

THINK BIG

Linde HT100 – HT180 Heavy Trucks





"Our **Linde HT160** are in operation 24/7, 365 days a year. They often operate in close proximity to the red-hot melting furnaces, where it's up to 750 degrees and extremely dusty. These challenging conditions pose no problem for our robust HT160 models, which have been specially adapted for use in foundries. We've been really impressed by the reliability and performance of all the Linde trucks, including the other twenty electric and combustion engine trucks in our Linde fleet."

James McCoy, Procurement Specialist,
Novelis Recycling, Warrington, UK

"I spend the whole day moving heavy aluminum bars around the facility. It's a big area with ordinary roads, but you hardly notice the bumps and vibrations from the uneven road surface, thanks to the fantastic sprung seat. The large driver's cab is really comfortable and I always have a great view of the road, even when reversing."

Mike Boden, HT160 forklift truck driver, Novelis
Recycling, Warrington, UK



Here you can find more content
via your smartphone:
Linde Augmented Reality App



1. Start App
2. Capture symbol
3. AR content starts

YOUR PERFECT SOLUTION GUARANTEED!

If you want to move heavy loads, you need a big forklift truck. Sounds simple, but as a logistics professional, you'll know that finding the right truck is more challenging than it may seem. You don't just need a big forklift; you need one that is tailored to your exact requirements – you need a forklift that's efficient, cost-effective, ergonomic and sustainable.

What you need is a HT100 – HT180 heavy truck from Linde, 100% guaranteed to meet every one of your requirements. These hydrodynamic forklifts offer the best performance in their class; unbeatably low servicing costs to make your budget go further; and lower emissions values than any of the competition, meaning they really do set the standard in occupational health and safety and the environment. Our heavy trucks also boast the best operator visibility on the market and the same exceptional ergonomic standards you would expect from a Linde truck – so your employees are protected against fatigue on even the most demanding shifts.

What's more, you can tailor our heavyweights to your specific operational requirements thanks to a vast array of equipment options. You simply won't find a better solution for even your most challenging work environments.

→ **www.linde-mh.com**



Highlights

TOP PERFORMANCE IN EVERY DETAIL

What you need: Forklift trucks that meet the highest standards in terms of productivity, availability, and cost-effectiveness – 100% guaranteed.

What we provide: Heavy trucks with a load capacity of 10 to 18 tons, where every single component has been carefully designed to provide the best performance on the market and exceptional safety standards.

COMPLETE CONCENTRATION

Ergonomic driver's cab with ample space and cleverly arranged controls – ensuring safe handling and preventing fatigue

PERFECT OVERVIEW

High-resolution 7-inch color display with user-friendly touchscreen operation and the option of an integrated camera display

OPTIMAL VIEW, OPTIMAL SAFETY

Armored glass roof, fitted as standard, gives the driver a clear view overhead and maximum protection against falling objects

CLEAR VIEW TO THE REAR

Optimum visibility over the counterbalance and reduced blind spot – for maximum safety when reversing and a significantly reduced risk of accidents

MINIMAL FUEL CONSUMPTION

Highly efficient, high-performance turbo-charged common-rail diesel engine with diesel particle filter system and emissions well below the EU-V emissions standard

EQUIPPED FOR ALL USE(R)S

Wide range of additional features and special equipment, from state-of-the-art assistance systems to a wide range of attachments

MAXIMUM SERVICEABILITY

Easily accessible service door provides access for regular maintenance checks and hydraulic mechanism for tilting the cab forwards gives access to the engine compartment from both sides

UTMOST PRECISION

Electronic hydraulic controls for millimeter-precision maneuvering, reduced fuel consumption and best handling performance of any hydrodynamic forklift truck

Driver's Workstation

YOUR EMPLOYEES FIRST



Whether your employees are office workers or forklift truck drivers, the same principle applies: If you give your employees what they need, they will be more motivated and, ultimately, produce better work results. This exact principle was our starting point when designing the cab for the Linde HT100 – HT180 heavy trucks. The driver is at the center of every element of the design, from the spacious cab offering excellent visibility, to the sophisticated controls through to the logical arrangement of the displays. Plus, since your logistics team often work long hours in challenging conditions, we've added lots of clever extra comfort features to enhance the ergonomics.

OUTSTANDING FEATURES

Based on a decade of close dialog with users from a vast range of sectors, we have developed an extremely spacious driver's cab which makes no compromises when it comes to ergonomics or the user experience. The cab comes with all models as standard and can be enhanced with some pioneering equipment options. One great option is the rotating driver's seat, which can rotate 10 or 17 degrees to the right, thus reducing the strain on the drivers' spine when reversing. Drivers control all key lift functions using a non-slip joystick, while their arm rests comfortably on the length and height-adjustable armrest with integrated storage compartment for keys, mobile phone, etc. The height and angle of the steering column can also be adjusted to the driver's preferred position. The cab impresses with numerous extra storage solutions and a heated rear windscreen; and if that's not enough, the wide range of optional extras includes everything from a high-performance air-conditioning system to a passenger seat.



SMART INFORMATION

The high-resolution 7-inch touchscreen color display is installed on the overhead console, facing the driver. The display gives the driver an overview of all the key information, including footage from the optional rear-view camera, meaning there is no need for a separate screen if this option is selected. The touchscreen controls are also extremely easy to use and intuitive. The radio option comes with a Bluetooth speakerphone, so drivers can listen to music and make calls safely while working whenever they want.



THE HEIGHT OF COMFORT

Bumps, shocks, and vibrations can all cause problems for drivers' health and wellbeing. To counter this, Linde's engineers have used special rubber bearings to keep the driver's cab completely separate from the truck and the chassis, so that drivers feel as few vibrations as possible. The individually-adjustable cushioned seat, which is fitted as standard, also makes a significant contribution to the operator's comfort. Fitted with hydraulic suspension, it provides additional protection against vibrations, such as those caused by uneven surfaces.



JUMP IN AND GET GOING

The Linde HT100 – HT180 have a really simple pedal set-up – one pedal for acceleration and a combined brake/inching pedal – so they are very easy to operate and it takes very little time to train drivers. To change direction, you simply flip the switch in the armrest. This set-up is a tried-and-tested solution that is widely used around the world, so if your fleet contains trucks from other manufacturers, your drivers won't have to adapt to different controls each time they switch trucks.

Safety

SAFETY FIRST



In busy environments involving complex interactions between industrial trucks, people, and infrastructure, it is vital to maintain rigorous safety standards. Ultimately, if your operations are safe, your logistics processes will run smoothly, your employees will be happy at work, and your company won't incur expensive costs resulting from repairs and downtimes. This is precisely the reason why our heavy trucks provide maximum safety as standard – with an intelligent design based on optimum visibility, as well as a wide range of optional assistance systems and safety features.

MAXIMUM VISIBILITY

We want your drivers to be able to drive with confidence, as well as care, which is why the HT100 – HT180 heavy trucks have been designed to reduce fatigue and increase productivity and safety when handling heavy loads. Take the lift mast for example: the mast profile has been reshaped and made slimmer in order to maximize the driver's view of both the load and the road ahead. Similarly, at the back of the truck, Linde's engineers have given the counterbalance a sloping shape and integrated the exhaust aftertreatment system – including the exhaust, air inlet, and combi-radiator – into the chassis, to give the driver a clear view of the road behind.



MAXIMUM GRIP, MINIMUM RISK

Of course, when it comes to these giants of the forklift world, we have not only thought about the big picture, but also kept a keen eye on the important details. The best example of this is the highly slip-resistant steps, which are fitted as standard. This design detail protects your employees from dangerous trips or slips, and particularly comes into its own in scenarios where drivers have to keep hopping on and off – with wet shoes, for example. There is also an optional lighting system for the steps – a useful addition for fleets of forklifts that have to operate in poor lighting conditions.

100% RELIABLE BRAKING

When transporting heavy loads, even the slightest slip can be extremely dangerous. For this reason, we have fitted the Linde HT100 – HT180 with an automatic parking brake as standard. The brake activates automatically as soon as the driver dismounts, enabling safe stopping on ramps and gradients.

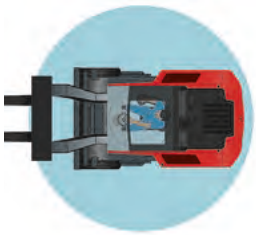


SAFE REVERSING

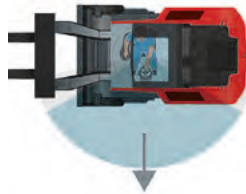
When a big bulky load is blocking the view to the front, sometimes the only option is to drive backwards. The problem here is that the driver has to twist their upper body into an unnatural position in order to see where they're going. The more they have to do this, the greater the strain on their body and, ultimately, the greater the damage to their health and the greater the risk of an accident. Our optional rotating driver's workstation solves this problem. By pressing foot-pedals, the driver can rotate their entire workstation – including their seat, operating controls, steering wheel, and pedals – to the required position. This reduces the strain on their spine caused by turning backwards in their seat and also improves their field of vision. The rotating driver's workstation can be adjusted to any position up to a maximum rotation of 180 degrees.

180°

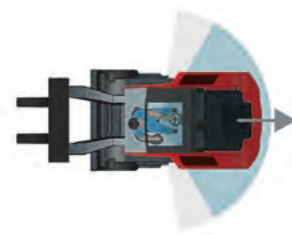
VIEW THANKS TO ROTATING DRIVER WORKSTATION



Full field of vision with left-rotating driver's workstation



Field of vision when rotating the workstation 90 degrees to the left



Field of vision when rotating the workstation through 180 degrees

■ Active field of vision
■ Passive field of vision

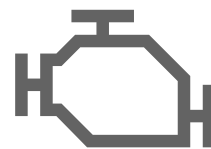


EARLY WARNINGS TO REDUCE RISKS

The Linde Safety Guard really comes into its own in confined environments where forklift trucks and people are working close together. This state-of-the-art assistance system is able to establish – with centimeter accuracy – the exact location of pedestrians and vehicles in the truck's vicinity. The system uses special transmitter and receiver units which communicate with one another – even through shelves, walls and doors – with zero interference thanks to the ultra-broadband technology. The Linde Safety Guard is therefore able to detect potentially critical situations ahead of time, for instance if a forklift driver and a pedestrian are on a collision course in the warehouse. Linde's new interactive safety vest also comes into play in scenarios like this. Featuring smart technology, the garment alerts the wearer to an approaching truck by means of vibration as well as an acoustic signal. Thanks to the ultra-bright LED stripes, the vest also makes the wearer highly visible from a good distance away.

Drive

HIGH POWER, HIGH PERFORMANCE



Heavy goods handling requires power and endurance. And Linde's HT100 – HT180 trucks certainly have no shortage of either, thanks to our range of high-performance, clean diesel engines, with various power outputs, and our state-of-the-art hydrodynamic drive.



TOP QUALITY COMPONENTS

No matter what your material handling requirements, you can rest assured that our heavy trucks are made with top-quality components that have a proven track record in demanding industrial environments. For instance, we source our engine products from Mercedes-Benz (MTU) and Cummins, two European companies with extensive experience in this specialist engine segment. The transmission is from ZF, the drive axle from Kessler, and the hydraulics from Danfoss.

Benefits For You

- **Short downtimes:** Maintenance intervals of 1000 (Mercedes-Benz) or 750 operating hours (Cummins) increase truck availability and reduce costs, including for servicing.
- **Lowest fuel consumption in its class:** The Linde heavy trucks have the lowest fuel consumption of any hydrodynamic forklifts. This has been verified in a TÜV NORD-certified work cycle in which our model was shown to use around 10% less diesel than the next best competitor.
- **Lowest emissions in its class:** Thanks to a state-of-the-art exhaust aftertreatment system – comprising DOC (diesel oxidation catalyst), DPF (diesel particulate filter) and SCR (Selective Catalytic Reduction) with AdBlue injection – the emissions from our heavy trucks are well below those of our direct competitors and also well within the strict limits imposed by the EU-V emissions standard, e.g. for nitrogen and particle emissions.
- **Low noise levels:** Noise reduction features ensure that, even at full power, our engines always run quietly. This means drivers are subject to less noise and are less likely to need time off for health conditions related to working in loud environments. This is very important since noise-induced hearing loss is one of the most common occupational illnesses. Neighboring buildings (especially in residential areas) also benefit from the reduced noise levels.

Mercedes-Benz OM934

4-cylinder 5.1-liter engine with power output of 129, 150, or 170 kW

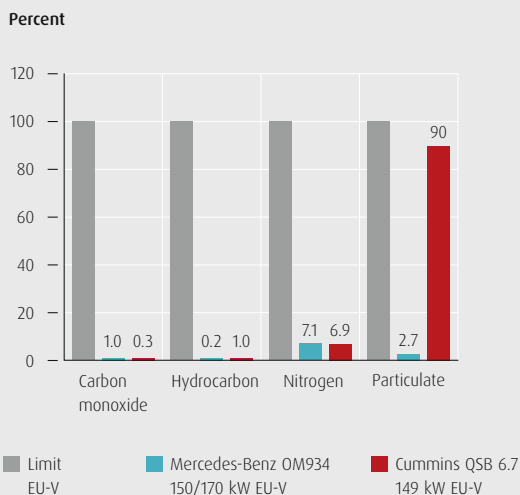


Cummins QSB 6.7

6-cylinder 6.7-liter engine with power output of 129 or 149 kW



Exhaust Emissions: Mercedes-Benz OM934 and Cummins QSB 6.7 vs. EU-V limits

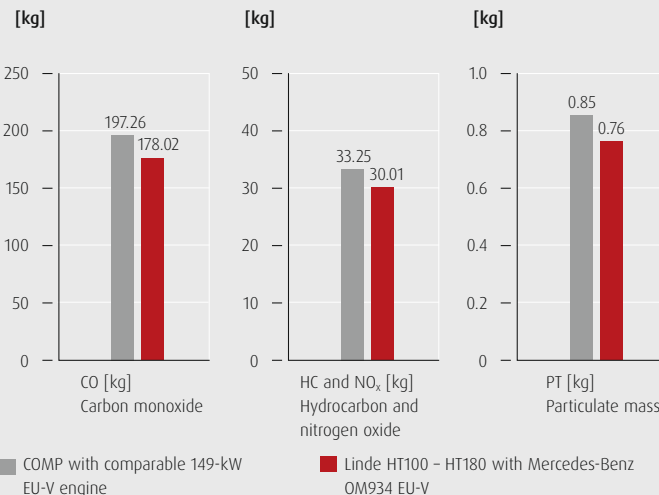


Pollutant Emissions: Linde HT 160/1200 vs. COMP (per 1000 operating hours)

COMP = competitor

The Linde HT160/1200 emits up to 9.75 percent less carbon monoxide per 1000 operating hours than a competitor truck with a comparable EU-V engine.

The amount of pollutant emitted per load is also reduced, thanks to the high throughput of the Linde HT160/1200.



Special Equipment

EXCEPTIONAL FLEXIBILITY



Heavy goods come in all shapes and sizes, be it bulky or compact, narrow or wide, round or square. That's why we've developed a range of special equipment options for our Linde HT100 – HT180 models to cover every material handling requirement. Below is a small selection of the attachments, fork carriages, and other customized solutions we offer.

ATTACHMENTS



Multi-Pallet Clips

These clips are an absolute must for the beverage industry. They allow forklifts to lift up to eight Europallets at the same time, meaning fewer transport runs. In an ideal scenario, they also allow a larger truck to do the work of multiple smaller trucks, which helps reduce your costs.



Coil Boom

Our robust coil booms are the perfect choice for transporting bulky, hollow items, such as paper rolls or wire coils, safely from A to B. They are available in a number of different designs, including directly integrated on the mast or hung on the fork carriage.

FORK CARRIAGES



Multi-Functional Fork Carriage

This solution – which is exclusive to Linde – is designed to ensure the safe handling of bulky loads such as large metal sheets. As well as the basic version with its end position side-shifter, we also offer versions with additional fork adjustment options and/or single fork adjustment.



Fork Positioner with Level Compensation

Ideally suited for smooth loading and unloading on difficult surfaces, the fork positioner with level compensation (+/-5 degrees) is available with both integrated and hook-mounted forks.

HEIGHT-ADJUSTABLE FORKS

Height-adjustable forks (+/- 100 millimeters) enable operators to lift loads safely, even if they haven't been stored in an exactly horizontal position. This makes them the ideal choice for operations such as sawmills where forklifts often have to maneuver planks, beams, and panels that have been stored at an angle or on uneven ground.

Height-adjustable forks can be combined with all types of full taper and standard forks.



PIPE CLAMP

Extra safety measures are required when transporting round loads, such as pipes, since they are liable to roll around. The pipe clamp from Linde Material Handling makes handling these tricky loads simple, holding the pipes in place and preventing them from slipping.



NARROW VARIANT

Often, as loads get heavier, the only solution is to invest in newer, more powerful forklift trucks. Unfortunately, these trucks are also usually wider, which can cause problems if the roads or aisles are too small. As narrow variants, the Linde HT100/600 and HT120/600 offer the perfect solution to this problem. They measure 2150 and 2296 mm in width, making them 381 mm and 235 mm narrower than the comparable standard design (2531 mm).

Another advantage of these narrower variants is that they have a smaller turning circle which means they can work faster. They are also fitted with super-elastic tires, which neither affect the maximum load capacity nor the stability of the truck, but which do mean you never have to worry about punctures.

ADDED EXTRA: THE TILTING MAST

When a heavy truck itself needs transporting, the seven meter high mast can pose something of a problem. Removing the fork carriage and mast takes time and a lot of manpower; but the Linde HT100 – HT180 trucks offer a different solution. These trucks come with an optional mast variant, which allows the mast to be tilted forward in a few simple steps, reducing the truck's height and making it quicker, simpler, and more cost-effective to transport the truck by road.



Service and Maintenance

SERVICING MADE SIMPLE



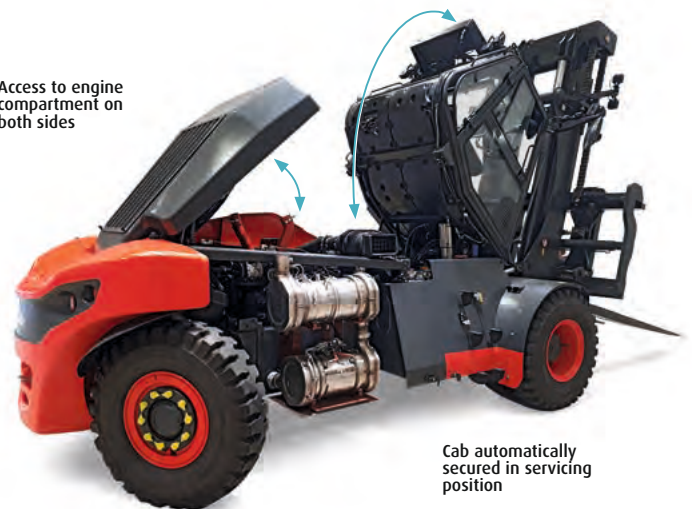
Even the best forklift trucks need regular check-ups, but at Linde we like to make servicing as efficient as possible. That's why our HT100 – HT180 models have been specially designed to ensure any work on the trucks can be completed as quickly and cost-effectively as possible. As our customer, you also benefit from access to our extensive Linde service network, with over 8000 service technicians and more than 700 sales and service facilities in around 100 countries worldwide – 24 hours a day, seven days a week.

OUR TOP TIP: THE TILTING CAB

One of our best features to improve servicing is our tilting cab and integrated combi-radiator. As the cab is tilted forward into the servicing position using electrohydraulics, the combi-radiator lifts up at the back.

Benefit: In its tilted position, the cab is out of the service technicians' way, giving them clear access to the components in the engine compartment on either side.

Access to engine compartment on both sides



Cab automatically secured in servicing position



FOR QUICK MAINTENANCE CHECKS: THE SIDE SERVICE DOOR

Does the starter battery have enough power? Is the washer fluid tank topped up? A quick pit stop is now even easier thanks to the handy side service door on the Linde HT100 – HT180 models. The door gives your employees quick and easy access to all the components that need checking daily:

- washer fluid tank
- starter battery
- central fuses
- cab tilt switch



PRE-OP CHECK APP

Daily maintenance checks – using the handy service door – are made even easier with the “Pre-Op Check” app from our dedicated range of fleet management software “Linde connect.” Using the app, drivers must verify the condition of their truck before the start of their shift on a mobile device. The app runs through a series of questions, and the truck cannot be started until the driver is able to confirm that no defects have been detected.





Linde Fleet Management

SMART SOLUTION FOR INCREASED PRODUCTIVITY

Smart technologies have transformed our lives and your fleet of heavy trucks is no different. With Linde connect you can connect all the trucks in your fleet, manage their workloads, and optimize their usage based on the available data. What's more, if you sign up for the connect:cloud option, you can manage your fleet 24 hours a day, no matter where you are. The Linde connect fleet management software is a modular system, which is easily adapted to your specific business needs and operating environment. So you can reap the benefits of efficient processes, perfectly timed servicing and maintenance schedules, and significantly improved workplace safety and transparency.



Linde Material Handling GmbH, a KION Group company, is a leading global manufacturer of forklift trucks and warehouse trucks, and a solutions and service provider for intralogistics. With a sales and service network that spans more than 100 countries, the company is represented in all major regions around the world. In the 2019 financial year, the Linde MH EMEA Operating Unit (Europe, the Middle East and Africa) recorded a total revenue of roughly EUR 3.5 billion, with approximately 12,000 employees worldwide. Global sales of Linde-branded trucks in 2019 amounted to around 135,000.

TOTAL
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