

***HYSTER* vs. Linde**

Competitive Comparison

H80XM



Style

- * The smooth rounded hood, steering column, frame and counterweight are modern looking and pleasing to the eye.
- * Dual cooling air outlets on counterweight.
- * The back lit instrument panel, mounted on right side of dash, is easy to read and attractive.
- * The one piece design of the modern integral operator's compartment looks sturdy.

Style

- * Dated Porsche design.
- * Dual cooling air outlets on counterweight.
- * Steering column-mounted instrument panel is basic.
- * Lightweight mast construction.



Linde H45T

Hyster



- * The open tread design step has a height of 17.7", gives good foothold and allows for quick and convenient on/off access.



- * The large contoured, rubber coated handgrip on left side (optional on right side) is bolted to the left-hand side of the overhead guard leg and allows the operator to easily and safely enter/exit the operator compartment.



- * Standard seat is a vinyl non-suspension seat with forward and rearward adjustments with seat belt and hip restraints. Optional seat (shown) is available with full suspension, vinyl or cloth, with forward, rearward, backangle, and seat firmness adjustment.

Linde



- * The 20.25" high inset step provides poor access into the operator compartment. The step is hard to find when exiting the truck, increasing the opportunity for injury.



- * The handgrip on front left overhead guard leg is not rubber-coated for sure grip.



- * The standard adjustable suspension seat has no hip restraints or seat belt.

Hyster



- * Tilt cylinders are located under floorplates allowing an unobstructed floor area for the operator. A wide, single inching/brake pedal allows use with either foot.



- * Seat side hydraulic levers (modern) are staggered and are placed within the operator's comfort zone for convenient and productive operation.



- * The five-position tilt steering column provides additional operator comfort for convenient and productive operation.

Linde



- * Tilt cylinders are located under floorplates out of the way, but floorboard area is still cluttered with three foot pedals that provide an unnatural pedal operation.

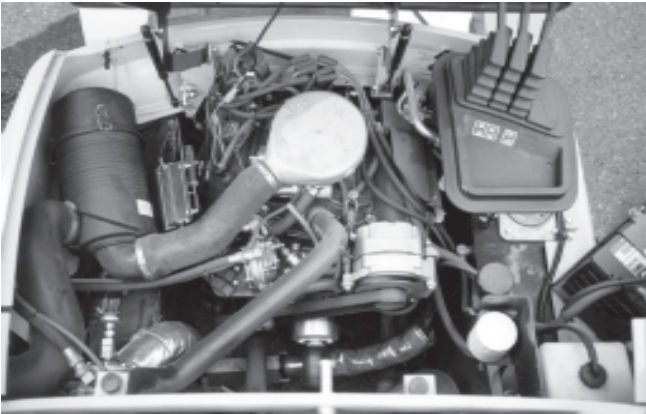


- * Seat side hydraulic levers have unnatural cross pattern for hoist and tilt.

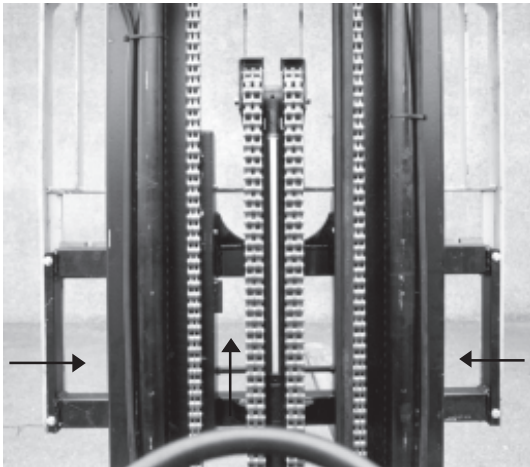


- * Steering column does not tilt for operator comfort.

Hyster



- * The powerful and reliable GM V6 4.3 L LPG/carburetor engine will withstand rugged and demanding applications and deliver high productivity and performance with increased travel speeds and a horsepower of 93.5.

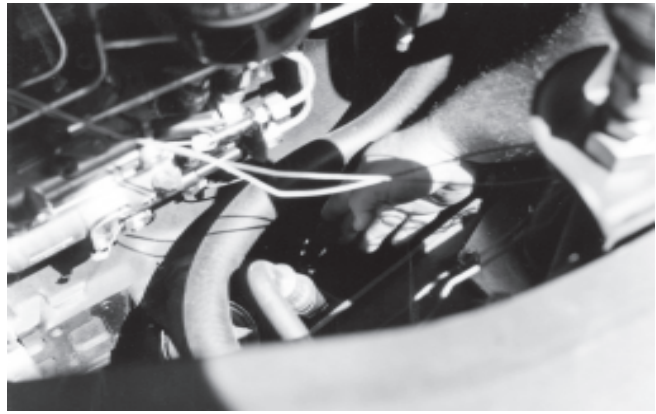


- * The VISTA mast provides good visibility at truck bed height.



- * The bar on edge overhead guard provides good vision overhead.

Linde



- * The Perkins/G4.236 diesel engine provides 18.9 less horsepower than the GM 4.3L Vortec.



- * The narrow mast with single free lift chain, and carriage roller support plates limit visibility.



- * The overhead guard has relatively small opening with bar on edge design, partially obscuring visibility.

Hyster



- * The rubber bushing mounted cast ductile iron steer axle has tapered roller wheel bearings. It also provides responsive control, and eliminates mechanical linkage for reduced surface shock and simplified maintenance.

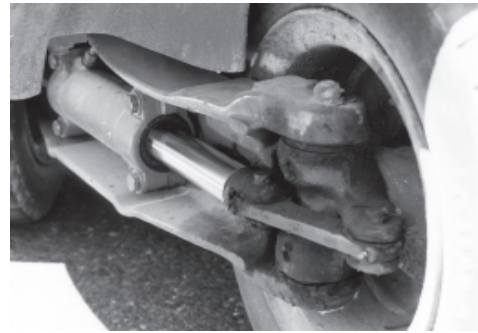


- * The Hyster VISTA mast angled load rollers resist forward, backward and lateral forces.

Ergonomics

- * A 3/8" thick floor mat insulates against vibration and reduces noise.
- * The isolated comfortable operator's compartment is welded in one piece and mounted on rubber isolators providing durability and reduced noise and vibration.
- * Standard seat is a vinyl non-suspension seat with forward and rearward adjustments with seat belt and hip restraints.
- * A Monotrol pedal is standard which provides foot controlled directional changes to free one hand for steering and the other to steer or to control hydraulics.
- * A handbrake is placed in an easy to reach location within the operator's comfort zone.
- * The back lit instrument module is easy to read and provides a quick visual check of the truck.
- * Convenience/clipboard trays are an added feature for the operator's convenience.
- * Hydrostatic steering allows for precise, reliable control.

Linde



- * Rubber bushing mounted steer axle reduces shock to steer axle and is not protected from the rear.



- * Chains are exposed and unprotected on the outside of the mast channels.

Ergonomics

- * A thin 1/4" thick floor mat provides less noise and heat insulation.
- * The isolated cab is mounted on rubber shock absorbers.
- * The steering wheel is very small and has an imposing steer knob.
- * Forward and reverse traction control is achieved with separate foot directional controls. The brake pedal is between the two.
- * Foot park brake pedal with hand twist park brake release on left of steering column.
- * The steering column mounted instrument module is small and partially obscured by steering wheel.
- * No clipboard trays or storage compartments are provided.
- * Hydrostatic steering.
- * The grid style overhead guard is open only in front. Rear section is enclosed, partially obstructing visibility as well as blocking light.

Hyster

Performance/Productivity

- * An optional 2-speed forward autoshift transmission provides smooth shifting and high productivity.
- * The cowl mounted 2nd gear lockout switch provides the option of locking out 2nd gear if higher speed is not needed.
- * A large steel square wave radiator allows engine to run cooler.
- * A Monotrol pedal is available (not shown) which provides foot controlled directional changes to free one hand for steering and the other to steer or to control hydraulics.
- * An engine shutdown system is provided for safety of engine components.

Serviceability

- * The instrument module is easy to read and provides a quick visual check of truck functions.
- * The hood pivots forward and opening side panels offer quick, easy checking of belts, alternator, water pump and radiator.
- * The removable/hinged side panels allow easy access to engine compartment.
- * The swing out battery tray allows easy changing of the battery.
- * J-hook mast mounting is easier, safer and requires less time.
- * The truck is standard pre-wired for lights.
- * The floor plate easily lifts out with no tools required for easy access for servicing.
- * The steer axle requires no adjustment, which saves time.
- * The cowl mounted fuse panel is easily accessible.
- * Bolt-on fender extensions are easily in stalled/removed on trucks with dual drive tires.
- * The transmission oil dipstick can be accessed through a door in the floorplate without having to remove the entire floorplate.
- * The brake drums are easily removed for service of brakes.
- * A single serpentine drive belt provides superior service life and maintains tension without adjustment like v-belts would.

Linde

Performance/Productivity

- * Hydrostatic transmission with infinitely variable speeds. (no powershift)
- * Foot controls for forward and reverse with automatic braking.

Serviceability

- * The instrument module is basic easy to read and the instrument cluster provides a quick visual check of truck functions.
- * Hood pivots to the rear for checking of belts, alternator, water pump and radiator but has limited opening.
- * Poor access to engine compartment and hydrostatic transmission.
- * Two bolts must be removed to lift out floor plates.
- * The hydrostatic transmission also acts as a wear-free service brake. An integral multiple disc brake acts only as a parking brake.

Hyster

Noise control

- * The hydraulic pump is mounted inside the counterweight for quieter operation.
- * The cooling fan is mounted inside counterweight.
- * All panel joints are sealed.
- * The 3/8" thick floormat insulates against vibration and reduces noise.
- * Noise absorption materials are used around engine compartment.
- * The covers are dampened to eliminate noise.

Visibility

- * The instrument panel is backlit.
- * Integral sideshift is provided for better maneuverability.
- * High visibility carriage bars allow better visibility at truck bed height.

Vibration control

- * Elastomeric mounts cushion shock for smooth ride and good operator comfort.
- * The isolated operator's compartment is a one-piece structure mounted on rubber isolators.
- * Variable spring rate engine mounts.

Reliability

- * The Hyster steer axle is a one piece cast ductile iron steer axle.
- * Tapered roller bearing spindle mounting lasts much longer than needle bearings and eliminates adjustment for wear.
- * The drive axle is a single piece cast design for strength and durability.
- * The carriage has 6 canted load rollers to provide good lateral stability.
- * The standard Monotrol pedal provides foot controlled directional changes to free one hand for steering and the other hand to steer or control hydraulics.
- * Dual speed transmission provided for high productivity and performance.
- * The fork stops in the counterweight prevent damage to components.

Linde

Noise control

- * Insulated engine cover.
- * Cooling fan mounted inside counterweight.
- * A sound abatement package is standard.

Visibility

- * A backlit instrument panel aids in visibility, but panel is obscured by steer column.
- * Integral sideshift allows load adjustment.
- * There is no load backrest.

Vibration control

- * Isolated operator compartment has rubber mounts for shock absorption.

Reliability

- * Single piece cast steer axle with tapered roller bearings.
- * Hydraulic differential is standard and eliminates the need for ring and pinion gear reduction and a conventional drive axle.
- * The standard hydrostatic drive system also eliminates wear items such as mechanical transmission, torque converter, universal joints, drive shafts, and clutch packs.
- * Features wear free dynamic braking through the drive line with additional oil disc brakes for high speed emergency stopping and secure parking.
- * The steer axle is exposed and unprotected below the counterweight.
- * Forward/reverse control pedals.
- * Hydrostatic transmission has infinite speeds.
- * There are no fork stops in the counterweight to protect components.