IC COUNTERBALANCED LIFT TRUCKS

H6.0-7.0FT FORTENS / FORTENS ADVANCE / FORTENS ADVANCE+

6 000-7 000 KG
<table>
<thead>
<tr>
<th>Specification</th>
<th>H6.0FT</th>
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### FORTENS, FORTENS ADVANCE & FORTENS ADVANCE+ H6.0FT, H7.0FT – LPG

#### 1.1 Manufacturer (abbreviation)
- Hyster

#### 1.2 Manufacturer's type designation
- Fortens

#### 1.3 Model
- Fortens

#### 1.4 Engine / transmission
- GM 4.3L Electronic PowerShift
- 2 Speed
- GM 4.3L Electronic PowerShift
- 3 Speed
- 2 Speed with Soft Shift DuraMatch™

#### 1.5 Brake type
- Wet Brakes
- Wet Brakes
- Wet Brakes
- Wet Brakes
- Wet Brakes

### PERFORMANCE DATA

#### 2.1 Tyre size, front
- P 245/70 R15

#### 2.2 Tyre size, rear
- P 295/70 R15

#### 2.3 Axle loading laden/unladen, front/rear
- kg 10,800 / 10,700

### DIMENSIONS

#### 3.1 Axle loading laden/unladen, front/rear
- kg 10,700 / 10,600

#### 3.2 Overall width
- b1 (mm) 2,492 mm

#### 3.3 Tyre size, rear
- 8.25x15

#### 3.4 Tyre size, front
- 7.00x15

#### 4.1 Lift
- kg 1,070 kg

#### 4.2 Fork carriage width
- mm 2,410 mm

### HYGROSCOPIC MATERIALS

#### 5.1 Axle loading laden/unladen, Stage IIIA diesel engine
- kg 10,700 / 10,600

#### 5.2 Lift speed, laden/unladen
- m/s 2.1 m/s

#### 5.3 Lowering speed, laden/unladen
- m/s 1.9 m/s

### ELECTRIC AND HYDRAULIC DATA

#### 6.1 Hydraulic cylinder displacement
- cm³ 170 cm³

#### 6.2 Fuel consumption according to VDI cycle
- l/km 1,510 l/km

#### 6.3 Fuel type
- Diesel

#### 6.4 Type of drive unit
- 4-Wheel Drive

#### 6.5 Average noise level at operator's ear
- dB(A) 82 dB(A)

#### 6.6 Sound power level during the workcycle
- dB(A) 90 dB(A)

### SPECIFICATION DATA

#### 7.1 Engine manufacturer/type
- GM 4.3L

#### 7.2 Engine power according to ISO 1834
- kW 90 kW

#### 7.3 Rated speed
- rpm 2,400 rpm

#### 7.4 Number of cylinders/displacement
- cm³ 6 cm³

### BRAKE DATA

#### 8.1 Type of service brake
- Wet Brakes

#### 8.2 Towing coupling, type DIN
- 5F 10B

#### 8.3 Lift
- kg 1,070 kg

**Specification data is based on VDI 2198.**
TRUCK DIMENSIONS

**NOTE:**
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.

- Add 32 mm with load backrest
- Bottom of forks
- Without load backrest
- Full suspension seat in depressed position
- \( h_1 \) subject to +/- 5 mm tolerance 2 549 mm for Cab option
- Stacking aisle width (lines 4.34.1 & 4.34.2) is based on the VDI 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 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
- Consult your Hyster lift truck dealer

**MAST TABLES:**
- Deduct 224 mm without load backrest
- Deduct 224 mm with load backrest

**EQUIPMENT AND WEIGHT:**
Weights (line 2.1) are based on the following specifications:
- Complete truck with 3400mm 2-stage limited free lift mast, 1980mm carriage, 1200mm forks, e-hydraulics, overhead guard and standard pneumatic drive and steer tyres

**NOTE:**
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.

---

**TRUCK DIMENSIONS**

\[\text{AST} = W_a + \sqrt{(l_6 + x)^2 + (b_{12}/2 - b_{13})^2}\]

= Centre of gravity of unladen truck

For \( b_{12}/2 < b_{13} \):
\[\text{AST} = W_a + x + l_6 + a\]

For \( b_{12}/2 > b_{13} \):
\[\text{AST} = W_a + \sqrt{l_6 + x)^2 + (b_{12}/2 - b_{13})^2}\]

Minimum operating clearance
(VDI standard = 200 mm  BITA recommendation = 300 mm)

\( l_6 \) = Load length

---

**RATED CAPACITIES**

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

**Rated load**
Based on vertical masts up to 5 400 mm to top of forks.

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![Graph showing rated capacities](image-url)
MASTS 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 H6.0-7.0FT

<table>
<thead>
<tr>
<th>Mast type</th>
<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 of forks) (mm)</th>
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<tbody>
<tr>
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<td>2540</td>
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H6.0-7.0FT – Capacity Chart in kg @ 600mm Load Centre

NOTES

To calculate truck capacities with alternative truck specifications to the ones shown in the above tables, please contact 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.

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

PRODUCT PACKAGES

The Hyster FortensTM range been designed to match the vast range of application requirements and business objectives that customers demand. The H6.0-7.0FT Series is available in several truck packages, with multiple powertrain combinations to choose from, to best match operational demands. Each configuration offers improved efficiency, advanced dependability, lower cost of ownership and simple serviceability.

<table>
<thead>
<tr>
<th>Model / Bundle</th>
<th>H6.0FT</th>
<th>H7.0FT</th>
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<td>Transmission</td>
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<td>Kubota 3.8L</td>
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Please refer to the Price List for full option configurations.
PRODUCT FEATURES

The new Hyster Fortens H6.0-7.0FT 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.

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

Fortens models feature Kubota V3600 IDI-T 3.6 L and new Kubota V3800 E4 3.8L diesel engines or GM 4.3 L V6 engine. Fortens Advance & Advance+ models feature the new Kubota V3800 E4 3.8L diesel engine or GM 4.3 L V6 LPG engine.

LOW EMISSION ENGINES FORM KUBOTA

Kubota turbo charged diesel engines deliver outstanding reliability. The Kubota V3600 IDI-T 3.6 L (62kW@2400rpm) engine is available for unregulated markets and Kubota V3800 E4 3.8L (70 kW@2200rpm) engine is available for regulated markets.

The Stage IIIB Kubota 3.8L diesel engine meets the stringent emissions regulations by using a number of technologies including cooled exhaust gas recirculation, charge air cooling and an active regenerating Diesel particulate filter (DPF) which reduces soot levels by 90% to 0.025g/kWh.

Hyster Stage IIIB trucks stand for profitable low emissions through intelligent design. They are recognisable by the Stage IIIB symbol.

THE CHOICE OF TRANSMISSIONS

The Standard Fortens Stage IIA model features a 2-speed (2F/2R) Electronic Powershift Transmission and Stage IIIB model features 2-speed (2F/2R) Electronic Powershift with Soft Shift Power Reversal function for handling delicate loads, which inhibits direction changes at speeds of over 3.5km/h.

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 decent 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** (where available) 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 and 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.

All powertrains are controlled, protected and managed by the Pacesetter VSM™ industrial on-board 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 a new 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 **32.1cm**. 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, 30cm 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**.

- An active regenerating diesel particulate filter significantly reduces the number of services interventions. DPF performance is constantly monitored and displayed on supplemental display at operator eye level.
- 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 range of warehouse equipment, 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 material 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 material handling needs so you can focus on the success of your business today and in the future.