Prüfstelle für Landmaschinen



REPORT on test in accordance with OECD STANDARD CODE 2 for the Official Testing of Agricultural Tractor Performance

OECD No. 2/1870
10th December 1999

Agricultural Tractor

MF 8260 (4WD)

Manufacturer

AGCO S.A.
B.P. 60307
F-60026 Beauvais

This is a report on a tractor test in accordance with OECD STANDARD CODE for the Official Testing of Agricultural Tractor Performance ('Yellow Code', January 1998, Code 2 (Restricted Code)).

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

Duration of tests: May till July 1999

DLG-Testing Station for Agricultural Machinery, Max-Eyth-Weg 1,
D-64823 Groß-Umstadt

This report has been approved by the OECD Co-Ordinating Centre (CEMAGREF, France being in accordance with the OECD STANDARD CODE.

Date of approval: 10th December 1999

OECD No. 2/1870
Code 2

In this report all performance characteristics are given corresponding to the International System of Units.

The reference to the former used Technical System of Units is given by the following relations:

Forces	1 kN	=	1000 N	=	102 kp
Powers			1 kW	=	1,36 PS
Pressures	1 MPa	=	10 bar	=	10,2 kp/cm^2
	100 kPa	=	1000 mbar	=	750,10 mm Hg

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MF 8260 (4WD) **DLG-Test No. 99-117**

Tractor manufacturer:	AGCO S.A. B.P. 307 Avenue Blaise Pascal F-60026 Beauvais
Location of tractor assembly:	F-60026 Beauvais, France
Submitted for test by:	AGCO S.A., F-60026 Beauvais
Selected by:	Manufacturer with agreement by DLG
Place of running-in:	Beauvais and Groß-Umstadt
Duration of running-in:	35 h
Location of test:	DLG-Testing Station, D-64823 Groß-Umstadt

1 SPECIFICATION OF TRACTOR

1.1 Identification

- Make/Model/Type:	MF / 8260 / wheel tractor, unit construction with additional frame
- Number of driving- wheels:	4
- Serial No.:	H078 101
- 1st serial No.:	G013019

1.2 Engine

Make/Model:	SISU / 634 DSBAE
Type:	water-cooled 4-stroke Diesel-engine, direct injection, supercharged, intercooled (air to air)
Serial no.:	J02133

1.2.1 Cylinders

Number/disposition:	6 / in line
Bore/stroke:	108 / 134 mm
Capacity:	7365 cm^3
Compression ratio:	16.5 ± 0.5 : 1
Arrangement of valves:	Overhead valves
Cylinder liners:	wet

1.2.2 Supercharging

- Make / Model:	SCHWITZER / S 200
- Type:	Exhaust driven supercharger
- Pressure	109.5 kPa

1.2.3	Fuel system	
	- Fuel feed system:	BOSCH fuel supply pump, piston type, FPKG24P200; 1 separate water trap; fuel cooler in front of engine cooler
	- Fuel filter	
	Make/Model:	CAV / -
	Type :	2 replaceable paper element filters, double-stage
	- Capacity of fuel tank:	410 dm^3
	- Injection pump	
	Make/Model:	BOSCH / PES6P120B320RS3382
	Type :	inline injection pump
	Serial no.:	70290004-0402076814
	Manufacturer's production setting:	113 ± 2 mm^3/stroke at full load and rated speed
	Flow rate:	44.75 ± 0.79 dm^3/h at 2200 rev/min and full load
	Timing:	Static 13° ± 1° BTDC
	- Injectors	
	Make/Model:	STANADYNE / M33877
	Type :	multi hole
	Injection pressure:	26 + 2 MPa
1.2.4	Governor	
	- Make/Model:	BOSCH / RSV425.1100POA669
	- Type:	Centrifugal, variable speed, attached to injection pump, pressure compensating device
	- Governed range of engine speed:	900 to 2310 rev/min
	- Rated engine speed:	2200 rev/min
1.2.5	Air cleaner	
	- Pre-cleaner	
	Make/Model:	DONALDSON / -
	Type:	Cyclone, aspirated, incorporated in housing of main cleaner
	Location of air intake:	In front of engine, below bonnet
	- Main cleaner	
	Make/Model:	DONALDSON / -
	Type:	Dry paper element filter with safety cartridge
	- Maintenance indicator:	Warning light on dashboard
1.2.6	Lubrication system	Pressure lubricated, engine oil/cooling water heat exchanger integrated in filter socket
	- Type of feed pump:	Gear pump
	- Type of filter:	Cartridge, full flow oil filter, exchangeable
	- Number of filter:	1

1.2.7	Cooling system	
	- Type of coolant:	Water-antifreeze mixture
	- Type of pump:	Centrifugal pump
	- Specification of fan:	EATON viscous drive fan, belt driven, variable fan speed controlled by air flow temperature
	Number of fan blades:	8
	Fan diameter:	650 mm
	- Coolant capacity:	34 dm^3
	- Type of temperature control:	Thermostat with by-pass
	- Superpressure system:	Overpressure relief valve set to 70 kPa
1.2.8	Starting system	
	- Make/Model:	MAGNETI MARELLI / M 127 (2.8)
	- Type:	Electrical, solenoid pre-engaged drive starter motor, 2.8 kW, 12 V
	- Cold starting aid:	Thermostart, flame glow plug in air intake manifold
	- Safety device:	Starter only operable if power shift lever in parking position and clutch pedal depressed
1.2.9	Electrical system	
	- Voltage:	12 V, negative earth
	- Generator:	
	Make/Model:	VALEO / 14 V 120 A
	Type:	12 V, 3-phase alternator, A 13 VI 243
	Power:	1700 W
	- Battery:	2 lead acid batteries, 105 Ah at 20 hours rating each
1.2.10	Exhaust system	
	- Make/Model:	TECHNOV / AGCO 0023
	- Type:	Expansion type silencer, 1262 mm long, 140 mm dia
	- Location:	Vertical stack to the right of engine hood, mouth showing forward, 3041 mm above ground
1.2.11	Operating hours meter	Electronic, counts real operating hours when engine is running

1.3 Transmission

1.3.1 Clutch (travel alone)

- Make/Model/Type: FUNCK / - / wet multi-plate clutches
- Diameter of discs: 149 mm
- Method of operation: Hydraulical, by low pressure circuit, controlled by pedal

1.3.2 Gear box

- Make/Model: FUNCK / AG 250
- Type: Mechanical full powershift gearbox for all forward and reverse speeds
- Discription: Powershifted epicyclical gearbox, ratios electro-hydraulically selected by lever and controlled by wet multi-plate clutches

	Forward	Reverse
Number of gears	18	9
Number of ranges/groups	1	1
Total of arrangements	18	9

- Available options: Creeper gearbox : Reduction 1 : 4; mechanically acting on all speeds giving additional 18 forward and 9 reverse speeds; 1 additional lever
- Lubrication: Force feed lubrication by low pressure circuit, oil cooler in front of engine water cooler; oil filters in suction line; oil reservoir in common with hydraulic circuit

1.3.3 Rear axle and final drives

- Make/Model: GIMA / -
- Type: Bevel gear drive, bevel gear differential with lock, planetary final drives

Differential lock

- Type: Claw, electro-hydraulically operated
- Method of engagement and disengagement: engaged by switch, disengaged when brakes are actuated or power lift is raised

1.3.4 Front axle and final drives

- Make/Model: DANA ITALIA / AG 200 H
- Type: 4WD axle, transmission via wet multi-plate clutch (electro-hydraulically operated by switch), central drive shaft without universal joints, bevel gear drive, planetary final drives
- Differential lock: Automatic limited slip multi-plate lock

  Method of engagement and disengagement: Automatic

1.3.5 Total ratios and travelling speeds

Gear No.	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed*) at rated engine speed 2200 min^{-1} km/h
Forward Speeds		
1	334.49	2.24
2	259.67	2.89
3	200.69	3.74
4	176.14	4.26
5	155.80	4.82
6	136.74	5.49
7	120.42	6.23
8	105.68	7.10
9	93.48	8.03
10	82.04	9.15
11	72.23	10.39
12	63.41	11.84
13	56.07	13.39
14	49.23	15.25
15	43.34	17.32
16	33.64	22.31
17	26.00	28.87
18	20.19	37.18
Reverse Speeds		
1	334.49	2.24
2	200.69	3.74
3	176.14	4.26
4	120.42	6.23
5	105.68	7.10
6	72.23	10.39
7	63.41	11.84
8	43.34	17.32
9	26.00	28.87

*) calculated with the radius index (ISO 4251-1/1992) 905 mm

Number of revolutions of front wheels for one revolution of rear wheels: 1.325

1.4 Power take-off

1.4.1 Main power take-off

- Type: Independent;
- Method of engagement: Electro-hydraulically operated multi-plate clutch controlled by rotary switch
- Number of shafts: 1
- Method of changing power take-off shaft ends and speeds: Flanged stub shaft changeable; 2 speeds are shiftable by separate lever

1.4.1.1 Power take-off proportional to engine speed

	540 min^{-1} PTO	1000 min^{-1} PTO
- Location:	at rear of tractor	
- Diameter of p.t.o shaft	35 mm	35 mm
- Number of splines:	6	21
- in conformity with ISO 500 : 1991	type 1	type 2
- Height above ground	842 mm	
- Distance from the median plane of tractor:	0 mm	
- Distance behind rear wheel axis	637 mm	
- PTO speed at rated engine speed 2200 min^{-1}	596 min^{-1}	1052 min^{-1}
- Engine speed at standard power take-off speed:	1993 min^{-1}	2091 min^{-1}
- Ratio of rotation speeds:	3.691	2.091
- Power restriction:	- kW	- kW
- Maximum torque transmissible:	2986 Nm	1689 Nm
- Direction of rotation (viewed from behind tractor):	clockwise	

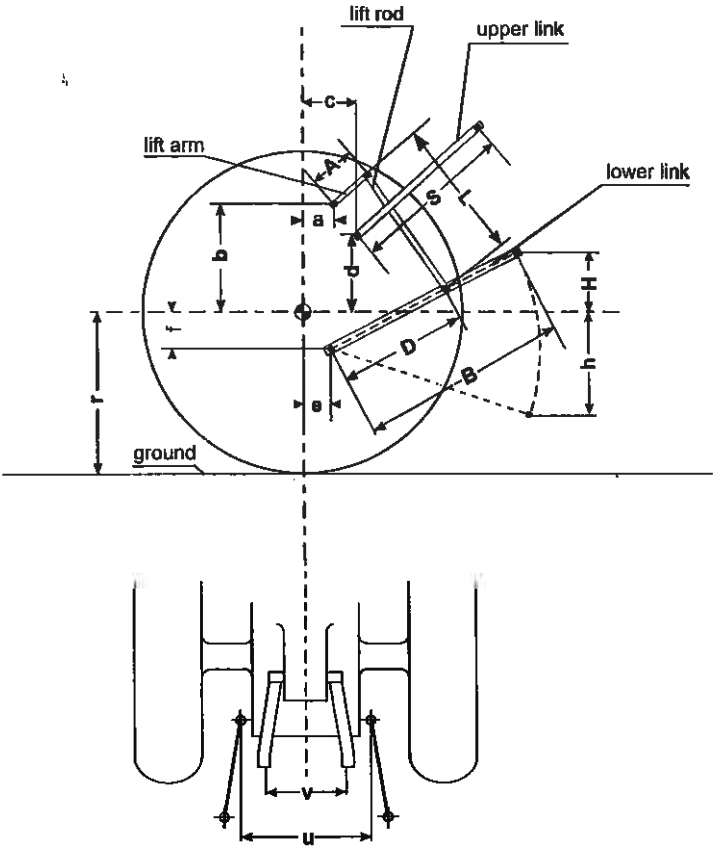
1.4.1.2 Power take-off proportional to ground speed: None

1.5 Hydraulic power lift

- Make/Model:	BOSCH /EH23LS
- Type:	Electronic - hydraulic power lift, disintegrated construction; lower link sensing
- Type of hydraulic system:	Closed, load sensing, pressure and flow compensated; oil cooler in front of engine coolant radiator
- Type and number of cylinders:	2 external cylinders, single acting, 105 mm bore, 250 mm stroke
- Type of linkage lock for transport:	Lowering throttle
- Opening pressure of cylinder safety valve:	22 ± 1 MPa
- Relief valve pressure setting:	20 - 1 MPa
- Lift pump type:	BRUENINGHAUS HYDRAULIK variable displacement axial-piston pump
- Transmission between pump and engine:	Pump driven by gearbox
- Type and number of filters:	1 screen filter in suction line, 1 external main filter in pressure line, changeable cartridge
- Site of oil reservoir:	Oil reservoir in common with gear box
- Type, number and location of tapping points:	6 oil couplings and 1 low pressure return coupling, at rear of tractor; 3 additional control valves
- Maximum volume of oil available to external cylinders:	40 dm^3

1.6 Three-point linkage

- Category: 3, acc. to ISO 730-1/1994
  with WALTERSCHEID quick couplers
- Category adapter: None



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Dimensions of implement linkage			projected lengths in mm dimensions (general)	dimensions used for tests on page 24	25
Rear tyres 620/70 R 42 Front tyres 480/70 R 30		(r) *) (r') *)	905 695		
Length of lift arms		(A)	380		
Length of lower links		(B)	975		
Distance of lift arm pivot points from rear wheel axis	horizontal vertical	(a) (b)	205 450		
Horizontal distance between lower link pivot points		(u)	520		
Horizontal distance between lift arm end points		(v)	630		
Length of upper link		(S)	645 to 855	770	785
Distance of upper link pivot point from rear wheel axis	horizontal vertical	(c) (d)	447/467 280/220	467 220	447 280
Distance of lower link pivot points from rear wheel axis	horizontal vertical	(e) (f)	253 330		
Distance of lower link pivot points from lift rod pivot points on lower links		(D)	535/585	535	585
Length of lift rods		(L)	840 to 955	920	840

Heights (h, H, H') of lower link hitch points relative to rear wheel axis (situated 905 mm above ground), at different adjustments of L and D

These data are valid for unloaded power lift

		Data for tests on page 24 and 25			
Length of lift rods	(L)	955	920	840	
Linkage distance of lift rods	(D)	535		585	535
Lowest position	(h)	745	675	460	500
Highest position	(H)	5	60	175	195
Transport position	(H')	5	60	175	195

*) Assuming r resp. r' = tyre dynamic radius index of ISO 4251-1/1992

1.7 Swinging drawbar

- Type:	Clevis	
- Height above ground		
maximum:		570 mm
minimum:		425 mm
- Type of adjustment:	Clevis, bolted either above or below the bar; bar horizontally shiftable	
- Distance of hitch point		
from rear wheel axis,	horizontal:	960/1040/1140 mm
from p.t.o. shaft end,	vertical:	272 or 417 mm
	horizontal:	323/403/503 mm
- Lateral adjustment (centre of clevis)		
right hand:		Min. 155, max. 192 mm
left hand:		Min. 155, max. 192 mm
drawbar can be fixed in central position		
- Distance of pivot point from rear wheel axis, horizontal:		0 mm
- Diameter of drawbar pin hole:		33 mm
- Maximum vertically permissible load:		17 kN

1.8 Trailer hitch Optionally available, fitted

- Make/Model:	CRAMER / KU 301 AF	
- Type:	Non automatic	
- Diameter of pin:		32 mm
- Height above ground:	Adjustable in steps to	802/852/952/1002 or 1102 mm
- Distance of hitch point from rear wheel axis horizontal:		785 mm
- Distance of hitch point from p.t.o. shaft end vertical:	below 40, above	10/110/160 or 260 mm
horizontal:		148 mm
- Maximum vertically permissible load:		20 kN

1.9 Holed drawbar Optionally available, not fitted

1.10 Piton fix

height above ground:		617 mm
distance from rear wheel axis, horizontal:		654 mm
distance from p.t.o. shaft end, vertical:		225 mm
horizontal:		17 mm
- Pin diameter:		44 mm

1.11 Steering

- Make/Model:	DANFOSS / ORBITROL OSPC 200 LSD
- Type:	Hydrostatic front axle steering
- Method of operation:	By steering wheel and double acting steering cylinder acting on steering levers
Pump:	Hydrostatic 200 cc
Ram:	1 steering cylinder, double acting, 2x149 mm stroke, 75 mm bore, 40 mm piston rod diameter
- Working pressure:	16.6 MPa

1.12 Brakes

1.12.1 Service brake

- Make/Model:	GIMA / -
- Type:	Power-assisted brake, acting on 2 axles, separate brake-fluid reservoir
- Method of operation:	pedal operated, hydraulic transmission; rear axle brake wet multi-plate brake with 2 discs per half shaft, outside diameter of discs 313 mm front axle brake automatic engagement of front wheel drive
- Trailer braking take-off:	On request available; hydraulic brake

1.12.2 Parking brake

- Make:	SIRMAC-HUSCO
- Type:	Multi-plate brake in final drives' housing, acting on rear axle
- Method of operation:	mechanically, actuated by hand lever; parking lock activated by power-shift gear lever

1.12 Wheels

- Number: 4
  front: Steering and driving, 2 pneumatics
  rear: Driving, 2 pneumatics
- Wheel base: 3075 mm

- Track width adjustment:

	Minimum	Maximum	Adjustment method
Front	1630 mm	2030 mm	Offset lug rims and reversing central wheel discs
Rear	1610 mm	1900 mm	central wheel discs shiftable on axle by clamping pieces

- Possible combinations of tyres sizes

Front	Rear
16.9 R 30	20.8 R 42
16.9 R 28	20.8 R 38
480/70 R 30	620/70 R 42
600/65 R 28	710/70 R 38

This is the list of the most popular tyres combinations, further tyres combinations are available

1.13 Protective structure

- Make/Model/Type: MASSEY FERGUSON / 5002 E5 / -
- Manufacturer's name and address: AGCO S.A. BP 307 Avenue Blaise Pascal - F-60026 Beauvais, France
- Protective device
  Cab: OECD-tested safety cab with integrated safety frame
  Tiltable: No
- OECD approval
  Approval number: CSS 4/0 555/1
  Date of approval: 21st April 1999
  Nos. of minor modification certificates: -

1.14 Seat

1.14.1 Driver's seat

- Make/Model:	GRAMMER / MSG 95A / 20	
- Type:	Upholstered seat with back rest and arm rests	
- Seat and steering wheel reversible:	No	
- Type of suspension:	Pneumatic	
- Type of damping:	Hydraulic	
- Range of adjustment		
. Longitudinal:		210 mm
. Vertical:	Above platform	480 to 640 mm
- Safety belt:	No	

1.14.2 Optional Driver's seat(s) Available

1.14.3 Passenger seat

- Location: On the left mudguard, inside of cab
- Capacity (number): 1

1.15 Lighting

Electrical, 12 Volt

	Height above ground of centre mm	Size mm	Distance from outside edge of lights to median plane of tractor mm
Headlights	1408	155 x 95	193
Sidelights	2200	35 x 110	1015
Rearlights	1975	175 x32	920
Reflectors, 1st pair	1869	138 x 30	873
2nd pair	868	105 x 55	545

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2. TEST CONDITIONS

2.1 Overall dimensions, unballasted

Length mm	Width (track widths as in 2.5) mm	Height at top of protective structure mm	Height at top of exhaust silencer pipe mm
5240	2518	3068	3041

2.2 Ground clearance 425 mm

- Clearance-limiting part: Bracket of swinging drawbar

2.3 Tractor mass (with cab)

	Without driver kg	With driver kg
Front	2910	2920
Rear	5770	5835
Total	8680	8755

2.4 Track specifications Not applicable

2.5 Tyres and track widths specifications

	Front	Rear
Tyres:	KLEBER SUPER 9L	
dimensions	480/70 R 30	620/70 R 42
load index speed index	141 A 8	160 A 8
type	radial	radial
maximum load (tyre manufacturer's)	25.80 kN	45.00 kN
at travelling speed	40 km/h	40 km/h
at tyre inflation pressure	160 kPa	160 kPa
maximum load (tractor manufacturer's)	2300 kN	3700 kN
dynamic radius index	695 mm	905 mm
Chosen track width:	1860 mm	1800 mm

2.6 Fuel

- Type:	ARAL-Diesel-fuel, in conformity with DIN 51601	
- Density at 15°C:	At p.t.o. test	0.844 g/cm³
	at drawbar power test	0.844 g/cm³

2.7 Oils and lubricants

2.7.1 Capacity and change interval

	Capacity dm³	Oil change h	Filter-change h
Engine	19	300	300
Gear box, rear axle, hydraulic system and steering	160	1000	500
Front axle	10		-
Final drives at front	4		-

2.7.2 Specifications:

	Recommended	Used during test
Engine oil:		
Type	Engine oil	BP TERRAC MANAGER
Viscosity	10W/40	10W/40
Classification	MIL-L-2104 D	MIL-L-2104 D
Transmission oil:		
Used in gearbox, rear axle, front axle, front axle drives, hydraulic- and steering system		
Type	Engine oil	BP TERRAC EXTRA
Viscosity	10 W/40	10 W/40
Classification	API-GL4 MIL-L-2104 C	API-GL4 MIL-L-2104 C

2.7.3 Grease Multi purpose grease

- Type: BP TERRAC CHARGE
- number of lubrication points: 10

3 COMPULSORY TESTS

3.1 MAIN POWER TAKE OFF PERFORMANCE (1000 min^{-1})

Date of tests: 26-Jul-99
Location of tests: DLG-Testing Station Groß-Umstadt
Type of dynamometer: SCHENCK hydraulic dynamometer U1-40

Power	Speed		Fuel consumption			Specific energy
	Engine	P.t.o.	hourly		specific	
kW	min^{-1}	min^{-1}	dm³/h	kg/h	g/kWh	kWh/dm³
Maximum power						
3.1 At 2-hour test						
143.8	1900	909	41.80	35.28	245	3.44
3.1.2 At rated speed						
136.7	2200	1052	44.38	37.46	274	3.08
3.1.3 At standard p.t.o. speed						
140.0	2091	1000	43.14	36.41	260	3.25
3.1.4 Part loads, the governor hand lever in the position corresponding to maximum power at full load (curve a)						
3.1.4.1 the torque corresponding to maximum power at rated speed						
136.7	2200	1052	44.38	37.46	274	3.08
3.1.4.2 85% of the torque obtained in 3.1.4.1						
118.7	2247	1075	39.77	33.57	283	2.99
3.1.4.3 75% of the torque defined in 3.1.4.2						
90.4	2281	1091	33.46	28.24	313	2.70
3.1.4.4 50% of the torque defined in 3.1.4.2						
61.0	2310	1105	26.71	22.54	370	2.28
3.1.4.5 25% of the torque defined in 3.1.4.2						
30.9	2333	1116	20.09	16.96	550	1.54
3.1.4.6 unloaded						
-	2365	1131	11.83	9.98	-	-

MF 8260 (4WD) **DLG-Test No. 99-117**

Power kW	Speed Engine min^{-1}	Speed P.t.o. min^{-1}	Fuel consumption hourly dm³/h	Fuel consumption hourly kg/h	Fuel consumption specific g/kWh	Specific energy kWh/dm³
3.1.5 Part loads, the governor hand lever in the position corresponding to standard p.t.o. speed at full load (curve b)						
3.1.5.1 the torque corresponding to maximum power						
140.0	2091	1000	43.14	36.41	260	3.25
3.1.5.2 85% of the torque obtained in 3.1.5.1						
122.3	2149	1028	39.05	32.96	269	3.13
3.1.5.3 75% of the torque defined in 3.1.5.2						
93.2	2183	1044	32.07	27.07	291	2.91
3.1.5.4 50% of the torque defined in 3.1.5.2						
63.0	2212	1058	25.71	21.70	345	2.45
3.1.5.5 25% of the torque defined in 3.1.5.2						
31.9	2239	1071	17.87	15.08	473	1.78
3.1.5.6 unloaded						
-	2262	1082	10.98	9.26	-	-

No load maximum engine speed:	2365 min^{-1}
Equivalent flywheel torque at rated engine speed:	593 Nm
Equivalent flywheel torque at 2-hour test:	722 Nm
at engine speed:	1900 min^{-1}
Maximum equivalent fly wheel torque:	852 Nm
at engine speed:	1298 min^{-1}

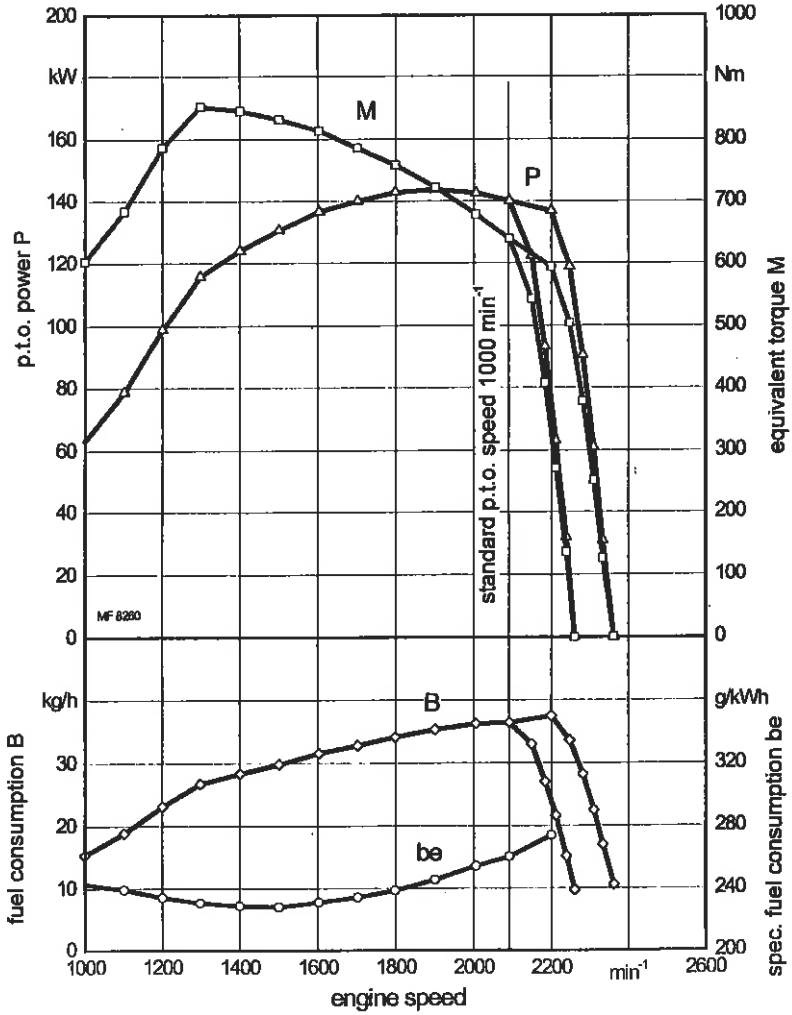
Mean atmospheric conditions

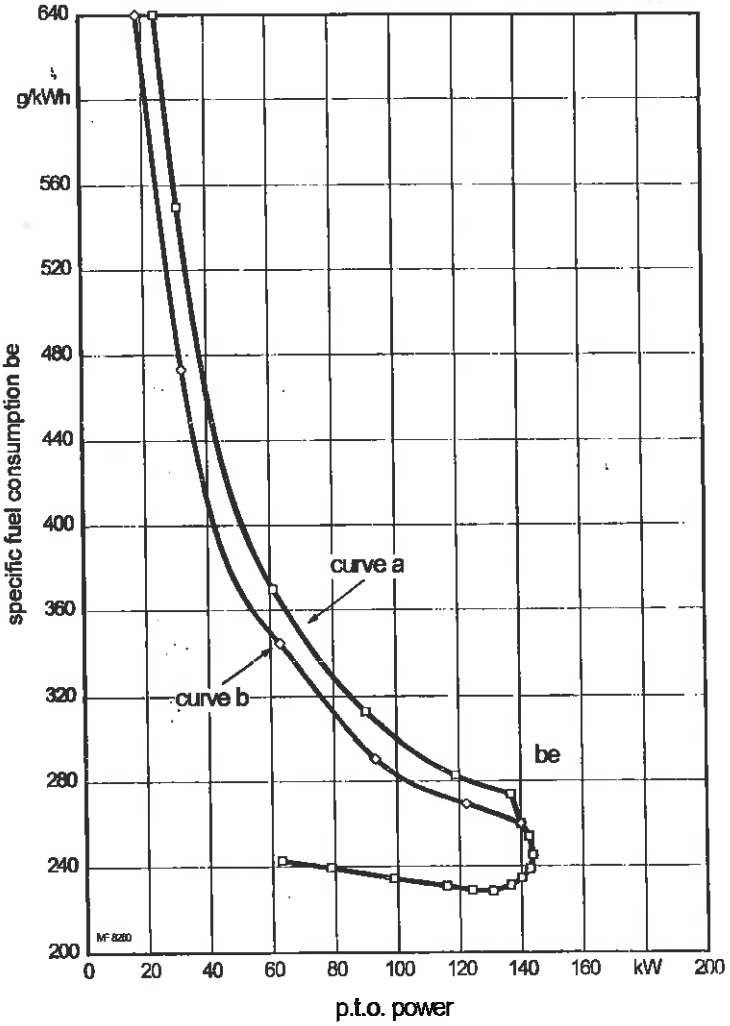
temperature:	21 °C
pressure:	996 hPa
relative humidity:	26 %

Maximum temperatures

coolant:	80 °C
oil:	113 °C
fuel:	40 °C
air intake:	21 °C

p.t.o. test


p.t.o. power P
kW
equivalent torque M
Nm
M
P
standard p.t.o. speed 1000 min⁻¹
MF 8260
fuel consumption B
kg/h
B
be
spec. fuel consumption be
g/kWh
engine speed
min⁻¹
1000
1200
1400
1600
1800
2000
2200
2600


640
g/kWh
560
520
480
440
400
360
320
280
240
200
specific fuel consumption be
curve a
curve b
be
MF 8260
0
20
40
60
80
100
120
140
160
kW
200
p.t.o. power

3.2 HYDRAULIC POWER AND LIFTING FORCE

- Date of tests: 8th till 14th July 1999

3.2.1 Hydraulic power test

- Sustained pressure with relief valve open 18.7 MPa
- Pump delivery rate at minimum pressure 125.2 dm^3/min

	Hydraulic power kW	Flow rate dm^3/min	Pressure MPa	Oil Temperature °C
At 90% of the actual relief valve setting	30.4	108.6	16.8	65
Maximum	30.9	108.9	17.0	65

- Tapping point used for test: At rear of tractor, connected to 2 additional control valves (red and green)

3.2.2 Power lift test

Measured maximum hydraulic pressure in the working cylinders 19.5 MPa

- Linkage settings for test - see on page 12

	At the hitch points	On the frame
Height of lower hitch points above ground in down position	230 mm	
Vertical movement without load with load	735 mm 725 mm	845 mm 830 mm
Max. corrected force exerted through full range	76.5 kN	72.0 kN
Corresponding pressure of hydraulic fluid	17.6 MPa	
Moment about rear-wheel axis	-	130.4 kNm
Max. tilt angle of mast from vertical		8.5°

Lifting heights relative to horizontal plane including the lower link pivot points

mm	-385	-345	-300	-200	-100	0	+100	+200	+300	+380	+400	+445
Lifting forces at hitch points, corrected to 17.6 Mpa												
kN		76.5	81.0	86.6	92.3	95.6	99.0	102.4	104.6	104.6		
Lifting forces at standard frame, corrected to 17.6 Mpa												
kN	72.0		77.0	80.1	82.4	83.7	84.6	84.6	83.7		80.1	78.8

Additional measurements with different power-lift linkage adjustments to obtain maximum lifting forces:
- Linkage settings for test - see on page 12

	At the hitch points	On the frame
Height of lower hitch points above ground in down position	435 mm	
Vertical movement without load with load	645 mm 635 mm	727 mm 713 mm
Max. corrected force exerted through full range	90.0 kN	85.5 kN
Corresponding pressure of hydraulic fluid	17.6 MPa	
Moment about rear-wheel axis	-	157.7 kNm
Max. tilt angle of mast from vertical	-	8°

Lifting heights relative to horizontal plane including the lower link pivot points											
mm	-160	-130	-100	0	+100	+200	+300	+400	+490	+500	+560
Lifting forces at hitch points, corrected to 17.6 MPa											
kN		90.0	92.3	99.0	104.6	110.3	114.8	117.0	117.0		
Lifting forces at standard frame, corrected to 17.6 MPa											
kN	85.5		89.6	93.6	95.9	97.2	97.2	95.9		91.4	87.8

3.3 DRAWBAR POWER TEST

- Date of test: 21st till 26th May 1999
- Type of track: Concrete

Gear number	Power	Drawbar pull	Speed	Engine speed	Slip of wheels	Specific fuel consumption
	kW	kN	km/h	min^{-1}	%	g/kWh
3.3.1	MAXIMUM POWER IN TESTED GEARS (unballasted tractor)					
4	85.8	82.36	3.75	2244	15.1	369
5	95.4	81.76	4.20	2221	15.0	378
6	111.8	81.83	4.92	2200	11.8	335
7	114.7	74.26	5.56	2103	8.2	321
8	118.3	74.18	5.74	1900	8.1	299
9	118.3	64.60	6.59	1895	6.0	299
10	119.3	56.30	7.63	1900	4.9	297
11	118.7	48.88	8.74	1901	4.2	298
12	120.4	43.29	10.01	1901	3.7	294
13	118.1	37.32	11.39	1901	3.0	299
14	117.6	32.43	13.06	1901	2.5	301
3.3.2	FUEL CONSUMPTION					
3.3.2.1	in selected gear, at maximum power at rated speed					
12	111.8	34.37	11.71	2201	2.8	332
3.3.2.1.1	75 % of pull at maximum power at rated speed					
12	86.3	25.79	12.05	2243	1.9	366
3.3.2.1.2	50 % of pull at maximum power at rated speed					
12	58.8	17.25	12.28	2275	1.4	429
3.3.2.1.3	next higher gear at reduced engine speed; same pull and travelling speed as in 3.3.2.1.1					
13	86.2	25.71	12.07	1993	1.9	330
3.3.2.1.4	next higher gear at reduced engine speed; same pull and travelling speed as in 3.3.2.1.2					
13	58.7	17.19	12.29	2019	1.4	381
3.3.2.2	in selected gear nearest to 7.50 km/h at rated speed					
8	113.5	60.00	6.81	2200	5.4	329
3.3.2.2.1	75 % of pull at maximum power at rated speed					
8	88.7	44.97	7.10	2252	3.6	350
3.3.2.2.2	50 % of pull at maximum power at rated speed					
8	60.9	29.94	7.32	2285	2.2	400
3.3.2.2.3	next higher gear at reduced engine speed; same pull and travelling speed as in 3.3.2.2.1					
9	89.0	44.95	7.13	2002	3.8	316
3.3.2.2.4	next higher gear at reduced engine speed; same pull and travelling speed as in 3.3.2.2.2					
9	61.6	30.14	7.36	2036	2.4	349

MF 8260 (4WD) **DLG-Test No. 99-117**

	Height of drawbar above ground	Tyre inflation pressure	
		Front	Rear
unballasted	580 mm	80 kPa	80 kPa

Specific energy	Temperature			Atmospheric conditions		
	Fuel	Coolant	Engine oil	Temperature	Relative humidity	Pressure
kWh/l	°C	°C	°C	°C	%	kPa
2.29	45	73	109	22	64	99.5
2.24	44	74	108	20	64	99.5
2.52	48	73	109	24	64	99.5
2.63	47	75	111	24	70	99.5
2.82	46	75	110	23	70	99.5
2.82	43	75	109	20	85	99.5
2.84	44	75	110	22	85	99.5
2.84	45	75	110	23	85	99.5
2.87	45	75	110	23	85	99.5
2.82	45	75	110	21	70	99.5
2.81	45	75	110	23	70	99.5
2.54	49	76	113	28	64	99.5
2.30	48	75	112	27	64	99.5
1.97	47	71	109	27	64	99.5
2.56	43	74	108	19	64	99.5
2.21	41	71	106	20	64	99.5
2.57	47	75	112	23	64	99.5
2.41	47	74	112	24	64	99.5
2.11	47	72	109	23	64	99.5
2.67	46	73	109	26	64	99.5
2.42	46	73	108	24	64	99.5

4	**Optional Test Results**	None
4	**REPAIRS AND REMARKS**	None

Head of tractor test section

M. Lober

Dip.-Ing. Manfred Lober

Deutsche Landwirtschafts-Gesellschaft

Test carried out by

B. Huber

Dipl.-Ing. Bodo Huber

Date: 19th January 2000

8. MINOR MODIFICATION CERTIFICATE

OECD approval number according to Code 2:	**2/1870**
Station test-no. for the original report:	99-117
Date and location of test:	May till July 1999, DLG Prüfstelle für Landmaschinen Max-Eyth-Weg 1 D-64823 Gross-Umstadt,
Date of approval:	10th December 1999
Modification number:	MOD 1
Previous Modification Certificates	-

8.1 Specification of the Tractor

8.1.1	Manufacturer's name and address:	AGCO S.A. B.P. 60307, Avenue Blaise Pascal F-60026 Beauvais
	Submitted for the test by:	AGCO S.A., F-60026 Beauvais
8.1.2	Make of the tractor: Model (trade name): Type:	MF 8260 4 WD
8.1.3	Serial Number from which modification applies:	L142028
8.1.4	Other Specifications:	-NA-

8.2 Details of Modifications

Since the original test report the following modifications have been made:

- **The tractor MF 8260 will be offered optionally under the second make "Challenger" with the model denomination MT 645.**
- **The colour red is changed for yellow.**

8.3 Statement

The effect of the modifications on performance has been examined.
The modifications are considered not to affect the results of the original test.
The original test report therefore applies also to the modified tractor.

Drafted on the responsibility of the national Designated Authority by the Station which carried out the original test, this certificate is circulated as an annex to the original test report.

Location: DLG-Prüfstelle für Landmaschinen
Max-Eyth-Weg 1
D-64823 Groß-Umstadt

Date: 17th June 2002

Test section tractors and vehicles

Dipl.-Ing. Lober

Deutsche Landwirtschafts-Gesellschaft

Responsible for tests

Dipl.-Ing. (FH) Feuerstein



Impulse für den Fortschritt

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