



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

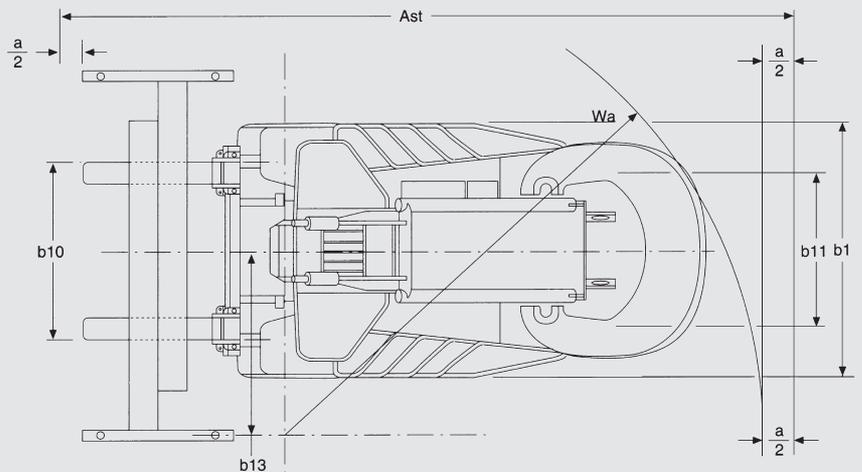
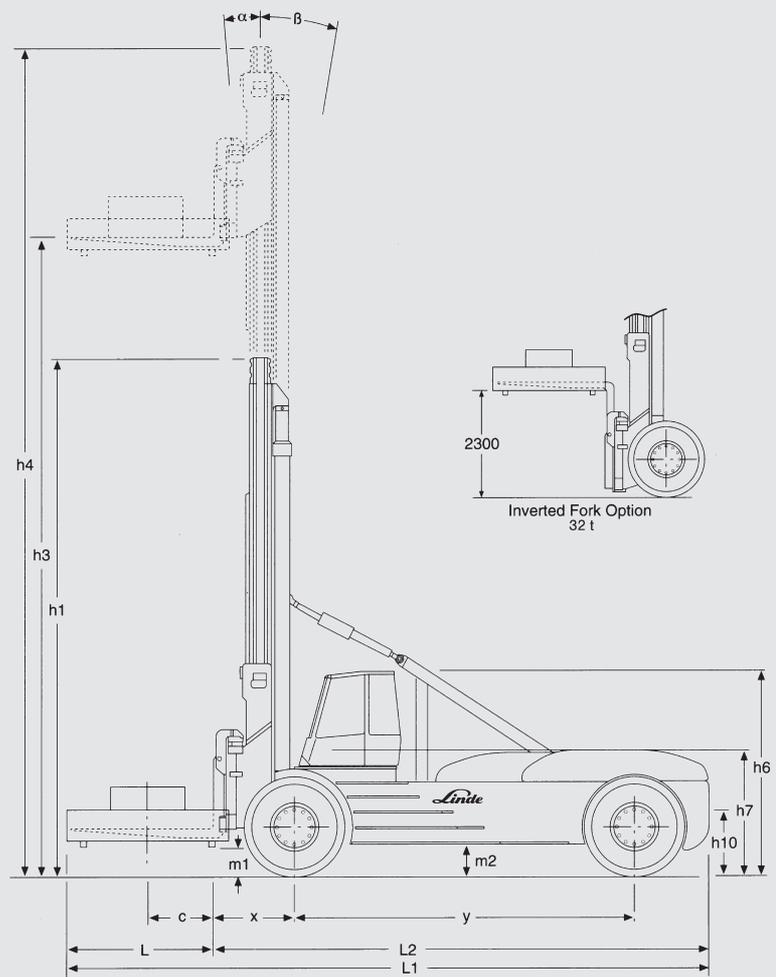
Linde

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 | /cm3 | 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/H 460 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 emission 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 powerfull 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

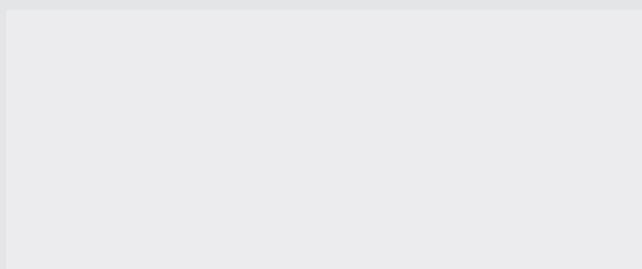
- Fully adjustable high quality seat
- Forced air heating and ventilation system
- Adjustable steering column
- Adjustable armrest and hydraulic control console
- Optimised position of operator control instrumentation

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



Linde AG

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