## Specifications

**Equipment and weight**:
- **Weights**: (line 2.1) are based on the following specifications:
  - Complete truck with 5 565 mm 2-stage limited free lift mast, 2 030 mm carriage, 1 200 mm forks, e-hydraulics, overhead guard and standard pneumatic drive and steer tyres.

**Other specifications**
- **Specification Data is based on VDI 2198**

---

### 1.1 Manufacturer

- **Model**: 5650 Forward

### 1.2 Model designation

- **Series**: H8.0-9.0FT
- **Configuration**: Single Drive

### 1.3 Engine

- **Type**: Cummins 6B3.9
- **Output**: 156 kW (210 hp)

### 1.4 Transmission

- **Type**: Automatic
- **Ratio**: 156.21

### 1.5 Axle

- **Type**: Single Axle

### 1.6 Brakes

- **Type**: Drum

### 1.7 Suspension

- **Type**: Hydraulically

### 1.8 Tyres

- **Type**: Pneumatic

## Characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>HYSTER</th>
<th>Hyster Advance</th>
<th>Hyster Advance+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall weight</td>
<td>11 567</td>
<td>11 239</td>
<td>11 271</td>
</tr>
<tr>
<td>Engine power</td>
<td>156 kW</td>
<td>210 hp</td>
<td>210 hp</td>
</tr>
<tr>
<td>Traction power</td>
<td>40 kW</td>
<td>54 hp</td>
<td>54 hp</td>
</tr>
<tr>
<td>Fuel consumption</td>
<td>2.8 l/100 km</td>
<td>4 l/100 km</td>
<td>4 l/100 km</td>
</tr>
</tbody>
</table>

## Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Hyster Advance</th>
<th>Hyster Advance+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine power</td>
<td>156 kW</td>
<td>210 hp</td>
</tr>
<tr>
<td>Traction power</td>
<td>40 kW</td>
<td>54 hp</td>
</tr>
<tr>
<td>Fuel consumption</td>
<td>2.8 l/100 km</td>
<td>4 l/100 km</td>
</tr>
</tbody>
</table>
Mast and capacity information

Values shown are for standard equipment. When using non-standard equipment, these values may change. Please contact your Hyster dealer for information.

### Masts H8.0-9.0FT

<table>
<thead>
<tr>
<th>Maximum fork height (mm)</th>
<th>Back tilt</th>
<th>Overall lowered height (mm)</th>
<th>Overall extended height (mm)</th>
<th>Free lift (TOP) (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 065</td>
<td>9°</td>
<td>2 712</td>
<td>4 350</td>
<td>105</td>
</tr>
<tr>
<td>3 565</td>
<td>9°</td>
<td>2 962</td>
<td>4 850</td>
<td>105</td>
</tr>
<tr>
<td>4 565</td>
<td>9°</td>
<td>3 482</td>
<td>5 850</td>
<td>105</td>
</tr>
<tr>
<td>5 565</td>
<td>9°</td>
<td>3 962</td>
<td>6 850</td>
<td>105</td>
</tr>
<tr>
<td>6 065</td>
<td>9°</td>
<td>4 212</td>
<td>7 350</td>
<td>105</td>
</tr>
<tr>
<td>4 615</td>
<td>6°</td>
<td>2 702</td>
<td>6 077</td>
<td>1 565</td>
</tr>
<tr>
<td>5 515</td>
<td>6°</td>
<td>3 002</td>
<td>6 977</td>
<td>1 865</td>
</tr>
<tr>
<td>5 965</td>
<td>6°</td>
<td>3 152</td>
<td>7 427</td>
<td>2 015</td>
</tr>
</tbody>
</table>

### H8.0-9.0FT- Capacity Chart in kg

<table>
<thead>
<tr>
<th>Maximum fork height mm (b_{3+s})</th>
<th>With carriage only</th>
<th>With carriage + sideshift</th>
<th>With carriage + sideshifting fork positioner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H8.0FT6</td>
<td>H8.0FT9</td>
<td>H9.0FT</td>
</tr>
<tr>
<td>3 065</td>
<td>8 000</td>
<td>8 000</td>
<td>9 000</td>
</tr>
<tr>
<td>3 565</td>
<td>8 000</td>
<td>8 000</td>
<td>9 000</td>
</tr>
<tr>
<td>4 565</td>
<td>8 000</td>
<td>8 000</td>
<td>9 000</td>
</tr>
<tr>
<td>5 565</td>
<td>8 000</td>
<td>8 000</td>
<td>9 000</td>
</tr>
<tr>
<td>6 065</td>
<td>7 840</td>
<td>7 850</td>
<td>8 830</td>
</tr>
<tr>
<td>4 615</td>
<td>8 000</td>
<td>8 000</td>
<td>9 000</td>
</tr>
<tr>
<td>5 515</td>
<td>8 000</td>
<td>8 000</td>
<td>9 000</td>
</tr>
<tr>
<td>5 965</td>
<td>7 860</td>
<td>7 870</td>
<td>8 850</td>
</tr>
</tbody>
</table>

Note: To calculate truck capacities with alternative truck specifications to the ones shown in the above tables, please consult your Hyster dealer.

The rated capacities shown are masts in a vertical position on trucks equipped with standard or sideshift carriage, and nominal length forks. Masts above the maximum fork heights shown in the mast table are classified as high lift, and depending on the tyre/tread configuration may require reduced capacity, restricted back tilt or wide tread.
Specifications are affected by the condition of the vehicle and how it is equipped, as well as the nature and condition of the operating area. If these specifications are critical, the proposed application should be discussed with your dealer.

### Bottom of forks
- Without load backrest
- Dual Drive (b₂) except where specified
- h₃ subject to +/- 5 mm tolerance
- Full-suspension seat in depressed position
- Add 50 mm with load backrest
- Stacking aisle width (lines 4.33 & 4.34) is based on the V.D.I. standard calculation as shown on illustration. The British Industrial Truck Association recommends the addition of 100 mm to the total clearance (dimension a) for extra operating margin at the rear of truck.

### Gradeability figures (lines 5.7 & 5.8)
- Gradeability figures (lines 5.7 & 5.8) are provided for comparison of tractive performance, but are not intended to endorse the operation of the vehicle on the stated inclines. Follow instructions in the operating manual regarding operation on inclines.

### Variable
- Measured according to the test cycles and based on the weighting values contained in EN12053
- Top speed with single tyre option may be limited according to tyre manufacturers’ ETRTO recommendation. All single tyre orders need to be approved in advance by the Counterbalance SPED Department

### Mast tables:
- Deduct 125 mm without load backrest
- Deduct 125 mm with load backrest
- No capacity deration when single drive tyres fitted

### Load centre
Distance from front of forks to centre of gravity of load.

### Rated load
Based on vertical masts up to 5 565 mm.

---

Notice

Care must be exercised when handling elevated loads. When the carriage and/or load is elevated, truck stability is reduced. It is important that mast tilt in either direction be kept to a minimum when loads are elevated. Operators must be trained and adhere to the instructions contained in the Operating Manual.

Hyster products are subject to change without notice. Lift trucks illustrated may feature optional equipment.

Safety:
This truck conforms to the current EU requirements.
Product Packages

The Hyster Fortens™ range has been designed to match the vast range of application requirements and business objectives that customers demand.

The H8.0-9.0FT Series is available in three capacity variants, configured to best match operational demands, all of which offer improved efficiency, advanced dependability, lower cost of ownership and simple serviceability.

<table>
<thead>
<tr>
<th>Model / Bundle</th>
<th>H8.0FT6 Single Drive</th>
<th>H8.0FT6 Dual Drive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIESEL</strong></td>
<td><strong>Engine</strong></td>
<td><strong>Transmission</strong></td>
</tr>
<tr>
<td>Fortens Advance</td>
<td>Cummins 3.3L Turbo</td>
<td>DuraMatch™ Electronic 3 speed</td>
</tr>
<tr>
<td>Fortens Advance+</td>
<td>Cummins 3.3L Turbo</td>
<td>DuraMatch™ Plus 3 speed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model / Bundle</th>
<th>H8.0FT9</th>
<th>H9.0FT6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIESEL</strong></td>
<td><strong>Engine</strong></td>
<td><strong>Transmission</strong></td>
</tr>
<tr>
<td>Fortens Advance</td>
<td>Cummins 3.3L Turbo</td>
<td>DuraMatch™ Electronic 3 speed</td>
</tr>
<tr>
<td>Fortens Advance+</td>
<td>Cummins 3.3L Turbo</td>
<td>DuraMatch™ Plus 3 speed</td>
</tr>
</tbody>
</table>

Please refer to the Price List for full option configurations.
The new Hyster Fortens H8.0-9.0FT Series represents a powerful, compact materials handling solution for a wide range of demanding applications.

These trucks are ideally suited to handling operations with high-attachment usage such as paper, beverage, timber, metals and construction materials.

Its compact design ensures that space and on-site efficiency can be maximised to maintain low operating costs.

The powerful Tier-3 certified 82 kW Cummins diesel engine combined with Hyster’s electronically controlled 3-speed (3F/2R) DuraMatch™ transmissions, deliver superior productivity.

The Fortens Advance models feature the DuraMatch™3 transmission, providing:

- **Auto Deceleration System (ADS)** automatically slows the truck when the accelerator pedal is released, and finally brings the truck to a stop, which helps to significantly extend brake life. In addition, this feature assists the driver to accurately position the truck in front of a load. There are 10 ADS settings, programmable via the dash display by a service technician, which deliver different braking characteristics, from very gradual to aggressive, to suit the needs of the application.

- **Controlled Power Reversal**; the Pacesetter VSM™ controls the transmission to deliver smooth direction changes. The VSM reduces the throttle to slow the engine, initiates auto-deceleration to stop the truck, changes the transmission direction automatically and increases the throttle to accelerate the truck. The system virtually eliminates tyre spin and shock loads on the transmission and significantly increases tyre life. As with ADS, the system is programmable via the dash display by a service technician, with settings from 1 to 10, to suit the needs of the application.

- **Controlled Roll-Back on Ramp**; the transmission controls the rate of descent of the truck on a ramp, when the brake and throttle pedal are released, to provide maximum control on a grade and increase operator productivity.

- **First Gear** offers **Increased Drawbar Pull** for use on gradients.

- **Second & Third Gears** provide maximum engine efficiency in applications where longer travel distances are common.

The Fortens Advance+ models feature the electronically controlled three-speed extended function DuraMatch™ Plus3 transmission. This transmission, in addition to the above, features:

- **Throttle Response Management** allows the operator to manage his travel speed, according to the position of his foot on the accelerator pedal. For example, a certain speed can be maintained both on the flat and on a gradient, without the need to depress the pedal further. The system also compensates for hydraulic operation and drawbar pull.

- **Dynamic Auto Deceleration System**; as with the DuraMatch™3, the operator can slow the truck down without using the brake and the rate of braking is determined by the dashboard settings 1-10. In addition, thanks to the Throttle Response Management feature, the rate of deceleration can be further fine-tuned according to the rate at which the driver releases his foot from the accelerator pedal.

- **Auto-Speed Hydraulics with Automatic Inching Control**; when lifting a load, the engine speed is automatically increased to provide full hydraulic power. The Pacesetter VSM™ maintains the current travel speed (or prevents travel) until operator steps on accelerator. No operator inching is required and productivity is increased by simplifying operator actions.

The transmissions are compatible with the combi-cooler radiator and a superior counterweight tunnel design coupled with a “pusher” type fan, to provide the industry’s best cooling.

The standard Oil-immersed brakes offer reduced maintenance & repair time and costs, which results in extended truck dependability and uptime. These trucks are ideally suited to applications in wet, dirty or corrosive environments, and ensure consistent braking performance over the lifetime of the truck. This is thanks to the sealed unit that houses and protects the brakes, so preventing contaminants and damage.
The powertrain is controlled, protected and managed by the Pacesetter VSM™ industrial onboard computer, featuring a CANbus communications network.

This system permits adjustment and optimisation of the truck's performance, in addition to monitoring key functions. It enables quick, easy diagnostics, minimizing repair downtime and unnecessary parts swapping.

Hassle-Free Hydraulic systems, featuring Leak-free O-ring face seal fittings reduce leaks for enhanced reliability.

Non-mechanical, Hall-Effect sensors and switches have been fitted and are designed to outlast the life of the truck.

The operator compartment features class-leading Ergonomics for maximum driver comfort and productivity.

- Operator space is optimised, thanks to the modern overhead guard design and significantly more floor space.
- The Easy-to-use 3-point entry design of operator compartment features conveniently positioned hand-grips and three non-slip steps, with an initial step height of just 32.1 cm. The isolated operator compartment minimises the effect of powertrain vibration.
- The adjustable armrest that accompanies the E-hydraulic TouchPoint™ mini-levers moves with the seat and telescopes forward.
- The Rear grab handle with horn button facilitates reverse driving.
- An infinitely adjustable steering column, 30 cm diameter steering wheel with spinner knob and full-suspension seat enhance driver comfort.

The Hyster Fortens is the fastest and easiest lift truck to service.

- Simple service access to both sides of the engine compartment is via a gull-wing hood and a simplified layout of wiring and hydraulics offers greater access to components, which in turn decreases service time for unscheduled repairs and regular maintenance.
- Fast, colour-coded daily checks and diagnostic systems can be managed via the dash display.
- An Engine coolant change and Hydraulic oil change interval of 4 000 hours also contributes to reduced downtime.
Strong Partners, Tough Trucks, for Demanding Operations Everywhere.

Hyster supplies a complete product range, including Warehouse trucks, IC and Electric Counterbalanced trucks, Container Handlers and Reach Stackers.

Hyster is committed to being much more than a lift truck supplier. Our aim is to offer a complete partnership capable of responding to the full spectrum of materials handling issues:

Whether you need professional consultancy on your fleet management, fully qualified service support, or reliable parts supply, you can depend on Hyster.

Our network of highly trained dealers provides expert, responsive local support. They can offer cost-effective finance packages and introduce effectively managed maintenance programmes to ensure that you get the best possible value. Our business is dealing with your materials handling needs so you can focus on the success of your business today and in the future.