



# H135-155FT SERIES

SIT-DOWN, COUNTERBALANCED, ICE, PNEUMATIC TIRE

**STRONG PARTNERS.  
TOUGH TRUCKS.™**

[WWW.HYSTER.COM](http://WWW.HYSTER.COM)

# POWER TO HANDLE TOUGH APPLICATIONS

The Hyster® H135-155FT series represents a transformation in how lift trucks are designed, built and acquired. Drawing on the Hyster legacy of strength, durability and toughness, the Fortis® concept simplifies lift truck purchases with a series of engine-transmission bundles. Buying a Fortis® means you maximize your purchasing power by buying only the features you need for your application. Using a truck from the H135-155FT series allows for low cost of operations, dependability and owning a unit that's still going strong long after the day's work is done.

The H135-155FT series is configured to provide the right lift truck for your application. Multiple powertrain combinations are available to choose from to assure your cost of operations will be lowered. Each configuration helps assure improved efficiency, advanced dependability and simple serviceability.





## ➤ ADVANCED DEPENDABILITY

Approximately 70% of industrial lift truck downtime results from problems with the powertrain, brakes, electrical system, cooling system or hydraulic system. With the H135-155FT series, many of these mechanical issues become a thing of the past as design advances have reduced downtime by up to 30%.

### INDUSTRIAL STRENGTH ELECTRONICS

- CANbus communications network reduces wiring complexity, providing superior dependability.
- Non-mechanical, Hall-Effect sensors and switches are designed to outlast the life of the truck.
- Proven tough, Pacesetter VSM industrial onboard computer manages truck operation to maintain world-class dependability to maximize uptime.
- IP66 sealed electrical connectors keep out water and debris, so you can powerwash our trucks.
- Smart, one-way routing path for wire harnesses ensures consistent high-quality assembly while increasing durability and simplifying maintenance when needed.

### PROTECTED POWERTRAIN

- Pacesetter VSM™ industrial onboard computer monitors and protects the engine powertrain to maximize the H135-155FT series uptime.
- Transmission gears and shafts are up to 15% stronger to handle even the most demanding duty cycle.
- Electronically controlled powershift transmissions have state-of-the-art clutch packs that are stronger and larger and provide up to 3 times the life.
- Standard wet disc brakes provide excellent stopping power and extremely long service life. Brakes are completely sealed from water and dirt making them ready for tough environments.

### CARRIAGE-MOUNTED SIDE SHIFTING FORK POSITIONER

In addition to the carriage mounted sideshift, the optional carriage-mounted side shifting fork positioner (SSFP) is useful within industries that require handling a variety of load sizes. Available with all masts, the SSFP is a solution for applications that require frequent stops to reposition fork width. With this option, the operator can quickly and accurately sideshift the forks, as well as move the forks (simultaneously) inward or outward to handle a variety of pallet configurations. An integral load backrest is included with the attachment.



## COOLING TECHNOLOGY

- Standard combi-cooler radiator provides 4-row aluminum core for additional transmission oil cooling capacity for the most demanding and intensive applications.
- Soft rubber isolator mounted radiators increase reliability and durability to significantly extend service life.
- A superior counterweight tunnel design coupled with a “pusher” type fan and enhanced shroud design improves airflow and significantly reduces the recirculation of hot air to maximize cooling capabilities.
- Radiators for diesel engines feature air to air intercooler technology for additional engine power and efficiency.



*Diesel radiator features air to air intercooler technology*



*Counterweight tunnel design*



## ➤ LOW COST OF OWNERSHIP

Lowering operating costs in all types of applications is what the Fortis® series does best. With up to a 30% decrease in downtime, the H135-155FT series is an exceptionally smart choice. The series features two truck packages with multiple powertrain configurations that provide improved efficiency, while enhancing reliability and superior serviceability to reduce your operating costs.

### WORLD-CLASS EFFICIENCY

- Hyster® Variable Power Technology™, available on the PSI 4.3L engine or the Kubota 3.8L high output turbo diesel engine, provides adjustable performance modes that allow customers to boost productivity or fuel economy to fit their specific application requirements.
- Auto Deceleration System extends brake life by up to 60% by automatically slowing the truck when the accelerator pedal is released. (DuraMatch™)
- Controlled power reversal feature reduces tire spin, increasing tire life by up to 50%. This feature is programmable to match the needs from delicate to more aggressive settings for maximum productivity. (DuraMatch™)
- TouchPoint electronic hydraulic control (optional) valve precisely manages hydraulic pressure and flow to supply exactly the right amount of power for each function, reducing fuel consumption.
- Kubota diesel engines feature 500 hour service intervals.
- Extended transmission and hydraulic fluid change intervals.
- Improved engine options provide excellent performance with advanced combustion technology that enhances fuel economy.

### ADVANCED DEPENDABILITY

- Electronic controlled transmissions reduce shock loading; clutch packs with 3 times the life; 15% stronger gears and shafts; and Hyster® oil-cooled wet disc brakes all work to provide unmatched reliability.
- CANbus communications, non-mechanical sensors and switches and IP66 rated sealed connections mean electrical problems are a thing of the past.
- The H135-155FT series' superior airflow and heavy duty cooling systems keep heat in check, while providing world-class dependability in even the harshest of environments.
- Hassle-free hydraulics: Leak-free O-ring face seal fittings at all high pressure connection points, superior filtration (10 micron) system and smart placement of valve and lines take the worry out of hydraulics.



## SUPERIOR SERVICEABILITY

- Pacesetter VSM continuously monitors fluid levels and powertrain, reducing daily service checks and preventing major repairs.
- Unmatched service access: Gull-wing hood door design offers superior service access to the engine compartment.
- Daily checks are easily accessed and performed.
- State-of-the-art onboard diagnostics reduce repair time and minimize expensive parts swapping.
- Standard oil-cooled wet disc brakes significantly decrease brake maintenance.
- Kubota 3.8L DOC engine provides maintenance-free emissions—no need to add fluids or remove filters for cleaning.



*Easy service access*

| DOWNTIME IS COSTLY                           |               |
|--|---------------|
| ESTIMATED COSTS PER DOWNTIME EVENT:          |               |
| Repair Costs (parts & labor)                 | \$ 500        |
| Idle Operator Costs                          | +\$ 60        |
| Truck Rental Costs                           | +\$ 120       |
| Administrative Costs                         | +\$ 50        |
| <b>TOTAL COST (per Downtime Event)</b>       | <b>\$ 730</b> |
| <b>ADDITIONAL COSTS:</b>                     | <b>+\$</b>    |
| Lost Productivity and Sales                  | \$ ???        |
| Assumptions:                                 |               |
| 1. Operator Cost = \$15.00/hr.               |               |
| 2. Average Length of Downtime Event = 4 hrs. |               |



## 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. In fact, our Guaranteed Availability Program ensures that parts that are normally required in the first 2 years of operation will be available from your Hyster® parts dealer within 24 hours or they are free.\* 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.

## > EXCEPTIONAL ERGONOMICS

Extensive operator testing has resulted in a design of lift trucks that are easier and more comfortable to operate than the leading competitors. The Hyster Fortis® series reduces operator fatigue and increases productivity through superior operator comfort, precise handling, and easy entry and exit. For the Hyster® H135-155FT lift truck owner, this means significant savings in operating costs and productivity improvements.

### SUPERIOR OPERATOR COMFORT

- Low noise level at the operator's ear lessens driver fatigue, improving driver satisfaction for an overall increase in productivity.
- Isolated drivetrain minimizes the effect of powertrain vibration and road-borne shocks to increase operator comfort all shift long.
- Rear drive handle mounted on overhead guard leg (optional) provides an excellent hand hold for reverse driving while giving ready access to the auxiliary horn button for use when approaching cross-aisles and pedestrian traffic areas.
- An adjustable steer column and optional full suspension swivel seat assures the right fit for any operator.
- Easy-to-use 3-point entry design of operator compartment uses a large molded hand grip and open non-slip steps with a low step height to minimize muscle/joint strain during entry/exit.
- Adjustable armrest that accompanies the optional TouchPoint E-hydraulic control moves with the seat and telescopes forward/vertical in one simple movement to provide greater flexibility in achieving a more custom position.
- Choice of 5 different seats enables a more customizable level of operator comfort by its enhanced design and adjustable features.
- Increased shoulder clearance – a result of the redesigned overhead guard and more floor space – gives operators greater foot room.

### OPERATOR CAB

An optional factory installed cab offers additional comfort for the operator. Offered with or without air conditioning, the cab also includes:

- sound insulation
- integrated heater/defogger
- front and rear wiper/washers
- removable doors with sliding windows
- interior light
- air circulating fan and insulating headliner
- full LED light package

### PRECISE OPERATION

- Improved brake pedal layout and the reduced braking requirements of the Auto Deceleration System are designed to reduce operator fatigue. (DuraMatch™)
- 12-inch steering wheel with spinner knob improves steering response, increasing control and efficiency while minimizing shoulder strain with only 4 turns lock-to-lock.





## PERFORMANCE AT-A-GLANCE

- Advanced dash display uses a non-reflective, backlit LCD screen and 21 indicator lights provide performance at-a-glance in all lighting conditions.
- Easy-to-use onboard diagnostics through the advanced dash display provide fast and accurate troubleshooting for first-time fixes.
- Optional premium monitoring package reports air and hydraulic oil filter restrictions and low engine coolant levels.



## > ENHANCED PRODUCTIVITY

### HYSTER® VARIABLE POWER TECHNOLOGY™

Available on the PSI 4.3L engine and the Kubota 3.8L high output turbo diesel engine, Hyster® Variable Power Technology™ provides adjustable performance modes that allow customers to maximize productivity or fuel economy to fit their specific application requirements. With selectable performance modes, the H135-155FT series can be tailored to achieve a balance of enhanced performance and superior fuel economy, or to boost productivity during peak business periods when moving more loads is integral to the success of your operation.

### CUSTOMIZED PERFORMANCE

- Superior ergonomic features like more foot and leg room, 2 choices of hydraulic controls, adjustable steer column, integrated dashboard display, 12-inch steering wheel with spinner knob, Auto Deceleration System, 5 choices of seats and the rear drive handle enable your operator to maximize productivity.
- H135-155FT series choice of high output engines, performance transmissions, hydraulic controls and cooling system options allows you to customize your truck to optimize the productivity in your application.
- Three different engine choices provide a range of options for fuel efficiency, productivity and maintenance-free diesel emissions customized to your application.
- Pacesetter VSM™ industrial onboard computer enables you to adjust and optimize the performance of your H135-155FT trucks.
- Patented DuraMatch™ transmission provides breakthrough features that include the Auto Deceleration System, controlled rollback on ramps, controlled power reversals to move loads more efficiently with less operator fatigue and product damage.
- With the exceptional cooling and its ability for extended drawbar pull, the H135-155FT series will continue to perform when other lift trucks may fail.

### KUBOTA DIESEL ENGINES

Trucks equipped with the Kubota 3.8L high output and Kubota 3.8L DOC turbo diesel engines will deliver top notch productivity and help to decrease the operating cost per load moved. Designed and built for extreme durability with minimal service requirements, operators will enjoy operating the truck with low vibration and engine noise levels.

- 500 hour service intervals
- Deep skirt engine block
- Gear driven engine timing
- Cast iron block and cylinder head
- 74 horsepower (Kubota 3.8L DOC only)
- 105 horsepower (Kubota 3.8L high output only)
- 13 quart oil pan with oil cooler
- 80 amp alternator
- Hyster® Variable Power Technology™ (Kubota 3.8L high output only)
- Tier 4 Final compliant, utilizing cooled EGR, SCR and DPF technologies (Kubota 3.8L high output only)
- Tier 4 Final compliant, utilizing cooled EGR and DOC technologies (Kubota 3.8L DOC only)



*PSI 4.3L engine*



*High output Kubota 3.8L turbo diesel engine*

## WHICH ENGINE IS RIGHT FOR YOUR APPLICATION?

| Engine Type             | Fuel Type | Horsepower       | Torque           | EPA Emissions Compliant | Service intervals | Hyster® Variable Power Technology™ | Maintenance-free emissions | Cast iron block and cylinder heads | Deep skirt engine block | Turbo charged | Air to air intercooler | Replaceable intake valve seat inserts | Replaceable exhaust valve seat inserts | 4-valves per cylinder | Diesel oxidation catalyst | Diesel particulate catalyst | Selective Catalytic filter | Maximum Productivity |
|-------------------------|-----------|------------------|------------------|-------------------------|-------------------|------------------------------------|----------------------------|------------------------------------|-------------------------|---------------|------------------------|---------------------------------------|--|-----------------------|---------------------------|-----------------------------|----------------------------|----------------------|
| PSI 4.3L V6             | LPG       | 96@<br>2400 RPM  | 210@<br>2400 RPM | • 250                   | •                 | •                                  | •                          |                                    |                         |               | •                      | •                                     |  |                       |                           |                             |                            | •                    |
| Kubota 3.8L High Output | Diesel    | 105@<br>2400 RPM | 275@<br>1600 RPM | • 500                   | •                 |                                    | •                          | •                                  | •                       | •             | •                      | •                                     | •                                      |                       | •                         | •                           |                            | •                    |
| Kubota 3.8L DOC         | Diesel    | 74@<br>2200 RPM  | 227@<br>1400 RPM | • 500                   |                   | •                                  | •                          | •                                  | •                       | •             | •                      | •                                     | •                                      | •                     |                           |                             |                            |                      |



# 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 1920s 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. 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 7 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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