

H80-120FT SERIES



**STRONG PARTNERS.
TOUGH TRUCKS.™**

SIT-DOWN, COUNTERBALANCED, IC, PNEUMATIC TIRE



H80-120FT SERIES

The H80-120FT is more than 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 assure your cost of operations will be lowered. Each configuration offers improved efficiency, advanced dependability and simple serviceability.





■ **DEPENDABILITY**

- Electronically controlled powershift transmission
- Industrial strength electronics
- Exceptional cooling
- Hassle-free hydraulics

■ **LOW COST OF OWNERSHIP**

- Auto Deceleration System
- Electronic controlled transmissions
- Controlled power reversal
- CANbus communication system

■ **SERVICEABILITY**

- Pacesetter VSM
- Easy service access
- Wet disc brakes
- Complete cowl-to-counterweight access

■ **SUPERIOR ERGONOMICS**

- Low noise level
- Infinitely adjustable steering column
- Improved brake pedal layout
- Easy-to-use onboard electronics

■ **ENHANCED PRODUCTIVITY**

- High output engine
- DuraMatch™ transmission
- Controlled rollback on ramps
- Automatic inching control

DEPENDABILITY

DECREASE DOWNTIME BY UP TO 30%

Approximately 70% of industrial lift truck downtime results from problems with the powertrain, electrical system, cooling system or hydraulic system. With the Hyster® H80-120FT, many of these mechanical issues become a thing of the past as design advances have reduced downtime by up to 30%.



■ TOUGHEST POWERTRAIN

- Pacesetter VSM industrial onboard computer monitors and protects the engine powertrain to maximize the H80-120FT series uptime.
- Transmission gears and shafts are up to 15% stronger to handle even the most demanding duty cycle.
- Electronic controlled powershift transmission has 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.
- Premium wet disc brakes 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. (Standard on H100-120FT)

■ 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, during use or while powerwashing.
- Smart, one-way routing path for wire harnesses ensures consistent high-quality assembly while increasing durability and simplifying maintenance when needed.

■ EXCEPTIONAL COOLING

- 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 significantly 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.

■ 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.



LOW COST OF OWNERSHIP

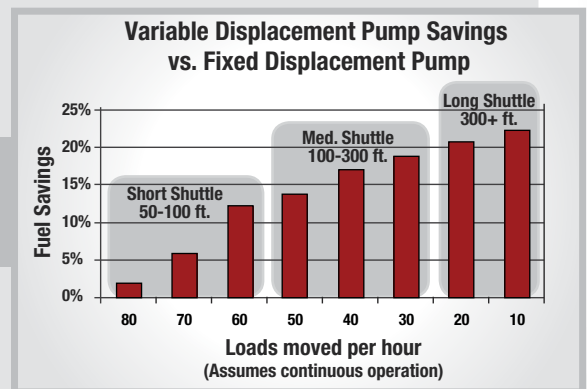
SUPERIOR RELIABILITY

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

- 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 virtually eliminates 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™)
- 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%.
- Extended transmission and hydraulic fluid change intervals.
- Improved engine options provide excellent performance with advanced combustion technology that enhances fuel economy.



■ ADVANCED DEPENDABILITY

- Toughest Powertrain: Electronic controlled transmissions reduce shock loading; clutch packs with 3 times the life; 15% stronger gears and shafts; and Hyster® premium brakes all work to provide unmatched reliability.
- Industrial Strength Electronics: CANbus communications, non-mechanical sensors and switches and IP66 rated sealed connections mean electrical problems are a thing of the past.
- Industry's Best Cooling: The H80-120FT series' superior airflow and choice of 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.
- Service access: Rear-opening one-piece hood (opens up 85 degrees) and easy-to-remove one-piece floor plate requiring no tools to remove, provide the industry's best cowl to counterweight service access.
- Daily checks are easily accessed and performed.
- State-of-the-art onboard diagnostics reduce repair time and minimize expensive parts swapping.
- Standard and Optional wet disc brakes virtually eliminate brake maintenance.

DOWNTIME IS COSTLY	
Estimated Costs per Downtime Event:	
Repair Costs (parts & labor)	\$ 500
Idle Operator Costs	+ \$ 60
Truck Rental Costs	+ \$ 120
Administrative Costs	+ \$ 50
TOTAL COST (per Downtime Event)	\$ 730
Additional Costs:	+ \$
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 for all lift trucks within two years of age are available within 24 hours, 100% of the time.*



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.

SUPERIOR ERGONOMICS

FATIGUE-REDUCING OPERATOR COMPARTMENT

The Fortis H80-120FT series features an ergonomically designed 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.

■ 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 TouchPoint E-hydraulic optional configurations moves with the seat and telescopes forward/vertical in one simple movement to provide greater flexibility in achieving a more custom position.
- 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.



■ PRECISE, EFFORTLESS OPERATION

- 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.
- Optional swingout dropdown EZXchange bracket frees the LP tank from over the counterweight and lowers the tank on a stable platform to minimize arm and back strain for even easier changeouts.
- Improved 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 while minimizing shoulder strain 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™)



TouchPoint E-hydraulic mini-lever controls



Swingout EZXchange bracket



Rear drive handle with horn button



Full suspension swivel seat in vinyl or cloth

ENHANCED PRODUCTIVITY

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.

■ ON-DEMAND HYDRAULIC SYSTEM

The optional load-sensing 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 hydraulic controls.



■ SERVICEABILITY WITH LESS DOWNTIME

- Complete cowl-to-counterweight access.
- Integral dashboard display featuring onboard diagnostic capabilities.
- One piece, steel floor plate is easily removed to provide incredible service access.
- This optional bracket swings out from over the top of the counterweight, providing a stable platform for quick, easy LP tank replacement.
- Standard wet disc brakes provide excellent stopping power and extremely long service life.
- Engine cover is hinged at the rear, offering superior service access to the engine compartment.

■ 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.



Infinitely adjustable steer column with spinner knob and integrated dashboard display

■ 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 electronic monitoring package reports air and hydraulic oil filter restrictions and low engine coolant levels.
- A heads-up display monitors and controls the emissions system with a diesel particulate filter (DPF) that captures and oxidizes particulate matter (soot).

APPLICATION-MATCHED PERFORMANCE

■ PERFORMANCE CUSTOMIZED FOR YOUR APPLICATION

The H80-120FT series is configured to provide the right lift truck for your application. Our truck packages with multiple powertrain combinations to choose from assure your cost of operations will be lowered. Each configuration offers improved efficiency, advanced dependability and simple serviceability.

- A 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.
- Both engine choices provide enhanced fuel efficiency so you can get more loads moved on a single tank.
- Pacesetter VSM industrial onboard computer enables you to adjust and optimize the performance of your H80-120FT trucks.
- Patented DuraMatch™ transmission provides breakthrough features that include the Auto Deceleration System, controlled rollback on ramps, controlled power reversals with automatic inching control to move loads more efficiently with less operator fatigue and product damage.



■ PAPER APPLICATIONS KIT

The Paper Application Kit is recommended for any truck used in a paper 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:

- Enclosed hood with vented side panels
- Heavy duty ductile iron exhaust manifolds
- Exhaust wraps
- Reduced displacement hydraulic pump (H100-120FT only)
- Heavy duty engine modification for GM 4.3L LPG engines

■ HEAVY DUTY GM 4.3L V6 LPG ENGINE OPTION

The standard GM 4.3L V-6 engine is well suited for tough applications, specially fitted with components to provide exceptional performance and durability, including:

- Cast iron block and cylinder heads
- Cast iron camshaft with hydraulic roller lifters
- Cast iron exhaust manifolds
- Induction-hardened intake valve seats
- Replaceable hardened exhaust valve seat inserts
- Reduced-force intake and exhaust valve springs

To further extend engine life and improve serviceability under high engine temperature conditions, Hyster has designed a heavy duty LPG engine option which takes the engine described above and adds:

- Replaceable hardened intake valve seat inserts
- Heavy duty ductile iron exhaust manifolds

The heavy duty LPG Engine accessory option is required for workloads or duty cycle applications where high engine temperatures and/or near-continuous truck operation are encountered. Engine life is significantly extended, even in tough applications. If the cylinder heads ever require service, the replaceable valve seats simplify the process and further extend the life of the rebuild.

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 fork lift 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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