

Sideloader

With standard or wide deck

3000 kg to 6000 kg



316

Linde S 30 – S 60 Sideloader driven by an IC engine combines the flexibility and precise control of the Linde hydrostatic transmission with the robust, compact chassis design and a high basic specification. The Sideloader is the ideal machine for handling long loads such as timber packs, pipes, steel plate and similarly shaped items. As the loads are handled by the fork reaching out sideways, aisle widths in storage yards can be reduced to little more than the width of the machine.

Requirements of the application are fully met by leading edge technology:

- High torque engines matched with a Linde hydrostatic transmission provide quick acceleration and precise control of travel speed, resulting in higher productivity in materials handling
- The diesel and LPG engines are tuned for optimised performance and feature outstandingly low exhaust emission levels
- The functional yet optimised ergonomic design of the operator compartment creates a high standard of working environment and comfort

High-comfort operator compartment

Fully enclosed all-weather cab with forward opening door. Fresh air/heater unit for a controlled operator environment. Hydraulic controls positioned for easy location and operation. A hydraulically damped suspension seat provided with adjustment for weight, height, backrest and position.

Travel direction lever positioned to the right of the steering column, under the steering wheel. The handbrake lever is conveniently mounted at the left-hand side of the operator's seat.

Rugged chassis

Compact chassis of optimum heavy-duty design with integrated counterweight and chequer plate decks.

Optimised engine

Standard power unit is a high rating four-cylinder Perkins 1104-44 diesel engine developing 64 kW at 2400 rpm. Perkins 1004-40S LPG engine available as an option.

Direct drive transmission

The S30-S60 sideloaders are fitted with a Linde hydrostatic transmission giving infinitely variable forward and reverse speeds. Axial piston pump directly mounted to the engine driving a swash plate hydrostatic motor mounted on drive axle differential. Heavy-duty double reduction drive axle.

Anti-kick steering

Full hydrostatic power steering is standard, resulting in excellent manoeuvrability without operator fatigue. A heavy-duty fabricated axle assembly housing a single, double-acting steering cylinder, which is connected to the stub axles by, fixed length track rods. Anti-kick hydrostatic power-steering system.

Strong mast construction

Robust mast with precision roller guide built for high strength, maximum load stability and rigid support at full lift height.

Deck tilt and suspension

Two hydraulic cylinders mounted on the load side of the machine provide infinitely variable tilting of the deck to aid picking up and depositing loads, and stabilise the load when travelling. Oil transfer between these two cylinders serves as a suspension system to ensure that all four truck wheels safely on the ground when driving over rough surfaces.

Brakes

Three independent braking systems are incorporated:

1. Dual circuit hydraulic service brakes consisting of drum brakes in the steer axle hubs and in-board, oil-immersed disc brakes on the drive axle
2. Hydrostatic braking effect provided by the transmission
3. Handbrake operated disc parking brake

LINDE

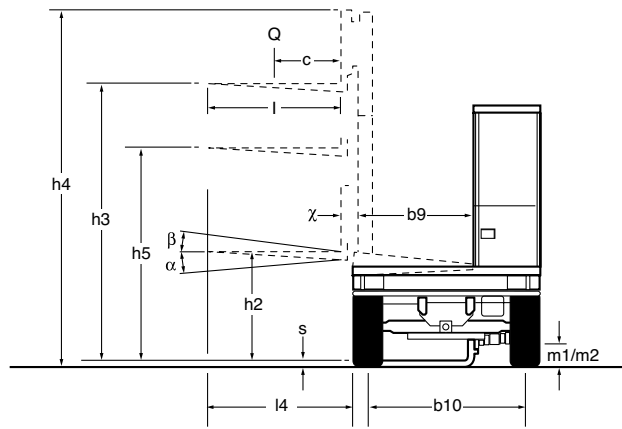
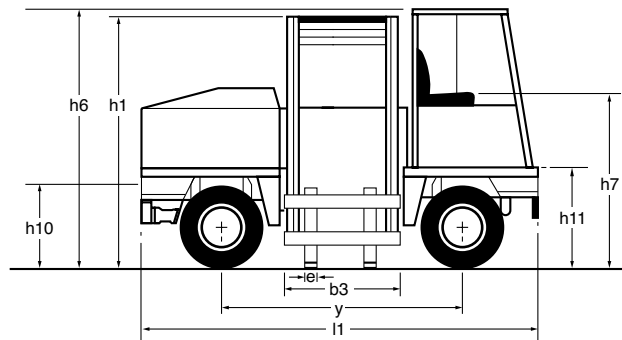
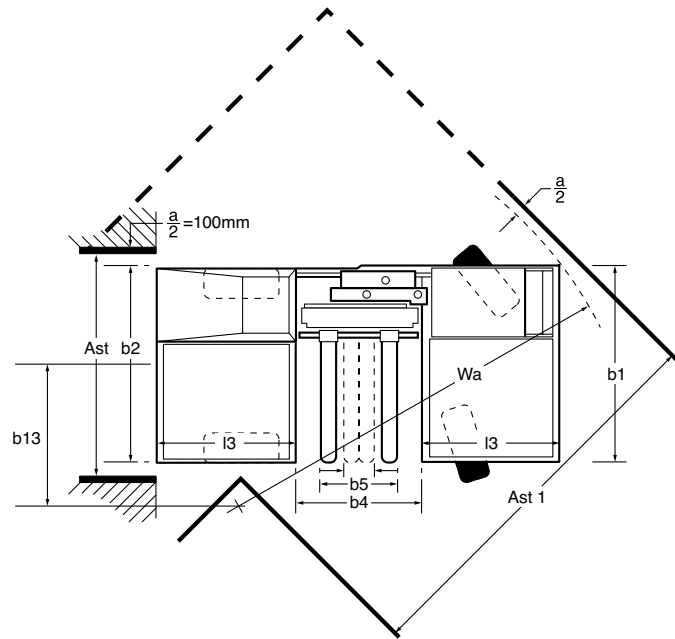
Sideloader 316 03

Denomination acc. DIN 15140

Data sheet for mater

January 2004

Characteristics	1.1	Manufacturer		Linde	Linde	
	1.2	Model designation		S 30	S 30 W	
	1.3	Power unit: battery, diesel, LP gas, mains power		Diesel	Diesel	
	1.4	Operation: manual, pedestrian, stand-on, seated, order picker		Rider seated	Rider seated	
	1.5	Load capacity	Q (kg)	3000	3000	
	1.6	Load centre	c (mm)	600	700	
	1.8	Platform edge to load face	x (mm)	58	58	
Weight	1.9	Wheelbase	y (mm)	2450	2450	
	2.1	Service weight	kg	6220	6420	
	2.2	Axle load with load, front/rear	kg	4420/4800	4530/4890	
Wheels and tyres	2.3	Axle load without load, front/rear	kg	2920/3300	3030/3390	
	3.1	Tyres, front/rear. SE = (superelastic), P = (pneumatic)		P/P	P/P	
	3.2	Tyre size, front		750 x 15/14 PR	750 x 15/14 PR	
	3.3	Tyre size, rear		750 x 15/14 PR	750 x 15/14 PR	
	3.5	Wheels, number, front/rear (x = driven)		2/2x	2/2x	
	3.6	Track width, front	b10 (mm)	1648	1828	
	3.7	Track width, rear	b11 (mm)	1698	1828	
Dimensions	4.1	Mast/fork carriage/truck tilt, forward/backward	α/β (°)	3.5/4	3/3.5	
	4.2	Height of mast lowered	h1 (mm)	2730	2730	
	4.3	Free lift	h2 (mm)	150	150	
	4.4	Lift	h3 (mm)	3550 ¹⁾	3550 ¹⁾	
	4.5	Height of mast extended	h4 (mm)	4450	4450	
	4.7	Height of overhead guard (cabin)	h6 (mm)	2510	2510	
	4.8	Height, operators seat/stand-on platform	h7 (mm)	1370	1370	
	4.12	Towing coupling height	h10 (mm)	520 ²⁾	520 ²⁾	
	4.13	Platform height, unladen	h11 (mm)	870	870	
	4.17	Loading platform, length	l3 (mm)	1425	1425	
	4.18	Loading platform, width	b9 (mm)	1220	1400	
	4.19	Overall length	l1 (mm)	4150	4150	
	4.21	Overall width	b1/b2 (mm)	1975/1975	2155/2155	
	4.22	Fork dimensions	s/e/l (mm)	50 x 120 x 1200	50 x 120 x 1400	
	4.23	Fork carriage to DIN 15173, class/form A, B		3A	3A	
	4.24	Width of fork carriage	b3 (mm)	1200	1200	
	4.25	Fork spread, minimum/maximum	b5 (mm)	260/1200	260/1200	
	4.26	Width between platform well width (Sideloader)	b4 (mm)	1300	1300	
	Performance	4.28	Reach travel	l4 (mm)	1270	1450
		4.31	Ground clearance, mast	m1 (mm)	165	165
4.32		Ground clearance, centre of wheelbase	m2 (mm)	225	225	
4.33		Aisle width with pallets 1000 x 1200 crosswise	Ast (mm)	2175	2355	
4.34		Aisle width with pallets 800 x 1200 lengthwise	Ast (mm)	2175	2355	
4.35		Turning radius	Wa (mm)	4020	4155	
4.36		Minimum pivoting point distance	b13 (mm)	1310	1450	
4.39		Aisle 90 deg. intersect	Ast1 (mm)	3800	3955	
5.1		Travel speed, with/without load	km/h	24/26	24/26	
5.2		Lift speed, with/without load	m/s	0.51/0.53	0.51/0.53	
5.3	Lowering speed, with/without load	m/s	0.51/0.40	0.51/0.40		
5.4	Reach speed, with/without load	m/s	0.22/0.22	0.22/0.22		
5.5	Tractive force, with/without load	kN	25	25		
5.7	Climbing ability, with/without load	%	22/22	22/22		
5.10	Service brake front/rear		Dry drum/Wet disc	Dry drum/Wet disc		
Drive	6.4	Battery voltage, rated capacity	V/Ah	1 x 12/105	1 x 12/105	
	7.1	Engine manufacturer/type		Perkins 1104-44	Perkins 1104-44	
	7.2	Engine performance according to ISO 1585	kW	64	64	
	7.3	Rated speed	1/min	2400	2400	
Other	7.4	Number of cylinders/displacement	/cm3	4/4400	4/4400	
	8.1	Type of drive control		hydrostatic/infini. Variable	hydrostatic/infini. Variable	
	8.2	Working pressure for attachments	bar	190	190	
	8.3	Oil flow for attachments	l/min	100	100	
	8.4	Noise level, at operator's ear, Overhead guard/Cab	dB (A)	77	77	
	8.5	Trailer coupling, design/type DIN	\varnothing (mm)	32 ²⁾	32 ²⁾	
1) See mast tables						
2) Optional						



Standard Mast	S 30, S 30 W, S 40, S 40 W										
Lift height	h3	3550	3850	4150	4550	4850	5250	5650	6050	6450	6850
Lift height	h3 + s	3600	3900	4200	4600	4900	5300	5700	6100	6500	6900
Normal free lift	h2	150	150	150	150	150	150	150	150	150	150
Height, mast lowered	h1	2730	2880	3030	3230	3380	3580	3780	3980	4180	4380
Height, mast extended	h4	4450	4750	5050	5450	5750	6150	6550	6950	7350	7750

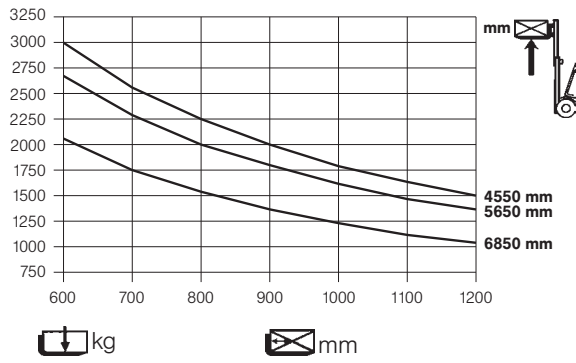
h1 = mast lowered with 150 mm free lift – standard

Standard Mast	S 50, S 50 W, S 60, S 60 W										
Lift	h3	3150	3450	3750	4150	4450	4850	5250	5650	6050	6450
Lift height S 50, S 50 W, S 60	h3 + s	3210	3510	3810	4210	4510	4910	5310	5710	6110	6510
Lift height S 60 W	h3 + s	3220	3520	3820	4220	4520	4920	5320	5720	6120	6520
Normal free lift	h2	150	150	150	150	150	150	150	150	150	150
Height, mast lowered	h1	2730	2880	3030	3230	3380	3580	3780	3980	4180	4380
Height, mast extended	h4	4250	4550	4850	5250	5550	5950	6350	6750	7150	7550

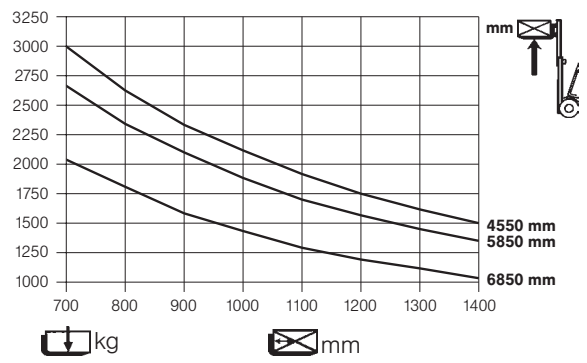
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Capacity charts

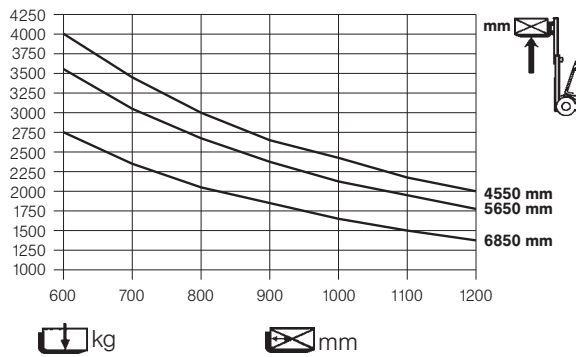
Model: S 30



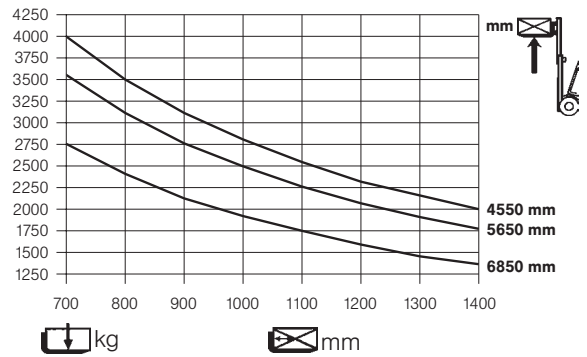
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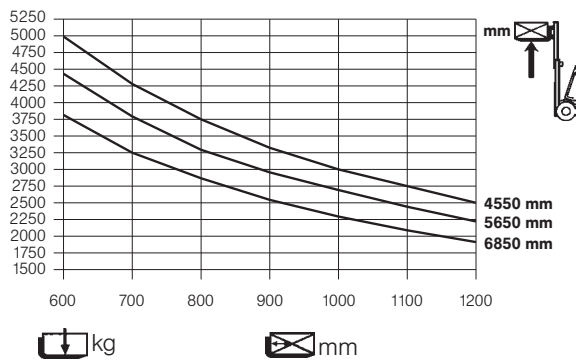
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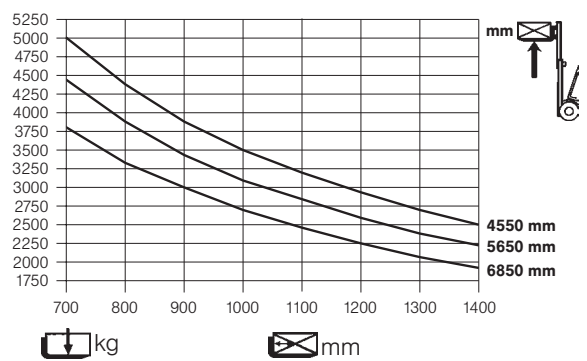
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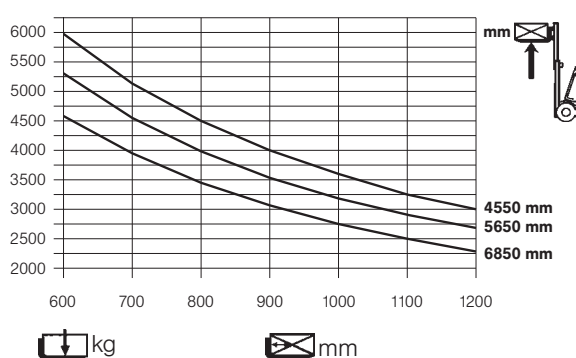
Model: S 50



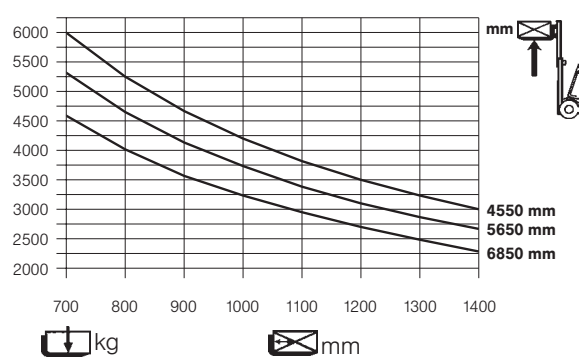
Model: S 50 W



Model: S 60



Model: S 60 W



Equipment



Safety

- Three independent braking systems
- Engine-Neutral start transmission safety interlock
- Audible warning (horn)
- Steering control-integrated 'anti-kick' valve
- Steering axle proximity mounted-shock valve
- Steering reverts to manual in the event of engine failure
- Safe load lowering valve
- Pressure relief valve
- Good all-round visibility

Standard equipment

- Fully equipped cab with front opening door, wipers and washers for windscreen and rear screen, heater and de-mister
- Fully adjustable suspension-type seat
- Comprehensive instrumentation
- Full road lighting
- Perkins 1104-44, 4-cylinder water-cooled diesel engine
- Linde hydrostatic transmission
- Heavy-duty double hub reduction drive axle
- Power-assisted hydraulic steering
- Hydraulic deck tilt
- Deck width – 1220 mm (S 30 – S 60)
– 1400 mm (S 30 W – S 60 W)
- Hydraulic drum brakes on steer axle and disc brakes on drive axle
- Pneumatic tyres
- Standard clearview lift mast
- Non hydraulic fork carriage
- Forks – 1200 mm long (S 30 – S 60)
– 1400 mm long (S 30 W – S 60 W)
- Standard colour schemes – vermilion and charcoal grey

Optional equipment

- Side opening cab door
- Audible warning – reverse gear
- Safety lighting
- Double-stage mast, 1050 mm free lift
- Duplex full free lift mast
- Perkins 1004-40S LPG engine
- Heavy-duty engine air filter
- Exhaust purifier
- Spark arrester and inlet flame trap
- Additional hydraulic circuits
- Carriage tilt
- Load stabiliser
- Vertically moving forks
- Fork-spreading carriage
- Automatic reversing light
- Carriage backrest extension
- Carriage or fork mounted crane jibs
- Paper roll clamps
- Load weight indicator
- Alternative colour schemes

Other options available on request.

Subject to modification in the interests of progress. Illustrations and technical details not binding for actual construction. All dimensions subject to customary tolerances.