CONSIGLIO NAZIONALE DELLE RICERCHE
ISTITUTO PER LA MECCANIZZAZIONE AGRICOLA
Strada delle Cacce, 73 - 10135 TORINO (Italia)

Report No. 1901/T/1994

TEST IN ACCORDANCE WITH THE OECD FULL CODE FOR THE OFFICIAL TESTING OF AGRICULTURAL TRACTORS

TRACTOR: Make: S+L+H
Model: HURLIMANN 6135 VDT
Type: 4 WD



Manufactured by:	S+L+H S.p.A. - TREVIGLIO (Italy)
Date and location of the tests:	October 1991 - I.S.M.A. - Treviglio (BG) (Italy)
Date and location of the checks:	August - September 1994 - IMA - Torino (Italy)

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

Number and date of approval: 1338/2 - 11th October 1994

PRELIMINARY REMARK

The HÜRLIMANN 6135 VDT (4WD) and the LAMBORGHINI 135 VDT (4WD) (see tractor test OECD No. 1338 of 06/12/1991) tractors are technically identical in all main respects, except with regard to the following items:

- model designation
- colour
- side bonnets design
- supercharging
- starting system
- generator
- driver's seat
- passenger's seat
- height above ground of headlights.

Therefore, tests have not been repeated, and approval number is valid for the both tractor models.
All tests were carried out on the LAMBORGHINI 135 VDT (4WD).

This bulletin is based on engineering tests in accordance with O.E.C.D. Full Code (Code I).
It does not contain an evaluation of performance of the tractor on practical farm work.

The S+L+H HÜRLIMANN 6135 VDT tractor is manufactured in following variants:

1. with 24 forward and 24 reverse speeds (6x4 gear units plus inverter);

2. with 36 forward and 36 reverse speeds (12x3 gear units plus inverter);

3. with 48 forward and 48 reverse speeds (12x4 gear units plus inverter);

Checks have been carried out on tractor with the third variant.

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

TABLE OF CONTENTS

	Page
Specification of tractor	4
Test condition	22
Compulsory tests	
1 - Main power take-off performance	25
2 - Hydraulic power and lifting force.	26
3 - Drawbar performance	28
4 - Turning area and turning circle	30
5 - Location of centre of gravity	30
6 - Braking	30
7 - Measurement of external noise level	31
8 - Repairs	31
9 - Remarks	31

Annex

	Fig. No.
Compulsory main power take-off test	
Curves of power, torque, hourly and specific fuel consumption/cranckshaft speed	1
Curves of specific fuel consumption/crankshaft power p.t.o.	2

Tractor manufacturer's name and address:	S+L+H S.p.A. Viale Cassani, 15 24047 TREVIGLIO (BG) - Italy
Submitted for checks by:	Manufacturer
Selected for checks by:	Manufacturer with the agreement of IMA
Place of running-in:	TORINO - Italy
Duration of running-in:	Engine and tractor appr. 50 hours
Location of checks:	IMA - Torino - Italy

I. SPECIFICATION OF TRACTOR

TRACTOR

Make:	S+L+H S.p.A.
Model:	HÜRLIMANN 6135 VDT
Type:	wheeled tractor, unit construction
Number of driving wheels:	4WD
Serial number:	H 6135 VT *1168*
First serial number:	1001

ENGINE

Make:	S+L+H S.p.A.
Model:	1000.6 WT
Type:	4-stroke Diesel engine, direct injection, water cooled, turbo charged
Serial number:	001820

Cylinders

Number/disposition:	6, vertical, in-line
Bore/stroke:	105 x 115.5 mm
Capacity:	6000 cm^3
Compression ratio:	16 : 1
Arrangement of valves:	overhead
Cylinder liners:	wet liners

Supercharging

Make:	GARRETT
Model:	70707-4
Type:	turbocharger
Pressure:	93 kPa
Available options:	
Make:	SCHWITZER
Model:	S2B
Type:	turbocharger
Pressure:	93 kPa

Fuel system

Fuel feed system:	AC CORONA type fuel feed pump
Make, model and type of fuel filter:	FIAMM FNA 255/00
Capacity of fuel tank:	210 dm^3
Make, model and type of injection pump:	BOSCH PFR 1K 90A 517, immersed pump, one for cylinder, in line injection pump
Serial number:	none
Available options:	
Make, model and type of injection pump:	BOSCH PFR 1K 90A 503, immersed pump, one for cylinder, in line injection pump
Serial number:	none
Manufacturer's production setting of injection pump:	
- flow rate:	60 ± 2 mm^3/stroke at rated speed and full load corresponding 27.23 dm^3/h
- timing:	16.0° ± 0.5° before TDC
Make, model and type of injectors:	BOSCH DLLA 150 S 925 multihole injection nozzles
Injection pressure:	18 ± 1 MPa

Governor

Make:	S+L+H
Model:	527.16
Type:	electronic
Governed range of engine speed:	from 650 to 2709 rev/min
Rated engine speed:	2500 rev/min

Air cleaner

Pre-cleaner:	none
Main cleaner:	
Make:	DONALDSON
Model:	FLG 10-0220
Type:	dry paper element filter with two replaceable cartridge elements; DONALDSON make, P13-3138 type for the internal one and XLP77-2555 type for the external one
Location of air intake:	left front side above the main cleaner under the bonnet
Maintenance indicator:	with the warning lamp on the dashboard

Lubrication system

Type of feed pump:	forced feed from gear pump
Type of filter:	FIAMM FT 48 03 IN
Number:	2

Cooling System

Type of coolant:	water
Type of pump:	impeller
Specification of fan:	propeller fan driven by engine shaft
Number of fan blades:	6
Fan diameter:	500 mm
Coolant capacity:	18 dm^3
Type of temperature control:	electrical control
Superpressure system:	0.6 bar

Starting system

Make:	ISKRA
Model:	AZ J3557 12 V
Type:	electromagnetic engagement
Available options:	
Make:	BOSCH
Model:	JF 12 V
Type:	electromagnetic engagement
Starter motor power rating:	3.0 kW
Cold starting aid:	none
Safety device:	preventing engine start in gear

Electrical system

Voltage:	12 V, negative earth
Generator:	
- Make:	ISKRA
- Model:	AAK3563 14V 65A
- Type:	Alternator
- Power:	780 W
Available options:	
- Make:	BOSCH
- Model:	K1 14V 65A
- Type:	Alternator
- Power:	780 W
Battery:	1 lead acid, FIAMM make, 2.9559.036.0 model
- Rating:	155 Ah at 20 hours

Exhaust system

Make:	S+L+H
Model:	DGM SA 1686
Type:	one reflection absorption chamber
Location:	on the left side of engine cowling, vertical position

TRANSMISSION TO WHEELS

Clutch — utilized only for travelling

Make:	S+L+H
Model:	527.23
Type:	indipendent, single disk dry clutch
Number of plates:	1
Diameter of plates:	330 mm
Method of operation:	hydraulically operated by pedal

Gearbox

Make:	S+L+H
Model:	527.22
Type:	mechanical syncromesh speed change gear
Arrangement:	six speeds forward, with four ranges, one electrohydraulic shifted reduction gear (hi/lo) and one reverse group
Number of gears:	48 forward and 48 reverse
Available options:	
- Arrangement:	six speeds forward, with three ranges, one electro-hydraulic shifted reduction gear (hi/lo) and one reverse group
- Number of gears:	36 forward and 36 reverse

- Arrangement:	six speeds forward, with four ranges and one reverse group
- Number of gears:	24 forward and 24 reverse

Rear axle and final drives

Make:	S+L+H
Model:	527.44
Type:	bevel gear differential and epyciclic final drive
Differential lock	
- Make:	S+L+H
- Model:	527.35
- Type:	electrohydraulic
- Method of engagement:	by push button
- Method of disengagement:	by push button
Available options:	
- Make:	S+L+H
- Model:	SBA original SAME system
- Type:	electrohydraulic
- Method of engagement:	by push button
- Method of disengagement:	by push button or automatically when steering angle exceeds 17 degrees, or when forward speed exceeds 15 km/h

Front axle and final drives

Make:	S+L+H
Model:	527.43
Type:	S+L+H system with central shaft, bevel gear drive, differential and epyciclic final drives
Differential lock	
- Make:	S+L+H
- Model:	527.46
- Type:	electrohydraulic
- Method of engagement:	by push button
- Method of disengagement:	by push button
Available options:	
- Make:	S+L+H
- Model:	SBA original SAME system
- Type:	electrohydraulic
- Method of engagement:	by push button
- Method of disengagement:	by push button or automatically when steering angle exceeds 17 degrees, or when forward speed exceeds 15 km/h

HÜRLIMANN 6135 VDT with 48 forward and 48 reverse speeds

Total ratios and travelling speeds (tyres 20.8 R 38 and pressure 130 kPa)

Gear no.	Group or range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed (*) at rated engine speed of 2500 rev/min km/h
		FORWARD	
1	R lo	4127.3	0.195
1	R hi	3537.6	0.228
2	R lo	3200.8	0.252
2	R hi	2743.5	0.294
3	R lo	2462.2	0.327
3	R hi	2110.4	0.382
4	R lo	1920.5	0.420
4	R hi	1646.1	0.490
5	R lo	1459.2	0.552
1	S lo	1375.8	0.586
5	R hi	1250.7	0.644
1	S hi	1179.2	0.683
6	R lo	1137.1	0.709
2	S lo	1066.9	0.755
6	R hi	974.6	0.827
2	S hi	914.5	0.881
3	S lo	820.7	0.982
3	S hi	703.5	1.145
4	S lo	640.2	1.259
4	S hi	548.7	1.469
5	S lo	486.4	1.657
5	S hi	416.9	1.983
1	N lo	397.4	2.027
6	S lo	379.0	2.126
1	N hi	340.7	2.365
6	S hi	324.9	2.480
2	N lo	308.2	2.614
2	N hi	264.2	3.050
3	N lo	237.1	3.399
3	N hi	203.2	3.965
4	N lo	184.9	4.357
4	N hi	158.5	5.084
5	N lo	140.5	5.734
5	N hi	120.4	6.690
6	N lo	109.5	7.359
6	N hi	93.9	8.586
1	F lo	86.5	9.314
1	F hi	74.2	10.866
2	F lo	67.1	12.010
2	F hi	57.5	14.012
3	F lo	51.6	15.612
3	F hi	44.2	18.215
4	F lo	40.3	20.016
4	F hi	34.5	23.353
5	F lo	30.6	26.343
5	F hi	26.2	30.734
6	F lo	23.8	33.807
6	F hi	20.4	39.442

(*) Calculated with a tyre dynamic radius index of 855 mm (ISO 4251/1 - 1988).

Number of revolutions of front wheels for one revolution of rear wheels: 1.2571

Gear no.	Group or range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed (*) at rated engine speed of 2500 rev/min km/h
		REVERSE	
1	R lo	3906.7	0.206
1	R hi	3348.5	0.241
2	R lo	3029.7	0.266
2	R hi	2596.9	0.310
3	R lo	2330.6	0.346
3	R hi	1997.6	0.403
4	R lo	1817.7	0.443
4	R hi	1558.1	0.517
5	R lo	1381.3	0.583
1	S lo	1302.2	0.619
5	R hi	1183.9	0.681
1	S hi	1116.2	0.722
6	R lo	1076.3	0.749
2	S lo	1009.9	0.798
6	R hi	922.5	0.873
2	S hi	865.6	0.931
3	S lo	776.9	1.037
3	S hi	665.9	1.210
4	S lo	605.9	1.330
4	S hi	519.4	1.552
5	S lo	460.4	1.750
5	S hi	394.6	2.042
1	N lo	376.2	2.142
6	S lo	358.8	2.246
1	N hi	322.5	2.499
6	S hi	307.5	2.620
2	N lo	291.8	2.762
2	N hi	250.1	3.222
3	N lo	224.4	3.590
3	N hi	192.4	4.189
4	N lo	175.1	4.603
4	N hi	150.0	5.731
5	N lo	133.0	6.058
5	N hi	114.0	7.068
6	N lo	103.6	7.775
6	N hi	88.8	9.071
1	F lo	81.9	9.840
1	F hi	70.2	11.480
2	F lo	63.5	12.688
2	F hi	54.4	14.803
3	F lo	48.9	16.494
3	F hi	41.9	19.243
4	F lo	38.1	21.146
4	F hi	32.7	24.672
5	F lo	29.0	27.830
5	F hi	24.8	32.470
6	F lo	22.6	35.715
6	F hi	19.3	41.669

(*) Calculated with a tyre dynamic radius index of 855 mm (ISO 4251/1 - 1988).

Number of revolutions of front wheels for one revolution of rear wheels: 1.2571

HÜRLIMANN 6135 VDT with 36 forward and 36 reverse speeds

Total ratios and travelling speeds (tyres 20.8 R 38 and pressure 130 kPa)

Gear no.	Group or range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed (*) at rated engine speed of 2500 rev/min km/h
		FORWARD	
1	S lo	1375.8	0.586
1	S hi	1179.2	0.683
2	S lo	1066.9	0.755
2	S hi	914.5	0.881
3	S lo	820.7	0.982
3	S hi	703.5	1.145
4	S lo	640.2	1.259
4	S hi	548.7	1.469
5	S lo	486.4	1.657
5	S hi	416.9	1.933
1	N lo	397.4	2.027
6	S lo	379.0	2.126
1	N hi	340.7	2.365
6	S hi	324.9	2.480
2	N lo	308.2	2.614
2	N hi	264.2	3.050
3	N lo	237.1	3.399
3	N hi	203.2	3.965
4	N lo	184.9	4.357
4	N hi	158.5	5.084
5	N lo	140.5	5.734
5	N hi	120.4	6.690
6	N lo	109.5	7.359
6	N hi	93.9	8.586
1	F lo	86.5	9.314
1	F hi	74.2	10.866
2	F lo	67.1	12.010
2	F hi	57.5	14.012
3	F lo	51.6	15.612
3	F hi	44.2	18.215
4	F lo	40.3	20.016
4	F hi	34.5	23.353
5	F lo	30.6	26.343
5	F hi	26.2	30.734
6	F lo	23.8	33.807
6	F hi	20.4	39.442

(*) Calculated with a tyre dynamic radius index of 855 mm (ISO 4251/1 - 1988).

Number of revolutions of front wheels for one revolution of rear wheels: 1.2741

Gear no.	Group or range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed (*) at rated engine speed of 2500 rev/min km/h
		REVERSE	
1	S lo	1302.2	0.619
1	S hi	1116.2	0.722
2	S lo	1009.9	0.798
2	S hi	865.6	0.931
3	S lo	776.9	1.037
3	S hi	665.9	1.210
4	S lo	605.9	1.330
4	S hi	519.4	1.552
5	S lo	460.4	1.750
5	S hi	394.6	2.042
1	N lo	376.2	2.142
6	S lo	358.8	2.246
1	N hi	322.5	2.499
6	S hi	307.5	2.620
2	N lo	291.8	2.762
2	N hi	250.1	3.222
3	N lo	224.4	3.590
3	N hi	192.4	4.189
4	N lo	175.1	4.603
4	N hi	150.0	5.371
5	N lo	133.0	6.058
5	N hi	114.0	7.068
6	N lo	103.6	7.775
6	N hi	88.8	9.071
1	F lo	81.9	9.840
1	F hi	70.2	11.480
2	F lo	63.5	12.688
2	F hi	54.4	14.803
3	F lo	48.9	16.494
3	F hi	41.9	19.243
4	F lo	38.1	21.146
4	F hi	32.7	24.672
5	F lo	29.0	27.830
5	F hi	24.8	32.470
6	F lo	22.6	35.715
6	F hi	19.3	41.669

(*) Calculated with a tyre dynamic radius index of 855 mm (ISO 4251/1 - 1988).

Number of revolutions of front wheels for one revolution of rear wheels: 1.2741

HÜRLIMANN 6135 VDT with 24 forward and 24 reverse speeds

Total ratios and travelling speeds (tyres 20.8 R 38 and pressure 130 kPa)

Gear no.	Group or range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed (*) at rated engine speed of 2500 rev/min km/h
		FORWARD	
1	R	3537.6	0.228
2	R	2743.5	0.294
3	R	2110.4	0.382
4	R	1646.1	0.490
5	R	1250.7	0.644
1	S	1179.2	0.683
6	R	974.6	0.827
2	S	914.5	0.881
3	S	703.5	1.145
4	S	548.7	1.469
5	S	416.9	1.933
1	N	340.7	2.365
6	S	324.9	2.480
2	N	264.2	3.050
3	N	203.2	3.965
4	N	158.5	5.084
5	N	120.4	6.690
6	N	93.9	8.586
1	F	74.2	10.866
2	F	57.5	14.012
3	F	44.2	18.215
4	F	34.5	23.353
5	F	26.2	30.734
6	F	20.4	39.442
		REVERSE	
1	R	3348.5	0.241
2	R	2596.9	0.310
3	R	1997.6	0.403
4	R	1558.1	0.517
5	R	1183.9	0.681
1	S	1116.2	0.722
6	R	922.5	0.873
2	S	865.6	0.931
3	S	665.9	1.210
4	S	519.4	1.552
5	S	394.6	2.042
1	N	322.5	2.499
6	S	307.5	2.620
2	N	250.1	3.222
3	N	192.4	4.189
4	N	150.0	5.371
5	N	114.0	7.068
6	N	88.8	9.071
1	F	70.2	11.480
2	F	54.4	14.803
3	F	41.9	19.243
4	F	32.7	24.672
5	F	24.8	32.470
6	F	19.3	41.669

(*) Calculated with a tyre dynamic radius index of 855 mm (ISO 4251/1 - 1988).

Number of revolutions of front wheels for one revolution of rear wheels: 1.2741

POWER TAKE OFF

Main power take-off

Type and method of engagement:	independent, engaged or disengaged by push button. Driven by multiplate wet clutch independent of travel clutch; ISO Standard 500-1979
Number of shafts:	1
Method of changing power take-off shaft ends and speeds:	it is possible, through 6 screws, to mount one PTO shaft end at 6 or 21 splines. Speed selection by external hand lever combined with a lever at the left hand side of the seat

Power take-off proportional to engine speed

540 rev/min

Location:	at rear of tractor, in tractor's median plane
Diameter of power take-off shaft end:	35 mm
Number of splines:	6, in conformity with ISO 500/1991 type 1
Height above ground:	830 mm
Distance from the median plane of the tractor:	0 mm
Distance behind rear-wheel axis:	475 mm
PTO speed at rated engine speed:	605 rev/min
Engine speed at standard power take-off speed:	2229 rev/min
Ratio of rotation speeds (engine speed/p.t.o. speed):	4.1278
Power restriction and maximum torque:	143 kW, 2524 Nm
Direction of rotation (viewed from behind tractor):	clockwise

1000 rev/min

Location:	at rear of tractor, in tractor's median plane
Diameter of power take-off shaft end:	35 mm
Number of splines:	21, in conformity with ISO 500/1991 type 2
Height above ground:	830 mm
Distance from the median plane of the tractor:	0 mm
Distance behind rear-wheel axis:	475 mm
PTO speed at rated engine speed:	1033 rev/min
Engine speed at standard power take-off speed:	2421 rev/min
Ratio of rotation speeds (engine speed/p.t.o. speed):	2.4211
Power restriction and maximum torque:	143 kW, 1363 Nm
Direction of rotation (viewed from behind tractor):	clockwise

775 rev/min

Location:	at rear of tractor, in tractor's median plane
Diameter of power take-off shaft end:	35 mm
Number of splines:	21
Height above ground:	830 mm
Distance from the median plane of the tractor:	0 mm
Distance behind rear-wheel axis:	475 mm
PTO speed at rated engine speed:	784 rev/min
Engine speed at standard power take-off speed:	2470 rev/min
Ratio of rotation speeds (engine speed/p.t.o. speed):	3.188
Power restriction and maximum torque:	143 kW, 1762 Nm
Direction of rotation (viewed from behind tractor):	clockwise

1300 rev/min

Location:	at rear of tractor, in tractor's median plane
Diameter of power take-off shaft end:	35 mm
Number of splines:	21
Height above ground:	830 mm
Distance from the median plane of the tractor:	0 mm
Distance behind rear-wheel axis:	475 mm
PTO speed at rated engine speed:	1337 rev/min
Engine speed at standard power take-off speed:	2431 rev/min
Ratio of rotation speeds (engine speed/p.t.o. speed):	1.869
Power restriction and maximum torque:	143 kW, 1050 Nm
Direction of rotation (viewed from behind tractor):	clockwise

Power take off proportional to ground speed
(separated syncromesh shaft, not adjustable to 540 - 775 - 1000 - 1300 rev/min)

Location and method of engagement:	at rear of tractor, in tractor's median plane, engaged or disengaged by hand level at the left hand side of the seat
Number of shafts:	1
Travelling distance for one revolution of power take-off shaft:	0.214 m
Number of power take-off shaft revolutions for one revolution of rear driving wheels:	25.00
Direction of rotation with forward gear engaged (viewed from behind tractor):	clockwise

Secondary power take-off

Type and method of engagement:	independent, engaged or disengaged by push button. Driven by multiplate wet clutch independent of travel clutch; ISO Standard 500-1979

Number of shafts:	1
Method of changing power take-off shaft ends and speeds:	none

Power take-off proportional to engine speeds

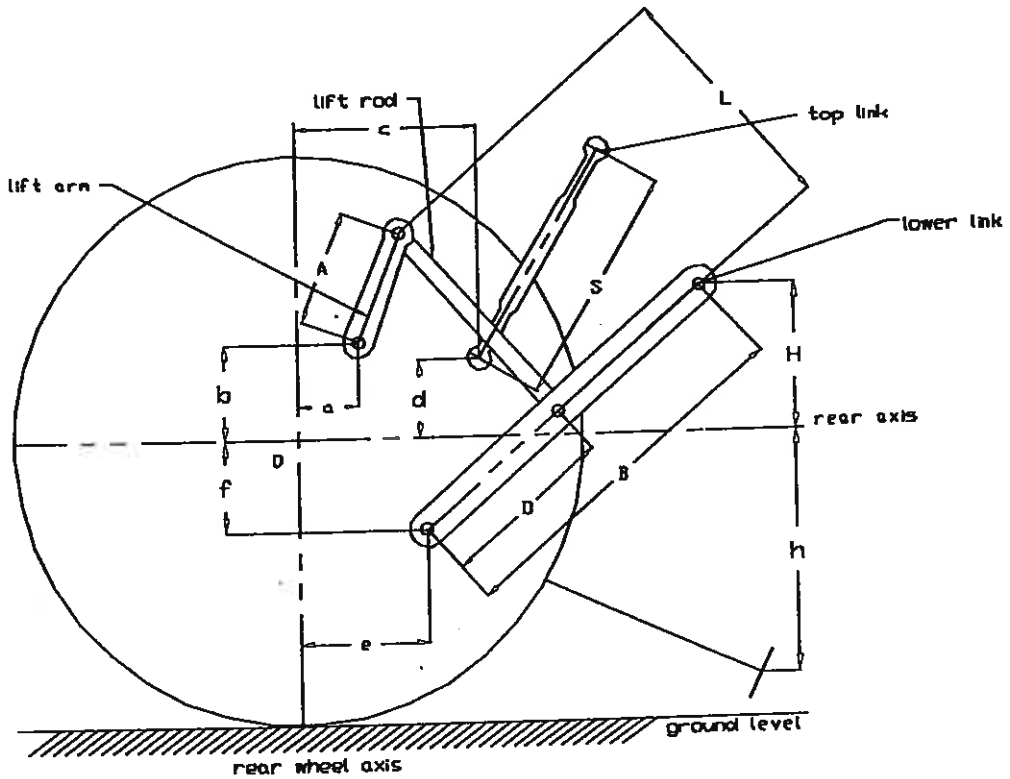
Location:	at front of tractor, in tractor's median plane
Dimension:	ISO Standard 500-1979 type 2 (35 mm - 21 splines)
Ratio of rotation speeds (engine speed/p.t.o. speed):	1.869
Direction of rotation (viewed from facing driving end):	anticlockwise

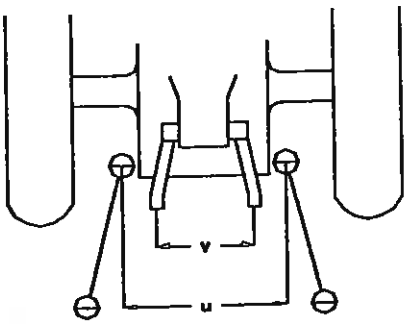
REAR POWER LIFT

Make:	S+L+H
Model:	527.59 electronic control
Type:	load sensing
Type of hydraulic system:	open centre system
Type and number of cylinders:	1 internal single acting, and 2 external single acting
Type of linkage lock for transport:	mechanical, with screwed tie rods that lock the lower links
Relief valve pressure setting:	18 $\pm$ 0.5 MPa
Opening pressure of anti-shock valve:	21.0 MPa
Opening pressure of cylinder safety valve:	none
Lift pump type:	hydraulic rotary pump, driven by engine shaft, pump BOSCH make, HY/ZFS 11/22.5 R206V
Transmission between pump and engine:	mechanical
Type and number of filters:	1, replaceable paper cartridge
Site of oil reservoir:	gear-box
Type, number and location of tapping points:	6 ways distributor at rear of tractor
Maximum volume of oil available to external cylinders:	15 dm^3

Three point linkage

Category:	2nd, implement attachment with three point linkage and lower links with quick connection, in conformity with ISO Standard 730/I-1990
Category adapter:	3rd


lift rod
c
L
top link
lift arm
lower link
A
S
H
b
a
d
rear axis
D
f
B
D
h
e
ground level
rear wheel axis


v
u

REAR POWER LIFT

Dimension of linkage geometry (when connected to the standard frame)

		Dimension or range mm	Settings used in test mm
Length of lift arms	(A)	280	280
Length of lower links	(B)	840	840
Distance of lift arm pivot point from rear wheel axis: - horizontally	(a)	135	135
- vertically	(b)	402	402
Horizontal distance between the 2 lower link points	(u)	550	550
Horizontal distance between the 2 lift arm end points	(v)	580	580
Length of upper link	(S)	from 500 to 770	729
Distance of upper link pivot point from rear wheel axis: - horizontally	(c)	335	335
- vertically	(d)	217-282-347	282
Distance of lower link pivot point from rear wheel axis: - horizontally	(e)	220	220
- vertically	(f)	230	230
Distance of lower link pivot points to lift rod pivot points on lower links	(D)	430-470	430
Length of lift rods	(L)	from 730 to 870	825
Heigth of lower hitch points relative to the rear wheel axis:			
- in low position	(h)	from 429 to 747	655
- in high position	(H)	from 4 to 247	75
Height above ground of lower hitch points when locked in transport position (*)			930

(*) Assuming the dynamic radius index: 855 mm (ISO 4251/1-1988)

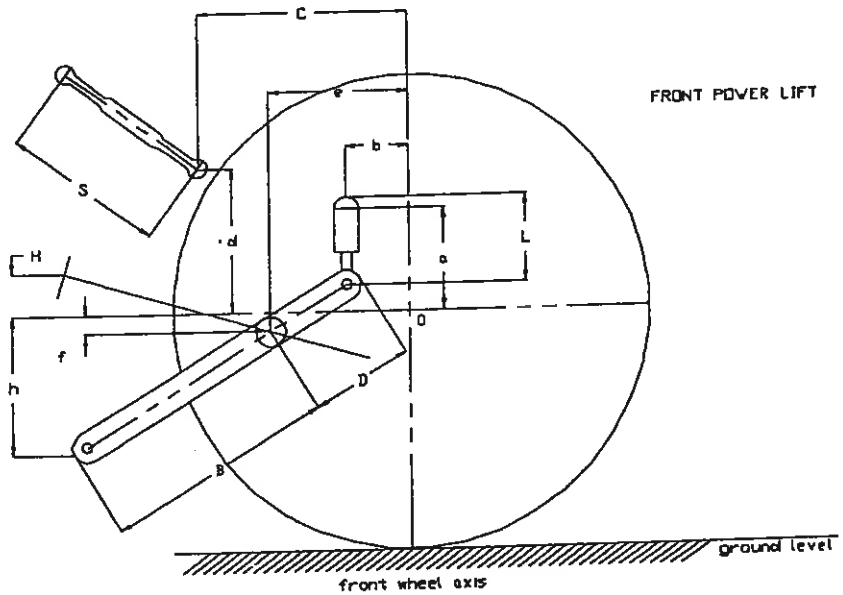
FRONT POWER LIFT

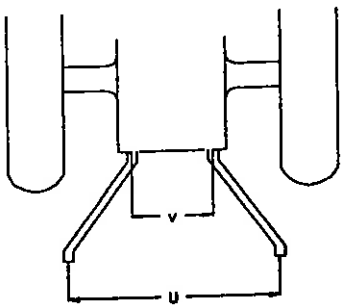
Make:	S+L+H
Model:	ORIGINAL SAME SYSTEM, 526.59 FRONT electronic control
Type and number of cylinders:	2 at single acting
Type of linkage lock for transport:	none
Relief valve pressure setting:	18 ± 0.5 MPa
Opening pressure of anti-shock valve:	21.0 MPa

Lift pump type:	hydraulic rotary pump, driven by engine shaft, pump BOSCH make
Transmission between pump and engine:	mechanical
Type and number of filters:	1, replaceable paper cartridge
Site of oil reservoir:	gear-box

Three point linkage

Category:	2nd, implement attachment with three point linkage and lower links with quick connection, in conformity with ISO Standard 730/I-1990
Category adapter:	none





FRONT POWER LIFT

Dimension of linkage geometry (when connected to the standard frame)

		Dimension or range mm	Settings used in test mm
Length of lower links	(B)	920	920
Distance of cylinders pivot point from front wheel axis: - horizontally	(a)	328	328
- vertically	(b)	320	320
Horizontal distance between the 2 lower link points	(u)	870	870
Horizontal distance between the 2 lift arm end points	(v)	360	360
Length of upper link	(S)	from 510 to 690	599
Distance of upper link pivot point from front wheel axis: - horizontally	(c)	625-640	640
- vertically	(d)	360-420	420
Distance of lower link pivot point from front wheel axis: - horizontally	(e)	470	470
- vertically	(f)	60	60
Distance of lower link pivot points to cylinders points on lower links	(D)	180	180
Length of cylinders:			
- in low position	(L)	329	329
- in high position	(L)	503	503
Heigth of lower hitch points relative to the front wheel axis:			
- in low position	(h)		440
- in high position	(H)		225
- Height above ground of lower hitch points (*)			920

(*) Assuming the dynamic radius index: 695 mm (ISO 4251/1-1988)

SWINGING DRAWBAR (optional not fitted on tested tractor)

Type:	97313
Height above ground (tyre size 20.8 R 38):	
- max:	565 mm
- min:	490 mm
Type of adjustment:	reversible
Distance of hitch point from rear wheel axis:	
- horizontally:	815 mm

Distance of hitch point from power take-off shaft end:	
- vertically:	290 - 365 mm below
- horizontally:	485 mm behind
Lateral adjustment(centre of clevis):	
- right hand:	270 mm
- left hand:	270 mm
Distance of pivot point from rear wheel axis, horizontally:	485 mm forward
Diameter of drawbar pin hole:	33 mm
Maximum vertical permissible load:	not specified

TRAILER HITCH

Type:	SAME DGM-GA 1189/C
Hole diameter:	28 mm
Height above ground:	
- min:	525 mm
- max:	790 mm
Distance of hitch point from rear wheel axis, horizontally:	560 mm
Distance of hitch point from power take-off shaft end:	
- vertically:	175 mm below, 20 mm above
- horizontally:	110 mm
Maximum vertical permissible load:	14.7 kN

HOLED DRAWBAR

Number of holes:	7
Distance between holes:	100 mm
Hole diameter:	28.5
Thickness/width of the drawbar:	30/80 mm
Height above ground with tyre 20.8 R 38:	
- minimum:	300 mm
- maximum:	1050 mm
Horizontal distance behind power take-off shaft end:	590 mm

STEERING

Make:	DANFOSS
Model:	ORBITROL OSPC 160 OR
Type:	hydrostatic
Method of operation:	
- pump:	hydrostatic steering with BOSCH hydraulic gear pump HY/ZFS 11/11 L201
- rams:	two double acting rams acting directly on front axle
Working pressure:	15 MPa

BRAKES

Service brake:

Make:	S+L+H
Model:	524.54

Type:	oil bath disc, total 6 discs, 4 at front (2 for wheel) and 2 at rear (1 for wheel), all mounted before the final drive. Front disc 224 mm dia, rear disc 280 mm dia, FRENDO HDT 303 lining material
Method of operation:	hydraulically actuated with 2 pedals
Trailer braking take-off:	none

Parking brake:

Type:	fully independent of service brake, 4 oil bath disc mounted on the pinion shaft in the gear box, ISOBOND SINTERIX lining material
Method of operation:	mechanical by hand lever

WHEELS

Steering wheels

Number:	2
Location:	at front

Driving wheels

Number:	4
Location:	2 at front and 2 at rear

Tyre matching			
At front		At rear	
16.9 R 30	6 ply	20.8 R 38	8 ply
14.9 R 30	129 A8	18.4 R 38	146 A8
480/70 R 28	140 A8	520/70 R 38	150 A8

Wheelbase: 2750 mm

Track width adjustment

	Minimum mm	Maximum mm	Adjustement method
Front	1800	2060	Changing the position of the rims with respect to the disc
Rear	1750	2250	Changing the position of the rims in respect to the disc

PROTECTIVE STRUCTURE

Make:	S+L+H
Model:	C 32
Type:	cab, not tiltable
Manufacture's name and address:	S+L+H S.p.A., Viale F. Cassani 15 24047 TREVIGLIO (BG) - Italy
OECD approval number:	CSD 1261/2

DRIVER'S SEAT

Make:	GRAMMER
Model:	LS 95H1/90 A
Type:	upholstered seat with back rest
Type of suspension:	adjustable spring
Type of damping:	shock absorber
Range of adjustment:	
- longitudinal:	150 mm
- vertical:	60 mm
Available options:	
Make:	KAB
Model:	U Series XH2
Type:	upholstered seat with back rest
Type of suspension:	adjustable spring
Type of damping:	shock absorber
Range of adjustment:	
- longitudinal:	150 mm
- vertical:	60 mm

PASSENGER'S SEAT

Location:	on the left side of the cab
Number of places:	1

LIGHTING

	Height above ground of centre* mm	Size mm	Distance from outside edge of lights to median plane of tractor mm
Headlights	1180	170 x 110	240
Sidelights	1875	110 x 35	860
Rearlights	1865	115 x 70	800
Reflectors	1815	110 X 35	800

(*) with tyres: 16.9 R 30 front - 20.8 R 38 rear

II. TEST CONDITIONS

Overall dimensions (with tyres 16.9 R 30 front and 20.8 R 38 rear)

	Length	Width		Height at top of	
		minimum	maximum	protective structure	exhaust silencer
	mm	mm	mm	mm	mm
Ballasted	5255	2250	2500	2890	2905
Unballasted	5140	2250	2500	2890	2905

Ground clearance (unballasted tractor): 520 mm

Clearance-limiting part: differential of the front axle

Tractor mass (with protective structure and full fuel tank):

	Ballasted		Unballasted	
	Without driver kg	With driver kg	Without driver kg	With driver kg
Front	3090	3110	2510	2530
Rear	3050	3105	2930	2985
Total	6140	6215	5440	5515

Ballast

	Weights		Water (kg)
	Number	Total mass (kg)	
Front wheels	-	-	-
Front weight	1	400	-
Rear wheels	6	300	-

Tyres and track width specifications

	Front	Rear
Tyres:		
- dimensions	16.9 R 30	20.8 R 38
- ply rating	6	8
- type	radial	radial
- maximum load (tyre manufacturer')	14.9 kN	24.3 kN
- maximum load (tractor manufacturer's)	14.5 kN	24.0 kN
- inflaction pressure (tyre manufacturer's)	130 kPa	130 kPa
- dynamic radius index	695 mm	855 mm
Chosen track width:	1720 mm	1840 mm

Oils and lubrication

Capacity and change interval

	Capacity dm^3	Oil change h	Filter change h
Engine with filter	15.0	150	300
Gear box with power lifts, rear axle, final drive and hydraulic system	97.0	1200	2400 (*)
Front axle	13.0	1200	-
Front final drive	5.0	1200	-

(*) or when the warning lamp is lighted.

Specifications (SAE, API, MIL-L, ISO)

	Recommended	Used during test
Engine oil - Type: - Viscosity: - Classification:	AGIP DIESEL SIGMA S SAE 30 12.50 cSt API SE-CD	As recommended
Hydraulic fluid - Type: - Viscosity: - Classification:	AGIP ROTRA THT 11.50 cSt API GL 4	As recommended
Front and rear axle, final drives and gear box - Type: - Viscosity: - Classification:	AGIP ROTRA THT 11.50 cSt API GL 4	As recommended
Steering oil - Type: - Viscosity: - Classification:	AGIP ROTRA THT 11.50 cSt API GL 4	As recommended

Grease: GREASE 30
- Number of lubrication points: 10

Fuel

Type: AGIP DIESEL, DIN 51601, in conformity with national standard.

Density at 15 °C: 0.834 g/cm^3

COMPULSORY TEST RESULTS

1. MAIN POWER-TAKE-OFF

- Date and location of tests: 15th October 1991 - I.S.M.A. TREVIGLIO (BG)
- Type of dynamometer: ZOELLNER B 500

Power	Speed		Fuel consumption			Specific energy
	Engine	P.t.o.	Hourly		Specific	
kW	rev/min		kg/h	l/h	g/kWh	kWh/l
1.1 **MAXIMUM POWER** - TWO HOUR TEST						
93.5	2501	1033	22.71	27.23	243	3.43
1.2 POWER AT RATED ENGINE SPEED						
93.5	2501	1033	22.71	27.23	243	3.43
1.3 STANDARD POWER TAKE OFF SPEED (1000 ± 25 rev/min)						
92.5	2424	1001	22.14	26.55	239	3.49
1.4 **PART LOADS**						
1.4.1 the torque corresponding to maximum power at rated engine speed						
93.5	2501	1033	22.71	27.23	243	3.43
1.4.2 85% of torque obtained in 1.4.1						
82.0	2574	1063	21.08	25.28	257	3.24
1.4.3 75% of torque defined in 1.4.2						
62.8	2623	1084	17.47	20.95	278	3.00
1.4.4 50% of torque defined in 1.4.2						
42.4	2659	1098	13.88	16.64	328	2.54
1.4.5 25% of torque defined in 1.4.2						
21.4	2685	1109	10.39	12.46	486	1.72
1.4.6 unloaded						
----	2709	1119	6.89	8.26	----	----
1.5 **PART LOADS AT STANDARD POWER TAKE OFF SPEED** (1000 ± 25 rev/min)						
1.5.1 the torque corresponding to maximum power						
92.5	2424	1001	22.14	26.55	239	3.49
1.5.2 85% of torque obtained in 1.5.1						
81.1	2498	1032	20.02	24.00	247	3.38
1.5.3 75% of torque defined in 1.5.2						
62.1	2551	1054	16.62	19.93	268	3.11
1.5.4 50% of torque defined in 1.5.2						
41.8	2582	1066	13.47	16.15	322	2.59
1.5.5 25% of torque defined in 1.5.2						
21.0	2607	1077	10.03	12.02	477	1.75
1.5.6 unloaded						
----	2632	1087	6.58	7.89	----	----

STANDARD SPECIFIC FUEL CONSUMPTION: 257/328/247/322 g/kWh

- No load maximum engine speed: 2709 rev/min
- Torque (1) at maximum power at rated engine speed: 357.4 Nm
- Maximum torque (1) (engine speed: 1319 rev/min): 510.5 Nm
- Mean atmospheric conditions:
  - Temperature: 22 °C
  - Pressure: 99 kPa
  - Relative humidity: 60%
- Maximum Temperatures:
  - Coolant: 85 °C
  - Engine oil: 113 °C
  - Fuel: 30 °C
  - Engine air intake: 25 °C

(1) The torque is the equivalent crankshaft torque

2. HYDRAULIC POWER AND LIFTING FORCE

- Date of tests: 16th October 1991 - I.S.M.A. TREVIGLIO (BG)

2.1 HYDRAULIC POWER TEST

- Sustained pressure with relief valve open: **18.8 MPa**
- Pump delivery rate at minimum pressure: **61.0 l/min**

	Flow rate l/min	Power kW	Pressure MPa	Oil temp. °C
Flow rate corresponding to a hydraulic pressure equivalent to 90% of the actual relief valve pressure setting and corresponding hydraulic power	50.8	13.55	16.0	63
Flow rate and hydraulic pressure corresponding to maximum hydraulic power	50.0	15.42	18.5	66

- Tapping point used for test: at rear of tractor

2.2 REAR POWER LIFT TEST

	at the hitch point		on the frame	
Height of lower hitch points above ground in down position	200	mm	200	mm
Vertical movement	730	mm	772	mm
Maximum corrected force exerted through full range	40.22	kN	44.14	kN
Corresponding pressure of hydraulic fluid	18.50	MPa	18.50	MPa
Moment about rear-wheel axis	42.63	kNm	73.71	kNm
Maximum tilt angle of mast from the vertical	- degress		3 degress	

Lifting heights relative to the horizontal plane including the lower pivot points											
mm	-425	-400	-300	-200	-100	0	100	200	300	305	347
Lifting forces											
at the hitch points kN	40.22	41.00	42.30	44.34	47.87	50.62	52.97	55.82	57.78	57.83	-
Corresponding presure: 18.5 MPa											
at the frame kN	44.14	45.06	46.15	48.76	51.01	52.58	54.12	55.73	55.37	-	53.56
Corresponding pressure: 18.5 MPa											

2.3 FRONT POWER LIFT TEST

	at the hitch point		on the frame	
Height of lower hitch points above ground in down position	255	mm	255	mm
Vertical movement	665	mm	665	mm
Maximum corrected force exerted through full range	15.20	kN	12.07	kN
Corresponding pressure of hydraulic fluid	18.50	MPa	18.50	MPa
Moment about rear-wheel axis	18.39	kNm	21.97	kNm
Maximum tilt angle of mast from the vertical	- degress		- degress	

Lifting heights relative to the horizontal plane including the lower pivot points								
mm	-380	-300	-200	-100	0	100	200	285
Lifting forces								
at the hitch points kN	22.85	20.79	19.32	18.24	17.36	16.53	15.65	15.20
Corresponding presure: 18.5 MPa								
at the frame kN	23.45	20.21	18.07	16.48	15.04	13.62	12.55	12.07
Corresponding pressure: 18.5 MPa								

3. DRAWBAR PERFORMANCE

Date of tests: 17th to 24th October 1991 - I.S.M.A. TREVIGLIO (BG)
Type of track: concrete
Tyre size - front: 16.9 R 30 6 ply
- rear: 20.8 R 38 8 ply

	Height of hitch above ground	Tyre inflaction pressure Front	Rear
Unballasted	675 mm	130 kPa	130 kPa
Ballasted	670 mm	130 kPa	130 kPa

Gear no. and group	Driving speed km/h	Power kW	Drawbar pull daN	Engine speed rev/min	Slip of wheels %	Specific fuel consumption g/kWh	Specific energy kWh/l	Temperature Fuel °C	Coolant °C	Engine oil °C	Atmospheric conditions Temperature °C	Relative humidity %	Pressure kPa
3.1 - MAXIMUM POWER IN TESTED GEARS (unballasted tractor)													
1R lo	0.18	1.75	3501	2688	15	5846	0.152	38	79	99	16	75	100.3
1R hi	0.21	2.40	4121	2687	15	4000	0.209	38	79	99	16	75	100.3
2R lo	0.23	2.65	4148	2687	15	3642	0.229	38	79	100	16	74	100.4
2R hi	0.27	3.16	4217	2687	15	3054	0.273	39	78	100	15	75	100.3
3R lo	0.30	3.53	4236	2686	15	2861	0.291	39	78	100	16	75	100.4
3R hi	0.35	4.15	4271	2676	15	2446	0.341	39	81	101	16	75	100.3
4R lo	0.38	4.54	4306	2685	15	2258	0.369	38	81	100	16	75	100.4
4R hi	0.45	5.39	4315	2683	15	1948	0.428	38	80	99	15	75	100.3
5R lo	0.50	5.01	4330	2679	15	1830	0.456	39	81	100	16	76	100.3
1S lo	0.53	6.42	4364	2674	15	1869	0.446	39	81	101	15	76	100.3
5R hi	0.58	6.90	4286	2676	15	1710	0.488	37	82	102	16	76	100.4
1S hi	0.62	7.43	4318	2675	15	1629	0.512	38	83	102	16	76	100.4
6R lo	0.64	7.54	4244	2675	15	1618	0.515	38	80	102	16	77	100.3
2S lo	0.68	8.17	4327	2671	15	1518	0.549	37	81	101	17	76	100.2
6R hi	0.75	9.18	4409	2672	15	1345	0.620	37	81	101	17	77	100.2
2S hi	0.80	9.44	4249	2670	15	1324	0.630	37	82	102	17	77	100.3
3S lo	0.89	10.47	4235	2669	15	1203	0.693	35	82	102	17	77	100.3
3S hi	1.03	12.26	4286	2667	15	1044	0.799	35	81	103	17	77	100.2
4S lo	1.13	13.42	4276	2663	15	984	0.848	36	80	103	18	77	100.3
4S hi	1.32	15.66	4271	2661	15	852	0.978	36	81	103	18	77	100.4
5S lo	1.49	18.25	4411	2658	15	773	1.079	37	82	104	18	78	100.4
5S hi	1.74	20.13	4167	2657	15	704	1.185	36	84	103	18	78	100.3
1N lo	1.82	21.07	4169	2652	15	676	1.233	36	83	103	18	78	100.3
6S lo	1.91	22.06	4159	2653	15	653	1.278	36	82	104	17	78	100.4
1N hi	2.12	24.02	4081	2652	15	601	1.388	36	81	103	18	78	100.4
6S hi	2.22	25.78	4182	2647	15	566	1.473	34	81	103	18	79	100.4
2N lo	2.34	26.99	4153	2643	15	574	1.452	34	82	104	18	79	100.3
2N hi	2.72	31.02	4107	2634	15	525	1.587	35	82	103	19	79	100.3
3N lo	3.01	34.17	4087	2624	15	509	1.638	35	81	104	19	79	100.2
3N hi	3.50	38.57	3969	2616	15	464	1.797	35	81	105	19	79	100.2
4N lo	3.83	43.62	4101	2603	15	431	1.935	34	80	104	18	78	100.2
4N hi	4.42	50.14	4057	2590	15	397	2.101	34	80	104	18	79	100.2
5N lo	5.05	55.23	3938	2579	14	373	2.236	35	79	105	19	79	100.3
5N hi	5.86	65.64	4033	2533	13	340	2.455	35	80	105	19	79	100.4
6N lo	6.52	66.76	3687	2506	11	345	2.421	34	80	105	19	80	100.3
6N hi	7.76	69.00	3202	2501	9	335	2.491	34	81	104	19	80	100.4
1F lo	8.53	72.29	3052	2506	8	318	2.621	35	81	105	19	80	100.4
1F hi	10.01	73.38	2640	2498	7	315	2.644	34	80	106	19	80	100.3
2F lo	11.22	69.58	2233	2506	6	331	2.523	34	80	105	19	80	100.4

Gear no. and group	Driving speed km/h	Power kW	Drawbar pull daN	Engine speed rev/min	Slip of wheels %	Specific fuel consumption g/kWh	Specific energy kWh/l	Temperature Fuel °C	Coolant °C	Engine oil °C	Atmospheric conditions Temperature °C	Relative humidity %	Pressure kPa
3.2 - MAXIMUM POWER IN TESTED GEARS (ballasted tractor)													
1R lo	0.18	2.01	4026	2683	15	5149	0.162	39	80	100	18	83	99.3
1R hi	0.21	2.41	4126	2683	15	4303	0.194	38	80	100	18	83	99.3
2R lo	0.23	2.81	4393	2682	15	3708	0.225	38	79	101	18	83	99.3
2R hi	0.27	3.56	4742	2681	15	3048	0.274	38	80	101	18	83	99.3
3R lo	0.30	3.82	4587	2682	15	2736	0.305	37	81	100	19	83	99.4
3R hi	0.35	4.30	4428	2681	15	2535	0.329	37	81	100	19	83	99.3
4R lo	0.38	4.75	4499	2678	15	2358	0.354	36	80	101	19	83	99.2
4R hi	0.44	5.61	4590	2674	15	2103	0.397	37	81	101	18	84	99.2
5R lo	0.50	7.19	5178	2672	15	1697	0.492	37	83	102	19	84	99.3
1S lo	0.53	7.61	5172	2670	15	1643	0.508	37	83	103	19	83	99.3
5R hi	0.58	8.37	5198	2670	15	1496	0.558	36	82	102	19	83	99.2
1S hi	0.62	8.83	5129	2671	15	1393	0.599	37	82	102	19	83	99.2
6R lo	0.64	9.27	5217	2669	15	1359	0.614	36	82	103	19	84	99.2
2S lo	0.68	9.67	5123	2669	15	1305	0.639	36	81	103	18	83	99.2
6R hi	0.74	10.54	5129	2667	15	1214	0.687	36	82	103	18	83	99.3
2S hi	0.79	11.09	5054	2667	15	1159	0.720	37	83	103	18	83	99.3
3S lo	0.88	11.98	4903	2667	15	1071	0.779	36	83	104	17	83	99.3
3S hi	1.03	14.59	5099	2665	15	894	0.932	35	83	104	18	82	99.4
4S lo	1.13	16.29	5190	2661	15	804	1.037	35	84	104	18	82	99.4
4S hi	1.31	18.41	5061	2659	15	747	1.117	35	82	104	17	81	99.3
5S lo	1.48	20.74	5047	2653	15	699	1.193	34	82	105	17	81	99.2
5S hi	1.72	24.32	5092	2651	15	602	1.384	34	82	105	17	82	99.2
1N lo	1.80	25.83	5168	2645	15	592	1.408	34	83	106	18	83	99.2
6S lo	1.89	25.80	4915	2646	15	591	1.411	34	82	105	17	83	99.4
1N hi	2.09	29.31	5050	2637	15	553	1.509	34	83	106	18	83	99.5
6S hi	2.20	30.54	4998	2637	15	531	1.570	35	83	106	17	83	99.5
2N lo	2.31	32.30	5036	2634	15	506	1.648	35	83	106	17	83	99.6
2N hi	2.69	36.63	4903	2624	15	472	1.766	34	82	106	17	83	99.5
3N lo	2.99	41.45	4992	2621	15	425	1.964	34	83	106	17	84	99.6
3N hi	3.45	48.43	5057	2594	15	405	2.062	33	82	106	17	84	99.5
4N lo	3.78	52.71	5021	2585	15	385	2.166	33	81	106	17	84	99.4
4N hi	4.37	60.84	5013	2563	15	355	2.349	34	82	107	16	83	99.4
5N lo	4.83	67.25	5014	2513	15	339	2.460	35	81	407	16	83	99.5
5N hi	5.88	70.59	4323	2498	11	326	2.560	36	82	107	17	83	99.4
6N lo	6.61	72.17	3931	2501	9	319	2.617	36	81	108	17	83	99.3
6N hi	7.82	73.34	3377	2513	8	311	2.683	36	82	107	17	82	99.3
1F lo	8.59	72.00	3018	2516	7	312	2.672	36	81	107	17	83	99.3
3.3.1 - FIVE HOUR TEST at 75% of pull at maximum power													
6N lo	6.96	56.85	2942	2572	7	373	2.233	37	88	106	16	81	99.8
3.3.2 - FIVE HOUR TEST at pull corresponding to 15% wheelslip - with 380 kg as additional ballast													
5N lo	5.12	71.25	5016	2550	-	-	-	38	88	106	15	78	100.2

Oil consumption during ten hours tests 3.3.1 and 3.3.2: 70 g/h

Tests 3.3.2 was carried out with additional ballast; so. the not quoted figures are irrelevant.

4. TURNING AREA AND TURNIG CIRCLE

Wheel equipment front: 16.9 R 30 6 ply
rear: 20.8 R 38 8 ply
Track width front: 1720
rear: 1840

	With brakes		Without brakes	
	Right-hand m	Left-hand m	Right-hand m	Left-hand m
Radius of turning area	5.42	5.48	5.90	5.97
Radius of turning circle	5.16	5.22	5.70	5.77

5. LOCATION OF CENTRE OF GRAVITY

Height above ground	1021 mm
Distance forward from the vertical plane containing the axis of the rear wheels	1262 mm
Distance from the median plane of the tractor	0 mm

6. BRAKING

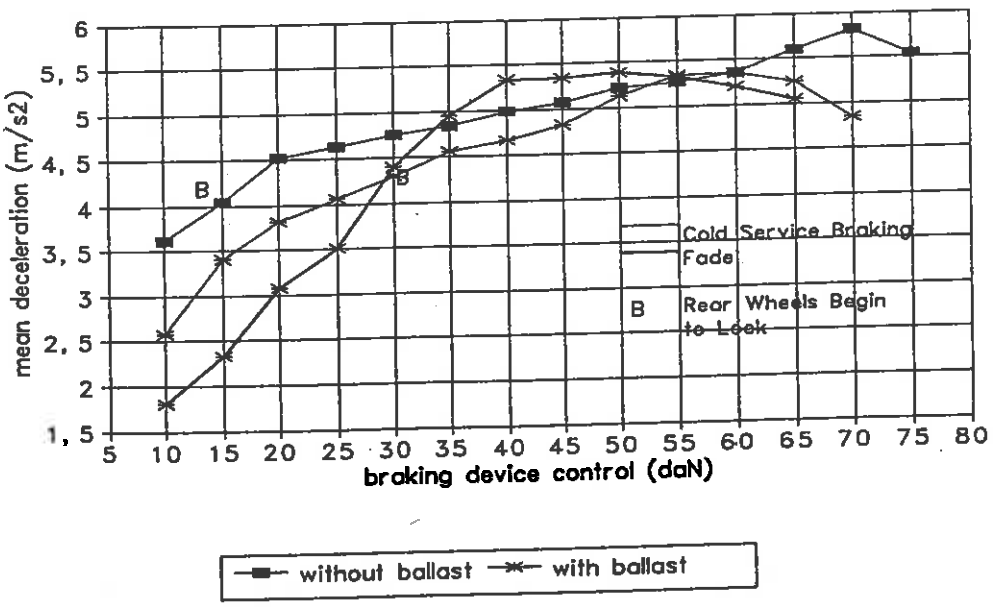
- Date of tests: 30th November 1990 - I.S.M.A. TREVIGLIO (BG)
- Type of track: asphalt
- Type of decelerometer: PEISELER

- Tractor masses during test (*)

	front axle kg	rear axle kg	total kg
ballasted	2820	5395	8215
unballasted	2530	2955	5525

(*) tractor carring a driver and the decelerometer (85 kg)

6.1 Cold service braking device test - 6.2 Fade test



Cold service braking device test

	Ballasted tractor	Unballasted tractor
Speed before application of brakes (km/h)	42.5	42.5

Fade test

- Maximum deviation of the tractor from its original course: none
- Abnormal vibration: none
- Brake heating method: by means of towing the tractor for 1 km

6.3 **Parking braking device test**

	Uphill	Downhill
Braking device control force	15.70 daN	14.71 daN

7. **MEASUREMENT OF EXTERNAL NOISE LEVEL**

- Date of tests: 25th October 1991 - I.S.M.A. TREVIGLIO (BG)
- Sound level meter:
  - . make: BRUEL & KJAER
  - . model: 2231
  - . type: impulse precision
- Type of track: concrete
- Gear number: 6 F hi
- Travelling speed before acceleration: 32.0 km/h
- Sound level: 85.7 dB(A)

8. **REPAIRS** = none

9. **REMARKS** = none

The Responsible of Homologation

R. MARENGO

The Director

S. POTECCHI

Torino, 2nd September 1994

HURLIMANN 6135 VDT

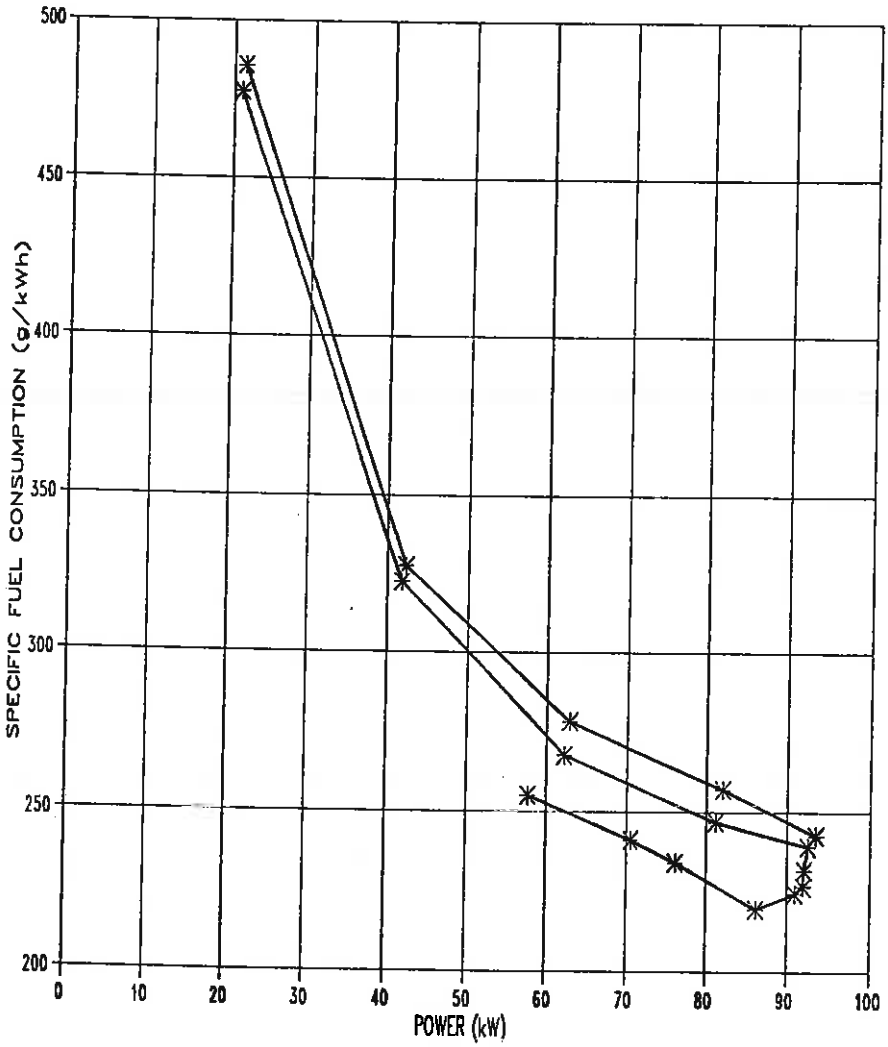


Fig. 1 - POWER TAKE-OFF TEST

HURLIMANN 6135 VDT

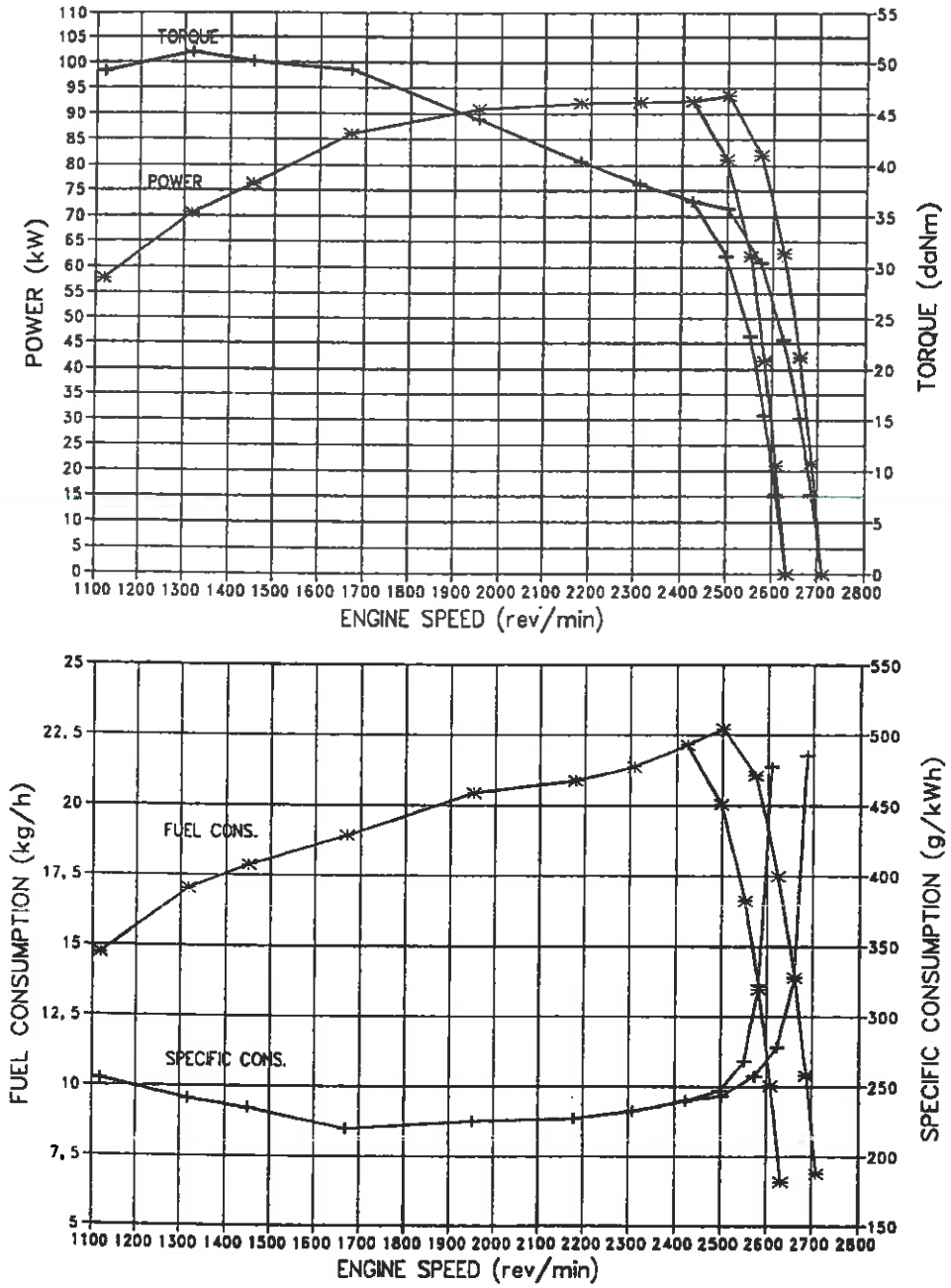


Fig. 2 - POWER TAKE-OFF TEST