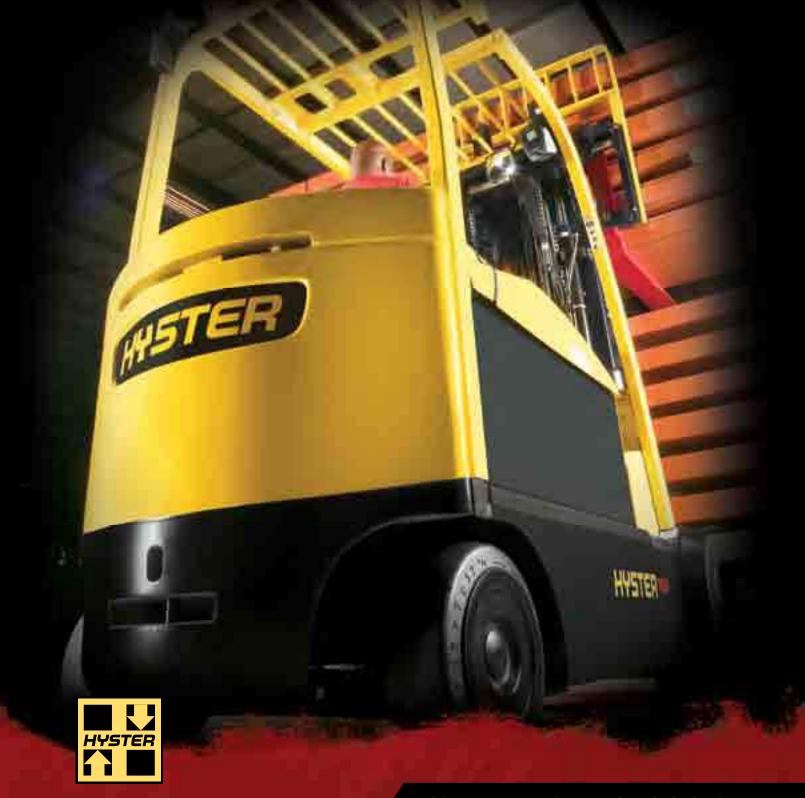
# E80F120MN SE



## E80-120XN SERIES

As the market leader in the 8,000 to 12,000 lb. cushion tire electric truck category, we could have rested on our laurels. But that's not the Hyster way. Instead, we talked with customers and operators in automotive, paper and manufacturing industries, along with our designers and engineers, and went to work making our trucks more comfortable, more durable and more efficient than ever. Hyster® E80-120XN series trucks do the heavy lifting with ease—up to 12,000 pounds—so your operators can be more productive and you can maximize your ROI.



#### **Built for Peak Performance**

Our electric E80-120XN series trucks meet the same high-performance standards as our counterbalanced ICE trucks in regards to acceleration, speed control and load-lift abilities. They also offer a lower operating cost, along with zero emissions. Power-assisted braking means improved brake life and reduces operator braking efforts by 40 percent. Plus, with Hyster Company's automatic park brake—which no other manufacturer offers—your operators can save significant time.



## DEPENDABILITY

### There's no quit in a Hyster<sup>®</sup> Lift Truck.

Hyster Company has a history of more than 80 years spent engineering and manufacturing some of the most reliable and productive lift trucks on the market. The new Hyster® E80-120XN series continues that legacy with a lift truck that was designed and built to be the most dependable in the marketplace.

#### **Thermal Management System**

- The Hyster-designed thermal management system continuously monitors the E80-120XN series' controller and motor temperature. Upon identifying an irregularity,
   it protects the component by automatically adjusting truck performance.
- Large air inlet ports in the rear of the truck are protected and strategically positioned to provide fresh air intake for controller cooling.
- Heat sinks are used to draw heat away from the motor controllers, and cooling fans are positioned on top of the heat sink.

**Heat Sink** 

#### World-Class Dependability

- The Hyster-designed cast ductile iron steer axle provides maximum dependability. Its transverse, double-acting hydraulic cylinder, tapered roller spindle-support bearings and non-adjustable tie rods provide maximum durability with superior steering control and load handling.
- The unitized design and welded steel construction of the frame provide better rigidity and excellent protection for the internal components. The exceptional strength and durability of the frame are designed and tested using computer-generated Finite Element Analysis. A stamped steel hood provides a durable, long-lasting exterior that will not crack.
- The full floating design of the drive axle lets the axle housing, not the shafts, carry the weight of the load, enhancing dependability and reliability for a longer service life.



Frame

• Wet disc brakes provide excellent stopping power with low brake pedal effort, while also requiring no adjustments and minimal servicing (periodic lubrication changes at 4,000-hr intervals).

#### **Industrial-Strength Electronics**

- CANbus communications network reduces wiring complexity, providing superior dependability.
- Double-sealed electrical connectors provide a waterproof connection to prevent contamination.
- A smart, one-way routing path for wire harnesses ensures consistent high-quality assembly while increasing durability and simplifying maintenance when needed.
- Non-mechanical, Hall-Effect sensors and switches are designed to outlast the life of the truck.
- Proven to be durable, the Pacesetter VSM (Vehicle System Manager) industrial onboard computer manages truck operations to maintain world-class dependability to maximize uptime.

#### **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 percent 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 and improving longevity.



## **LOW COST OF OWNERSHIP**

#### Little to own. Lots to appreciate.

The Hyster® E80-120XN series can lower your cost of operations by delivering increased productivity, lowered energy consumption, advanced dependability and reduced maintenance costs. The standard AC traction and hydraulic motors are unsurpassed in the materials handling industry so they spend more time working and less time being worked on.

#### Brushless AC Technology

- The E80-120XN is a full AC product, utilizing AC traction and hydraulic motors eliminating the motor brushes and the commutator, as well as related parts and service costs.
- A single hydraulic pump and motor is utilized for both the mast and steering functions decreasing the number of components and reducing the chances of failure.

#### **■ Vehicle System Manager**

• The Pacesetter VSM monitors and communicates the truck's multiple systems via the CANbus communication system, keeping a constant check on the unit and vital components.



#### **Superior Serviceability**

- The E80-120XN series utilizes CANbus communications to simplify wiring and improve serviceability.
- State-of-the-art onboard diagnostics reduce repair time and minimize expensive parts swapping.
- A two-piece floor plate and side plates can be easily removed for unrestricted service access. The lift-out floor plates require no tools, for quick and easy daily operator checks.
- Easy battery access is provided via the spring-assisted hood and quick release handle. The rear counter weight service cover is easily removed by removing two screws.





#### 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 en sures 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, available to our dealers' technicians. This technical training program provides both systems level as well as product-specific education to ensure lift trucks are repaired right the first time.

<sup>\*</sup> Contact your local dealer for program details.

## **ERGONOMICS**

#### Superior comfort comes standard.

The superior ergonomic design of the E80-120XN means greater comfort for your operator. Enhanced ergonomics combined with customizable performance characteristics increase overall productivity and uptime.

#### **Superior Operator Compartment**

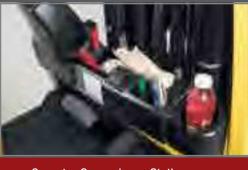
- An 11 percent increase in floor space creates the largest floor space among leading competitors for its capacity and promotes improved operator comfort, while the widened overhead quard legs allow for greater visibility.
- The Operator Convenience Station features an industry-leading dash storage area that provides the operator with a productive work environment and dedicated storage areas for markers, cell phone, pick tickets, beverages and almost anything else an operator needs.
- The easy-to-use 3-point entry design of the operator compartment uses a large molded hand grip, hip restraint and an open non-slip lowered step height to minimize muscle and joint strain during entry and exit.
- High-comfort seat conforms to the operator to reduce operator fatigue and maximize ergonomics. They
  offer no-cinch ELR seat belts and 6 inches of fore/aft adjustment with 13 latching positions. The optional
  full suspension seat features an adjustable seat back and weight adjustment control. The optional swivel
  seat provides 6 degrees left swivel and 12 degrees right swivel.



**High-Comfort Seat** 



3-Point Entry Design



Operator Convenience Station

#### **Low-Effort Operation**

- The Automatic Park Brake Option automatically applies the parking brake when the truck is stationary and releases it when the accelerator pedal is depressed. Power-assisted braking improves brake life while reducing operator effort.
- The standard 12-inch steering wheel with integrated spinner knob reduces fatigue while providing more knee room and offers superior efficiency, maneuverability and control.
- An infinitely adjustable tilt steer column provides increased comfort while minimizing fatigue. The optional telescopic steer column with tilt memory provides enhanced adjustability to accommodate the full operator size range.
- Improved brake pedal layout allows actuation with either foot and the Auto Deceleration System significantly reduces operator fatigue.
- Rear drive handle (optional) is excellent for reverse driving while giving ready access to the auxiliary horn button for use when approaching cross-aisles and pedestrian traffic areas.

#### **Hydraulic Controls**

- Choose from two configurations that employ seat side hydraulic levers or TouchPoint mini-levers to provide unsurpassed, low effort, tactile control of all hydraulic functions.
- Optional Electro-Hydraulic Controls with TouchPoint mini-levers provide precise fingertip control of all
  hydraulic functions. An adjustable armrest with palm rest, mounted on the operator seat, positions the
  mini-levers in the optimal position.
- The armrest is cushioned and contoured to provide full forearm support. The hydraulic functions, seat side directional control switch, horn and battery disconnect button are all incorporated in the armrest and designed to maximize operator comfort and ease of use.



Electro-Hydraulic Controls with TouchPoint Mini-Levers



Rear Drive Handle

## **PRODUCTIVITY**

#### Only 24 hours in a day. Make the most of them.

The Hyster® E80-120XN works harder, longer and faster without compromising safety to make it one of the most productive lift trucks in the industry. The end result is a lift truck that increases throughput and sales volume while reducing operating costs.

#### **Superior Operator Control**

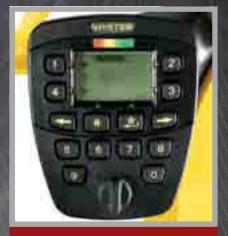
- Mast provides fast lift and lower speeds combined with superb visibility.
- The optional Hyster-designed integral sideshift provides excellent visibility and affords greater capacities than carriage mounted sideshifts.
- Low-effort ergonomics and intuitively-located controls provide superior operator comfort minimizing fatigue and maximizing productivity.
- The seat side directional control and the Hyster exclusive MONOTROL® pedal each provide for quicker, smoother control of travel speed and direction, improving operator efficiency and bolstering productivity.
- On-demand hydrostatic steering provides low-effort steering and superior control with reduced noise.
- The multifunction display features a large LCD backlit screen that shows truck status for quick and easy diagnostics.



MONOTROL Pedal



Seat Side Directional Control



**Multifunction Display** 

#### **Performance Modes**

- An adjustment of customizable performance parameters to match your application needs is accessible via the multifunction display and technician password protection.
- A significant increase in loaded travel speeds and acceleration rates beyond the standard setting
  is possible when the "Extended Shift" setting is turned off.
- Our standard "Extended Shift" AC controller setting provides the optimum balance between performance needs and battery shift life.

#### **AC** Technology

- AC Technology delivers quick and smooth changes in travel direction and offers precise speed control with excellent acceleration thereby significantly increasing productivity potential.
- The standard "Extended Shift" feature allows enhanced run time without recharging over longer periods.
- The Hyster-designed thermal management system maximizes performance during continuous operation, while preventing damage to components due to heat.



## **PERFORMANCE**

#### Handles the heaviest loads with ease.

Hyster® E80-120XN series trucks are built for superior stability, so operators can trust them with tall loads, long loads and all loads in-between. Our patented Hyster Stability System (HSS<sup>™</sup>) is built into the fundamental design of every truck—it's not "added on" like other manufacturers—to allow for articulation on uneven surfaces and to minimize truck lean for enhanced lateral stability.

- Hyster Stability System is a 100% maintenance-free design.
- Its "Passive" mechanical system uses gravity to optimize steer-axle geometry.
- Trunnion-mounted masts increase long load center handling.
- Mast channels built with one-piece, high-strength rolled steel.
- Load rollers are canted at 3 degrees to resist forward/backward movement.



## **Customized performance for any application.**

No two working environments are exactly alike. That's why Hyster Company gives you the option of tailoring your lift truck's performance and features to your application. Customize speed settings and directional control methods. And take advantage of Extended Shift functionality to maximize productivity. No matter what truck configuration you choose, your Hyster® lift truck will work as long and as hard as you do.

#### **Superior Trucks. Superior Options.**

- Application environmental construction
  - Standard construction
    - Operating temperatures: +32 °F to +120 °F
  - Cooler/freezer package option
    - Operating temperatures: 0 °F to +120 °F



- Return to Set Tilt Option brings the load to a preset position when tilting for easy operation.
- Operator Selectable Performance Modes allow varying levels of truck performance.
- Rapid Charge Option further improves productivity by eliminating battery changes.
- 36-, 48- or 80-volt systems provide excellent performance.
- 80-volt control system option for maximum performance in long-haul applications.
- Extended Shift can be disabled for increased productivity levels.



### When you buy a Hyster® truck, you get more than a truck.

Hyster® lift trucks are designed to lower your cost of operations. In fact, in an independent survey, current customers rated Hyster Company #1 in Total Cost of Ownership.\* Our lift trucks are also backed by an unmatched network of specialists. Through our Dealer Network, we can offer the expertise of fleet managers, parts suppliers, capital procurement specialists and trainers.

\*Peerless Media Research Group, 2011





**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 application, make, model and operation environment. Hyster service programs / offer scheduled inspections and maintenance, and when you need immediate service on a fleet or single / truck, your local dealer offers quick, responsive service dispatched to your location.



