HYSTER

STRONG PARTNERS.
TOUGH TRUCKS.™

H80-120FT SERIES

SIT-DOWN, COUNTERBALANCED, ICE, PNEUMATIC TIRE FORKLIFT

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H80-120FT SERIES

The H80-120FT is more than just a lift truck series. It represents a transformation in how lift trucks are designed, built and offered. Drawing on Hyster Company's legacy of strength, durability and toughness, Fortis® lift trucks provide a simplified approach to purchasing through a series of engine-transmission combinations. Fortis® means you maximize your purchasing power by buying only the features you need for your application.

Using a truck from the H80-120FT series means low cost of operations, dependability and owning a unit that's still going strong long after the day's work is done. The H80-120FT series is configured to provide the right lift truck for your application. Multiple powertrain combinations are available to choose from to help reduce your total cost of operations. Each configuration offers efficiency, advanced dependability and simple serviceability.

Seneca Sawmill
EUGENE, OREGON
WEST COAST LUMBER
GROWN IN OREGON
HYSTER
HYSTER 80
FORTIS

DECREASE DOWNTIME BY UP TO 30%

Most industrial lift truck downtime results from problems with the powertrain, brakes, electrical system, cooling system or hydraulic system. Advanced design of the H80-120FT truck series has reduced downtime by up to 30%.

MULTIPLE ENGINE CONFIGURATIONS

The H80-120FT series offers a choice of 4 engine configurations, a host of transmission options, and the ability to customize each powertrain to optimize the productivity and efficiency in your application.

The PSI 4.3L V-6 engine has been engineered to deliver exceptional performance and fuel efficiency at lower engine speeds rather than traditional high RPM automotive-style versions. The engine features chain-driven engine timing and a valve train built to last, even in continuous high-cycle applications. The V-6 configuration provides smooth power and fuel efficiency. Adjustment-free hydraulic valve lifters and self-tensioned serpentine drive belt, plus a 250-hour service interval, reduces maintenance time and effort.

PSI 4.3L V-6 engine

The Kubota 3.8L spark ignited LPG engine and the Kubota 3.8L spark ignited dual fuel engine feature a deep skirt engine block and a cast iron cylinder head. Hardened exhaust valve seats with stellite coated valves provide superior durability. Ignition systems feature individual coils for each cylinder. The Kubota LPG/dual fuel engines feature a long cylinder stroke for improved torque. Electronic throttle control provides precise performance and consistent operation, and a coil over plug ignition design eliminates spark plug wires.

Kubota 3.8L LPG engine

The Kubota 3.8L turbo diesel engine also utilizes a two piece cylinder block for maximum durability while reducing engine noise. Cylinders are cast into the block for optimum durability and cooling efficiency. Cylinder heads feature a helical, 4-valve "Crossflow" design within each cylinder to create additional airflow into the cylinder for added power. A simple design, the turbocharger uses a variable waste-gate to ensure the proper amount of boost at all engine speeds. The engine is certified to EPA Tier 4 Final emissions standards.

HASSLE-FREE HYDRAULICS

- Leak-free O-ring face seal fittings reduce leaks for enhanced reliability.
- A 10-micron high-performance in-tank filtration system captures 99.5% of hydraulic system debris, significantly extending component life.
- Smart placement of the control valve and hydraulic lines away from heat sources reduces operating temperature, extending the life of seals and hoses for unbeatable reliability.
- Optional load-sensing on-demand hydraulic system delivers oil flow only when required, using less fuel and producing less heat while extending system life.

INDUSTRIAL STRENGTH ELECTRONICS

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

COOLING TECHNOLOGY

- A choice of 2 aluminum core radiators, each with significant design and component improvements, provides exceptional cooling capacity – a key factor to increasing uptime and the economic life of your trucks.
- Soft rubber isolator mounted radiators increase reliability and durability to extend service life.
- A superior counterweight tunnel design coupled with a "pusher" type fan and enhanced shroud design improves airflow and reduces the recirculation of hot air to maximize cooling capabilities.
- Combi-cooler radiator provides 4-row aluminum core for additional transmission oil cooling capacity for the most demanding and intensive applications.
- Optional on-demand cooling system:
  - Reduces overheating.
  - Automatically reverses fan direction every 20 minutes to clear radiator of debris.
  - Extends overall truck service life by keeping major components running in their optimum temperature ranges.
  - Diesel radiators for diesel powertrains feature air to air intercoolers to increase efficiency and reduce emissions.

Counterweight venting improves airflow

PROTECTED POWERTRAIN

- 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. The premium wet disc brakes (standard on H100-120FT) circulate oil through the brake and back out for additional cooling capacity for the toughest applications with heavy brake usage as part of the typical work cycle.
- Pacesetter VSM industrial on-board computer monitors and protects the engine powertrain.
- Transmission gears and shafts are up to 15% stronger to handle even the most demanding duty cycle.
- Electronically controlled powershift transmission has state-of-the-art clutch packs that are stronger, larger and provide up to 3 times the life than previous designs.

LOW COST OF OWNERSHIP

SIGNIFICANT SAVINGS IN OWNERSHIP COSTS PER LIFT TRUCK – EACH YEAR.

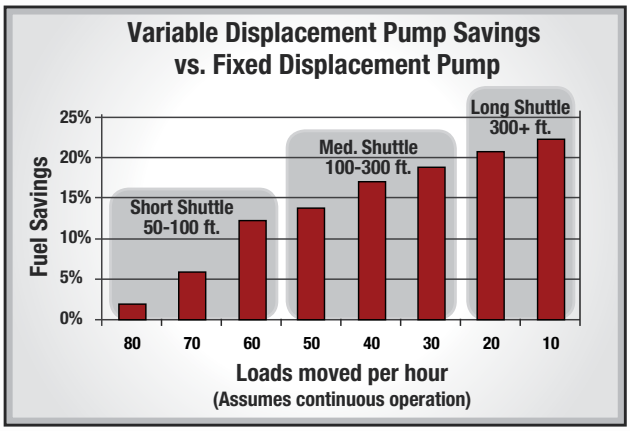
Lowering operating costs in all types of applications is what the Fortis® series does best. With decreased downtime, this lift truck is an exceptionally smart choice. The H80-120FT series is configured to provide improved efficiency, while enhancing reliability and superior serviceability to reduce your operating costs.

WORLD-CLASS EFFICIENCY

- The optional Kubota 3.8L spark ignited LPG and dual fuel engine significantly lowers the operating cost per load moved, yet delivers excellent productivity.
- Optional Hyster® Variable Power Technology™ provides adjustable performance modes that allow customers to maximize 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™)
- Optional on-demand hydraulic system, featuring a variable displacement pump, manages oil flow, supplying the right amount of oil as needed, reducing fuel consumption by up to 22% over trucks without the on-demand hydraulic system when traveling longer distances.
- Controlled power reversal feature virtually eliminates tire spin, increasing tire life by up to 50% over trucks not equipped with a Duramatch™ system. This feature is programmable to match the needs from delicate to more aggressive settings for maximum productivity.
- Extended transmission and hydraulic fluid change intervals.

ADVANCED DEPENDABILITY

- Standard wet disc brakes are completely sealed from water and dirt, ideal for heavy duty applications.
- Electronically controlled transmissions reduce shock loading; include clutch packs with 3 times the life and 15% stronger gears and shafts over previous designs; and incorporate Hyster® premium force-cooled wet disc brakes, all working 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.
- 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.



FULL VENTING PACKAGE

The full venting package features additional vented radiator and side covers. Increased air flow is drawn into the engine compartment from a higher position on the truck where the air is cleaner, resulting in reduced ingestion of dirt and debris into the engine compartment and radiator, reducing downtime used to clean radiators.

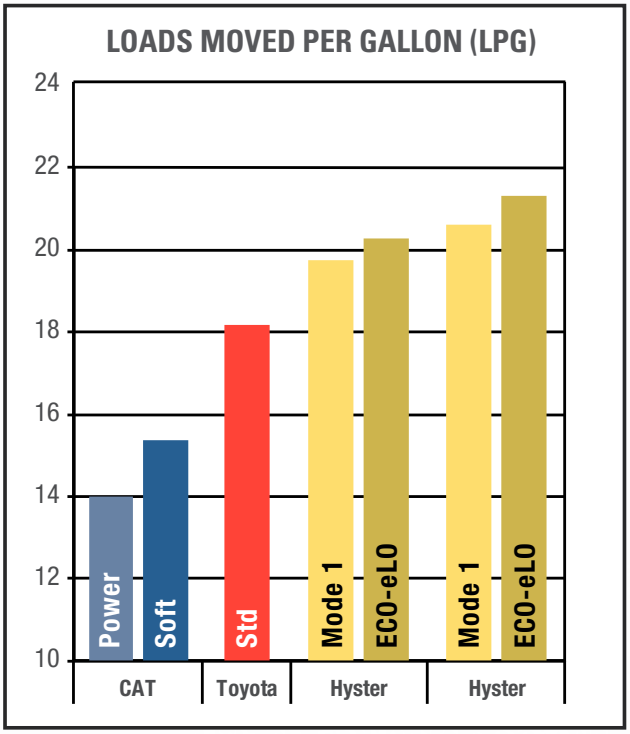
SUPERIOR SERVICEABILITY

- Pacesetter VSM continuously monitors fluid levels and powertrain, reducing daily service checks and helping prevent major repairs.
- Service access: Rear-opening one-piece hood (opens up 85 degrees) and easy-to-remove one-piece floor plate require no tools to remove.
- Daily checks are easily accessed and performed.
- State-of-the-art on-board diagnostics reduce repair time and minimize expensive parts swapping.
- Standard and optional wet disc brakes virtually eliminate brake maintenance and can last the life of the truck.

ON-DEMAND COOLING SYSTEM

The on-demand cooling system controls the speed and rotational direction of the fan. During normal operation, the fan reverses direction automatically for 20 seconds every 20 minutes. When necessary, a manual control button allows the operator to initiate a reversal manually.

- Greatly reduces overheating, and can eliminate overheating if properly maintained.
- Reduces debris vacuuming that can clog the radiator.
- Increases fuel efficiency.
- Maintains optimum powertrain temperatures.
- Lowers fan speeds, reducing noise levels.
- Can eliminate downtime spent cleaning debris from the radiator.



In standard performance mode, the Hyster® H80FT lift truck provides the lowest cost of operation compared to leading competitors when tested on a productivity course. The Hyster® Variable Power Technology™ on the optional Kubota 3.8L LPG engine allows the operator to choose which mode to use during operation: Mode 1 or ECO-eLo.

Furthermore, the optional on-demand hydraulic system reduces overall costs and reduces fuel consumption by pumping hydraulic oil only when needed.

Both engines are tuned for the most effective performance / fuel economy balance.

(VDI Turnover Output (VDI 2198, Dec 2012, Section 7.5-7.7). Reference TEP 313.)

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.*

FATIGUE-REDUCING OPERATOR COMPARTMENT

The Fortis® H80-120FT series features an ergonomically designed operator compartment that plays a big role to enhance overall productivity. Superior ergonomic features like ample leg room, 2 choices of hydraulic controls, an infinitely adjustable steer column, integrated dashboard display, 12-inch steering wheel with spinner knob, Auto Deceleration System, 6 choices of seats and optional rear drive handle and EZXchange bracket enable your operator to maximize productivity.

Ergonomically designed operator compartment

SUPERIOR OPERATOR COMFORT

- 20% more foot and leg room.
- Low noise level at operator ear lessens driver fatigue, improving driver satisfaction for an overall increase in productivity.
- Isolated drivetrain minimizes the effect of powertrain vibration and road-born shocks to increase operator comfort all shift long.
- An infinitely adjustable steer column and optional full suspension 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 step with a low step height to minimize muscle/joint strain during entry/exit.
- Adjustable armrest that accompanies the optional TouchPoint mini-lever electro-hydraulic controls moves with the seat and telescopes forward/vertical in one simple movement to provide greater flexibility in achieving a more custom position for the operator.
- A choice of 6 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.
- An optional cab is available, with or without air conditioning.

TouchPoint mini-lever electro-hydraulic controls

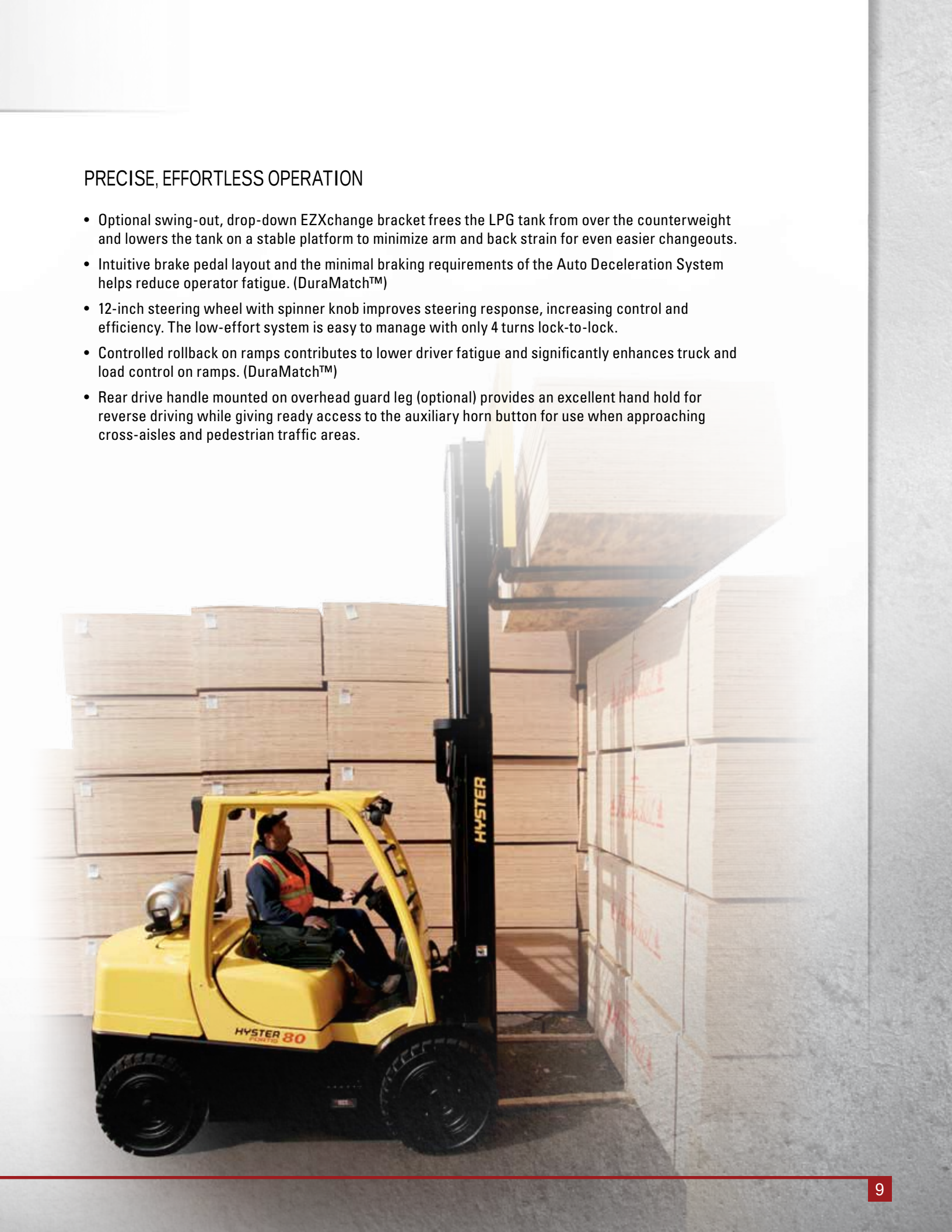
Swing-out EZXchange bracket

Full suspension swivel seat

Rear drive handle with horn button

PRECISE, EFFORTLESS OPERATION

- Optional swing-out, drop-down EZXchange bracket frees the LPG tank from over the counterweight and lowers the tank on a stable platform to minimize arm and back strain for even easier changeouts.
- Intuitive brake pedal layout and the minimal braking requirements of the Auto Deceleration System helps reduce operator fatigue. (DuraMatch™)
- 12-inch steering wheel with spinner knob improves steering response, increasing control and efficiency. The low-effort system is easy to manage with only 4 turns lock-to-lock.
- Controlled rollback on ramps contributes to lower driver fatigue and significantly enhances truck and load control on ramps. (DuraMatch™)
- 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.



INCREASE THROUGHPUT AND SALES VOLUME WHILE REDUCING OPERATING COSTS

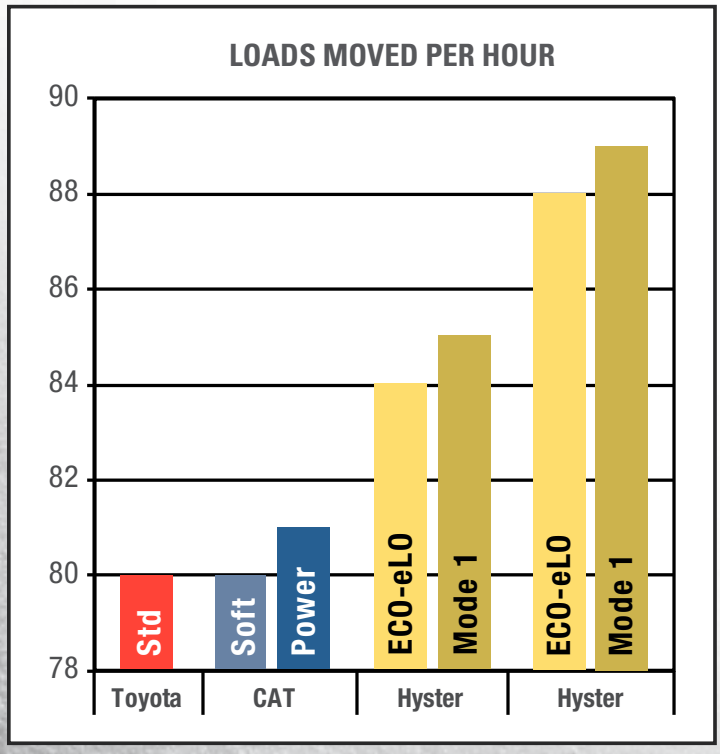
Productivity means moving more of your loads in less time with less cost. The Hyster® H80-120FT Fortis® series is among the top industry leaders in productivity through performance, ergonomics (operator comfort and control), service time and dependability.

FOCUSED ON PRODUCTIVITY

Two transmission selections are available: Electronic Powershift and DuraMatch™. The Electronic Powershift features electronic shift control, electronic inching (requires no adjustment), and heavy duty clutch packs. The DuraMatch™ transmission also features Auto Deceleration System—bringing the unit to a complete stop when the accelerator pedal is released, and controlled power reversals—reducing tire spin by precisely regulating engine speed. Controlled ramp descent limits roll to three inches per second. Both Electronic Powershift and DuraMatch™ transmissions are also available with two forward speeds for additional speed and gradeability.

ON-DEMAND HYDRAULIC SYSTEM

The optional on-demand hydraulic system introduces a more efficient and intelligent way to meet the truck's hydraulic load demands. Featuring Variable Displacement Pump (VDP) technology, the pump produces oil flow only when needed. The system minimizes the amount of engine power required, resulting in up to 22% greater fuel economy and reduced system temperatures. The on-demand hydraulic system is included with optional TouchPoint mini-lever electro-hydraulic controls.



HYSTER® VARIABLE POWER TECHNOLOGY™

Hyster® Variable Power Technology™ provides adjustable performance modes that allow customers to maximize productivity or fuel economy to fit their specific application requirements. With two selectable performance modes, the H80-120FT series can be tailored to achieve a balance of enhanced performance and superior fuel economy, or to maximize productivity during peak business periods when moving more loads is integral to the success of your operation.

Even in standard operating mode, the Hyster® H80FT lift truck moves more loads per hour then leading competitors. The optional on-demand hydraulics featuring Hyster® Variable Power Technology™ on the efficient Kubota 3.8L LPG engine boosts productivity even further by allowing more engine power to be applied to the transmission rather than pumping unnecessary hydraulic oil. Both engines are tuned for the most effective performance / fuel economy balance. (VDI Turnover Output (VDI 2198, Dec 2012, Section 7.5-7.7). Reference TEP 313.)

Infinitely adjustable steer column

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 on-board diagnostics through the advanced dash display provide fast and accurate troubleshooting for first-time fixes.
- Optional electronic monitoring package reports air and hydraulic oil filter restrictions and low engine coolant levels.
- Infinitely adjustable steer column with spinner knob and integrated dashboard display

OPTIONAL PAPER APPLICATION KIT

The Paper Application Kit is available with models equipped with a Kubota LPG or Diesel engine. Recommended for any truck used in an application where substantial loose paper material is present, this configuration reduces the accumulation of paper debris in the engine compartment, thereby reducing the potential for fire. The optional kit includes:

- Full venting package
- High-temperature hydraulic oil
- Reduced displacement hydraulic pump
- Exhaust wraps
- On-demand cooling system (recommended)

HSS
HYSTER STABILITY SYSTEM

Our patented Hyster Stability System (HSS®) is built into the fundamental design of every truck—not "added on" like other manufacturers—to allow for articulation on uneven surfaces and to minimize truck lean for enhanced lateral stability. And unlike some competitors, the HSS® is virtually maintenance-free.

PACESETTER VSM

The computer "brain" of the Fortis® line of lift trucks manages all vehicle systems to optimize performance and significantly increase overall reliability and enhance diagnostic capabilities for maximum uptime.

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. 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.

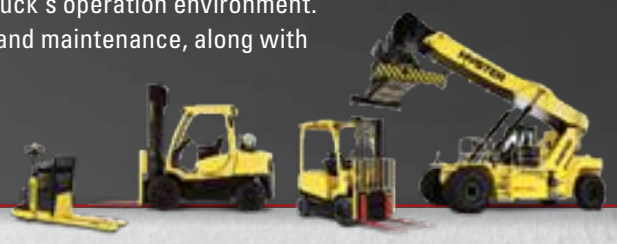
Rental Products — When leasing or buying isn't a practical option, we have access to more than 14,000 units for short- and long-term rental. We'll help you maintain output in a cost-effective manner.

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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