TECHNICAL DATA

SideLoader 300H / 500 IC Engine

3000 – 6000 kg at 600 – 900 mm load centers

The Series 300 H / 500 SideLoaders are designed to be extremely versatile and productive. They have been constructed to incorporate various platform widths and capacities to suit a wide range of Industrial applications. The standard production luxury cab offers the operator comfort and exceptional visibility.

Advantages at Glance:

- Optimum Space utilization – constructed for handling long and bulky loads.
- Torsion resistant box type frame.
- Tilt mast & load bed tilt, allow stacking without the use of outriggers.
- Mast - special hardened & formed profiles.
- Low Noise pollution – 73 db(A) at the operators ear.
- Low exhaust emissions following guide lines of the ECE R49 safety for the operator and the environment.

Chassis:

Steinbock Boss single plane design with heavy gauge protective "skirt" all round chassis together with chassis mounted loadposts, resist distortion and fatigue, protect all components from damage.

Engine

Standard (3 ton models)
Perkins 704-26 iDi, 4 cylinder water-cooled diesel engine.

Optional
General Motors L4 4-cylinder LPG water-cooled engine.

Standard (4,5 and 6 ton models)
Perkins 1004.4 4-cylinder water-cooled diesel.

Optional

Perkins G4.236 4-cylinder LPG water-cooled engine. Perkins 1004.42 "Low Emission" water-cooled diesel engine.

Engine

Air cleaner
Two-stage heavy duty cyclonic paper element filter.

Electrics
12V system with maintenance-free battery. Heavy duty alternator

Operating Temperature
Standard truck is cleared to operate between –10 deg. And +50 deg. C ambient temperature (+15 deg to 120 deg. F)

Transmission

(3 Ton Models)
Steinbock Boss Hydro 3 transmission, a third-generation hydrostatic drive system.

(4, 5 and 6 Ton Models)
Torque converter and 2 speed powershift transmission. Heavy duty clutch pads for reliability.

Brakes

(3 Ton Models)
Hydrostatic retarder gives controlled progressive deceleration to rest when foot is removed from the accelerator pedal. Conventional service brakes used for emergencies and final parking.

Service brakes
Hydraulically operated drum brakes, integrally mounted on the wheel motors. Asbestos-free brake linings.

Parking brake
Ratchet-type handbrake, mechanically linked to drum brakes.

(4, 5 and 6 Ton Models)
Large diameter, vacuum power-assisted hydraulic drum brakes on all four wheels. Light, progressive operation for safe, fatigue-free driving. Ratchet-type handbrake acts on drive wheels. Asbestos-free brake linings.

Tires

Pneumatic types have loading conforming to European standards (ETRTO) for safety and long tire life.

Steer axle

Large steel beam, mounted on high energy absorbing bearings giving cushioned movements. Stubs and hubs have high capacity taper roller bearings. A single, double-ended cylinder acts through steel connecting links direct on the stub axles. Ball joints, bushes, thrust washers, conventional pivot pins, track rods are eliminated. The steering geometry gives a small turning circle and minimum tire wear.

Steering System
Full power hydrostatic. Priority flow divider valve ensures easy steering at low engine speeds. 6 turns lock to lock. No “kickback” at the steering wheel.

Hydraulic suspension and platform tilt

Interconnected hydraulic cylinders on the cab side and pivots on the load side provide mast and platform tilt for easy, safe load handling. The cylinders give a smooth ride and ensure four wheel ground contact at all times for optimum traction and braking.

Stabilizer Free Operation

Steinbock Boss jackless “Safety Fast” four point suspension allows up to 6 tons to be handled without stabilizers for faster work cycles.

Hydraulics

Filtration
Suction filter in tank, full flow micronic filter, magnetic drain plug and filter/breather ensure oil cleanliness for long reliable life of the pump, valves and seals.

Control valve
Hydraulic valves are operated by hand levers for smooth accurate control of all functions. Integral pressure relief valve prevents system overload.

Cylinders
All hydraulic cylinders have non-metallic piston bearings, fine honed bores and hard chromium-plated piston rods for long trouble-free operation.

Pipes / Hoses
Steel pipe is used extensively. Wire braided, flexible hoses with swaged end fittings where movement is required.

Mast
Duplex mast is standard. Masts are constructed from special Steinbock Boss design, finished rolled steel nesting sections. The steel is “work hardening” so that the rollers wear over lift of the truck, not the mast sections. Inner mast is mounted on four large capacity canted rollers – two at top of outer and two at bottom of inner section – give maximum roller spacing for load stability and reliability.

Carriage and forks
Plate or bar type carriage, depending on model, with forged forks. Carriage is mounted on four high-capacity widely spaced canted rollers ensuring load stability and safety. Forks are easily adjusted for spread to suit various loads.

Mast traverse
Traverse speed and power are easily controlled by the driver throughout the mast travel for easy and safe load handling.

Load Posts
Chassis mounted load posts protect cab and engine housing.

Driver control center
Standard equipment is a luxury, weatherproof, wide cab with integral loadguard conforming to major world safety standards. Big sliding door for easy access even in narrow aisle. Footsteps and grab handles further aid entry / exit. Ventilation via platform side, sliding window.

Visibility
Large tinted glass windows provide glare-free all round visibility to extremities of truck, fork tips, load and working areas. Front and rear screen wipers. Rear view mirror.

Instruments
Fuel and water temperature gauges. A neat clear annunciator panel provides on-glance checking of engine oil pressure and alternator charge. Platform tilt level indicator.

Controls
Foot controls conform to the familiar, safe “automotive” layout. Electric direction change. Load handling controls are within easy reach of driver’s right hand. Key switch – incorporating neutral start and electric engine stop. Parking brake is beside the seat.

Steering
Finger-light power steering at low engine speeds, for quick, easy maneuvering. Spinner knob for easy one-handed steering.

Heater
Fan-assisted, hot and cold fresh air ventilation system, with front screen defoger mister for driver comfort in all weathers.

Seat
Suspension seat high backed and cloth covered (optional 3 ton models) incorporates weight, backrest angle and forward / backward adjustment, to suit drivers of varying height and weight.

Noise and emission levels
Noise level of 73db(A) Leq. (3 ton models) measured at the driver’s ear to latest BITA and DIN standards. Exhaust emissions well within ECE R49 regulations.

Service accessibility
Easy, direct access to engine, transmission and all possible components for easy daily and scheduled maintenance.

Standard finish
The chassis, mast, carriage and forks are “Steinbock Boss Orange”. Interior of driver’s cab finished in soft gray trim panels and rubber floor mat.

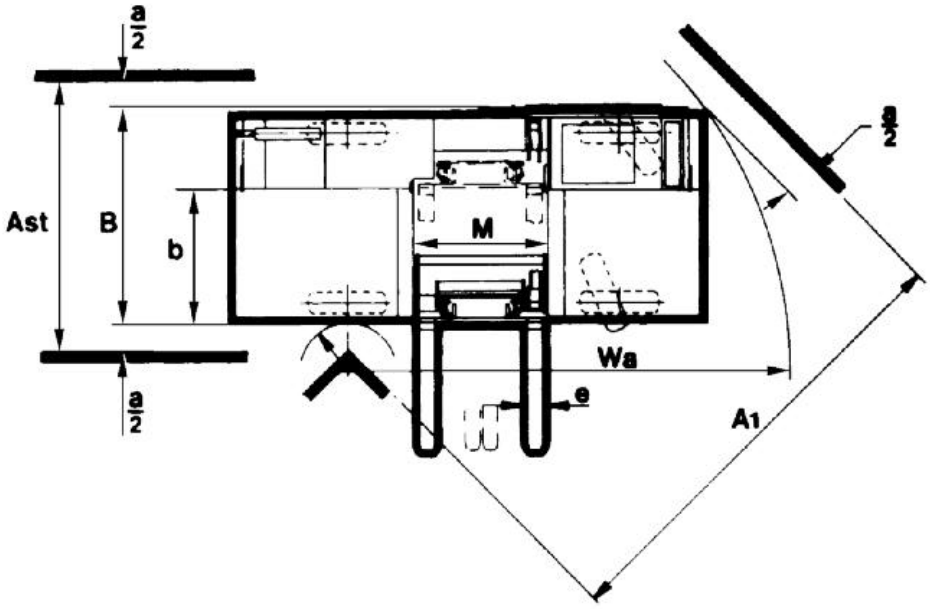
Optional equipment
A comprehensive range of optional equipment is available on request. This includes:
- alternative lift height duplex, duplex / triplex full free lift masts
- auxiliary hydraulic services
- alternative tires
- various lighting options
- platform side window guard

Parts and service

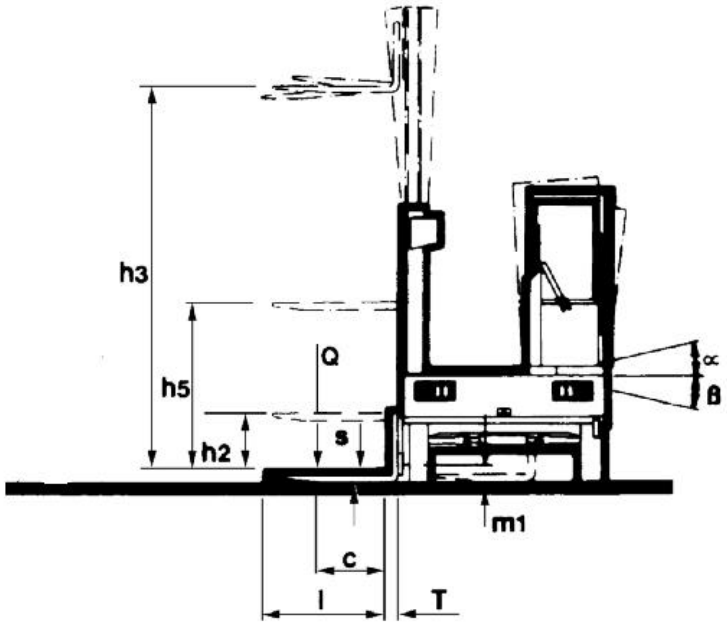
All Steinbock Boss products are backed by an excellent After-Sales Service and parts availability, through a comprehensive network of company depots and distributors.

Genuine Steinbock Boss

Steinbock Boss designs, manufactures, markets and supports a total range of warehouse, narrow aisle trucks, systems, frontlift, sidelift and container handling trucks, with capacities from 1ton to 50 ton. Steinbock Boss has led the field with innovative technology and proven design for more than 30 years. Boss sells and supports trucks in more than 100 countries.



All performance data given above has been proven on the Steinbock Boss Test Track Facility
Calculated figures provide for comparison of tractive performance only. For use of the vehicle on gradients in excess of 15% consult you local Steinbock Boss Dealer.
Due to a policy of continuous development and improvement the right is reserved to supply products which may differ from those described in this publication. Specifications on products sold by PMH are subject to change without prior notification.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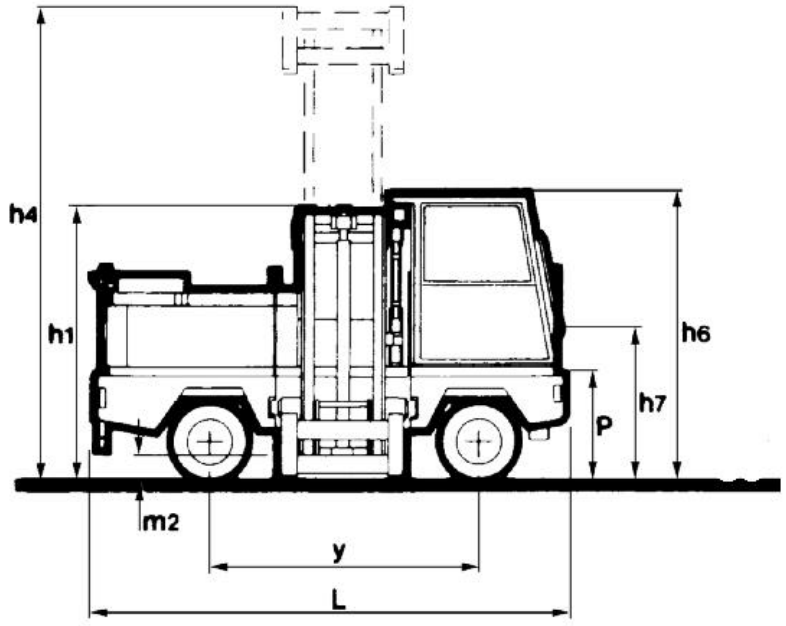
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	REF	DESCRIPTION	DIMENSIONS / COMMENTS	UNITS	DIA. SYM-BOLS	TRUCK DATA	TRUCK DATA	REF
SPECIFICATIONS	1	Manufacturer				Steinbock Boss	Steinbock Boss	1
	2	Model designation				336	546	2
	3	Carrying capacity	Mast vertical	kg	Q	3000	4000	3
	4	Load Center		mm	c	600	600	4
	5	Motive Power	Diesel, LPG			Diesel	Diesel	5
	6	Operator Position	Standing, seated			Seated	Seated	6
	7	Tires – front / rear	V-foam, L-Pneu			L/L	L/L	7
	8	Wheels driven	Front / Rear			2 / 2’	2 / 2’	8
DIMENSIONS	9	Mast lift height		mm	h_3	3500	4000	9
	10	Free Lift - Duplex		mm	h_2	120	1000	10
	11	Full free Lift -Dplx			h_5	---	---	11
	12	Carriage Class	ISO 2328			3	3	12
	13	Fork Dimensions		mm	s-e-l	50-100-1150	50-120-1175	13
	14	Mast / Platform tilt	Fwd / Backwd	Deg.	8 / ß	4 / 4	5 / 5	14
	15	Truck Length	Overall length	mm	L	4060 (4140)	4495	15
	16	Truck Width	Overall width	mm	B	1950	1950	16
	17	Standard Mast	Height lowered	mm	h_1	2470	3335	17
	18	Standard Mast	Raised height	mm	h_4	4335	5025	18
	19	Height Cab	Load Guard	mm	h_6	2590	2795	19
	20	Seat height		mm	h_7	1500	1665	20
	20a	Platform height		mm	P	910	1015	20a
	20b	Platform width		mm	b	1200	1210	20b
	20c	Well width		mm	M	1300	1300	20c
	20d	Fork face	Standout	mm	T	75	100	20d
	21	Outside turn radius		mm	Wa	3940	4040	21
	22							22
	23	Min. Aisle width	traveling	mm	Ast	2100	2145	23
	23a	Min. Aisle width	90 deg turn in	mm	A_1	4040	4000	23a
	24	Travel Speed	Load / Unload	km/h		20 / 21	36 / 40	24
	25	Lift Speed	Load / Unload	m/s		0.30 / 0.33	0.46 / 0.48	25
	26	Lowering Speed	Load / Unload	m/s		0.40 / 0.42	0.43 / 0.43	26
	26a	Traverse Speed	Load / Unload	m/s		0.10 / 0.15	0.20 / 0.20	26a

PERFORMANCE	27	Drawbar Pull	Load / Unload 60 min	N		- / -	- / -	27
	28	Drawbar Pull	Load / Unload 5 min	N		17167 / 13979	23695 / 17325	28
	29	Gradeability	Load / Unload	%		- / -	- / -	29
	30	Gradeability max.	Load / Unload	%		21 / 27	22 / 26	30
	31	Acceleration time	Load / Unload	s		-	-	31
WTS.	32	Weight	Unloaded w. battery	kg		5300	6360	32
	33	Loaded Weight	Front / Rear	kg		3800 / 4500	4860 / 5500	33
	34	Unload Weight	Front / Rear	kg		2320 / 2980	2860 / 3500	34
CHASSIS & WHEELS	35	Wheels front / rear	Number			2 / 2	2 / 2	35
	36	Tire size front		in		7.00-12 / 12PR	8.25-15 :16 PR	36
	37	Tire size rear		in		7.00-12 / 12PR	8.25-15 :16 PR	37
	38	Wheelbase		mm	y	2600	2600	38
	39	Track-front / rear		mm		1680 / 1680	1625 / 1670	39
	40	Ground clearance	Min.	mm	m_1	130	200	40
	41	Ground clearance	mid. wheelbase	mm	m_2	130	240	41
	42	Brakes-type	Mech/Hydr/Elec/Pneu			Hydr. / Mech	Hydr. / Mech	42
	43	Brakes-system	Foot/Hand/Deadman			Foot / Hand	Foot / Hand	43
POWER TRAIN	44	Battery type	DIN 43535/36 A/B/C			-	-	44
	45	Battery voltage	capacity	V/Ah		12 / 95	12 / 95	45
	46	Battery weight		kg		-	-	46
	47	Traction Motor	Rating – 1h	kW		-	-	47
	48	Hydraulic Motor	Rating – 15 min	kW		-	-	48
	49	Engine Mfg.				PERK 704-26	PERK 1004.4	49
	50	Engine max. power	DIN 70020	kW		43	65	50
	51	Engine Speed	Rated / installed	rpm		3000 / 2600	2500 / 2200	51
	52	Engine cylinders	capacity	cc		4 / 2600	4 / 4000	52
	53	Engine fuel	consumption	l/h		-	-	53
	54	Speed control	Elec/mech/fwd/rev			Elec / infinite	Elec: 2 / 2	54
	55	Transmission	SCR / Powershift			Hydrostatic	Powershift	55
	56	Coupling	Clutch / Torque cvtr			-	Torque Convtr	56
	57	Hydraulic pressure	For Attachments	Bar		175	155	57
	58	Noise level avg	At drivers ear	dB(A)		73 (77)	78(77)	58
	59	Rated Lift Height	Mast vertical	mm		4000	4000	59

	REF	DESCRIPTION	DIMENSIONS / COMMENTS	UNITS	DIA. SYM-BOLS	TRUCK DATA	TRUCK DATA	REF
SPECIFICATIONS	1	Manufacturer				Steinbock Boss	Steinbock Boss	1
	2	Model designation				556	566	2
	3	Carrying capacity	Mast vertical	kg	Q	5000	6000	3
	4	Load Center		mm	c	600	600	4
	5	Motive Power	Diesel, LPG			Diesel	Diesel	5
	6	Operator Position	Standing, seated			Seated	Seated	6
	7	Tires – front / rear	V-foam, L-Pneu			L/L	L/L	7
	8	Wheels driven	Front / Rear			2 / 2’	2 / 2’	8
DIMENSIONS	9	Mast lift height		mm	h_3	4000	4000	9
	10	Free Lift - Duplex		mm	h_2	1000	1000	10
	11	Full free Lift -Dplx			h_5	---	---	11
	12	Carriage Class	ISO 2328			4	4	12
	13	Fork Dimensions		mm	s-e-l	50-150-1175	60-150-1175	13
	14	Mast / Platform tilt	Fwd / Backwd	Deg.	8 / ß	5 / 5	5 / 5	14
	15	Truck Length	Overall length	mm	L	4495	4495	15
	16	Truck Width	Overall width	mm	B	1950	1950	16
	17	Standard Mast	Height lowered	mm	h_1	3370	3370	17
	18	Standard Mast	Raised height	mm	h_4	5120	5120	18
	19	Height Cab	Load Guard	mm	h_6	2795	2795	19
	20	Seat height		mm	h_7	1665	1665	20
	20a	Platform height		mm	P	1015	1015	20a
	20b	Platform width		mm	b	1210	1210	20b
	20c	Well width		mm	M	1300	1300	20c
	20d	Fork face	Standout	mm	T	100	100	20d
	21	Outside turn radius		mm	Wa	4040	4040	21
	22							22
	23	Min. Aisle width	traveling	mm	Ast	2145	2145	23
	23a	Min. Aisle width	90 deg turn in	mm	A_1	4000	4000	23a
	24	Travel Speed	Load / Unload	km/h		36 / 40	36 / 40	24
	25	Lift Speed	Load / Unload	m/s		0.27 / 0.29	0.27 / 0.29	25
	26	Lowering Speed	Load / Unload	m/s		0.45 / 0.32	0.51 / 0.49	26
	26a	Traverse Speed	Load / Unload	m/s		0.20 / 0.20	0.20 / 0.20	26a

PERFORMANCE	27	Drawbar Pull	Load / Unload 60 min	N		- / -	- / -	27
	28	Drawbar Pull	Load / Unload 5 min	N		23465 / 17950	23990 / 22765	28
	29	Gradeability	Load / Unload	%		- / -	- / -	29
	30	Gradeability max.	Load / Unload	%		19 / 25	17 / 26	30
	31	Acceleration time	Load / Unload	s		-	-	31
WTS.	32	Weight	Unloaded w. battery	kg		7260	8800	32
	33	Loaded Weight	Front / Rear	kg		5900 / 6360	7125 / 7650	33
	34	Unload Weight	Front / Rear	kg		3460 / 3800	3850 / 4950	34
CHASSIS & WHEELS	35	Wheels front / rear	Number			2 / 2	2 / 2	35
	36	Tire size front		in		8.25-15 / 16PR	300-15 / 18PR	36
	37	Tire size rear		in		8.25-15 / 16PR	300-15 / 18PR	37
	38	Wheelbase		mm	y	2600	2600	38
	39	Track-front / rear		mm		1625 / 1670	1625 / 1670	39
	40	Ground clearance	Min.	mm	m_1	200	200	40
	41	Ground clearance	mid. wheelbase	mm	m_2	240	240	41
	42	Brakes-type	Mech/Hydr/Elec/Pneu			Hydr. / Mech	Hydr. / Mech	42
	43	Brakes-system	Foot/Hand/Deadman			Foot / Hand	Foot / Hand	43
POWER TRAIN	44	Battery type	DIN 43535/36 A/B/C			-	-	44
	45	Battery voltage	capacity	V/Ah		12 / 95	12 / 95	45
	46	Battery weight		kg		-	-	46
	47	Traction Motor	Rating – 1h	kW		-	-	47
	48	Hydraulic Motor	Rating – 15 min	kW		-	-	48
	49	Engine Mfg.				PERK 1004.4	PERK 1004.4	49
	50	Engine max. power	DIN 70020	kW		65	65	50
	51	Engine Speed	Rated / installed	rpm		2500 / 2200	2500 / 2200	51
	52	Engine cylinders	capacity	cc		4 / 4000	4 / 4000	52
	53	Engine fuel	consumption	l/h		-	-	53
	54	Speed control	Elec/mech/fwd/rev			Elec : 2 / 2	Elec : 2 / 2	54
	55	Transmission	SCR / Powershift			Powershift	Powershift	55
	56	Coupling	Clutch / Torque cvtr			Torque Convtr	Torque Convtr	56
	57	Hydraulic pressure	For Attachments	Bar		155	169	57
	58	Noise level avg	At drivers ear	dB(A)		78	78	58
	59	Rated Lift Height	Mast vertical	mm		4500	4500	59