ISTITUTO SPERIMENTALE PER
LA MECCANIZZAZIONE AGRICOLA
SEZIONE DI TREVIGLIO

Report on test in accordance with the OECD Standard Code for the Official Testing of Agricultural Tractor Performance



SAME ARGON 70 VDT "4WD" OECD No. **1543/3** Full Code
HÜRLIMANN 307 VDT "4WD" OECD No. **1543/1** Full Code
LAMBORGHINI 574-70 VDT "4WD" OECD No. **1543/2** Full Code

Manufactured by: S+L+H S.p.A.
V.le F. Cassani 15
24047 Treviglio BG
Italy

Date of OECD approval: 9 February 1995
Period of test: November 1994

ISMA Via Milano 43 24047 Treviglio BG Italy
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The Same Argon 70 VDT (4WD), Hürlimann 307 VDT (4WD) and Lamborghini 574-70 VDT (4WD) tractors are technically identical in all main respects except with regard to model designation, colour and side bonnets design.
All tests were carried out on the Same Argon 70 VDT (4WD).

All stated dimensions and tests refer to tyre size 11.2R24 at front and 16.9R30 at rear, as well as to track widths 1400 mm at front and 1410 mm at rear.

Tractor manufacturer

- Name:	S+L+H S.p.A.;
- Address:	V.le F. Cassani 15, 24047 Treviglio BG, Italy;
- Location of tractor assembly:	Treviglio BG, Italy;
- Submitted for test by:	the manufacturer;
- Selected by:	the manufacturer with the agreement of ISMA;
- Place of running in:	Treviglio BG, Italy;
- Duration of running in:	50 hours,
- Location of test:	ISMA, Via Milano 43, Treviglio BG, Italy.

SPECIFICATION OF TRACTOR

TRACTOR

- Make:	SAME;
- Model:	Argon 70 VDT;
- Type:	wheeled tractor, unit construction, all wheels drive tractor;
- Number of driving wheels:	4;
- Serial number:	1339;
- First serial number:	1001.

ENGINE

- Make:	S+L+H;
- Model:	1000.3 AT;
- Type:	air cooled 4-stroke diesel engine, direct injection, turbocharged;
- Serial number:	3747.

Cylinders

- Number and disposition:	3, vertical, in-line;
- Bore x stroke:	105 x 115.5 mm;
- Capacity:	3000 cm^3;
- Compression ratio:	16:1;
- Arrangement of valves:	overhead;
- Cylinder liners:	without liners.

Supercharging:

- Make:	GARRET;
- Model:	T 25;
- Type:	exhaust driven supercharger, without intercooler;
- Supercharging pressure:	60 kPa.

Fuel system

- Fuel feed system:	AC corone fuel feed pump;
- Make, model and type of fuel filter:	FIAAM FNA 166/20;
- Capacity of fuel tank:	57 dm^3;
- Make, model and type of injection pump:	BOSCH PFR 1K 90 A 517, immersed pump, one per cylinder in line injection pump;
. serial number:	without serial number;
- Manufacturer's production setting of injection pump:	
. flow rate:	67 ± 2 mm^3/stroke at rated speed and full load corresponding 14.24 dm^3/h;
. timing:	16° 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:	0.85.1650.4;
- Type:	mechanical;
- Governor range of engine speed:	from 650 to 2477 rev/min;
- Rated engine speed:	2350 rev/min.

Air cleaner

- Main filter	
. make:	DONALDSON;
. model:	FLG 08-0524;
. type:	dry paper element filter with replaceable cartridge;
. location:	front of engine;
. air intake location:	above 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 4803;
- Oil specifications:	see page 19.

Cooling system

- Type and detail:	air cooling with axial blower;
- Specification of fan:	propeller fan driven by engine shaft;
- Number of fan blades:	13;
- Fan diameter:	250 mm;
- Type of temperature control:	none.

Starting system

- Make:	ISKRA;
- Model:	AZ 1349 12 V;
- Type:	electromagnetic engagement;
- Starter motor power rating:	2.7 kW;
- Safety device:	electrical lockout on clutch and PTO controls;
- Starting system for low temperatures:	none.

Electrical equipment

- Voltage:	12 V;
- Generator	
. make:	ISKRA;
. model:	12 V 55 A;
. type:	alternator;
. power:	55 A;
- Battery:	1 lead acid;
. capacity:	100 Ah at 20 hours rating.

Exhaust system

- Make:	S+L+H;
- Model:	DGM SA 1857;
- Type:	one reflection absorption chamber;
- Location:	on the left hand side of engine, horizontal position, under side bonnet;
- Height of outlet above ground:	530 mm.

TRANSMISSION

Clutch (utilized only for travelling of tractor)

- Make:	S+L+H;
- Model:	595.23;
- Type:	single disk dry clutch;
- Number of plates:	1;
- Plates diameter:	280 mm;
- Control system:	mechanical operated by pedal.

Gear box

- Make:	own make;
- Model:	595.31;
- Type:	mechanical syncromesh speed change gear;
- Arrangement:	two forward and one reverse group (forward fast, forward slow, reverse) combined with 4 speed change gear and reduction gear (high, low);
- Number of speeds:	16 forward and 8 reverse;
- Available options:	four speed forward, with three ranges of speeds, and one reverse group;
- number of speeds:	12 forward and 12 reverse; or: four speed forward, with three ranges of speeds, minireductor and one reverse group;
- number of speeds:	24 forward and 12 reverse;

Rear axle and final drives

- Make:	own make;
- Model:	595.44;
- Type:	bevel gear differential and epicyclic final drive.

Rear differential lock

- Make:	own make;
- Model:	595.47;
- Type:	mechanical;
- Control system:	engaged or disengaged by pedal.

Front axle and final drives

- Make:	own make;
- Model:	595.43;
- Type:	original S+L+H system with central shaft, bevel gear drive, differential and epicyclic final drives.

Front differential lock

- Make: own make;
- Model: 595.46;
- Type: mechanical;
- Control system: engaged or disengaged by pedal.

Total ratios and speeds

Gear	Group	Number of engine revolutions for one revolution of the driving wheels		Nominal travelling speed at rated engine speed of 2350 rev/min (*), km/h	
		LOW	HIGH	LOW	HIGH
FORWARD					
1	S	410.61	331.41	1.50	1.86
2	S	259.13	208.89	2.38	2.95
3	S	163.35	131.92	3.77	4.67
4	S	103.21	83.16	5.97	7.40
1	F	74.50	60.14	8.27	10.24
2	F	47.03	37.87	13.09	16.26
3	F	29.70	23.76	20.73	25.91
4	F	18.81	15.10	32.73	40.78
REVERSE					
1	R	349.23	220.28	1.76	2.80
2	R	138.85	87.86	4.43	7.01
3	R	63.36	39.85	9.72	15.45
4	R	25.25	15.84	24.39	38.87

S =Slow; F =Fast.

(*) Calculated with a tyre dynamic radius index of 695 mm (ISO 4251/1-1992).
Number of revolutions of front wheels for one revolution of rear wheels: 1.3830.

POWER TAKE-OFF

Power take-off proportional to engine speed

- Type:	independent, at rear of tractor, in tractor's median plane, engaged or disengaged by hand lever, driven by single disk dry clutch independent of travel clutch;
- Number of shafts:	1;
- Method of changing power take-off shaft ends:	none;
- Method of changing speed:	by hand lever.
540 rev/min PTO:	35 mm diameter, 6 splines, in conformity with ISO 500-1991, type 1;
- PTO speed at rated engine speed:	611 rev/min;
- Engine speed at standard PTO speed:	2077 rev/min;
- Ratio of rotation speeds (engine speed/PTO speed):	3.8462;
- Power restriction and maximum torque:	power and torque of the engine.
750 rev/min PTO:	35 mm diameter, 6 splines, not in conformity with ISO 500-1991;
- PTO speed at rated engine speed:	752 rev/min;
- Engine speed at standard PTO speed:	2344 rev/min;
- Ratio of rotation speeds (engine speed/PTO speed):	3.125;
- Power restriction and maximum torque:	power and torque of the engine.

Height above ground:	730	mm
Distance from the median plane of the tractor:	0	mm
Distance behind rear axle:	440	mm
Direction of rotation (viewed facing driving end):	clockwise	

Power take-off proportional to ground speed

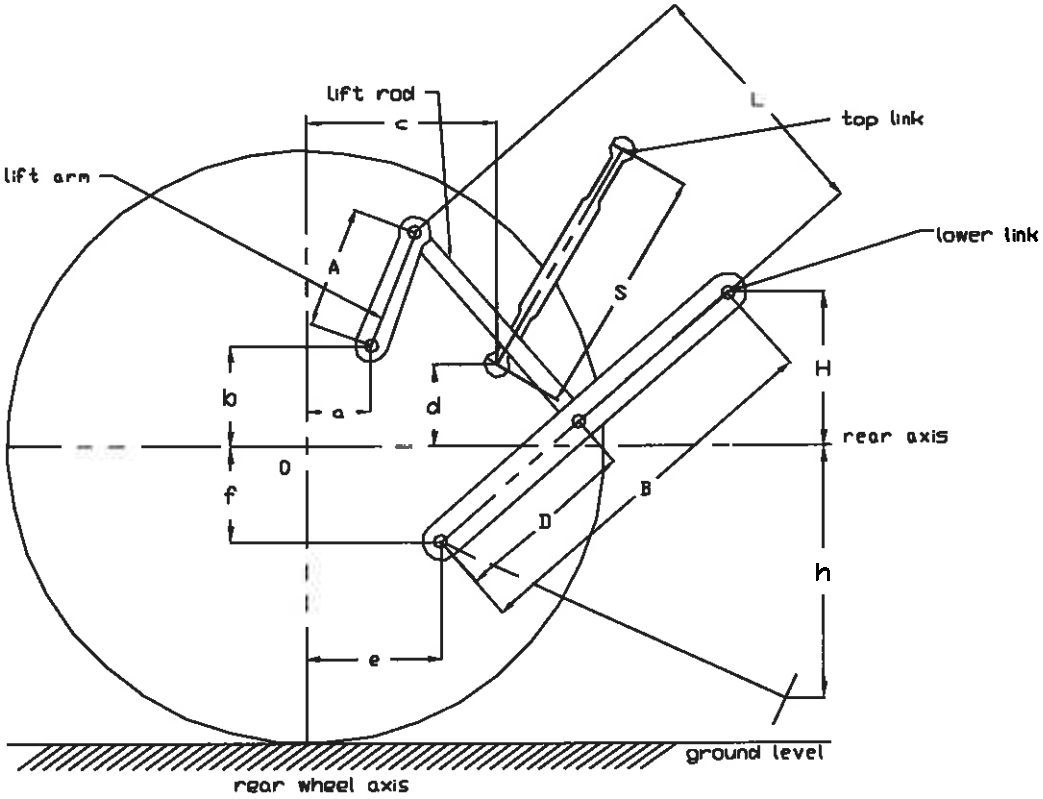
- Type:	independent, not adjustable to 540-750 rev/min, location at rear of tractor, in tractor's median plane, below the mean PTO, engaged or disengaged by hand lever at the left hand side of the seat;
- Number of shafts:	1;
- Method of changing power take-off shaft ends:	none;
- Direction of rotation with forward gear engaged:	clockwise;
- Travelling distance for one revolution of power take-off shaft:	0.296 m;
- Number of power take-off shaft revolutions for one revolution of rear driving wheels:	14.74.

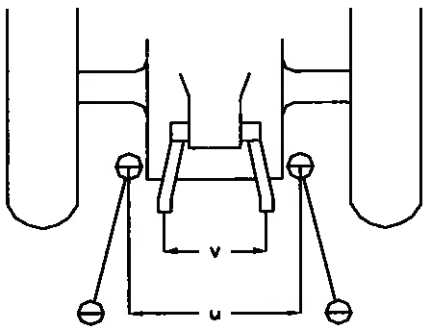
POWER LIFT

- Make:	S+L+H;
- Model:	595.39;
- Type:	load sensing;
- Type of hydraulic system:	open centre system;
- Number and type of cylinders:	1 internal single-acting;
- Type of lock for transport:	mechanical, with screwed tie rods that lock the lower links;
- Relief valves pressure setting:	18.0 ± 0.5 MPa;
- Opening pressure of anti-shock valve:	21.0 ± 0.5 MPa;
- Lift pump	
. make:	BOSCH A 510 241 101;
. type:	hydraulic rotary pumps, driven by engine shaft;
- Transmission between pump and engine:	mechanical;
- Number and type of filters:	1, replaceable paper cartridge;
- Oil capacity:	41 dm^3;
- Site of oil reservoir:	gear box;
- Number, type and location of tapping points:	4 ways distributor at rear of tractor;
- Maximum volume of oil available to external cylinders:	10 dm^3.
- Recommended oil:	see page 19.

Three-point linkage

- Category (ISO 730/1-1990): 2;
- Category adapter: none.





POWER LIFT (continued)

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

		Dimension or range mm	Settings used in test mm
Length of lift arms	(A)	250	250
Length of lower links	(B)	800	800
Distance of lift arm pivot point from rear wheel axis (behind)			
- horizontally	(a)	177	177
- vertically	(b)	315	315
Horizontal distance between the 2 lower link points	(u)	340	340
Horizontal distance between the 2 lift arm end points	(v)	450	450
Length of upper link	(S)	from 471 to 740	589
Distance of upper link pivot point from rear wheel axis			
- horizontally	(c)	407-397-407	397
- vertically	(d)	260-295-335	295
Distance of lower link pivot point from rear wheel axis			
- horizontally	(e)	183	183
- vertically	(f)	154	154
Distance of lower link pivot point to lift rod pivot points on lower links	(D)	400	400
Length of lift rods	(L)	from 505 to 655	645

Height of lower hitch points relative to the rear wheel axis:

Length of lift rods	(L)	505	655	645
Linkage distance of lift rods	(D)	400	400	400
Lowest position	(h)	188	571	495
Highest position	(H)	407	157	175
Height above ground of lower hitch points when locked in transport position (*)		1102	852	870

(*) *Assuming the dynamic radius index = 695 mm (ISO 4251/1-1992)*

SWINGING DRAWBAR: optionally available, not fitted.

HOLED DRAWBAR:

- Number of holes:	9;
- Distance between holes:	55 mm;
- Hole diameter:	22 mm;
- Thickness x width of the drawbar:	30 x 80 mm;
- Height above ground,	
. min:	400 mm;
. max:	1050 mm;
- Horizontal distance behind power take-off shaft end:	570 mm;
- Diameter of the pinhole:	28 mm.

TRAILER HITCH

- Type:	SAME DGM-GA 1189/C;
- Hole diameter:	28 mm;
- Height above ground	
. min:	320 mm;
. max:	925 mm;
- Distance of hitch point from rear wheel axis	
. horizontally:	550 mm;
- Distance of hitch point from power take-off shaft end	
. vertically:	410 mm below, 195 mm above;
. horizontally:	115 mm;
- Maximum vertical permissible load:	14.7 kN.

STEERING

- Specification:	hydrostatic steering with BOSCH hydraulic gear pump, one double acting ram acting directly on front axle.
- Make:	DANFOSS;
- Model:	ORBITROLL OSPC OR 80;
- Type:	hydrostatic;
- Working pressure:	15 MPa;
- Recommended oil:	see page 19.

BRAKES

Service brake

- Make:	S+L+H;
- Model:	595.54;
- Type:	oil bath disc, total 4 discs, 2 at front (1 per wheel) and 2 at rear (1 per wheel), all mounted before the final drive;
. front disc diameter:	178 mm,
. rear disc diameter:	224 mm,
. material:	FRENDO HDT 303 lining material;
- Method of operation:	hidraulically actuated with 2 pedals;
- Trailer braking take-off:	none.

Parking brake

- Type:	fully independent of service brake, 2 oil bath disc mounted on the pinion shaft in the gear box;
- Method of operation:	mechanical by hand lever.

Steering brake

- Metod of operation:	divided pedal of service brake, for normal use locked together.

STEERING WHEELS

- Number:	2;
- Location:	at front;
- Track widths	
. min:	1340 mm:
. max:	1540 mm;
- Adjustment:	changing the position of the rims with respect to the disc.

DRIVING WHEELS

- Number:	4;
- Location:	two at front and two at rear;
- Rear track widths	
. min:	1310 mm;
. max:	1410 mm;
- Adjustment:	changing the position of the rims with respect to the disc.

WHEELBASE: 2056 mm.

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PROTECTIVE STRUCTURE

Specifications

Tractors	OECD approval numbers
S+L+H SAME ARGON 70 VDT (4WD)	CSD 1378/21
S+L+H HÜRLIMANN 307 VDT (4WD)	CSD 1378/3
S+L+H LAMBORGHINI 574-70 VDT (4WD)	CSD 1378/12

- Date of approval:	26 May 1993;
- Location and country of test of protective structure:	Istituto di Ingegneria Agraria, Università degli Studi di Milano, Italy;
- Reference mass and wheelbase used for calculating impact energies and crushing forces:	2400 kg and 2056 mm;
- Make:	S+L+H;
- Model:	T 63;
- Type:	frame;
- Manufacturer's name:	S+L+H S.p.A.;
. address:	V.le F. Cassani 15, 24047 Treviglio BG, Italy;
- Protective device:	frame.

DRIVER'S SEAT

- Make:	KAB;
- Model:	P 2 XL 2;
- 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 : none.

LIGHTING

Lighting system in accordance with EEC 78/933
(all data referred to all models unless otherwise indicated)

	Height above ground of centre with tyre	Size	Distance from outside edge of tractor to centre at 1410 mm track width
	mm	mm	mm
Headligths	1100 1150 (1)	140 x 85	810
Front parking lights	1440	110 x 35	400
Front direction indicators	1440	110 x 35	370
Rear parking lights	1490	50 x 60	260
Rear direction indicators	1490	50 x 60	210
Brake lights	1490	50 x 60	310
Reflectors	1180	dia 80	270

(1) *Lamborghini 574-70 VDT.*

TEST CONDITIONS

OVERALL DIMENSIONS

	Length	Width		Height at top of protective structure
		min	max	
	mm	mm	mm	mm
Unballasted	3636	1635	1860	2345
Ballasted	3826	1635	1860	2345

- Ground clearance: 370 mm;
- Clearance-limiting part: front axle.

TRACTOR MASS (with full fuel tanks, frame and no water in tyres)

	Front kg	Rear kg	Total kg
Without driver			
Unballasted	1035	1355	2390
Ballasted	1230	1500	2730
With driver			
Unballasted	1060	1405	2465
Ballasted	1255	1550	2805

BALLAST

	Weights no.	Total weight kg	Water kg
Front	4	140	-
Rear	2 + 2	200	-

TYRES AND TRACK WIDTH SPECIFICATIONS

		Front	Rear
- Tyres			
. dimensions		11.2R24	16.9R30
. ply rating		-	-
. load index/speed index		114 A8	137 A8
. type		radial	radial
. maximum load (tyre manufacturer's)	daN	1157	2255
. inflation pressure (tyre manufact.'s)	kPa	160	160
. dynamic radius index	mm	515	695
- Chosen track width	mm	1400	1410
- Technically permissible axle load	daN	1570	2940
- Other tyres available		360/70R20	420/70R30

OILS AND LUBRICATION

Capacity and change interval

	Capacity dm^3	Oil change h	Filter change h
Engine	7.8	150	300
Gear box	41.0	1200	2400 (*)
Front axle and final drives	9.0	1200	-
Rear axle and final drives	in common with gear box		
Hydraulic system	in common with gear box		
Other (steering, etc.)	in common with gear box		

(*) *Or when the warning lamp is lighted*

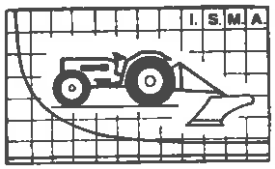
FUEL AND LUBRICANTS RECCOMENDED AND USED IN TESTS

Fuel
- Type: AGIP DIESEL, DIN 51601; (in accordance with the national standard)
- Specific gravity at 15 °C: 0.839 g/cm^3.

Engine oil
- Type: AKROS TURBO 15W40;
- Viscosity: 12.50 cSt;
- Classification: API CE MIL-L-2104 E.

Transmission (front and rear axle, final drives and gear box), hydraulic system and steering oil
- Type: AGIP ROTRA THT;
- Viscosity: 11.50 cSt;
- Viscosity index: 95;
- Classification: API GL 4.

Grease
- Type: GREASE 30;
- Number of lubrication points: 9.



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TEST RESULTS

COMPULSORY TESTS RESULTS

1. MAIN POWER TAKE-OFF PERFORMANCE

- Date and location of test: 17 November 1994, ISMA, Treviglio BG, Italy

- Type of dynamometer: ZÖLLNER 500 B

Power	Speed		Fuel consumption			Specific energy
	engine	PTO	hourly		specific	
kW	rev/min	rev/min	l/h	kg/h	g/kWh	kWh/l
1.1 MAXIMUM POWER - 2 HOUR TEST						
49.6	2351	611	14.24	11.95	241	3.48
1.2 POWER AT RATED ENGINE SPEED						
49.6	2351	611	14.24	11.95	241	3.48
1.3 STANDARD POWER TAKE-OFF SPEED (540 rev/min)						
46.9	2078	540	13.23	11.10	237	3.54
1.4 PART LOADS						
1.4.1 The torque corresponding to maximum power at rated engine speed						
49.6	2351	611	14.24	11.95	241	3.48
1.4.2 85% of torque obtained in 1.4.1						
43.0	2402	625	12.66	10.62	247	3.40
1.4.3 75% of torque defined in 1.4.2						
32.6	2429	632	10.30	8.64	265	3.17
1.4.4 50% of torque defined in 1.4.2						
22.0	2453	638	8.08	6.78	309	2.72
1.4.5 25% of torque defined in 1.4.2						
11.1	2472	643	5.71	4.79	433	1.94
1.4.6 unloaded						
0	2477	644	3.40	2.85	-	-

Power	Speed		Fuel consumption			Specific
	engine	PTO	hourly		specific	energy
kW	rev/min	rev/min	l/h	kg/h	g/kWh	kWh/l
1.5 PART LOADS AT STANDARD POWER TAKE-OFF SPEED (540 rev/min)						
1.5.1 The torque corresponding to maximum power available						
46.9	2078	540	13.23	11.10	237	3.54
1.5.2 85% of torque obtained in 1.5.1						
40.5	2110	549	11.25	9.44	233	3.60
1.5.3 75% of torque defined in 1.5.2						
30.8	2140	556	9.21	7.73	251	3.35
1.5.4 50% of torque defined in 1.5.2						
20.7	2162	562	6.94	5.82	281	2.99
1.5.5 25% of torque defined in 1.5.2						
10.5	2180	567	4.73	3.97	380	2.21
1.5.6 unloaded						
0	2202	573	2.84	2.38	-	-

- No load maximum engine speed: 2477 rev/min;
- Torque (1) at maximum power at rated engine speed: 201.4 Nm;
- Maximum torque (1) (engine speed: 1500 rev/min): 241.1 Nm.

- Mean atmospheric conditions

. temperature: 17 °C
. pressure: 100.1 kPa
. relative humidity: 55 %

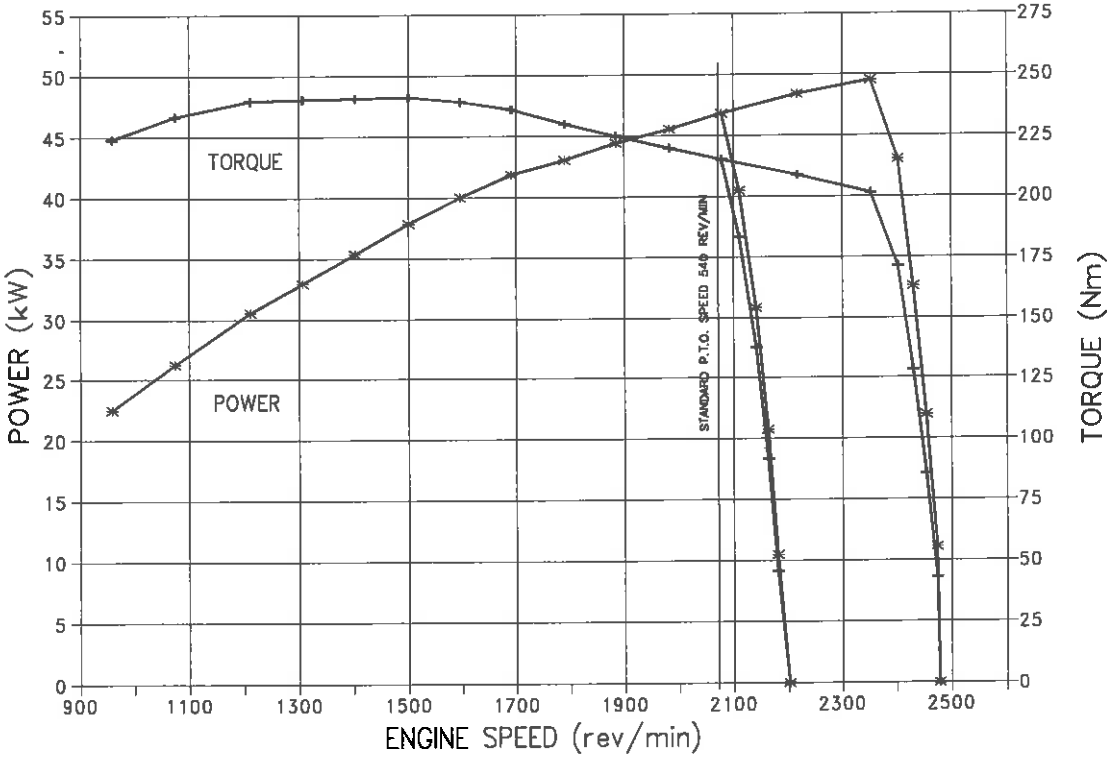
- Maximum temperatures

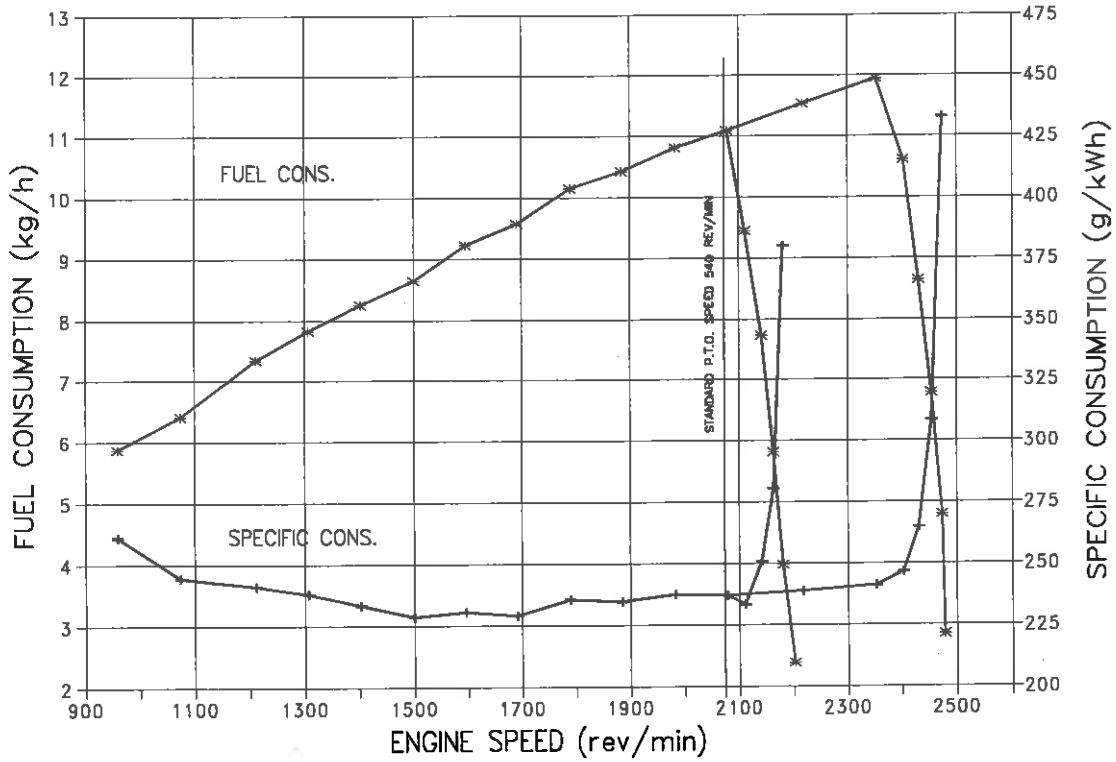
. coolant: - °C
. engine oil: 125 °C
. fuel: 32 °C
. engine air intake: 28 °C

(1) *The torque is the equivalent crankshaft torque.*

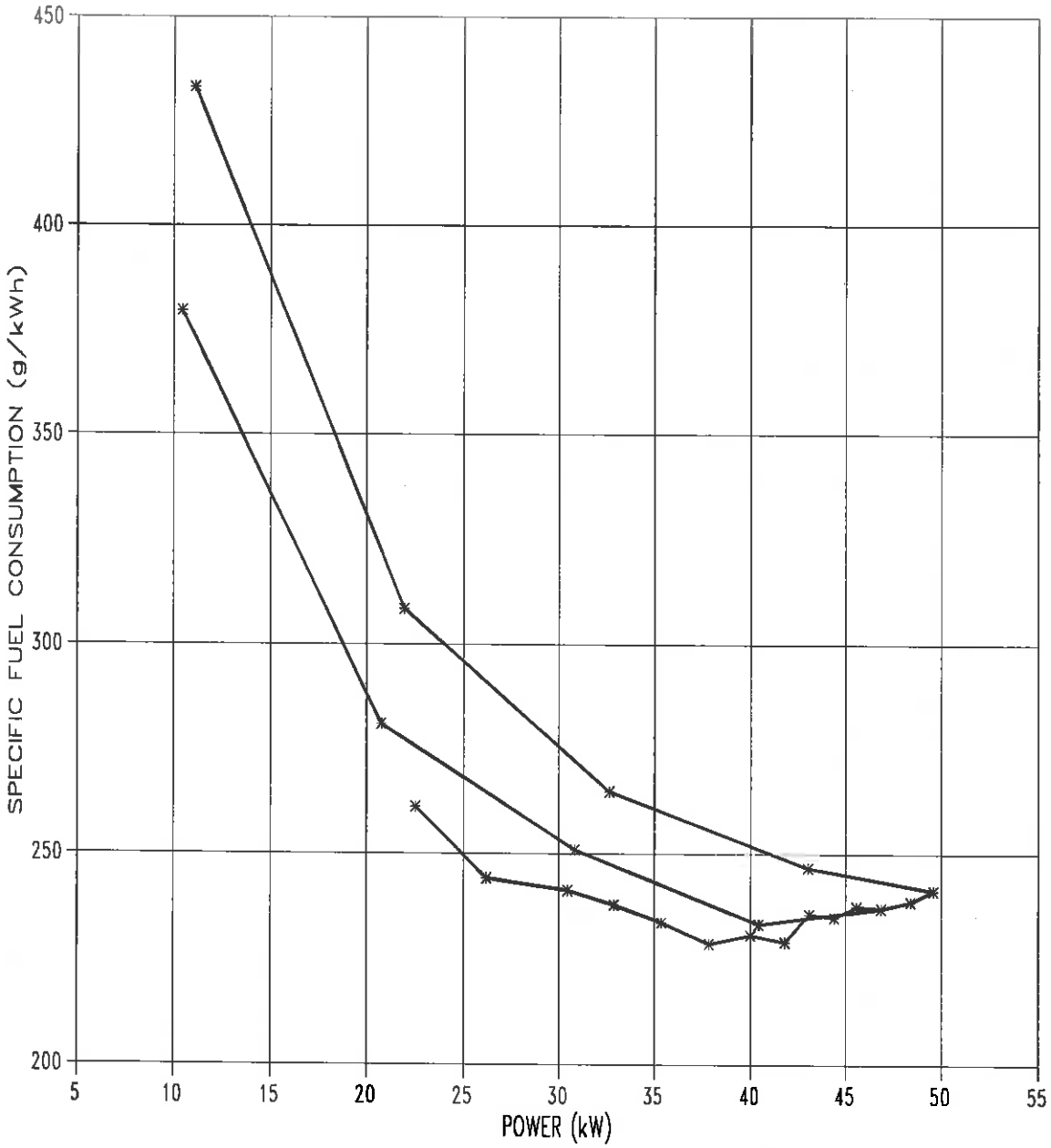
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PTO test





PTO test


SPECIFIC FUEL CONSUMPTION (g/kWh)
450
400
350
300
250
200
5
10
15
20
25
30
35
40
45
50
55
POWER (kW)

ISTITUTO SPERIMENTALE PER
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2. HYDRAULIC POWER AND LIFTING FORCE

- Date and location of tests: 21 November 1994, ISMA, Treviglio BG, Italy.

2.1 HYDRAULIC POWER TEST

- Sustained pressure with relief valve open: 18.0 MPa;
- Pump delivery rate at minimum pressure: 31.0 l/min;

	Hydraulic power kW	Flow rate l/min	Pressure MPa	Oil temp. °C
At 90% of the actual relief valve setting	8.10	30.0	16.2	67
Maximum	8.10	30.0	16.2	67

- Tapping point used for test: at rear of tractor.

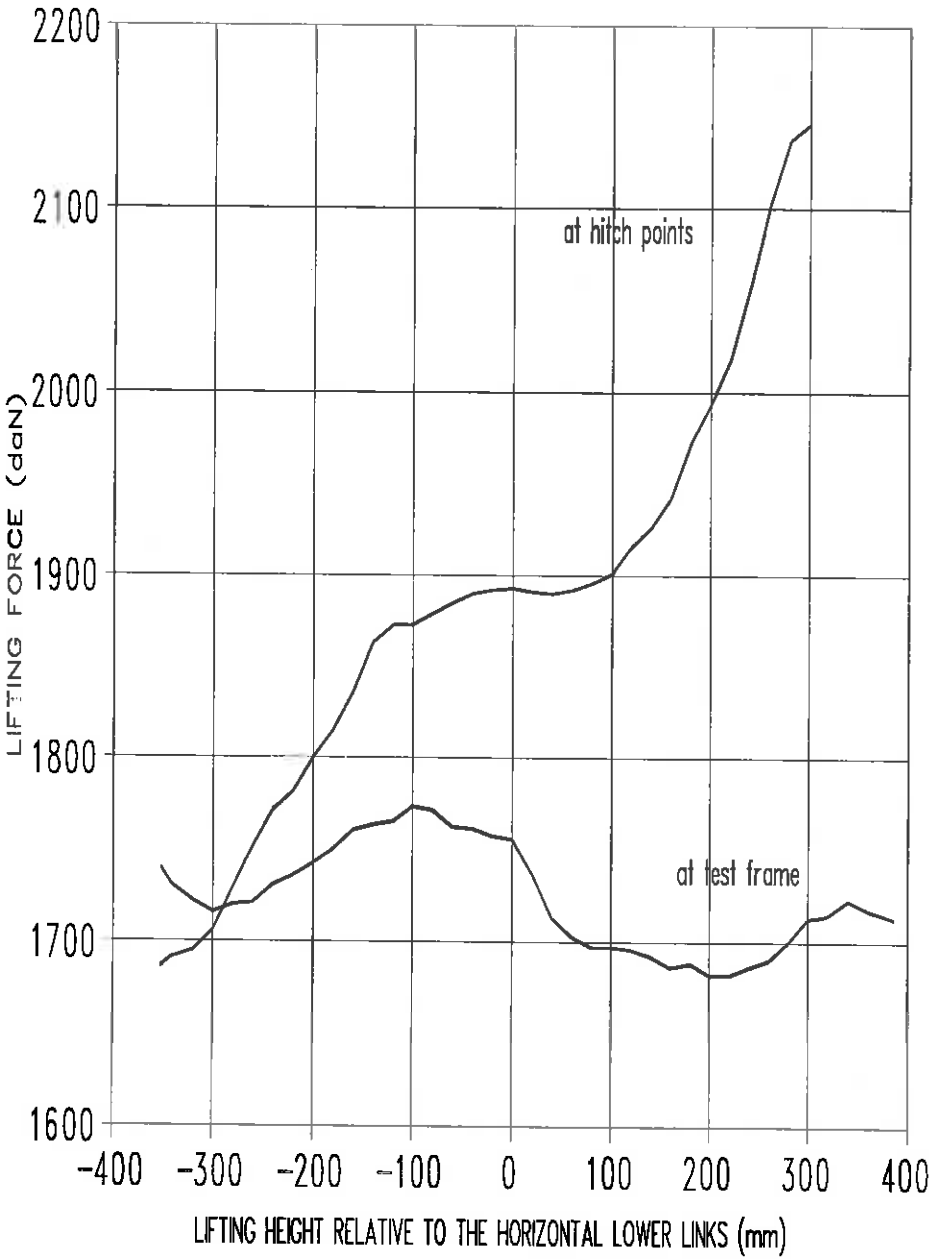
2.2 POWER LIFT

- Maximum pressure in the power lift cylinder: 18.0 MPa.

		At hitch point	On the frame
Height of lower hitch point above ground in down position	mm	200	189
Vertical movement without lifting forces	mm	670	766
with lifting forces	mm	653	738
Maximum corrected force exerted through full range	daN	1686	1682
Corresponding pressure of hydraulic fluid	MPa	16.2	16.2
Moment about rear axle	daNm	1657	2679
Maximum tilt angle of mast over range of lift	degrees	-	7

Lifting heights relative to the horizontal lower links											
mm	-352	-341	-300	-200	-100	0	100	200	300	312	386
Lifting forces at hitch points, corrected to 16.2 MPa											
daN	-	1686	1695	1781	1873	1891	1896	1973	2137	2145	-
Lifting forces at test frame, corrected to 16.2 MPa											
daN	1739	-	1715	1743	1773	1755	1697	1682	1713	-	1713

Performance of power lift



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3. DRAWBAR PERFORMANCE

- Date of test: 22 to 24 November 1994
- Type of track: concrete

3.1 MAXIMUM POWER IN TESTED GEARS (unballasted tractor)

- Height of drawbar above ground: 528 mm;
- Tyre inflation pressure: 160 kPa front, 160 kPa rear.

Gear and range	Power kW	Draw. pull daN	Speed km/h	Eng. speed rev/min	Slip of wheels %	Specific ener. kWh/l	Specific cons. g/kWh	Temperatures Fuel °C	Cool. °C	Eng. °C	Atm. conditions Temp. °C	Hum. %	Press. kPa
1SL	6.7	1813	1.34	2477	15	1.99	422	29	-	100	6	80	99.8
1SH	8.4	1804	1.67	2475	15	1.95	430	29	-	100	6	80	99.9
2SL	10.9	1844	2.13	2475	15	2.52	333	30	-	102	7	80	99.9
2SH	12.9	1765	2.64	2473	15	2.31	363	30	-	102	6	80	99.7
3SL	17.6	1882	3.37	2468	15	2.87	292	30	-	101	7	79	99.8
3SH	21.6	1881	4.14	2452	15	2.65	317	29	-	103	7	79	99.9
4SL	27.0	1851	5.26	2433	15	2.73	307	31	-	103	8	80	99.8
4SH	31.4	1744	6.49	2418	15	2.79	301	31	-	103	8	80	100.0
1FL	34.0	1706	7.18	2403	15	2.68	313	30	-	104	9	80	100.0
1FH	38.6	1471	9.45	2351	8	2.73	307	30	-	104	8	81	99.9
2FL	39.0	1126	12.46	2352	5	2.75	306	30	-	103	8	80	99.9
2FH	37.8	874	15.56	2350	4	2.62	320	29	-	103	9	80	99.8
3FL	36.2	655	19.91	2350	3	2.53	331	31	-	105	10	80	99.9

3.2 MAXIMUM POWER IN TESTED GEARS (ballasted tractor)

- Height of drawbar above ground: 527 mm;
- Tyre inflation pressure: 160 kPa front, 160 kPa rear.

Gear and range	Power kW	Draw. pull daN	Speed km/h	Eng. speed rev/min	Slip of wheels %	Specific ener. kWh/l	Specific cons. g/kWh	Temperatures Fuel °C	Cool. °C	Eng. °C	Atm. conditions Temp. °C	Hum. %	Press. kPa
1SL	8.4	2256	1.34	2474	15	1.98	423	31	-	102	11	85	99.9
1SH	10.3	2241	1.66	2473	15	1.84	455	32	-	101	11	86	100.1
2SL	13.5	2285	2.12	2473	15	2.38	353	32	-	103	10	86	100.0
2SH	15.8	2157	2.63	2472	15	2.75	305	31	-	102	10	86	99.8
3SL	19.9	2143	3.35	2459	15	2.69	312	31	-	101	11	87	99.8
3SH	24.6	2157	4.11	2441	15	2.68	313	30	-	102	11	87	99.8
4SL	29.2	2003	5.24	2426	15	2.76	304	32	-	103	10	87	99.7
4SH	35.6	2028	6.33	2362	15	2.55	329	31	-	104	11	88	99.6
1FL	38.5	1864	7.43	2350	10	2.71	309	32	-	104	11	88	99.8
1FH	38.7	1462	9.52	2351	7	2.70	310	30	-	103	11	88	99.9
2FL	38.9	1138	12.30	2351	6	2.73	308	30	-	103	10	88	99.8
2FH	37.8	877	15.52	2352	4	2.64	318	31	-	104	10	89	99.7
3FL	36.6	663	19.88	2350	3	2.57	327	31	-	103	10	88	99.9

S= Slow; F= Fast; L= Low; H= High.

DRAWBAR PERFORMANCE (continued)

3.3 FIVE HOUR TESTS

Gear and range	Power kW	Draw. pull daN	Speed km/h	Eng. speed rev/min	Slip of wheels %	Specific ener. cons. kWh/l	g/kWh	Temperatures Fuel °C	Cool. °C	Eng. °C	Atm. conditions Temp. °C	Hum. %	Press. kPa
3.3.1) FIVE HOUR TEST at 75% of pull at maximum power													
4SH	30.0	1521	7.11	2428	7	2.93	286	31	-	101	10	80	100.3
3.3.2) FIVE HOUR TEST at pull corresponding to 15% wheelslip with additional ballast: 170 kg													
4SL	31.5	2003	5.66	2427	(*)	(*)	(*)	32	-	97	7	78	100.2

S= Slow; F= Fast; L= Low; H= High.

(*) *Having the test been carried out with additional ballast, these figures are irrelevant.*

Oil consumption during ten hours duration of tests 3.3.1 and 3.3.2: 25 g/h.

4. TURNING AREA AND TURNING CIRCLE

	With brakes on four wheels Right hand m	Left hand m	Without brakes Right hand m	Left hand m
Radius of turning area	3.05	3.02	3.98	3.87
Radius of turning circle	2.95	2.92	3.88	3.75

5. LOCATION OF CENTRE OF GRAVITY

Height above ground	mm	758
Distance forward from rear axle centre	mm	884
Distance from tractor's median plane	mm	0

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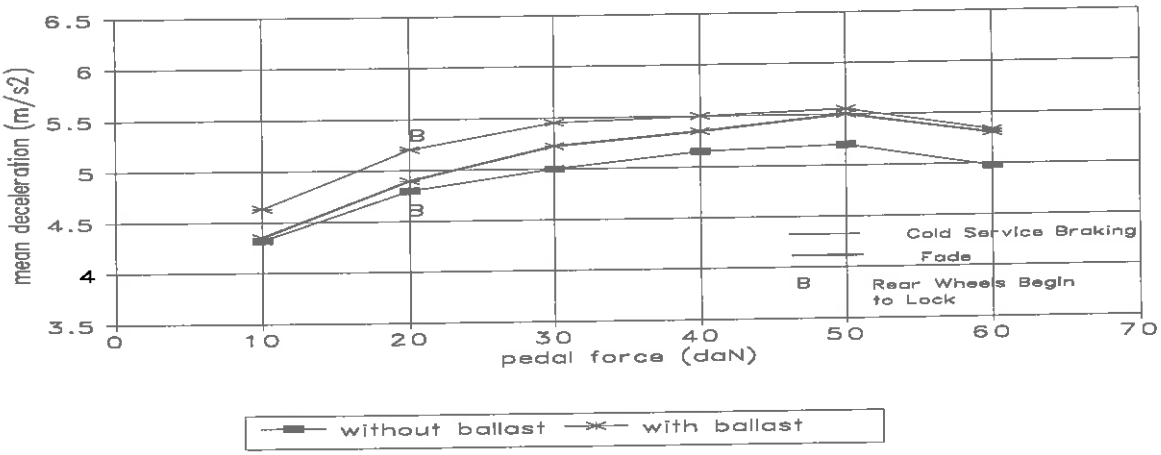
6. BRAKING PERFORMANCE

- Date of test: 29 November 1994;
- Type of track: concrete;
- Type of decelerometer: PEISELER.

Tractor mass (with driver)

	Front axle kg	Rear axle kg	Total kg
Unballasted	1060	1405	2465
Ballasted	1255	1550	2805

6.1 SERVICE BRAKES (all wheels braked)



- Speed before application of brakes (unballasted tractor): 43.3 km/h.
- Speed before application of brakes (ballasted tractor): 43.4 km/h.

The tractor brakes were heated by towing of the tractor for 1 km.
No significant deviation of tractor from original course and no abnormal vibrations were observed.

6.2 PARKING BRAKE

Ballasted tractor on 18% slope

		Up	Down
Braking device control force	daN	13.7	13.7

7. MEASUREMENT OF EXTERNAL NOISE LEVEL

- Date of test: 29 November 1994;
- Type of track: concrete;
- Type of sound level meter: BRÜEL & KJÆR, model 2231.

Tractor	Gear and group	Travelling speed before acceleration km/h	Sound level dB(A)
Same Argon 70 VDT	4FH	32.5	83.4
Hürlimann 307 VDT	4FH	32.7	83.5
Lamborghini 574-70 VDT	4FH	32.7	83.4

8. REPAIRS AND REMARKS: none.

DIRECTOR OF TESTING STATION
(Prof. Giuseppe COLZANI)

HEAD OF ISMA
(Ing. Giovanni SANTORO)