



Forklift Truck Capacity 42000 to 46000 kg H 420 – H 460

SERIES 356

Safety

Neutral start interlock preventing unintentional in-gear starting. Drive system inhibitors prevent incorrect downshift and reverse direction operation when in motion. Master warning lamp, steering column mounted, indicates monitored system warning.

Performance

The combination of a high power, low speed – high torque engine, matched with an electrically controlled 4-speed transmission, together with a multi-pump hydraulic system, manage the efficient use of energy, with maximised speed of operation while reducing the wear on hydraulic components.

Comfort

The cabin, equipped to provide the operator with a low stress and spacious working environment. Is provided with comfortable and intuitive ergonomics which are vital in creating the optimised working conditions necessary for sustained high performance operation.

Reliability

The high performance of the Linde Forklift truck is matched by the robustness of its construction. The high quality, heavy duty drive line components are designed to ensure maximum performance and durability. Heavy-duty main structural elements provide stress relief over the load bearing areas, thus ensuring lifelong product integrity.

Productivity

The forward central positioning of the operators cabin optimises the visibility to the fork carriage for loading and unloading operations, through the mast when travelling, and also around the machine when working in confined operating areas; Combining the operator comfort and component performance with intuitive ergonomics further enhances the ease of operation.

Linde Material Handling

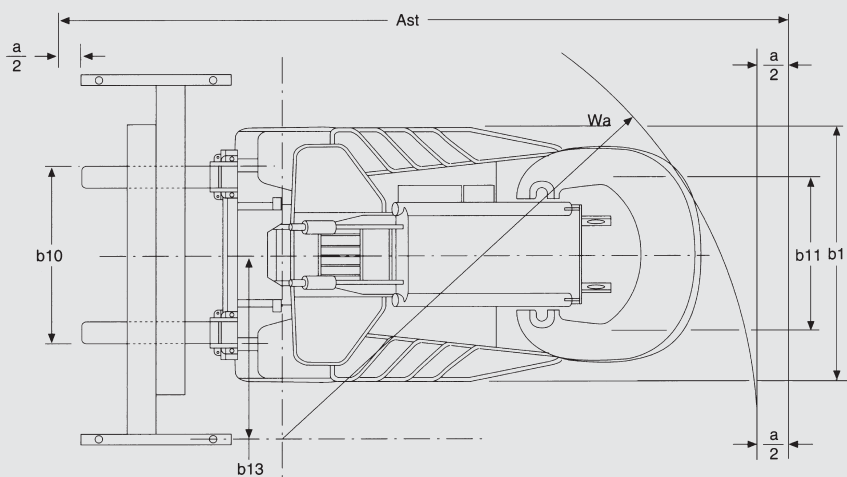
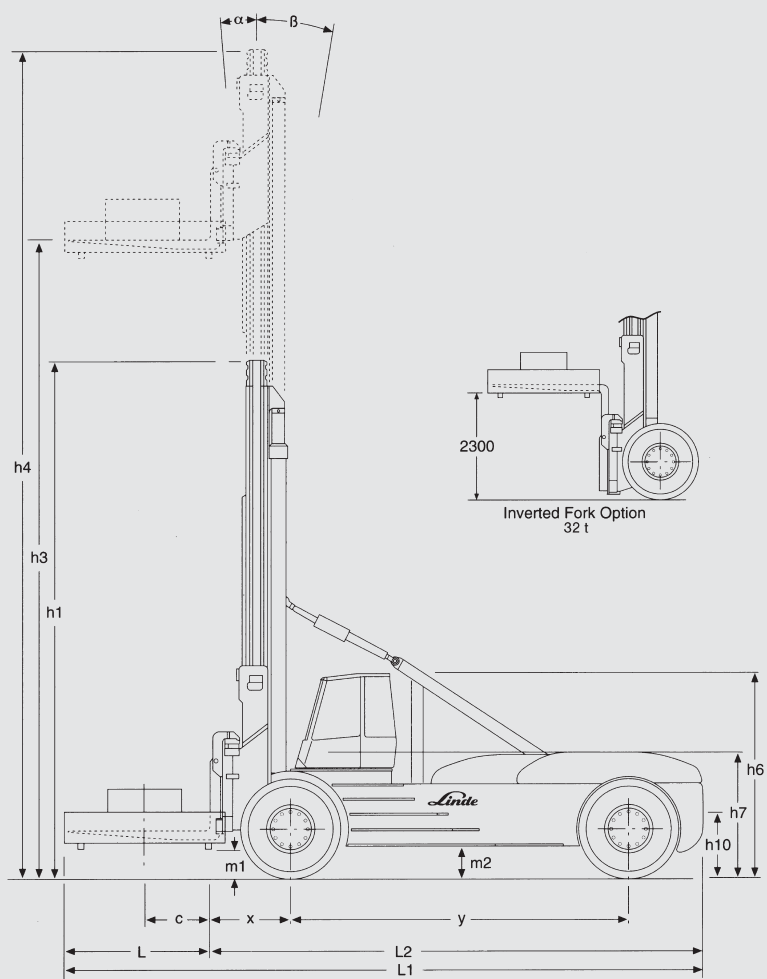
Linde

Technical data

Characteristics	1.1	Manufacturer		LINDE	LINDE
	1.2	Model designation		H 420	H 460
	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)	42000	46000
	1.6	Load centre	c (mm)	1200	1200
	1.8	Axle centre to fork face	x (mm)	1295	1295
	1.9	Wheelbase	y (mm)	5500	5500
	Weight	2.1	Service weight	kg	51640
2.2		Axle load with load, front/rear	kg	87785/5855	93675/6465
2.3		Axle load without load, front/rear	kg	26695/24945	26765/27375
Wheels and tyres	3.1	Tyres, front/rear. SE = (superelastic), P = (pneumatic)		P/P	P/P
	3.2	Tyre size, front		18.00 x 25/40pr	18.00 x 25/40pr
	3.3	Tyre size, rear		18.00 x 25/40pr	18.00 x 25/40pr
	3.5	Wheels, number front/rear (x = driven)		4x/2	4x/2
	3.6	Track width, front	b10 (mm)	3030	3030
	3.7	Track width, rear	b11 (mm)	2786	2786
	Dimensions	4.1	Mast/fork carriage/truck tilt, forward/backward	α/β (°)	5/10
4.2		Height of mast, lowered	h1 (mm)	5980	5980
4.3		Free lift	h2 (mm)	150	150
4.4		Lift	h3 (mm)	5000	5000
4.5		Height of mast, extended	h4 (mm)	8405	8405
4.7		Height of overhead guard (cab)	h6 (mm)	3425	3425
4.8		Height, operators seat/stand-on platform	h7 (mm)	2260	2260
4.12		Towing coupling height	h10 (mm)	600	600
4.19		Overall length	l1 (mm)	10400	10400
4.20		Length of fork face	l2 (mm)	8000	8000
4.21		Overall width	b1/b2 (mm)	4180/3400	4180/3400
4.22		Fork dimensions	s/e/l (mm)	140 x 300 x 2400	140 x 300 x 2400
4.24		Width of fork carriage	b3 (mm)	3500	3500
4.25		Fork spread, minimum/maximum	b5 (mm)	970/3000	970/3000
4.28		Reach travel	l4 (mm)	-	-
4.31		Ground clearance, mast	m1 (mm)	345	345
4.32		Ground clearance, centre of wheelbase	m2 (mm)	500	500
4.33		Aisle width with pallets 1000 x 1200 crosswise	Ast (mm)	12500	12500
4.34		Aisle width with pallets 800 x 1200 lengthwise	Ast (mm)	14500	14500
4.35		Turning radius	Wa (mm)	7600	7600
4.36	Minimum pivoting point distance	b13 (mm)	2925	2925	
Performance	5.1	Travel speed, with/without load	km/h	23.3/24.9	23.3/24.9
	5.2	Lifting speed, with/without load	m/s	0.30/0.40	0.30/0.40
	5.4	Lowering speed, with/without load	m/s	0.50/0.50	0.50/0.50
	5.5	Nominal tractive force, with/without load	kN	234/-	234/-
	5.6	Maximum tractive force, with/without load	kN	290/-	290/-
	5.7	Climbing ability with/without load	%	20.6/-	20.6/-
	5.8	Maximum climbing ability, with/without load	%	30.9/-	30.9/-
	5.10	Service brake		Wet disc	Wet disc
6.4	Battery voltage, rated capacity	V/Ah	2x 12/128	2x 12/128	
Drive	7.1	Engine manufacturer/type		Cummins QSM11	Cummins QSM11
	7.2	Engine output to ISO 1585	kW	246	246
	7.3	Rated speed	1/min	2100	2100
		Engine torque maximum/engine speed	Nm/rpm	1674/1100	1674/1100
	7.4	Number of cylinders/displacement	/cm ³	6/10820	6/10820
	7.5	Fuel consumption to VDI cycle	l/h	-	-
Others	8.1	Type of drive control		Torque converter 4/4	Torque converter 4/4
	8.2	Working pressure for attachments	bar	175	175
	8.4	Noise level, at operator's ear, overhead guard/cab	dB (A)	74	74
	8.5	Trailer coupling, design/type DIN	Ø (mm)	50	50

¹⁾ A container spreader is necessary to lift containers 2 or 3 high

LINDE	LINDE
H 460 GPCH/2¹⁾	H 460 GPCH/3¹⁾
Diesel	Diesel
Rider seated	Rider seated
36000 (46000) ¹⁾	36000 (46000) ¹⁾
1200	1200
1295	1295
5500	5500
60130	62240
88800/7330	91290/7150
38072/22058	40565/21875
P/P	P/P
18.00 x 25/40pr	18.00 x 25/40pr
18.00 x 25/40pr	18.00 x 25/40pr
4x/2	4x/2
3030	3030
2786	2786
5/10	5/10
7210	8710
150	150
7000	10000
10405	13405
3425	3425
2260	2260
600	600
9850	9850
7750	7750
4180/3400	4180/3400
140 x 300 x 2100	140 x 300 x 2100
6050/12150	6050/12150
970/3000	970/3000
240	240
345	345
500	500
12500	12500
14500	14500
7600	7600
2925	2925
23.3/24.9	23.3/24.9
0.30/0.40	0.30/0.40
0.50/0.50	0.50/0.50
234/-	234/-
290/-	290/-
20.6/-	20.6/-
30.9/-	30.9/-
Wet disc	Wet disc
2x 12/128	2x 12/128
Cummins QSM11	Cummins QSM11
246	246
2100	2100
1674/1100	1674/1100
6/10820	6/10820
-	-
Torque converter 4/4	Torque converter 4/4
175	175
74	74
50	50





H 420/H460 Standard Masts			
h ₃	h ₁	h _{1#}	h ₄
4000	5405	5480	7405
4500	5655	5730	7905
5000	5905	5980	8405
5500	6155	6230	8905
6000	6405	6480	9405
6500	6655	6730	9905
7000	6905	6980	10405
7500	7155	7230	10905
8000	7405	7480	11405
8500	7655	7730	11905
9000	7905	7980	12405
9500	8155	8230	12905
10000	8405	8480	13405

H 460/GPCH 2 & 3 Standard Masts			
h ₃	h ₁	h _{1#}	h ₄
7000	7135	7210	10405
10000	8635	8710	13405

h₃ = Lift
 h_{1#} = Height lowered, with Free lift
 h₄ = Height raised
 h₁ = Height lowered, without Free lift

Standard and optional equipment

Standard equipment

Forward mounted, centrally positioned cabin with access steps on left side	Heavy-duty automatic 4-speed electric powershift transmission with integrated safety protection; downshift, forward/reverse interlock
Fully equipped driver's cabin with hinged doors; wipers and washers for windscreen, rear screen and overhead screen, heater and demister	Robust double hub reduction drive axle, incorporating oil bath type multi-disk brakes with zero maintenance requirements
Hydraulic-suspension comfort-class seat with wide range of adjustment	Tilt system anti-sway hydraulic lock valve – preventing unintentioned load tilt
Hydraulic pilot line multi-function lever enabling precise load positioning with automatic anti-stall function	Reverse section, heavy duty load and container handling mast
Adjustable-angle steering wheel	Universal fork carriage system with integrated fork carriers for sideshift and fork positioning
Effortless hydrostatic power steering; lock-to-lock at standstill	2400 mm long pin mounted forks
Engine intake air cleaner with integrated safety element	Abundant storage space for writing materials, beverage cans, etc.
High performance hydraulic filters preserving maximum purity of oil for long life of all hydraulic components	Pneumatic tyres
On-demand working hydraulics, oil supply by multi-pump installation	Road lighting with counterweight mounted reverse lights
Comprehensive display units; monitor all key components	Reverse driving mirrors - chassis mounted
Central master warning light	Interior rearview mirror
Modern diesel engine with electronically controlled single-rail fuel injection system meeting European and international emissions regulations	Battery isolator connectors
	Audible warning in reverse

Options

Climate control	Heated reverse driving mirrors
Cabin pre-heat system – fuel burning or electrical	Panoramic interior mirror
Central greasing system – chassis, chassis & carriage, chassis carriage & spreader	Radio with compact disc unit and speakers
High level air intake – cabin (heater system only)	Spreader mounted working lights 2 or 4
Heated operators seat	Mast mounted lights 2 or 4
Additional seat	Cab mounted mirror – right side; standard or heated
Tinted glass	Rotating beacon or flashing beacon
Sliding window – right side	Sun blind - front and top
Air suspension seat with compressor	Fire extinguisher (2kg)
Joystick steering or mini-wheel steering systems	Engine coolant heater
Electrical socket in cab – 12volt	Hydraulic tank heater
Lift heights from 4000 mm to 10000 mm, 500 mm increments	Brake tank heater
Hydraulic accumulator	Counterweight mounted camera with monitor
Load weight device	Handrails – on steps left & right
Fork mounted 20' – 40' telescopic spreader	Low step left & right
Manual extension stops 20/24/40 or 20/24/30/40 or 20/30/40	Custom paintwork

Features

Power and drive system

- Powerful engine – high torque at low speed
- 4 speed electrically controlled transmission
- wide-track drive axle with wet disk brake system
- drive line protection with built-in operational inhibitors downshifting, reverse direction change, gear change ratio



Stable, robust chassis

- Heavy duty main chassis for optimised stress handling
- Unique mast construction for fork or container load handling
- Heavy gauge side panels providing impact protection

Load sensing hydraulics

- Highly efficient spur-gear multi-pump installation
- Switch-phased pumps supply metered oil for function selected
- Extended oil change frequency by reducing operational wear

Linde Central control system

- Master armrest console
- Central control lever – lift, tilt, sideshift and forkpositioner
- Centralised switches for key operational functions

Modern powerful engine

- Diesel motor Stage II emissions
- Turbocharger and Intercooler
- 6 cylinder – 11 litre
- 246 kW (330 bhp) @ 2100 rpm
- Maximum torque 1674 @ 1100 rpm



Operators compartment

- Fully adjustable high quality seat
- Forced air heating and ventilation system
- Adjustable steering column
- Adjustable armrest and hydraulic control console
- Optimised position of operator control instrumentation

Comprehensive display

- Engine – water temperature, oil pressure
- Transmission – oil pressure and temperature
- Hydraulic & Brake oil temperature
- Fuel – level
- Electrical – battery state
- Air – cleaner restriction warning

Universal fork carriage system

- Heavy duty fork carriage
- Twin fork-carrier shifting cylinders for precise fork positioning
- Roller mounted fork carriers for smooth operation
- Pin mounted forks for quick change operation

Subject to modification in the interests of engineering progress. Illustrations and technical details non-binding for actual construction. All measurements subject to customary tolerances.

