . cab
. tiltable : no
CEMAGREF test : 77242
OECD approval number : CSS 094/4

Description : see test report

2.17.2 Driver's seat

Make : GRAMMER DS 85H/90 AR
Type of suspension : parallelogram
Type of damping : gas cylinder
Range of adjustment . longitudinal : 150 mm
. vertical : 60 mm

2.17.3 Miscellaneous

Passenger's seat : either factory fitted or as an accessory
Location : left of the operator
Number of places : 1

2.18 Lighting

Unrestricted beam angle of head light in plan view in accordance with French regulation

	Height above ground of centre (mm)	Size (mm)	Distance from outside edge of tractor to centre at 2180 mm track width (mm)
Headlights	1208	167 x 107	991
Sidelights	1775	120 x 80	410
Rearlights	1844	300 x 62	289
Reflectors	804	98 x 62	557

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3. CONDITIONS DURING TEST

3.1 Overall dimensions

LENGTH m	WIDTH		HEIGHT	
	min m	max m	exhaust silencer m	at top of protective structure
4,527	1,943	2,407	2,869	2,869

3.2 Ground clearance : 428 mm limited by drawbar bracket

3.3 Track setting : . front : 1622 mm
. rear : 1680 mm

3.4 Tractor mass (kg)

(with driver, with tanks full and with cab)

Front	Rear	Total
1660	3145	4805

3.5 Fuel

. Type : Diesel Oil (in accordance to AFNOR standard NFM 15-008)
. Gravity at 15°C : 0,853

3.6 Recommended and used during test lubricants

Engine oil :
. Make : BP
. Type : SUPER TOU - MIL L 2104-C
. Viscosity : 10 W 30

Transmission oils }
Hydraulic fluid } Make : BP
Steering oil } Type : Agrotrans
Final drives } Classification : GL4
Front differential } Viscosity : 80 W 90
and final drives }

Grease : BP AGRICHARGE

Number of lubrication points : 13

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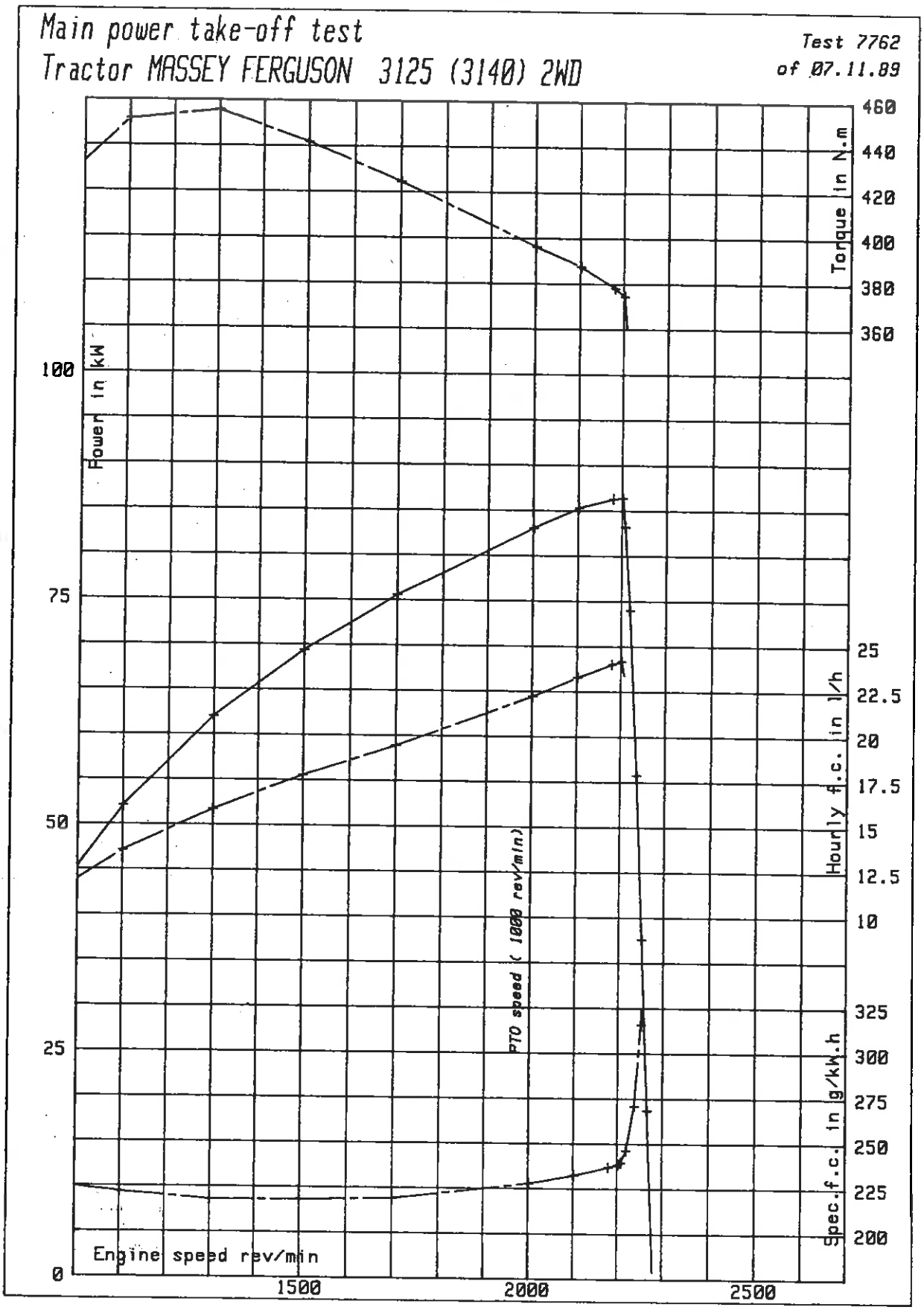
COMPULSORY TESTS RESULTS

4.1 Main power take-off performance

Location and date of tests : ANTONY, 7th november 1989
Type of dynamometer : SCHENCK W780

Power	Speed		Fuel consumption		Specific
	engine	power take-off	hourly	specific	energy
kW	rev/min		l/h	g/kWh	kWh/l
MAXIMUM POWER - TWO HOURS TEST					
86,4	2202	1101	24,17	239	3,57
MAXIMUM POWER AT RATED ENGINE SPEED					
86,4	2202	1101	24,17	239	3,57
PART LOADS (governor control being set for maximum power at rated engine speed) (1) Torque corresponding to 85% of the torque at maximum power at rated engine speed					
74,0	2220	1110	21,39	246	3,46
(2) 75% of the torque defined in (1)					
55,8	2238	1119	17,73	271	3,15
(3) 50% of the torque defined in (1)					
37,6	2252	1126	13,94	316	2,70
(4) 25% of the torque defined in (1)					
18,7	2264	1133	10,03	458	1,86
(5) Unloaded					
-	2280	1140	6,71	-	-
MAXIMUM POWER AT STANDARD POWER TAKE-OFF SPEED (1000 ± 25 rev/min)					
83,1	2002	1001	22,23	228	3,74
PART LOADS (governor control being set for maximum power at standard power take-off speed) (6) Torque corresponding to 85% of the torque at maximum power at standard power take-off speed					
71,7	2020	1010	19,83	236	3,61
(7) 75% of the torque defined in (6)					
53,8	2040	1020	16,09	255	3,35
(8) 50% of the torque defined in (6)					
36,3	2058	1029	12,51	294	2,90
(9) 25% of the torque defined in (6)					
18,3	2076	1038	8,88	414	2,06
(10) Unloaded					
-	2094	1047	5,59	-	-

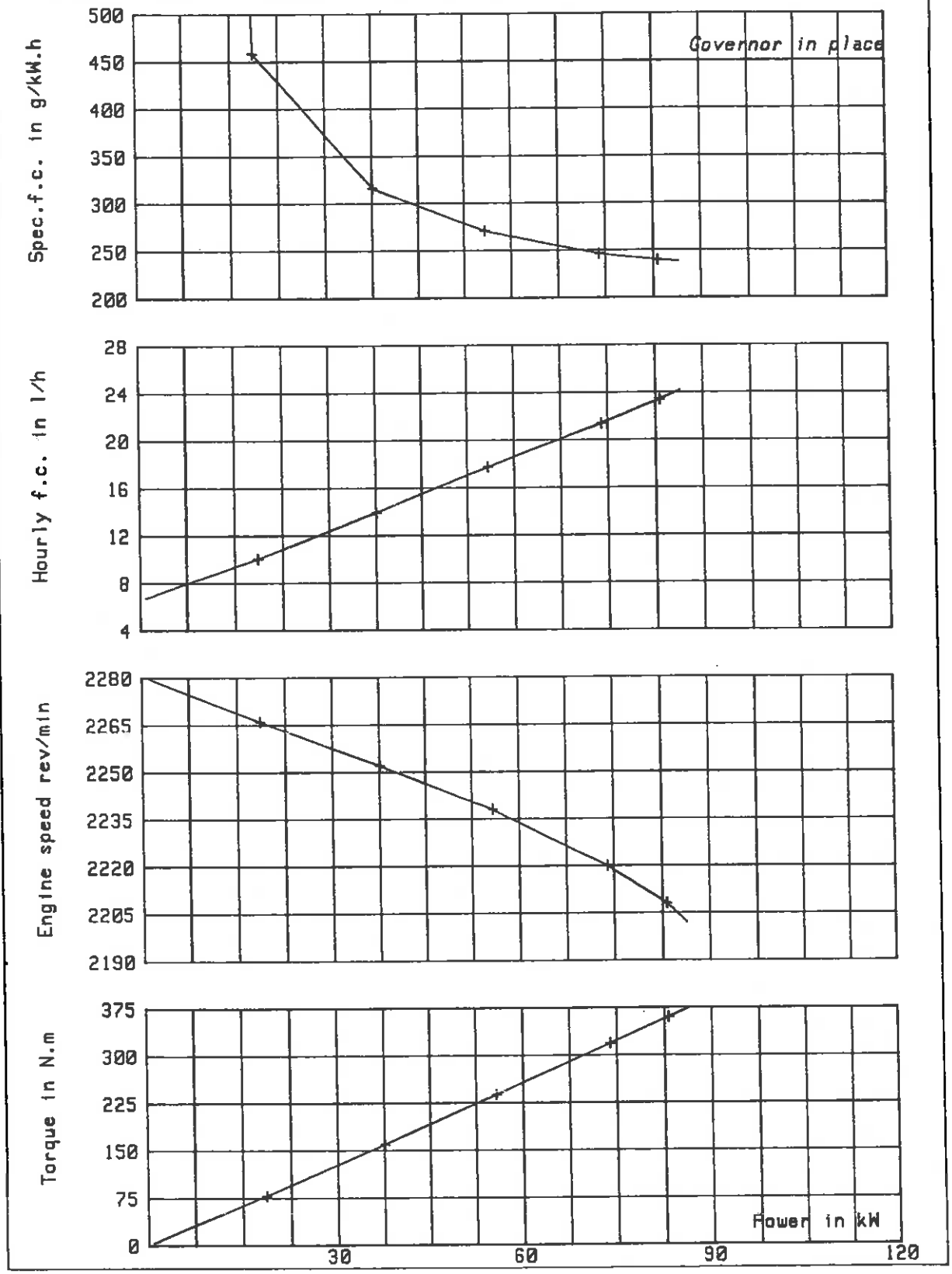
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Main power take-off test
Tractor MASSEY FERGUSON 3125 (3140) 2WD
Test 7762
of 07.11.89
Power in kW
Torque in N.m
Hourly f.c. in l/h
Spec.f.c. in g/kW.h
PTO speed (1000 rev/min)
Engine speed rev/min
0
25
50
75
100
1500
2000
2500
200
225
250
275
300
325
10
12.5
15
17.5
20
22.5
25
360
380
400
420
440
460

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Main power take-off test
Tractor MASSEY FERGUSON 3125 (3140) 2WD

Test 7762
of 07.11.89



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4.1 Main power take-off performance (continued)

Other results

No load, maximum engine speed : 2280 rev/min
Equivalent crakshaft torque at maximum power at rated engine speed : 374,5 N.m
Maximum equivalent crankshaft torque : 455,7 N.m at 1299 rev/min

Mean atmospheric conditions

Temperature : 23 °C
Pressure : 1010 mbar
Relative humidity : 38 %

Maximum temperatures

Coolant : 94 °C
Engine oil : 107 °C
Fuel : 26 °C
Air intake : 25 °C

Fuel consumption at variyng load

Charge	Governor control being set for maximum power at rated engine speed		Governor control being set for maximum power at standard pto speed	
	at 85% (1)	at 50% of 85% (2)	at 85% (1)	at 50% of 85% (2)
Hourly consumption (l/h)	21,39	13,94	19,83	12,51
Standard specific consumption (g/kWh)	246	316	236	294

(1) 85% of the torque corresponding to maximum power for the position of the governor hand lever
(2) 50% of the torque defined in (1)

4.2 Lifting force and hydraulic power

Date : 10th and 11th december 1989

4.2.1 Power lift test

Hydraulic fluid : see "fuel and lubricants used in tests"

	at the hitch point	on the frame
Height of lower hitch point above ground in low position mm	205	178
Vertical movement mm	563	585
Maximum force exerted through full range kN	51,4	43,6
Corresponding pressure of hydraulic fluid bar	175	175
Moment about rear axle kN.m	56,6	74,6
Maximum tilt angle of mast over range of lift degree	/	0°

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4.2.1 Power lift test (continued)

Lifting height (1)	mm	-397	-370	-300	-200	-100	0	+100	+188	+193
Lifting force (2)	at the hitch point kN	-	51,5	53,0	53,2	53,7	53,8	53,4	51,5	51,4
	at the frame kN	55,3	54,3	53,6	51,6	50,3	48,8	46,4	43,6	-

(1) Lifting height relative to the horizontal plane including the lower link pivot points
(2) The values of force measured are corrected to correspond to a hydraulic pressure equivalent to 90% of the actual relief valve pressure setting or to maximum power delivered by the hydraulic system, whichever is lower.

4.2.2 Hydraulic power test

Tapping point used for test : auxiliary service connection
Sustained pressure with relief valve open : 192 bars
Pump delivery rate at minimum pressure : 50,3 l/min

		corresponding to maximum hydraulic power	corresponding to a hydraulic pressure equivalent to 90% of the actual relief valve pressure setting
Pressure	bars	180	175
Flow rate	l/min	47,8	47,5
Power	kW	14,3	13,9

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4.3 Drawbar performance (unballasted tractor)

Date and location of test : 23rd november 1990, Antony

Type of track : Tarmacadam

Height of drawbar above ground : 0,820 m

Tyres	Front	Rear
. Size :	11.00 - 16	20.8 - 38
. Inflation pressure (bar) :	2,5	1,0

Atmospheric conditions :

. Temperature : 7°C
. Pressure : 1014 mbar
. Relative humidity : 62 %

Gear ratio	Travelling speed km/h	Drawbar pull kN	Power kW	Engine speed rev/min	Wheelslip %	Specific consumption g/kWh	Specific energy kW/l	Temperatures (1) °C	(2) °C	(3) °C
MAXIMUM POWER IN TESTED GEAR										
1 T	2,27	42,1	26,6	2266	15	446	1,92	17	82	74
1 T + S	2,86	42,0	33,4	2254	15	397	2,16	21	82	81
2 T	3,39	42,2	39,7	2246	15	366	2,34	22	82	82
2 T + S	4,28	41,6	49,5	2238	15	339	2,52	23	82	84
3 T	4,74	41,2	54,3	2234	15	326	2,62	22	82	82
3 T + S	5,85	41,1	66,8	2216	15	313	2,73	22	82	86
4 T	7,01	38,3	74,6	2188	11	286	2,99	23	82	86
4 T + S	9,29	29,7	76,6	2190	7	277	3,09	22	82	87
1 R	9,75	29,1	78,8	2188	6	268	3,20	25	82	88
1 R + S	12,55	22,5	78,4	2178	4	267	3,20	22	82	88
2 R	15,16	18,7	78,8	2176	2	269	3,18	22	82	88
TRANSMISSION AND FUEL CONSUMPTION CHARACTERISTICS (i) Maximum drawbar power in tested gear										
1 R	9,75	29,1	78,8	2188	6	268	3,20	25	82	88
(ii) 75% of pull at maximum power										
1 R	10,23	21,3	60,5	2234	4	294	2,91	25	82	88
(iii) 50% of pull at maximum power										
1 R	10,44	15,0	43,5	2248	2	326	2,63	24	82	87
(iv) Higher gear same pull as in (i) reduced engine speed										
1 R + S	10,24	21,6	61,4	1774	4	257	3,33	23	82	87
(v) Higher gear as in (ii) reduced engine speed										
1 R + S	10,44	15,5	46,0	1776	2	274	3,12	23	82	83
(vi) Higher gear same pull as in (i) reduced engine speed										
2 R	OUT OF MEASURE									
(vii) Higher gear as in (ii) reduced engine speed										
2 R	10,45	14,8	43,0	1482	2	256	3,34	23	81	83

(1) Fuel temperature - (2) Coolant temperature - (3) Engine oil temperature

CEMAGREF

OPTIONAL TESTS RESULTS

5.1 Engine performance

Location and date of tests : ANTONY, 28th decmber 1990
Type of dynamometer : SCHENCK W780

Power	Engine speed	Fuel consumption		Specific energy
		hourly	specific	
kW	rev/min	l/h	g/kWh	kWh/l
MAXIMUM POWER - TWO HOURS TEST				
93,6	2202	24,75	226	3,78
MAXIMUM POWER AT RATED ENGINE SPEED				
93,6	2202	24,75	226	3,78
MAXIMUM POWER AT STANDARD POWER TAKE-OFF SPEED (1000 ± 25 rev/min)				
89,2	1999	22,70	217	3,93
PART LOADS (governor control being set for maximun power at rated engine speed) (1) Torque corresponding to 85% of the torque at maximum power at rated engine speed				
80,6	2226	21,72	230	3,71
(2) 75% of the torque defined in (1)				
60,3	2241	17,61	249	3,42
(3) 50% of the torque defined in (1)				
40,7	2257	13,46	282	3,02
(4) 25% of the torque defined in (1)				
20,5	2272	9,48	395	2,16
(5) Unloaded				
-	2289	5,81	-	-

Other results

No load, maximum engine speed : 2289 rev/min
Equivalent crakshaft torque at maximum power at rated engine speed : 405,8 N.m
Maximum equivalent crankshaft torque : 476,9 N.m at 1344 rev/min

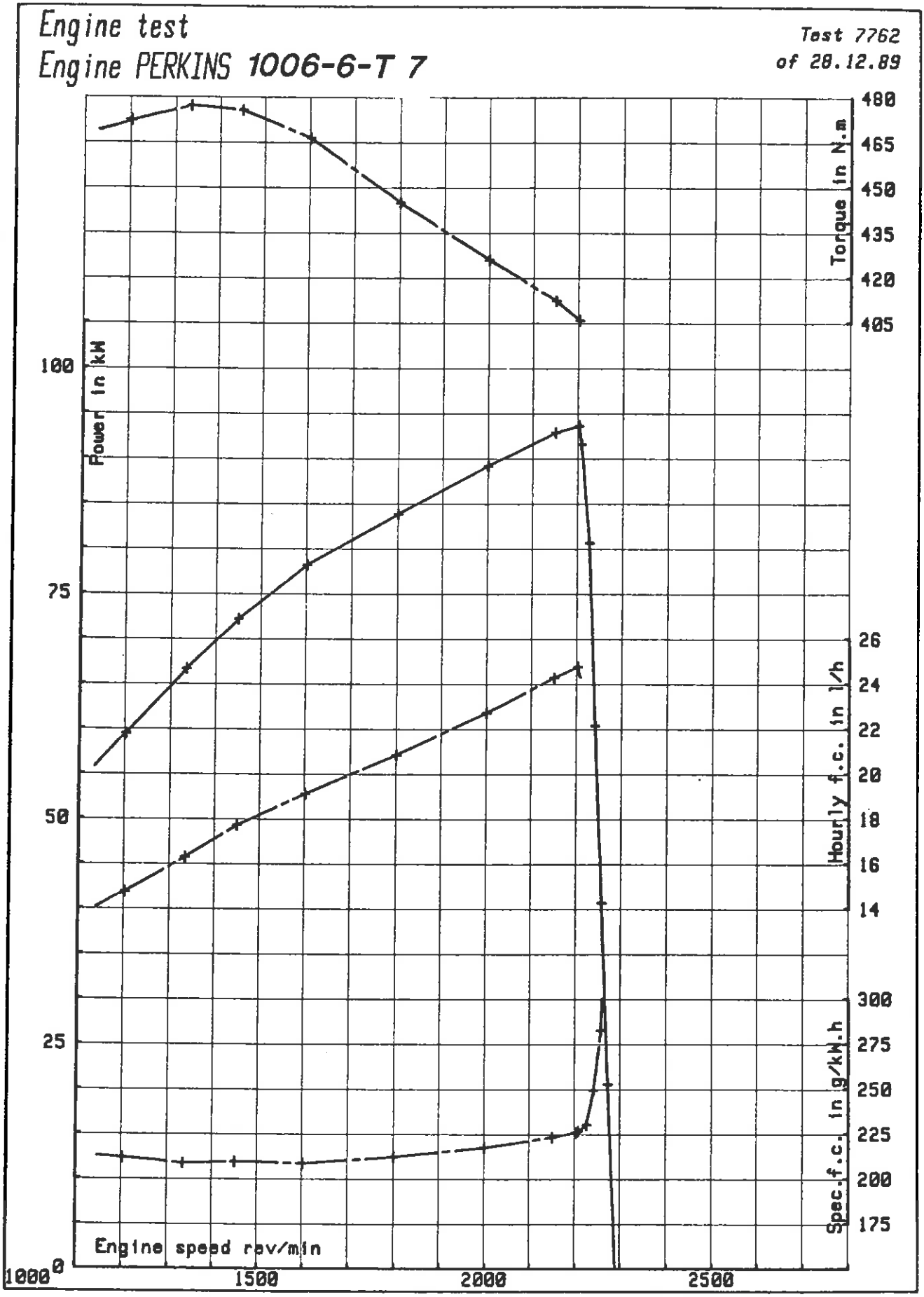
Mean atmospheric conditions

Temperature : 20 °C
Pressure : 1015 mbar
Relative humidity : 26 %

Maximum temperatures

Coolant : 93 °C
Engine oil : 107 °C
Fuel : 22 °C
Air intake : 22 °C

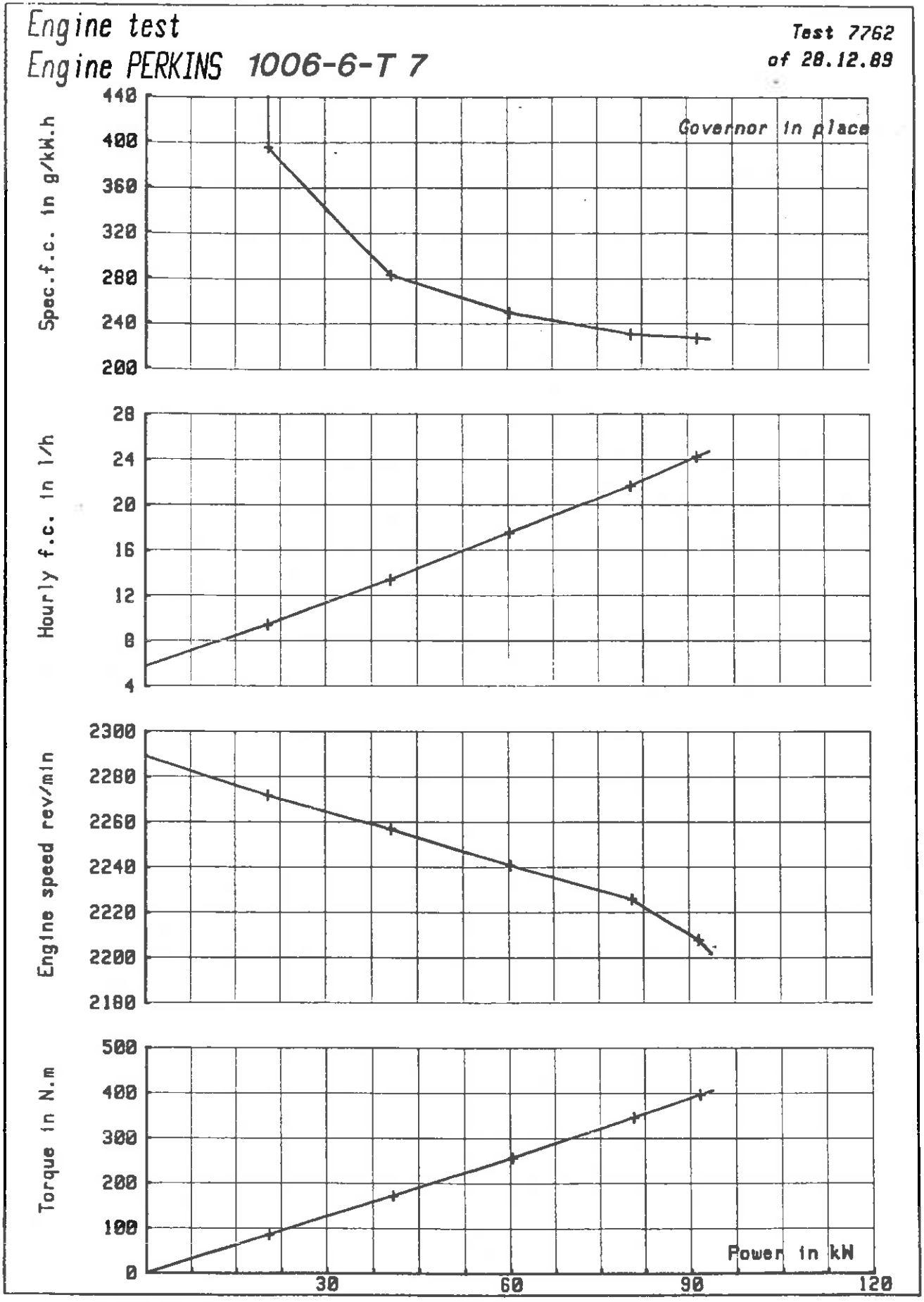
CEMAGREF


Engine test
Engine PERKINS 1006-6-T 7
Test 7762
of 28.12.89
Power in kW
100
75
50
25
0
Torque in N.m
480
465
450
435
420
405
Hourly f.c. in l/h
26
24
22
20
18
16
14
Spec.f.c. in g/kW.h
300
275
250
225
200
175
Engine speed rev/min
1000
1500
2000
2500

CEMAGREF

Engine test
Engine PERKINS 1006-6-T 7

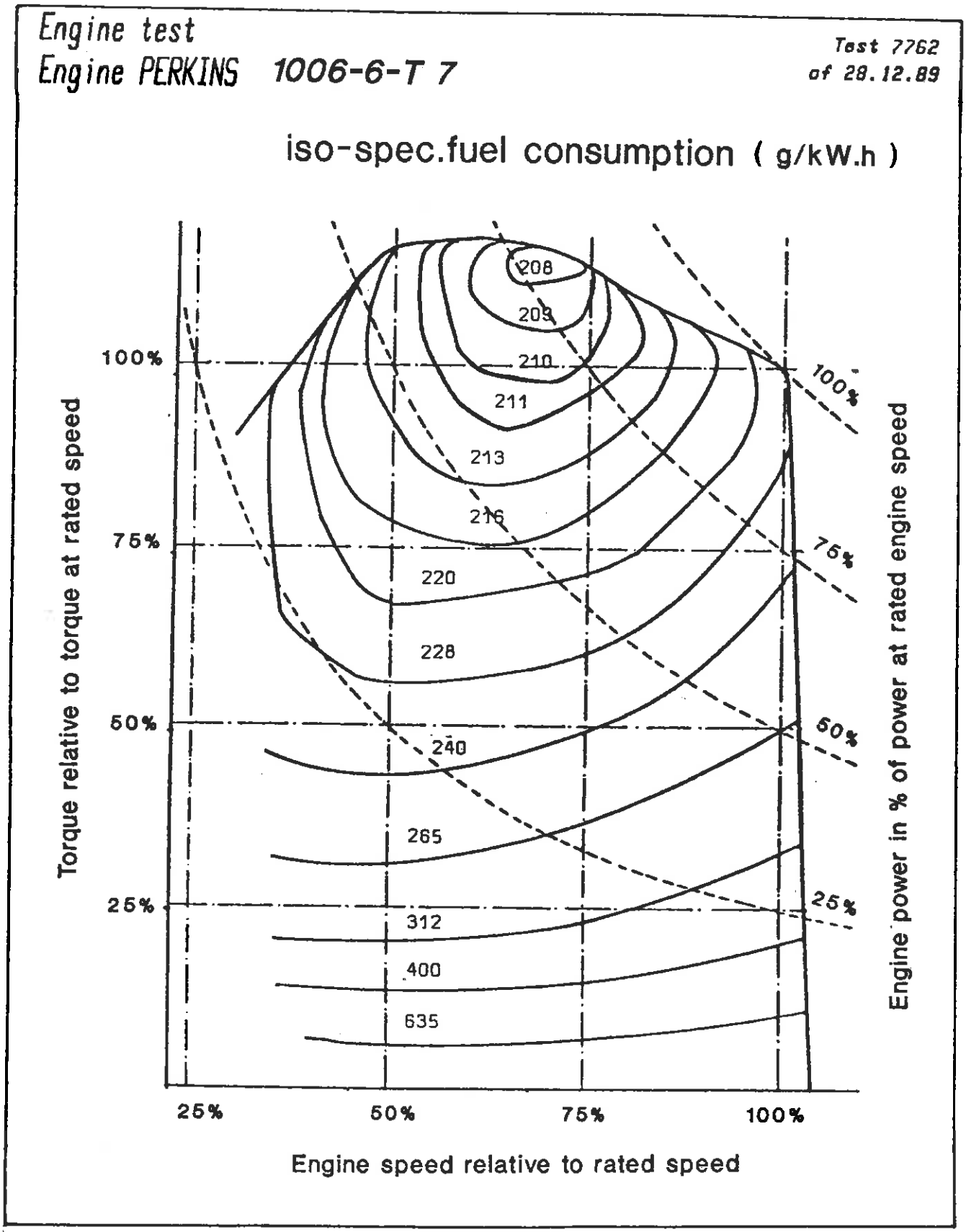
Test 7762
of 28.12.89



CEMAGREF

Engine test
Engine PERKINS 1006-6-T 7

Test 7762
of 28.12.89



CEMAGREF

OPTIONAL TESTS RESULTS (continued)

5.2 Measurement of external noise level

Date of test : 18th december 1989
Type of sound level meter : BRUEL & KJAER 2209
Type of track : Tarmacadam
Gear : 4 R
Travelling speed before acceleration : 25,2 km/h
Sound level : 85 dB(A)

REPAIRS AND ADJUSTMENTS DURING TESTS

none

Le Technicien chargé des essais	L'Ingénieur responsable des essais	Le Chef de la Division Tracteurs Travail du Sol
M.HOCQUEL	E.HUGO	J.F.GOUPILLON

- This test report was approved for publication by the requester of the test -

Diffusion 1990	
N°049	1ère édition