

Linde Material Handling

*Linde*

**Higher profits, lower costs.**

Linde 391 series IC LPG engine lift trucks.

H16-18-20 T, and H16-18-20 CT, H20 CT-600

Capacity 3,000 to 4,500 lb.



# The new Linde compact. 391 Series

These are the smallest models in the Linde IC truck range.

The Linde IC LPG engine lift trucks include the models:  
H16 T, 18 T, 20 T, H16 CT, 18CT, 20 CT, and H20CT-600.

Compact in design, these trucks satisfy big needs capable of handling load capacities from 3,000 up to 4,500 pounds. Versatile in application, their special strengths are appreciated wherever space is limited.

These trucks are extremely economical in operation and upkeep. Whether feeding an assembly line, loading/unloading goods or in a warehouse these compact trucks are reliable and demonstrate exceptional performance.

Where constant stop and go operation can result in excessive wear and tear on brakes and transmissions as well as overheating, Linde has refined the hydrostatic drive system to match these tough working conditions.

The design advantages of no transmission, no conventional service brake, and no clutches ensures durability and efficiency.



# Featuring

- CAD/FEM design
- Construction Machinery Style Driving Power
- Drastically Reduced Maintenance Expense
- Lowest Total Cost of Ownership
- Unrivaled Performance
- Time Tested Durability
- Ergonomic and Environmental Excellence



# Look at the unique benefits.

**The exclusive unique, top mounted tilt cylinders** provide smooth precision and control of the load. The result: high stability, fewer shocks and less noise thanks to maintenance free cushioning.

**Innovative mast design.** Slim mast profiles ensure a clear view of the load and surroundings. The result: enhanced safety and highly productive load handling.

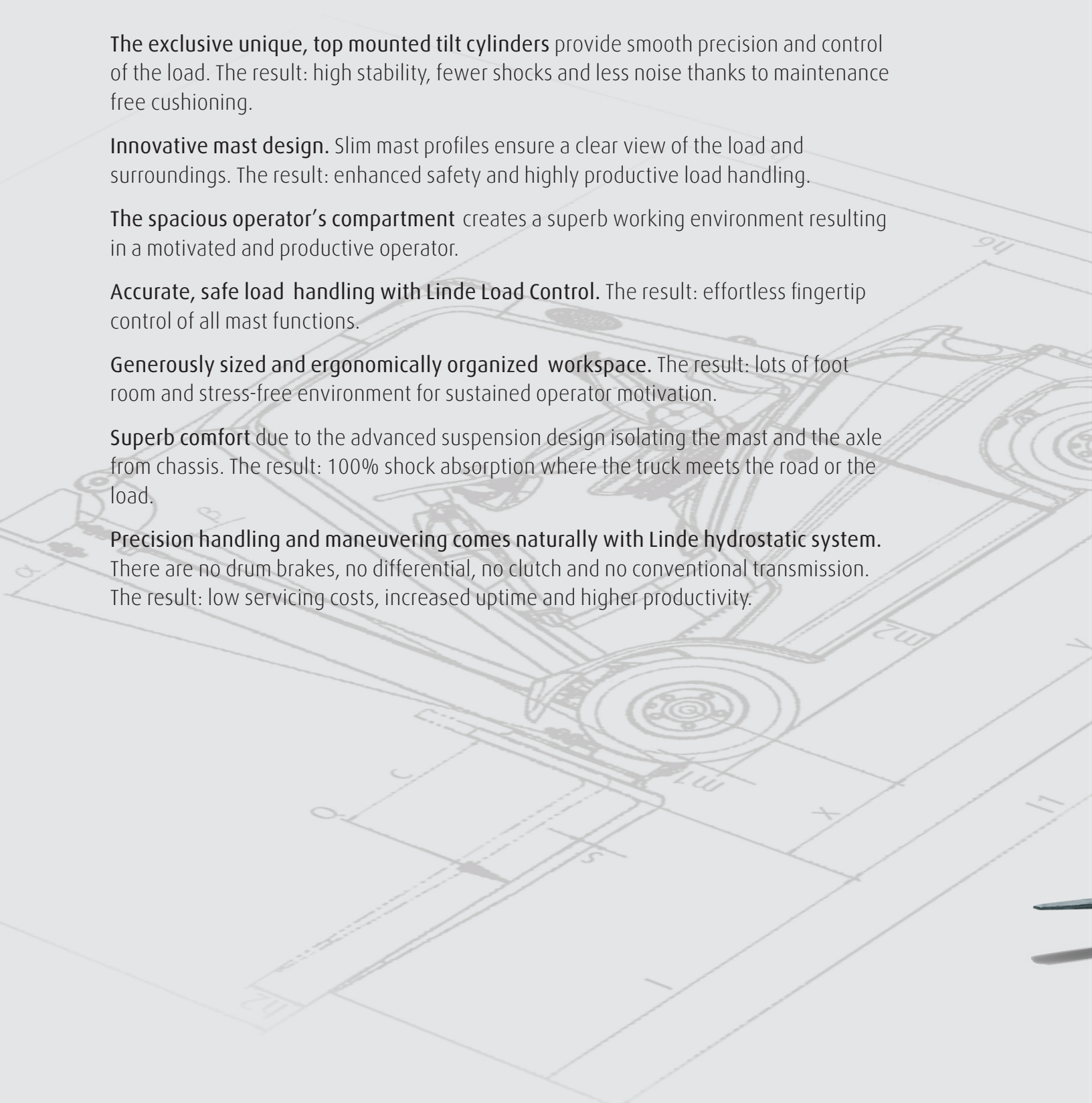
**The spacious operator's compartment** creates a superb working environment resulting in a motivated and productive operator.

**Accurate, safe load handling with Linde Load Control.** The result: effortless fingertip control of all mast functions.

**Generously sized and ergonomically organized workspace.** The result: lots of foot room and stress-free environment for sustained operator motivation.

**Superb comfort** due to the advanced suspension design isolating the mast and the axle from chassis. The result: 100% shock absorption where the truck meets the road or the load.

**Precision handling and maneuvering comes naturally with Linde hydrostatic system.** There are no drum brakes, no differential, no clutch and no conventional transmission. The result: low servicing costs, increased uptime and higher productivity.





# Optimum economy, productivity and efficiency.

## CAD/FEM design

Linde internal combustion engine powered pneumatic and cushion tire trucks are designed and built with a specific purpose in mind. Our goal is to help our customers maximize the return on their investment in man and machine. All Linde H-trucks are the products of meticulous design parameters utilizing CAD (Computer Assisted Design) and FEM (Finite Element Modeling) techniques. These procedures validate truck design prior to production and in combination with prototype destruction testing, assure that every Linde truck is built to the highest standards of reliability and durability. The global engineering tradition and expertise of Linde, one of the world's largest lift truck manufacturer, is an ever-present asset found in every truck we manufacture.

## Construction machinery style driving power.

Why do so many manufacturers of heavy-duty off-road construction machinery specify Linde drive systems? The simple answer lies in the unmatched performance and durability designed and built into every Linde hydrostatic system component. Originally designed for use in bulldozers, loaders and excavators, the hydrostatic drive systems found in our lift trucks are built to save you money. Literally built to push, pull and bulldoze loads, the Linde 391 range will out-perform all automotive torque converter type transmissions found in the marketplace.

## Drastically reduced maintenance expense

These trucks are perfectly suited to the rigors of constant stop/go/forward/reverse duty cycles. Linde technology completely eliminates the typical maintenance problems so often encountered in this environment. Truck overheating, excessive brake wear/fade and transmission failures all constitute documented problems associated with the use of torque converter type lift trucks in demanding warehouse shuttle applications. The Linde 391 range will eliminate these pervasive, disruptive and expensive problems in your operation.

## Lowest total-cost of ownership

The high starting efficiency inherent to Linde hydrostatic drive, when compared to trucks fitted with torque converter transmissions, allows for drastically reduced engine speeds throughout the trucks entire operating range. This exclusive design feature translates into lower fuel consumption, longer engine life and extended engine service intervals (up to 1,000 hours).\* When combined with built-in automatic wear-free "dynamic braking,"\* a standard feature eliminating friction brake wear, you get a series of trucks perfectly designed and built to maximize productivity, while yielding the lowest possible total cost of ownership.

## Unrivalled performance

These models feature EPA compliant VW four cylinder overhead cam engines. The proven motors have been in service with Linde for over 25 years. Renowned for their durability, fuel efficiency and ultra clean burning characteristics, these engines are governed to low speeds in order to attain maximum fuel efficiency with the lowest possible noise and exhaust gas emissions. Even more significant is the fact that the engine RPM is adjusted electronically to operate at a maximum of 1,050 RPM during the trucks' predominant duty cycle of 2.0-7.0 MPH both in the forward and reverse direction\* Due to the high efficiency of the Linde hydrostatic drive system this extremely low engine speed is more than adequate to easily provide ample power for all required truck tasks. The application of power with intelligence helps the user maximize the return of their investment in man and machine.



### Time tested durability

All Linde H-trucks feature an exclusive chassis belly-pan.\* This under-truck protective steel plate covers 100% of the chassis underside making it almost impossible for moisture, dirt, corrosives and banding materials to enter the engine compartment. The belly-pan also adds strength and rigidity to the overall chassis design while simultaneously containing engine noise. This design is equipped with convenient easy access panels for service requirements. Also, this range features sealed and pressurized hydraulic oil sumps. The typical tank breather system found on the competitions trucks, draws contaminants into the truck hydraulic circuit on a continuous basis. Linde's exclusive sealed tank design eliminates hydraulic oil contamination in even the dirtiest, most abrasive environments.\*

**Ergonomic excellence** defines the Linde 391 series of lift trucks. Automobile class operator compartments are spacious and fully sound insulated limiting the noise level at the operator's ear to a maximum 72-76 decibel average.\* A large cushioned and sound insulated floorboard features the patented Linde twin-pedal directional control system with standard parking brake pedal. Effortless, fingertip actuation of the integrated Linde Load Control joysticks /armrest enable all mast and operational hydraulic functions. With the on-demand diagnostic capability, all hydraulic and travel control functions are easily programmable using a laptop computer, via the new LTC (Linde Truck Control) system.\* This revolutionary and exclusive ergonomic enhancement takes the guesswork out of day-to-day truck operation by automatically selecting the ideal engine RPM for any and all required truck tasks. The application of power with intelligence yields smooth, quiet, precise and fuel-efficient operation resulting in reduced driver stress, a higher level of productivity and reduced merchandise damage. Shock mounted drive/steer axles and main hydraulic control valves

eliminate vibrations and protect these major components in especially abusive environments. In order to complete this exceptional ergonomic package Linde equips every truck with a Grammer premium three-way adjustable, full-suspension operator bucket seat as standard equipment.\* On the business end of every Linde cushion tire truck you will find high strength uprights designed to optimize driver visibility. Outer "C-Channel" mast construction combined with inner interlocking "I-Beams" and heavy-duty roller bearing mounted fork carriage result in exceptional upright strength and durability. Unique top mounted tilt cylinders ensure precision handling and control of the load. Due to the absence of a ring and pinion style drive axle, not required with the Linde hydrostatic drive system, uprights are directly mounted to the drive axle bringing them closer to the truck chassis resulting in exceptional base as well as residual capacities throughout the range.

### Environmentally sound

The overall design of the Linde IC range translates into products that experience a longer economic life while consuming fewer parts along the way. Extended engine maintenance intervals as well as reduced fuel consumption, noise and exhaust gases, contribute to a friendlier working environment and help reduce operator stress. Typically only requiring engine oil/oil filter changes every 500/1,000 operating hours the accumulation of waste oil is reduced significantly. At the same time, all Linde LP powered lift trucks feature 3-way catalytic exhaust purifiers as standard equipment. A wide variety of recycled materials are utilized in the manufacturing process and company mandated recycling policies insure that Linde Material Handling North America Corporation utilizes all available means to protect our environment for future generations.

\* Exclusive Linde Feature.





Linde ranks among the world's leading material handling equipment manufacturers. This position has been justly earned. Linde trucks excel not only with their recognized innovative technology but especially due to their low energy and operating costs.

High quality in production is matched by the standard of the services we provide. With our ten manufacturing plants and a comprehensive network of local partners, we are at your call around the clock and around the world.

Your local Linde dealer offers a complete single-source package including qualified pre-sales consulting, after-sales service and flexible finance options—whether leasing, renting or purchasing.



**For more information on Linde material handling equipment, please contact:**

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