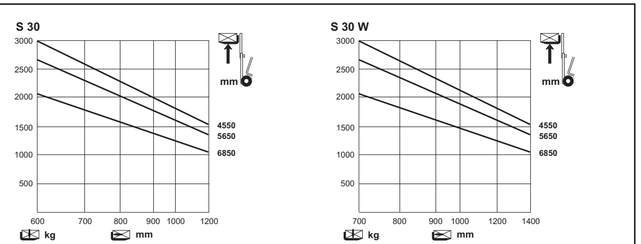
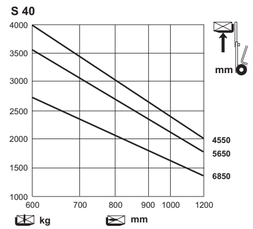
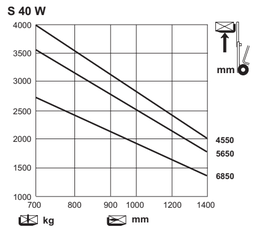
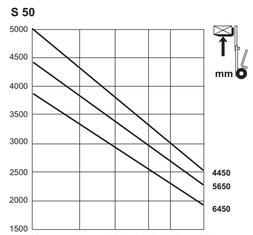
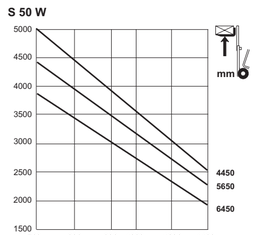
Capacity charts

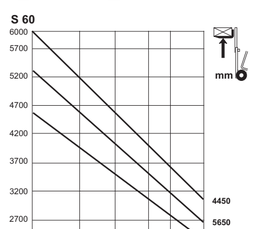


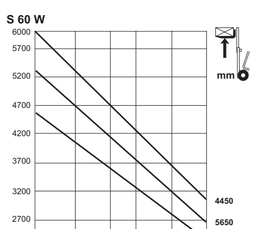




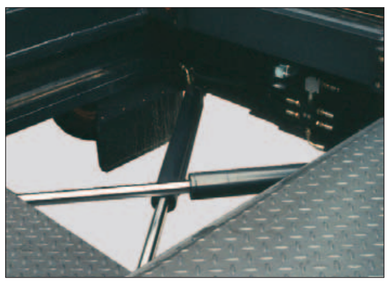








Features



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 demister.
- Fully adjustable, suspension type seat.
- Comprehensive instrumentation.
- Full road lighting.
- Perkins 1004-42, 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:-
  1 220 mm (S 30 to S 60).
  1 400 mm (S 30 W to S 60 W).
- Hydraulic drum brakes on steer axle and disc brakes on drive axle.
- Pneumatic tyres.
- Standard clearview mast:-
  3 550 mm lift (S 30/S 40, S 30 W/S 40 W),
  3 150 mm lift (S 50/S 60, S 50 W/S 60 W)
- Non hydraulic fork carriage.
- Fork length:-
  1 200 mm (S 30 to S 60).
  1 400mm (S 30 W to S 60 W).
- Standard colour scheme - vermilion and charcoal grey.

Optional equipment
- Side opening cab door.
- Audible warning in reverse gear.
- Safety lighting.
- Double stage mast, 1 050mm free lift.
- Duplex full free lift mast.
- Perkins 1 004-40S LPG engine.
- Heavy duty engine air filter.
- Exhaust purifier.
- Spark arrestor and inlet flame trap.
- Additional hydraulic circuits.
- Carriage tilt.
- Load stabiliser.
- Vertically moving forks.
- Forkspreading carriage.
- Automatic reversing light.
- Carriage backrest extension.
- Carriage or fork mounted crane jib.
- Paper roll clamp.
- Load weight indicator.
- Alternative colour schemes.

Other options available on request.

Linde Material Handling (UK) Ltd.,
Kingsclere Road, Basingstoke, Hampshire RG21 6XJ.
Tel: 01256 342000. Fax: 01256 342923. Web: www.linde-mh.co.uk
E-mail: enquiries@linde-mh.co.uk
For more information please contact your nearest national network company on **0845 608 5000**

Certificate No. FM 342

DM5094A/1/04

Sideloader
With standard or wide deck
3 000 kg to 6 000 kg

Introduction
The S 30 to S 60 engine powered sideloaders combine the flexibility and precise control of the Linde hydrostatic transmission with a 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 or 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.

The major characteristics at a glance:
- Ergonomically designed operator's compartment.
- Powerful, modern diesel engine.
- Linde hydrostatic transmission for smooth acceleration and deceleration, and precise control.
- Robust drive axle with low maintenance wet brake units.

Operator's compartment
The truck is equipped with an all-weather cab as standard. Access to the operator's position is through a front opening door. A full suspension seat is provided. It is hydraulically damped and fully adjustable for maximum comfort. The hydraulic control levers for lift, traverse and deck tilt are mounted close to the operator's right hand. The forward/reverse direction lever is fitted to the right of the steering column, under the steering wheel. The pedals consist of an accelerator and a brake pedal. Either foot can operate the brake pedal. The handbrake lever is mounted on the left hand side of the operator's seat.

Chassis
The compact, all welded chassis has integral ballasting and steel chequer plate decks. Its high strength to weight ratio is due to the use of high quality steel plate combined with computer aided design techniques.

Engine
A Perkins 1104-44, 4 cylinder direct injection diesel developing 64 kW at 2400 rpm is fitted as standard. Alternatively, Perkins 1 004-40S LPG engine, developing 49 kW at 2 100 rpm is available.

Transmission and drive axle
These models are fitted with a Linde hydrostatic transmission giving infinitely variable forward and reverse speeds. The transmission consists of an axial piston pump directly mounted to the engine. This pump drives a swash plate hydrostatic motor mounted on the differential. The drive axle is a heavy duty double reduction type fitted to the chassis on a central pivot.

Steering
Full hydrostatic power steering is standard, resulting in excellent manoeuvrability without operator fatigue. A heavy duty fabricated axle assembly is mounted to the chassis via a pivoting tilt plate. This houses the single, double acting steering cylinder, which is connected to the stub axles by fixed length track rods.

Lift mast
A robust clearview fabricated mast of all roller construction affords great strength, maximum load stability and mast rigidity at full lift height. Full width load rollers between inner and outer mast ensure complete alignment. The standard mast offers free lift of 150 mm. The optional masts offer either 1050 mm free lift or full free lift. A plate type carriage is standard and is roller mounted into the mast.

Deck tilt and suspension
Hydraulic cylinders mounted on the load side of the centre pivoted axles tilt the machine to aid picking up and depositing loads, and improve load stability when travelling. Transfer of oil between these two cylinders provides suspension over rough surfaces and ensures that all four wheels remain in contact with the ground at all times.

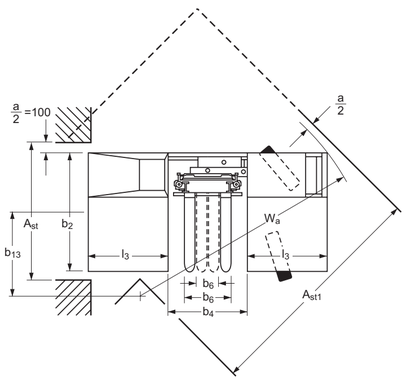
Brakes
These models incorporate three independent braking systems:
1. Dual circuit hydraulic service brakes consisting of drum brakes in the steer axle hubs and in-board, oil-immersed disc brakes on the drive axle.
2. Hydrostatic braking effect provided by the transmission.
3. Handbrake operated disc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

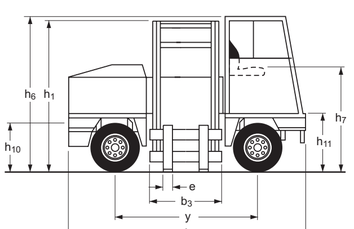
LINDE	**Sideloader** (Designation)	**Data sheet for material handling equipment** to VDI 3586	**316 03** (Series no)	VDI 2198
JANUARY 2004	**Manufacturer's data and design characteristics**		**Model types**	Registration note

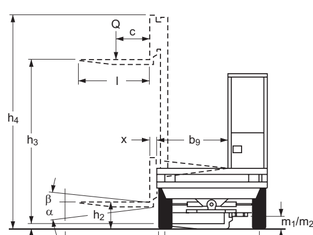
Characteristics	1.1	Manufacturer		Linde	Linde		Linde	Linde	Linde	Linde	Linde	Linde
	1.2	Model designation		**S 30**	**S 30 W**		**S 40**	**S 40 W**	**S 50**	**S 50 W**	**S 60**	**S 60 W**
	1.3	Power unit: battery, diesel, petrol, LP gas, mains power		Diesel	Diesel		Diesel	Diesel	Diesel	Diesel	Diesel	Diesel
	1.4	Operation: manual, pedestrian, stand-on, seated, order picker		Seated	Seated		Seated	Seated	Seated	Seated	Seated	Seated
	1.5	Load capacity	Q (t)	3.0	3.0		4.0	4.0	5.0	5.0	6.0	6.0
	1.6	Load centre	c (mm)	600	700		600	700	600	700	600	700
	1.8	Platform edge to load face	x (mm)	58	58		58	58	85	85	85	85
	1.9	Wheelbase	y (mm)	2 450	2 450		2 450	2 450	2 450	2 450	2 450	2 450
Weights	2.1	Service weight	kg	6 220	6 420		7 060	7 310	8 600	8 800	9 080	9 280
	2.2	Axle load with load, front/rear	kg	4 420 / 4 800	4 530 / 4 890		5 290 / 5 770	5 480 / 5 860	6 650 / 6 950	6 760 / 7 040	7 450 / 7 630	7 560 / 7 720
	2.3	Axle load without load, front/rear	kg	2 920 / 3 300	3 030 / 3 390		3 290 / 3 770	3 480 / 3 860	4 150 / 4 450	4 260 / 4 540	4 450 / 4 630	4 560 / 4 720
Wheels and tyres	3.1	Tyres, front/rear. SE = (superelastic), P = (pneumatic)		P/P	P/P		P/P	P/P	P/P	P/P	P/P	P/P
	3.2	Tyre size, front		7.50 x 15 / 14 PR	7.50 x 15 / 14 PR		7.50 x 15 / 14 PR	7.50 x 15 / 14 PR	8.25 x 15 / 14 PR	8.25 x 15 / 14 PR	300 x 15 / 18 PR	300 x 15 / 18 PR
	3.3	Tyre size, rear		7.50 x 15 / 14 PR	7.50 x 15 / 14 PR		7.50 x 15 / 14 PR	7.50 x 15 / 14 PR	8.25 x 15 / 14 PR	8.25 x 15 / 14 PR	300 x 15 / 18 PR	300 x 15 / 18 PR
	3.5	Wheels, number, front/rear (x = driven)		2 / 2x	2 / 2x		2 / 2x	2 / 2x	2 / 2x	2 / 2x	2 / 2x	2 / 2x
	3.6	Track width, front	b_{10} (mm)	1 648	1 828		1 648	1 828	1 648	1 828	1 648	1 828
	3.7	Track width, rear	b_{11} (mm)	1 698	1 828		1 698	1 828	1 698	1 828	1 650	1 828
Dimensions	4.1	Mast/fork carriage tilt, forward/backward	α/β (°)	3.5 / 4	3 / 3.5		3.5 / 4	3 / 3.5	3 / 5	4.5 / 4.5	3 / 5	4.5 / 4.5
	4.2	Height of mast, lowered [2]	h_1 (mm)	2 730	2 730		2 730	2 730	2 730	2 730	2 730	2 730
	4.3	Free lift	h_2 (mm)	150	150		150	150	150	150	150	150
	4.4	Lift	h_3 (mm)	3 550	3 550		3 550	3 550	3 150	3 150	3 150	3 150
	4.5	Height of mast, extended	h_4 (mm)	4 450	4 450		4 450	4 450	4 250	4 250	4 250	4 250
	4.7	Height of overhead guard (cabin)	h_6 (mm)	2 510	2 510		2 510	2 510	2 600	2 600	2 600	2 600
	4.8	Height, operators seat/stand-on platform	h_7 (mm)	1 370	1 370		1 370	1 370	1 460	1 460	1 460	1 460
	4.12	Towing coupling height Optional	h_{10} (mm)	520	520		520	520	610	610	610	610
	4.13	Platform height, unladen	h_{11} (mm)	870	870		870	870	960	960	960	960
	4.17	Loading platform, length	l_3 (mm)	1 425	1 425		1 425	1 425	1 425	1 425	1 425	1 425
	4.18	Loading platform, width	b_9 (mm)	1 220	1 400		1 220	1 400	1 220	1 400	1 220	1 400
	4.19	Overall length	l_1 (mm)	4 150	4 150		4 150	4 150	4 150	4 150	4 150	4 150
	4.21	Overall width	b_1/b_2 (mm)	1 975 / 1 975	2 155 / 2 155		1 975 / 1 975	2 155 / 2 155	1 975 / 1 975	2 155 / 2 155	1 975 / 1 975	2 170 / 2 170
	4.22	Fork dimensions	s/e/l (mm)	50 x 120 x 1 200	50 x 120 x 1 400		50 x 120 x 1 200	50 x 120 x 1 400	60 x 130 x 1 200	60 x 130 x 1 400	60 x 130 x 1 200	70 x 150 x 1 400
	4.23	Fork carriage to DIN 15173, class/form A, B		3A	3A		3A	3A	4A	4A	4A	4A
	4.24	Width of fork carriage	b_5 (mm)	1 200	1 200		1 200	1 200	1 200	1 200	1 200	1 200
	4.25	Fork spread, minimum/maximum	b_5 (mm)	260 / 1 200	260 / 1 200		260 / 1 200	260 / 1 200	320 / 1 200	320 / 1 200	320 / 1 200	320 / 1 200
	4.26	Width between platform well width (Sideloader)	b_4 (mm)	1 300	1 300		1 300	1 300	1 300	1 300	1 300	1 300
	4.28	Reach travel	l_4 (mm)	1 270	1 450		1 270	1 450	1 295	1 475	1 295	1 485
	4.31	Ground clearance, mast	m_1 (mm)	165	165		165	165	165	165	155	155
	4.32	Ground clearance, centre of wheelbase	m_2 (mm)	225	225		225	225	225	225	225	225
	4.33	Aisle width with pallets 1 000 x 1 200 across forks	Ast (mm)	2 175	2 355		2 175	2 355	2 175	2 355	2 175	2 355
	4.34	Aisle width with pallets 800 x 1 200 along forks	Ast (mm)	2 175	2 355		2 175	2 355	2 175	2 355	2 175	2 355
	4.35	Turning radius	Wa (mm)	4 020	4 155		4 020	4 155	4 020	4 155	4 020	4 155
	4.36	Minimum pivoting point distance	b_{13} (mm)	1 310	1 450		1 310	1 450	1 310	1 450	1 310	1 450
	4.39	Aisle 90° intersecting	Ast_1 (mm)	3 800	3 955		3 800	3 955	3 800	3 955	3 800	3 955
IC engine	5.1	Travel speed, with/without load	km/h	24 / 26	24 / 26		24 / 26	24 / 26	23 / 26	23 / 26	23 / 26	23 / 26
	5.2	Lift speed, with/without load	m/s	0.51 / 0.53	0.51 / 0.53		0.44 / 0.53	0.44 / 0.53	0.40 / 0.41	0.40 / 0.41	0.39 / 0.41	0.39 / 0.41
	5.3	Lowering speed, with/without load	m/s	0.51 / 0.40	0.51 / 0.40		0.51 / 0.40	0.51 / 0.40	0.48 / 0.36	0.48 / 0.36	0.48 / 0.36	0.48 / 0.36
	5.4	Reach speed, with/without load	m/s	0.22 / 0.22	0.22 / 0.22		0.22 / 0.22	0.22 / 0.22	0.22 / 0.22	0.22 / 0.22	0.22 / 0.22	0.22 / 0.22
	5.5	Tractive force, with/without load	kN	25	25		25	25	30	30	30	30
	5.7	Climbing ability, with/without load	%	22 / 22	22 / 22		22 / 22	22 / 22	22 / 22	22 / 22	22 / 22	22 / 22
	5.10	Service brake, front/rear		Dry drum / Wet disc	Dry drum / Wet disc		Dry drum / Wet disc	Dry drum / Wet disc	Dry drum / Wet disc	Dry drum / Wet disc	Dry drum / Wet disc	Dry drum / Wet disc
	6.4	Starting battery	V/Ah	1 x 12 / 105	1 x 12 / 105		1 x 12 / 105	1 x 12 / 105	1 x 12 / 105	1 x 12 / 105	1 x 12 / 105	1 x 12 / 105
Drive	7.1	Engine manufacturer/type		Perkins 1104-44	Perkins 1104-44		Perkins 1104-44	Perkins 1104-44	Perkins 1104-44	Perkins 1104-44	Perkins 1104-44	Perkins 1104-44
	7.2	Engine performance to ISO 1585	kW	64	64		64	64	64	64	64	64
	7.3	Rated speed	1/min	2 400	2 400		2 400	2 400	2 400	2 400	2 400	2 400
	7.4	Number of cylinders/displacement	/ cm^3	4/4 400	4/4 400		4/4 400	4/4 400	4/4 400	4/4 400	4/4 400	4/4 400
	7.5	Fuel consumption to VDI cycle	l/h	[1]	[1]		[1]	[1]	[1]	[1]	[1]	[1]
Other	8.1	Type of drive control		Hydrostatic / infinitely variable					Hydrostatic/infinitely variable			
	8.2	Working pressure for attachments	bar	190	190		190	190	190	190	190	190
	8.3	Oil flow for attachments	l/min	100	100		100	100	100	100	100	100
	8.4	Noise level at operator's ear, Overhead guard/Cab	LpA	77	77		77	77	77	77	77	77
	8.5	Towing coupling, design/type DIN Optional	ø (mm)	32	32		32	32	32	32	32	32

1) Refer to manufacturer for details.

2) With 150 mm free lift







Standard mast		**S 30, S 30 W, S 40, S 40 W**									
Lift	h_3	3 550	3 850	4 150	4 550	4 850	5 250	5 650	6 050	6 450	6 850
Lift height	h_{3+s}	3 600	3 900	4 200	4 600	4 900	5 300	5 700	6 100	6 500	6 900
Height of mast, lowered	h_1	2 730	2 880	3 030	3 230	3 380	3 580	3 780	3 980	4 180	4 380
Height of mast, extended	h_4	4 450	4 750	5 050	5 450	5 750	6 150	6 550	6 950	7 350	7 750
Free lift	h_2	150	150	150	150	150	150	150	150	150	150
Standard mast		**S 50, S 50 W, S 60, S 60 W**									
Lift	h_3	3 150	3 450	3 750	4 150	4 450	4 850	5 250	5 650	6 050	6 450
Lift height S 50, S 50 W, S 60	h_{3+s}	3 210	3 510	3 810	4 210	4 510	4 910	5 310	5 710	6 110	6 510
Lift height S 60 W	h_{3+s}	3 220	3 520	3 820	4 220	4 520	4 920	5 320	5 720	6 120	6 520
Height of mast, lowered	h_1	2 730	2 880	3 030	3 230	3 380	3 580	3 780	3 980	4 180	4 380
Height of mast, extended	h_4	4 250	4 550	4 850	5 250	5 550	5 950	6 350	6 750	7 150	7 550
Free lift	h_2	150	150	150	150	150	150	150	150	150	150