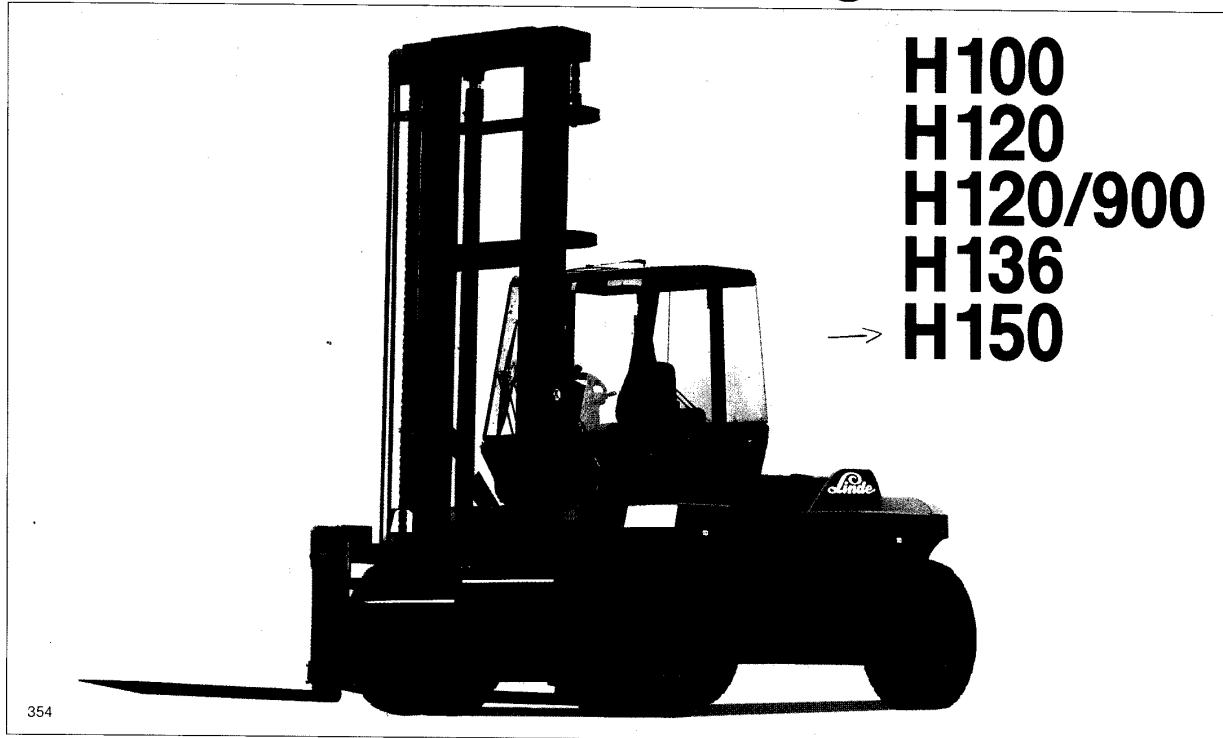


Engine Powered Forklift Trucks 10 000, 12 000, 13 600 and 15 000 kg

Linde



354

Introduction

The 10 to 15 tonne diesel counterbalanced trucks have been developed to suit a wide range of different applications, and incorporate the latest technology in meeting the rigorous existing and anticipated environmental standards. The main design features result from a thorough analysis of materials handling requirements and will ensure maximum productivity. Since operational efficiency is largely determined by the operator, the overall design concept was planned with the operator in mind.

Features

- Ergonomically designed operator's compartment.
- Latest technology diesel engine, giving high performance combined with low fuel consumption and exhaust emissions, to comply with existing and anticipated environmental requirements.
- Engine speed-up design affording power on demand and anti-stall feature.
- Heavy-duty industrial powershift transmission for smooth acceleration and deceleration.
- Full capacity to 6,1 m lift with sideshift and fork positioner.
- Centrally mounted all-weather metal cab.

Driver's compartment with optimised ergonomics

Access to the elevated driver's cab is provided by a staircase with safety rails. The

comfortable suspension-type driver's seat is fully adjustable to weight and size of the operator.

The controls not only satisfy the ergonomic standards defined by ISO 6682 but have been further optimised for easy operation. Multi-function hydraulic control lever for all load movements, facilitating smooth, safe load handling.

Control and supervision instruments are installed underneath the front cross member of the overhead guard; they do not require constant monitoring by the driver because possible malfunctions are signalled by a central warning light – the driver is capable of concentrating fully on the job in hand, in the safe knowledge that all important truck functions are subjected to permanent, automatic supervision.

Chassis

The monocoque chassis of fabricated steel plate gives high strength to weight ratio and full protection to components.

Engine

Perkins 1006.6e, 6 cylinder diesel engine developing 88,3 kW at 2600 rpm. Cubic capacity 6000 cc.

This engine meets Euro 1 standard for gases and particulates, whilst producing low smoke and noise levels.

Transmission and drive axle

A torque converter directly mounted to the engine drives a Clark powershift transmission giving 3 forward and reverse speeds.

Gear selection is electrically controlled and is automatic with upshift/downshift protection and forward/reverse inhibitor. The trucks have a Kessler heavy-duty double reduction type drive axle with spiral bevel primary and hub planetary secondary.

Steering

Full hydrostatic power steering is standard, resulting in excellent manoeuvrability with minimum operator fatigue and allowing lock to lock steering when stationary. A heavy-duty steer axle is mounted to the chassis via spherulastic bushes to allow axle articulation on uneven ground.

Mast

A robust clearview fabricated mast of all roller construction affords great strength, maximum load stability and mast rigidity to full lift height. Full width load rollers and side thrust rollers between inner and outer mast ensure complete alignment. A universal carriage is standard and features fork carriers for rapid interchange of various attachments.

Braking

The trucks incorporate a failsafe air brake system. Both the inching and brake pedals actuate the large diameter drum brakes in the drive axle hubs for positive braking control. The brakes can also be applied by the parking brake button situated on the side of the operator's seat.

LINDE		Forklift trucks Designation VDI 3586		Data Sheet for material handling equipment	
September 1996		Manufacturer's Data and Design Characteristics			
Characteristics	1.1	Manufacturer		Linde	Linde
	1.2	Model designation		H 100	H 120
	1.3	Power unit: battery, diesel, petrol, 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 (t)	10000	12000
	1.6	Load centre	C (mm)	600	600
	1.8	Axle centre to fork face	x (mm)	862	862
	1.9	Wheelbase	y (mm)	2950	2950
Weight	2.1	Service weight	kg	13945	15330
	2.2	Axle load with load, front/rear	kg	22080 / 1865	25340 / 1990
	2.3	Axle load without load, front/rear	kg	7035 / 6910	7280 / 8050
Wheels and tyres	3.1	Tyres, front/rear (SE = CS superelastic, P = pneumatic)		P / P	P / P
	3.2	Tyre size, front		10.00 x 20/16 PR	10.00 x 20/16 PR
	3.3	Tyre size, rear		10.00 x 20/16 PR	10.00 x 20/16 PR
	3.5	Wheels, number: front/rear (x = driven)		4x / 2	4x / 2
	3.6	Track width, front	b10 (mm)	1838	1838
	3.7	Track width, rear	b11 (mm)	2071	2071
Dimensions	4.1	Mast/fork carriage tilt, forward/backward	α/β (°)	5 / 10	5 / 10
	4.2	Height of mast, lowered	h1 (mm)	3575 1)	3575 1)
	4.3	Free lift	h2 (mm)	150	150
	4.4	Lift	h3 (mm)	4300	4300
	4.5	Height of mast, extended	h4 (mm)	5650	5650
	4.7	Height of overhead guard (cabin)	h6 (mm)	3075	3075
	4.8	Height of seat/stand-on platform	h7 (mm)	1940	1940
	4.12	Towing coupling height	h10 (mm)	-	-
	4.19	Overall length	l1 (mm)	5680	5680
	4.20	Length to fork face	l2 (mm)	4530	4530
	4.21	Overall width	b1/b2 (mm)	2509	2509
	4.22	Fork dimensions	s/e//l (mm)	75 x 200 x 1150	75 x 200 x 1150
	4.23	Fork carriage to DIN 15173, class/form A, B		Universal	Universal
	4.24	Width of fork carriage	b3 (mm)	2500	2500
	4.31	Ground clearance, mast	m1 (mm)	225	225
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	320	320
	4.33	Aisle width with pallets 1000x1200 across forks	Ast (mm)	6270	6270
	4.34	Aisle width with pallets 800x1200 along forks	Ast (mm)		
4.35	Turning radius	Wa (mm)	4020	4020	
4.36	Minimum between the centres of rotation distance	b13 (mm)	1360	1360	
Performance	5.1	Travel speed, with/without load	km/h	24 / 25	24 / 25
	5.2	Lifting speed, with/without load	m/s	0.32 / 0.34	0.30 / 0.34
	5.3	Lowering speed, with/without load	m/s	0.38 / 0.38	0.38 / 0.38
	5.5	Tractive force, with/without load, 60 minute rating	N	69 / 69	69 / 69
	5.7	Climbing ability, with/without load, 30 minute rating	%	29 / 30	25 / 28
	5.9	Acceleration time, with/without load (first 10 m)	s		
	5.10	Service brake		Pneumatic	Pneumatic
IC-engine	7.1	Manufacturer of engine / type		Perkins 1006e.6	Perkins 1006e.6
	7.2	Engine rated power to ISO 1585	kW	88.3	88.3
	7.3	Rated speed	rpm	2600	2600
	7.4	Number of cylinders / Displac. ccm	cm³	6 / 6000	6 / 6000
	7.5	Fuel consumption to VDI	l/h		
Others	8.1	Type of drive control		Torque converter 3/3	Torque converter 3/3
	8.2	Working pressure for attachments	bar	140	155
	8.3	Oil quantity for attachments	l/min		
	8.4	Mean noise level at driver's ear	dB (A)	77	77
	8.5	Towing coupling, design /type DIN, no			
1) Mast lowered height with 150 mm free it					

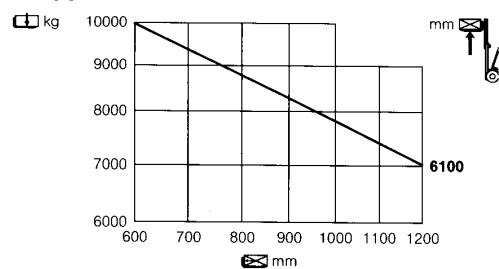
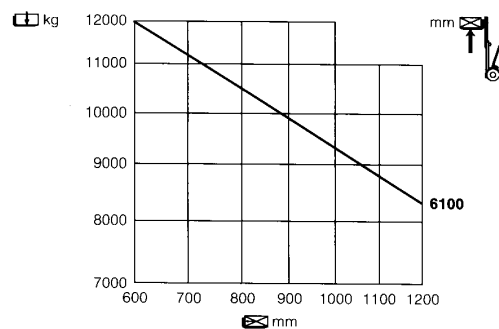
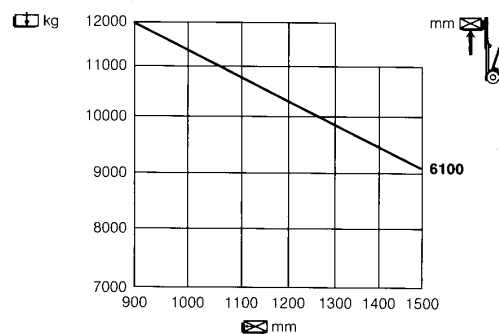
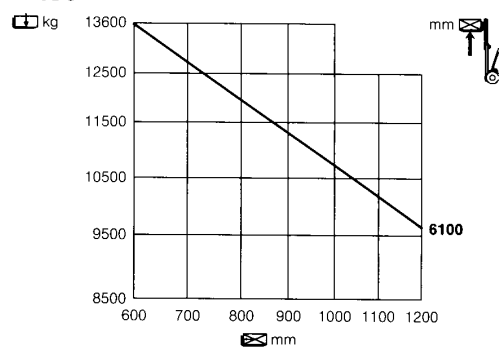
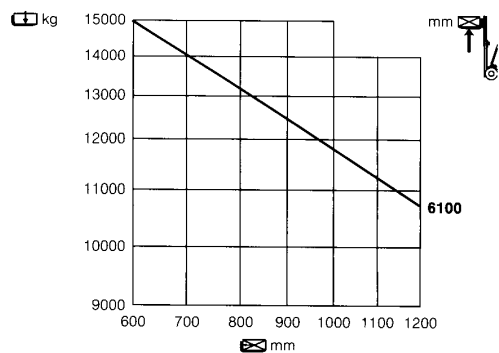
nt

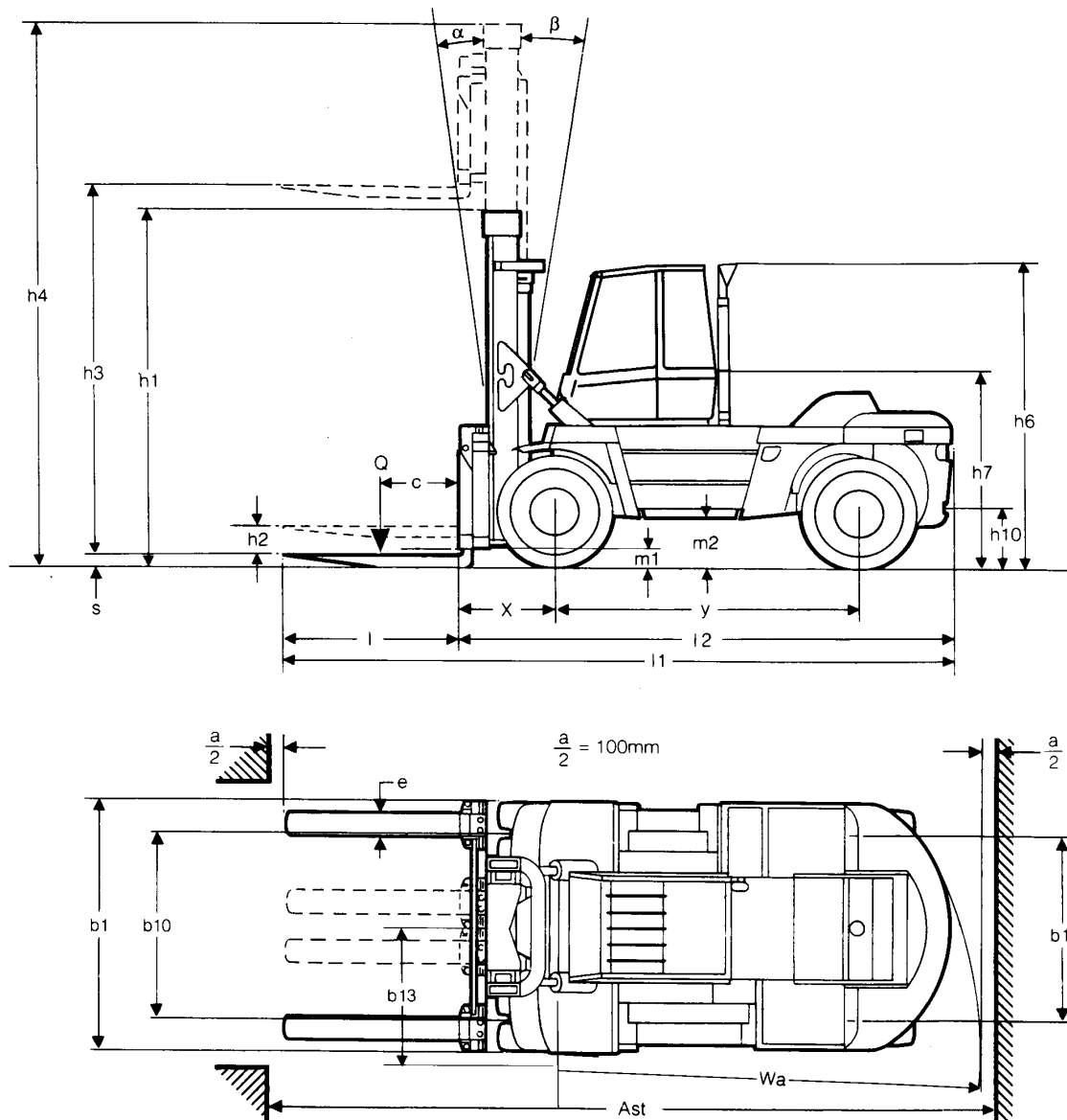
DFG
to VDI 3586
VDI 2198

Registration note

Model types

	Linde	Linde	Linde
	H 120/900	H 136	H 150
	Diesel	Diesel	Diesel
	Rider seated	Rider seated	Rider seated
	12000	13600	15000
	900	600	600
	940	940	940
	2950	2950	2950
	19155	18180	19265
	28820 / 2333	29440 / 2340	31980 / 2285
	9480 / 9675	8910 / 9270	9350 / 9915
	P / P	P / P	P / P
	12.00 x 20/20 PR	12.00 x 20/20 PR	12.00 x 20/20 PR
	12.00 x 20/20 PR	12.00 x 20/20 PR	12.00 x 20/20 PR
	4x / 2	4x / 2	4x / 2
	1838	1838	1838
	2071	2071	2071
	5 / 10	5 / 10	5 / 10
	3670 ¹⁾	3670 ¹⁾	3670 ¹⁾
	150	150	150
	3700	3700	3700
	5445	5445	5445
	3115	3115	3115
	1990	1990	1990
	-	-	-
	6610	6610	6610
	4810	4810	4810
	2550	2550	2550
	90 x 200 x 1800	90 x 200 x 1150	90 x 200 x 1150
	Universal	Universal	Universal
	2500	2500	2500
	250	250	250
	330	330	330
		6522	6522
	7122		
	4190	4190	4190
	1360	1360	1360
	24 / 25	24 / 25	24 / 25
	0.30 / 0.34	0.30 / 0.34	0.28 / 0.34
	0.38 / 0.38	0.38 / 0.38	0.38 / 0.38
	69 / 69	69 / 69	69 / 69
	21 / 29	20.5 / 29	19 / 29
	Pneumatic	Pneumatic	Pneumatic
	Perkins 1006e.6	Perkins 1006e.6	Perkins 1006e.6
	88.3	88.3	88.3
	2600	2600	2600
	6 / 6000	6 / 6000	6 / 6000
	Torque converter 3/3	Torque converter 3/3	Torque converter 3/3
	160	170	180
	77	77	77

H 100**H 120****H 120/900****H 136****H 150**



Standard Clearview Masts

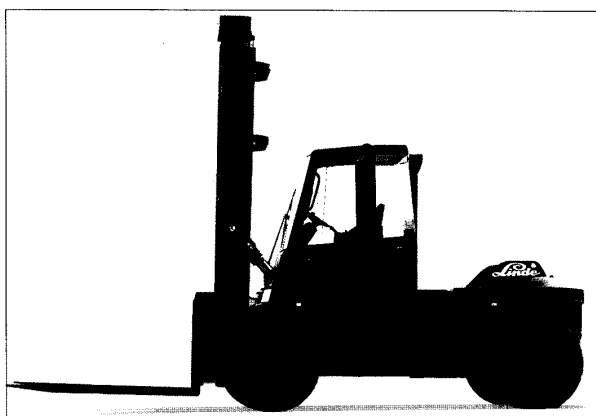
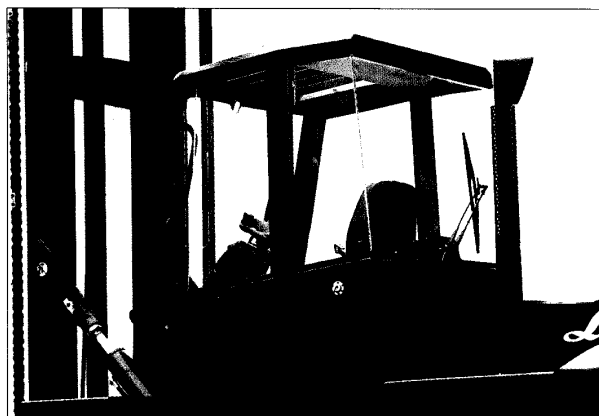
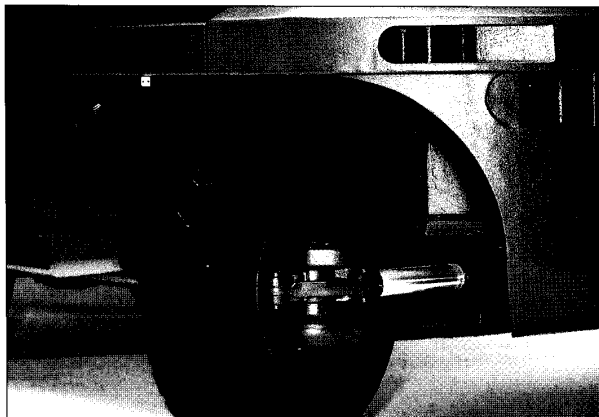
H 100 and H 120

h_3	Lift	3100	3700	4300	4900	5500	6100	6700
$h_3 + s$	Lift height	3175	3775	4375	4975	5575	6175	6775
h_2	Normal free lift	150	150	150	150	150	150	150
h_1	Height, mast lowered ¹⁾	2975	3275	3575	3875	4175	4475	4775
h_4	Height, mast extended	4450	5050	5650	6250	6850	7450	8050

H 120/900, H 136 and H 150

h_3	Lift	3100	3700	4300	4900	5500	6100	6700
$h_3 + s$	Lift height	3190	3790	4390	4990	5590	6190	6790
h_2	Normal free lift	150	150	150	150	150	150	150
h_1	Height, mast lowered ¹⁾	3370	3670	3970	4270	4570	4870	5170
h_4	Height, mast extended	4845	5445	6045	6645	7245	7845	8445

Equipment



Safety

- Engine meets Euro 1 standards for gases and particulates.
- Failsafe air brake system.
- Emergency warning light.
- Audible warning (low air pressure).
- Audible warning (horn).
- Audible warning (reverse gear).
- Good-all-round visibility.
- Tilt lock valve.
- Load lowering valve.
- Pressure relief valve.
- Low noise levels.

Standard equipment

Full cab with hinged doors, front, top and rear screen wipers and washers, heaters and demisters.

Full suspension seat.
Comprehensive instrumentation.
Perkins 1006.6e diesel engine.
Three-speed automatic powershift transmission with upshift/downshift protection and forward/reverse inhibitor.
Heavy-duty double reduction drive axle.
Full power hydraulic steering.
Air operated failsafe brakes with air dryer.
Twin mounted drive wheels.
Pneumatic tyres.
Standard clearview lift mast, 3700 mm lift (4300 mm – H100 und H120).
Universal fork carriage including sideshift and fork positioner.
Forks – 1150 mm long (1800 mm – H 120.02).
Standard colour scheme – vermilion and charcoal grey.

Optional equipment

Heavy-duty air filter.
High level air intake.
Spark arrestor and inlet flame trap.
Contoured solid (superelastic) tyres.
Standard clearview masts (see mast tables for details).
Additional hydraulic circuits.
Carriage backrest extension.
Alternative fork lengths and fork extensions.
Crane jibs and coil booms.
Cold climate specification to –25°C.
Alternative colour schemes.
Particle filter.
Air conditioning.
Other options available on request.