

# H550-700HD/S SERIES



**STRONG PARTNERS.  
TOUGH TRUCKS.™**

**HIGH CAPACITY FORKLIFT TRUCK**

# H550-700HD/S SERIES



## HIGH CAPACITY TRUCKS FOR HEAVY DUTY APPLICATIONS

Hyster Company has a long history of designing and building high capacity forklift trucks. The Hyster® H550-700HD/S series offers a Tier 4 Final powertrain featuring the Cummins 6.7L QSB engine with cooled Exhaust Gas Recirculation (EGR) and Selective Catalytic Reduction (SCR). Using reliable and proven new components to ensure high productivity and an overall lower cost of ownership, this versatile lift truck is your performance solution. The truck is engineered for easy service while offering up to 25% lower fuel consumption\* than other leading competitive products. The H550-700HD/S forklift series is also available with a Tier 3 engine for certain markets providing a cost effective alternative solution for various industry applications.

More than 80 years of heritage building tough forklift trucks is brought to bear in the H550-700HD/S forklift, available in seven models for use in applications such as steel manufacturing, sea ports, general cargo, mining and stevedoring.

*\* Results will vary based on application, physical environment, fuel quality, etc.*



## ■ **DEPENDABILITY**

- Heavy duty masts & carriages
- ZF transmission
- High capacity cooling system
- Heavy duty steer and drive axles

## ■ **LOW COST OF OWNERSHIP**

- Harmonized systems design
- On-demand cooling
- Lower fuel consumption
- On-demand hydraulics
- Traction speed limiter (optional)

## ■ **SERVICEABILITY**

- Optional powered tilting cab
- Quick access to key components
- On-board diagnostics
- Longer service intervals
- Radiator cooling systems

## ■ **ERGONOMICS**

- Excellent all-around visibility
- Designed for operator comfort
- Low noise
- Proportional hydraulic control

## ■ **PRODUCTIVITY**

- Rated capacities and lift speeds
- Competitive speeds
- ZF transmission with Cummins engine
- Auto-shifting transmissions with inching capability
- Hyster Tracker compatible

# DEPENDABILITY

## ENGINEERED FOR TOUGH APPLICATIONS USING PROVEN COMPONENTS

### ■ HEAVY DUTY MASTS & CARRIAGES

The Hyster® H550-700HD/S forklift, exceptionally suited for tough applications, has been engineered for long load centers, wide loads and heavy duty-cycle conditions. Coil rams, both integral and hook carriage mounted, are available in a number of configurations for steel industry and port applications.

The mast, with robust mast channels, rollers, stub shafts and chain anchors, is designed to excel in heavy duty applications. The sturdy mast design for this truck series enables less mast deflections while offering a number of single and 2-stage mast options for a wide variety of applications in multiple industries.

Greaseable load rollers with tapered roller bearings ensure the front end provides years of dependable performance. Carriages are designed to have minimal capacity derate on sideshifting carriages, enabling the truck to provide close to full rated capacity under all operating conditions.

### ■ COIL RAM OPTIONS

Hyster is committed to providing tailored solutions for unique customer applications. The H550-700HD/S series can be ordered with coil rams for steel applications. Configurations include integral, pin carriage or hook carriage mounted rams. Quick connect pin or hook carriage mounted rams are designed for dual use as a forklift truck or as a coil ram thus maximizing asset utilization for our customers.



*Hook-type coil ram*



*Integral coil ram*



*Pin-type coil ram*

### ■ CARRIAGE & FORK OPTIONS

Different applications require different tools — customize your truck with five available carriage and fork options on the H550-700HD/S truck series.



*Dual function sideshift fork positioner with integrated forks*



*Standard pin-type with manual fork positioning*



*Pin-type with individual hydraulic fork positioning*



*Apron-style sideshift*



*Apron-style sideshift with individual hydraulic fork positioning*

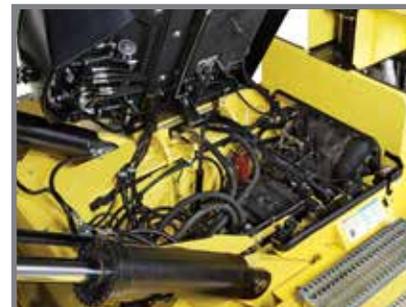


## ■ POWERTRAIN

- Cummins 6.7L QSB engine used on all models up to 70,000 lbs. lifting capacity.
- ZF WG 211 5-speed powershift transmission with proven field experience and reliability. The 5-speed transmission features improved shift point selection with an overdrive gear enabling maximum efficiency of the drivetrain while limiting fuel consumption.
- The Tier 4 Final well-integrated drivetrain includes an emission reduction package featuring cooled Exhaust Gas Recirculation (EGR), a Selective Catalytic Reduction (SCR) system for NOx reduction, a Diesel Oxidation Catalyst (DOC) for particulate matter (PM) removal and a Diesel Exhaust Fluid (DEF) delivery system.
- Tier 3 engines are available as an option for non-regulated markets, featuring Cummins 6.7L QSB engine and ZF WG 211 5-speed powershift transmission for all models up to 70,000 lbs. lifting capacity.
- Powertrain derate helps to prevent damage to the engine & transmission while enhancing component life by minimizing thermal degradation of engine oil, transmission and coolant fluids.
- Powertrain protects itself from excessive temperature and pressure.
- Torque derate strategy is implemented for engine and drivetrain protection.
- Derate conditions activated on:
  - High coolant temperature
  - High air intake temperature
  - High transmission oil temperature
  - Low oil pressure



*Standard profile Deutsch pin connectors, IP64 compliant*



*On-demand hydraulic system*

## ■ HIGH CAPACITY COOLING SYSTEM

- High capacity cooling system is designed for high ambient temperature conditions up to 113° F (45° C).
- Puller fan enables the cooling system to operate more efficiently by drawing cool, clean air from above through the radiator.
- On-demand hydraulics reduces heat load into the truck by pumping oil only when needed. The drivetrain runs cooler, thereby extending the hydraulic oil and component life.
- Components last longer with cooler fluid temperatures.



*Heavy duty steer axle*

## ■ HEAVY DUTY STEER AND DRIVE AXLES

- Hyster® steer axles are designed for longer life with a linkage design enabling six turns lock to lock.
- Hyster has collaborated with AxleTech to provide heavy duty drive axles with wet disc brakes to provide long life. The sturdy design enables longer service intervals on wearable service components.



*AxleTech drive axle*

# LOW COST OF OWNERSHIP

## MORE VALUE, LESS COST

Hyster understands that your total cost of ownership extends beyond the initial acquisition costs. Hyster has teamed with leading quality suppliers to provide well-integrated systems that help reduce your overall cost of operations over the useful life of the truck.



Cummins enabled powertrain

### ■ HARMONIZED SYSTEMS DESIGN

Unique partnership with Cummins enables a harmonized powertrain featuring a Cummins 6.7L QSB engine paired with the ZF WG 211 transmission.

- Powertrain solution is optimized for maximum performance and improved fuel economy.
- Efficient combustion results in lower fuel consumption.
- Low-hassle Tier 4 Final solution requires no use of Diesel Particulate Filter (DPF) or active regeneration; utilizes urea-based SCR system with a diluter for lower exhaust temperatures. The Tier 3 solution continues to be available in all non-regulated markets.
- Innovative ECO modes: Hi-P and e-Lo (Tier 4 Final)
  - Hi-P provides maximum performance and good fuel economy.
  - e-Lo provides minimum fuel consumption without losing productivity.
  - Automatic throttle-up feature enables truck to operate within its most efficient speed under varying load conditions.



On-demand cooling

### ■ ON-DEMAND COOLING (TIER 4)

- A proportional, viscous cooling fan draws power only when cooling is required between 10% and 100% of the engine speed, unlike direct drive fans which draw high levels of power at all times.
- Reduces accessory loads on the powertrain, consumes less fuel and lowers noise levels.

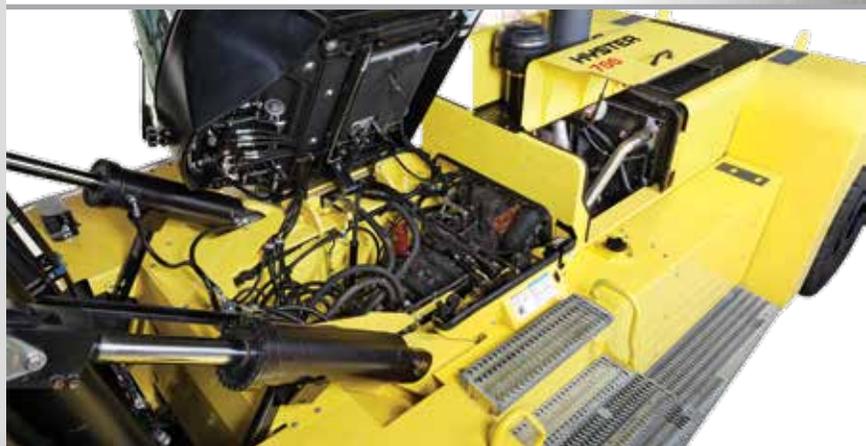
### ■ LOWER FUEL CONSUMPTION

Fuel consumption is a key driver of the total cost of ownership for high capacity lift trucks. Hyster provides a truck with superior fuel consumption characteristics compared to similarly sized trucks offered by the competition.

The engine design produces more power and torque using XPI high-pressure common rail fuel injection and variable geometry turbochargers. Advanced controls enable the Cummins 6.7L QSB engine to provide peak performance and operating efficiency while delivering great fuel economy and durability.

### ■ ROBUST HYDRAULIC SYSTEM

- Leak-free o-ring face seal fittings are used throughout the truck for enhanced reliability.
- Smart placement of the control valve and hose routing away from heat sources reduces operating temperature, extending the life of seals and hoses for enhanced reliability.

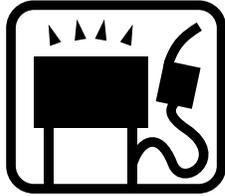


## Hyster Company Fuel Economy Estimates

### Hyster® H550-700HD/S Series

Fixed Displacement  
Hydraulic System

**9,000**  
GAL/YR



Power On-Demand  
Hydraulic System

**8,010**  
GAL/YR

**Estimated Annual Fuel Savings**

**SAVE \$3960 per year\***

Typical 3000 hrs/yr with Hyster on-demand  
hydraulic system and \$4/gal fuel price



\* Based on results of comparative testing conducted March 2014

## ■ ON-DEMAND HYDRAULICS

The Hyster® on-demand, load-sensing hydraulic system is developed in collaboration with Sauer Danfoss to deliver flow only when required. A variable displacement pump, capable of more oil displacement even at low pump speeds, means the engine runs at lower speeds, extending the life of components while operating more quietly. The system consumes up to 10% less fuel than a typical fixed displacement hydraulic system while producing less heat. Oil and filters last longer; hoses, seals and components also wear less and last longer.

## ■ TRACTION SPEED LIMITER (OPTIONAL)

This system reduces traction speeds and can be pre-set to suit varying customer applications:

- Unconditional traction speed limiter to set the maximum speed.\*
- Loaded traction speed limiter – limits traction speeds to a set point when a specified load weight is sensed on the forks. Factory preset to 8 mph and activates at 10% rated load.

This feature helps drivers to operate the truck in an optimal manner with regard to site limitations. Traction speed limiter settings are adjustable by your Hyster® dealer.

\* Less speed means lower fuel consumption

## ■ AUTOMATIC THROTTLE-UP (TIER 4 ONLY)

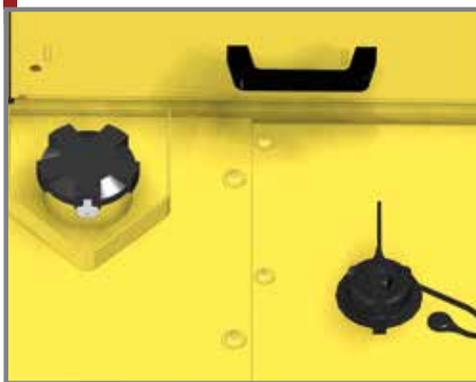
Automatic throttle-up, available on Hyster® H550-700HD/S Tier 4 Final trucks, provides automatic response to lift inputs from the operator when the lift lever is activated. A single-touch lever or joystick-controlled rev-up keeps the engine in the most efficient band delivering good fuel economy. Given the improved operator ergonomics, this feature enhances productivity. Automatic throttle-up feature applies only when the truck is in neutral.

## ■ EMPTY SEAT ENGINE SHUTDOWN (OPTIONAL)

This feature reduces fuel consumption by shutting down the truck when the operator is out of the seat for extended periods of time, thus limiting idle hours on the truck. Empty seat engine shutdown is programmable to activate within a 3-15 minute window after an operator leaves the seat. Factory preset to 15 minutes, the setting is easily adjustable by the customer with minimal tools, lowering the total cost of ownership over the useful life of the truck.

# SERVICEABILITY

## ACCESS MAJOR COMPONENTS IN SECONDS



*Fuel filler and cap*



*Easy access interior cabin filter*

### ■ EASE OF SERVICE

Hyster® trucks have been designed with the service technician in mind. Gull-wing hoods provide quick access to key components, and daily checks don't require tilting the cab. A tilting cab provides easy access to hydraulic components in seconds. Broad, slip-resistant running boards foster quick daily checks, while a large access bay enables easy radiator cleaning. A hydraulic sight gauge enables at-a-glance fluid level checks.



*Gull-wings provide easy access for quick service checks*

### ■ ON-BOARD DIAGNOSTICS

CANbus on-board diagnostics is available in an automotive-style layout for easy servicing and troubleshooting. Error codes are provided on an LCD display for quick and effective identification of service issues while enabling rapid implementation of remedies, reducing downtime and frequency of repairs.



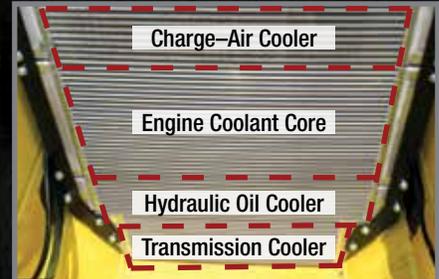
*Optional powered cab tilt provides easy access to major hydraulic components*

## ■ LONGER SERVICE INTERVALS

Major engine and drivetrain components are engineered to operate on 500-hour service intervals. Extended hydraulic oil change intervals of 200 hours ensure that the truck remains in operation with longer time between oil changes or servicing.

## ■ COOLING SYSTEM

- Designed for heavy duty cooling applications requiring additional cooling capacity.
- Cooling cores are packaged such that cool air (not pre-heated air) is channeled across cores.
- Quad-core radiator features four separate cooler cores.
- Cool overhead air is drawn in for more efficient cooling than in stacked radiator configurations.
- Louvered cooling fins for maximum air flow to radiator.
- Hinged hood pivots at wide angles to provide easy access to cooling system.
- Ample space in front of cooler cores enables effective maneuvering of service tools and equipment during service checks.
- Easy to clean since coolers are not stacked in front of each other.



*Quad-core configuration enables efficient cooling*



*Hinged cover enables easy serviceability access to radiator cooler*

## ■ SUPPORTING CUSTOMERS WITH WORLD-CLASS PARTS & SERVICE

Four Parts Distribution Centers strategically located around the world provide a full range of original equipment and aftermarket parts that help maintain our customers' uptime. G.A.P., our Guaranteed Availability Program, guarantees that if a covered part is not available the next business day it will be provided to you FREE of charge.\*

We also take that commitment into the field with the Hyster CERTECH® Certification training program. This technical training program provides both systems level as well as product-specific education to ensure lift trucks are repaired right the first time.



\*Contact your local dealer for program details.

# ERGONOMICS



## OUTSTANDING ALL-AROUND VISIBILITY

### ■ DESIGNED AROUND THE OPERATOR

As in all Hyster® big trucks, operator controls are conveniently placed within a spacious cab for maximum comfort to increase operator productivity. Mini-levers or joysticks and switches are integrated into the armrest for smooth controlled actuation of mast and attachment functions. The armrest moves with the seat to maintain the driver's control, even when driving over uneven surfaces.

On the exterior, the sloping counterweight enhances visibility of steer tires for defensive maneuvering and reduced tire gouging. Quiet operation is enhanced by lower engine speeds due to on-demand hydraulics and curved tempered glass properties. A fully adjustable steering column and seat comes standard for all H550-700HD/S trucks.



*Low profile carriage for clear line of vision*

### ■ CAB COMFORT & VISIBILITY

A low profile carriage enables a clear line of vision for an optimized view of fork tips. Forward visibility is uncluttered by the position of hydraulic valves, hoses or mast cross-members with a clear view through the mast window. Canted hoses are arranged along the line of sight so the operator sees only one hose and has good visibility.

Rear and side visibility are not impeded by structural elements of the truck. There are no front posts in the corners, which enhances operator's visibility.

A curved tempered glass windshield provides an uninterrupted front end view. Likewise, a curved rear windshield provides excellent rearward visibility over the operator's left and right shoulders.



*Optimized view of fork tips*



*Fully adjustable steering column*

### ■ LOW NOISE – OPERATOR & ENVIRONMENT

With minimal noise at the operator's ear (73 dB(A) BITA) cabin interior noise ranks among the lowest in the industry, which enhances operator alertness and productivity.

### ■ PROPORTIONAL HYDRAULIC CONTROL

Proportional settings enable smooth controllability of truck functions with unique settings to suit drivers' preferences. The automatic throttle-up function is enabled with a single touch actuation.



*Broad, slip-resistant running boards*

# PRODUCTIVITY

## MORE LOADS MOVED PER HOUR

### ■ RATED CAPACITIES

All models in this truck series offer full rated capacities at required load centers. Hyster has worked to ensure minimal derate compared to others in the industry.

- Full rated capacity at 55,000 lbs. with a pin carriage on the H550HD/S models
- Full rated capacity ranging from 62,000 through 70,000 lbs. with a pin carriage on the H620-700HD/S models.
- Full rated capacity for dual function sideshift fork positioner carriages for all models.

### ■ LIFTING, LOWERING & TRAVEL SPEEDS

Hyster® H550-700HD/S forklift trucks deliver high productivity with 4-mode average speeds of 84 ft/min (0.43 m/s)\*, very competitive in the industry at rated capacity.

Travel Speeds:

- 16 mph (25km/h) with or without load (H550-700HD/S)

Lifting Speeds:

- 67 ft/min (0.34 m/s) with or without load (H550HD/S)
- 55 ft/min (0.28 m/s) with or without load (H620-H700HD/S)

Lowering Speeds:

- 98 ft/min (0.5 m/s) with or without load (H550HD/S)
- 98 ft/min (0.5 m/s) with or without load (H620-700HD/S)

*\* Average speed calculated using: laden lift speed (ft/min) at full rated capacity; unladen lift speed; laden lowering speed at full rated capacity; unladen lowering speed.*



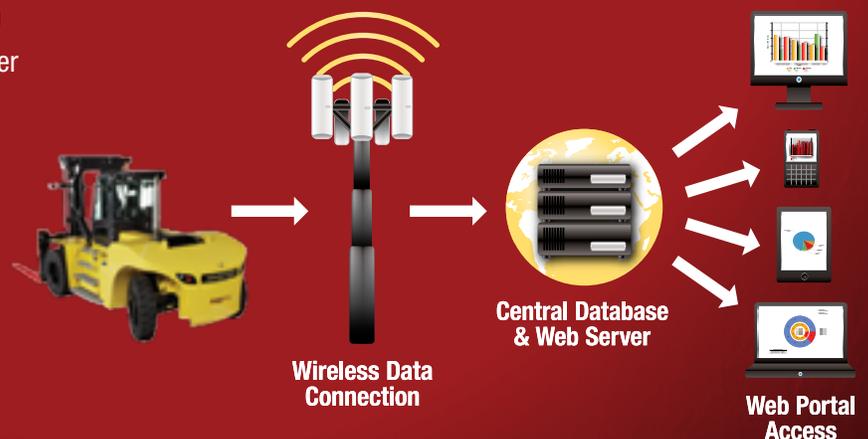
## ■ AUTO-SHIFTING TRANSMISSION WITH TRUE INCHING

This truck series is equipped with ZF transmissions paired with Cummins engines to provide inching capability and better controllability. The auto-shift transmissions enable smooth shifts that enhance the longevity of the drivetrain and operator comfort by reducing jolt. Competitor trucks utilize declutch which increases clutch energies on the transmission and creates wear and tear on driveline components.



## HYSTER TRACKER - WIRELESS ASSET MANAGEMENT

Take your fleet operation to the next level with wireless asset management from Hyster. Hyster Tracker provides a scalable solution for fleets. From monitoring truck utilization to limiting operator access, Hyster Tracker allows you to track your fleet at your fingertips.



TRACKER

# INNOVATIVE TRUCKS ENGINEERED TO MEET THE MOST DEMANDING APPLICATIONS

For more than 80 years, Hyster has been conquering the world's most demanding applications. In the 1920's Hyster started as a manufacturer of lifting machines used in the rigorous logging industry of the United States' Pacific Northwest. A few years later the first forklift trucks were invented and the Hyster brand quickly gained its reputation for rugged quality. Hyster® lift trucks are designed to lower your cost of operations. Every truck we make — gasoline, LPG, diesel and electric — is purpose-built to excel in its application. Every truck is also backed by an unmatched network of specialists.



**Dealer Network** — Our Dealer Network can offer the expertise of fleet managers, parts suppliers, capital procurement specialists and trainers. Hyster's carefully chosen dealers fully understand customer applications, assist in selecting the right lift truck and provide fast, reliable support.



**Hyster Fleet Services** — Even if you operate other brands, we can manage your maintenance and replacement plan. We can offer complete fleet analysis, fleet history summary and a cost-effective proposal for replacement and scheduled maintenance.



**Parts** — With genuine Hyster replacement parts and UNISOURCE™ parts for all makes of lift trucks, we are your one-stop source for lift truck parts. In fact, we offer more than 2 million part number crosses for most brands of materials handling and other in-plant mobile equipment.



**Rental Products** — When leasing or buying isn't a practical option, we have access to more than 14,000 units for short- and long-term rental. We'll help you maintain output in a cost-effective manner.



**Hyster Capital** — We can arrange solutions for special financing requirements, taking the difficulties out of buying the equipment you need. Whether you purchase or lease a new or used lift truck, Hyster Capital offers superior service and competitive rates.



**Special Products Engineering Department (SPED)** — Different materials require different handling. That's why we can work with you to customize your lift trucks. From strobe lights to specially made forks, SPED has the tools to help you get the job done right.



**Operator Training** — Proper education in operating lift trucks minimizes the risk of injuries due to accidents while increasing productivity. Hyster offers OSHA-compliant materials that support the training of qualified operators.



**Service** — Your local Hyster® dealer offers a flexible, customized and comprehensive maintenance plan based on each lift truck's operation environment. Hyster service programs offer scheduled inspections and maintenance, along with quick, responsive service dispatched to your location.





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