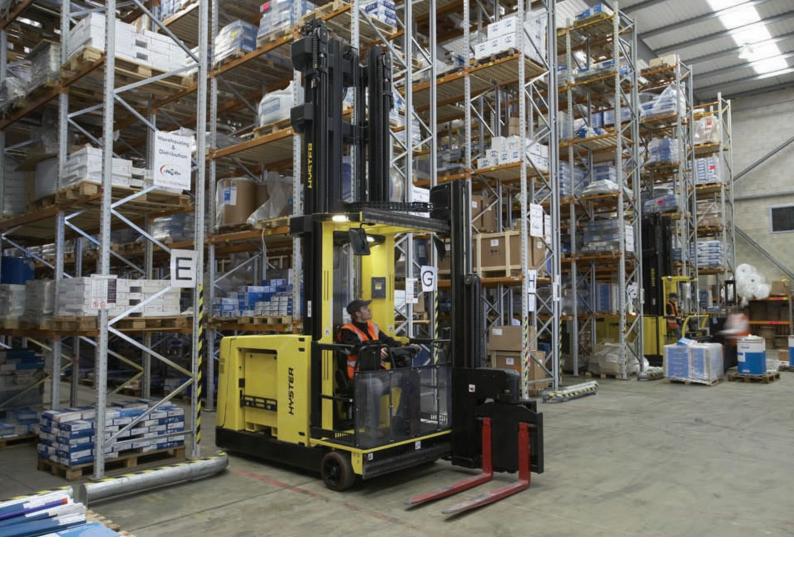


# **Very Narrow Aisle Trucks**





## **Welcome to Hyster**

the home of dependable warehousing solutions

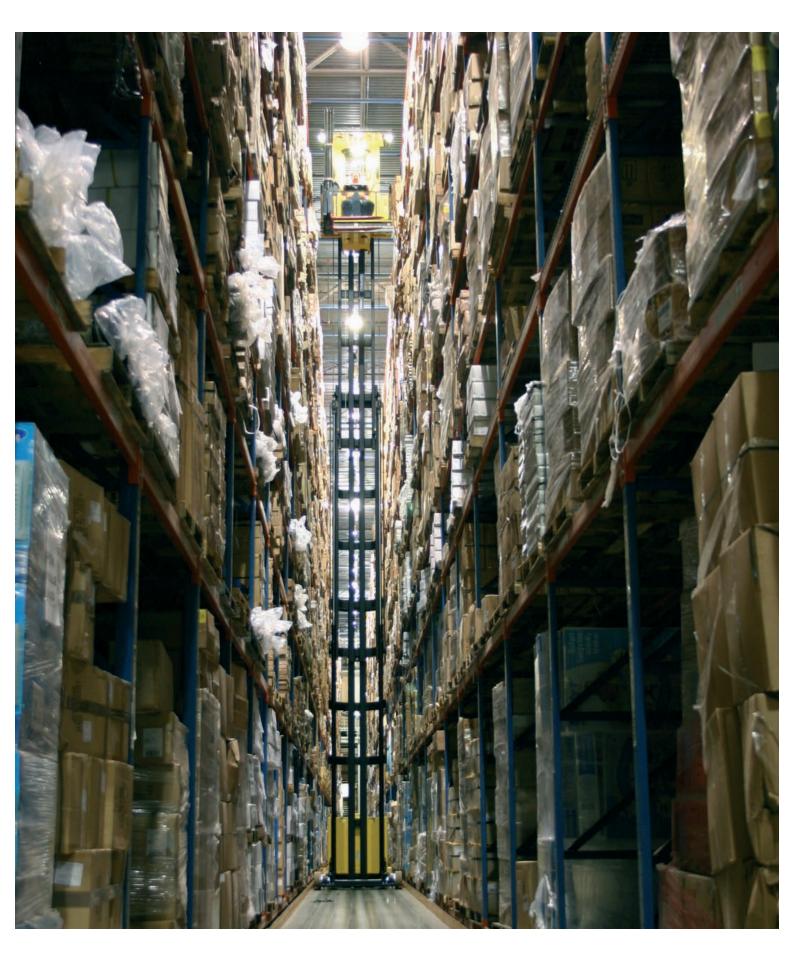
Hyster provides a complete range of world class materials handling equipment, to bring productivity to your warehouse. With local service support, Hyster has the optimum warehouse solution for your business.

The Hyster VNA (Very Narrow Aisle) series allows logistics managers to maximise warehouse capacity by optimizing storage space.

The truck is the perfect solution for working inside narrow aisles with very high racking.

#### **Contents**

04	Hyster VNA capability: Meeting the needs of high density storage operations
06	Product Features
09	Dependability
11	Low Cost of Ownership
13	Ergonomics
15	Productivity
17	Serviceability
18	VNA Configurations















### Hyster VNA capability: Meeting the needs of high density storage operations

Very narrow aisle warehouses are the solution for many of today's storage and distribution companies who need to reduce costs and increase output. Hyster's latest, range of state-of-the art VNA (Very Narrow Aisle) man-up truck is designed to meet the customer's needs by allowing maximum storage density with narrow aisle widths and maximum operating clearances.

With a range of model configurations, mast options and lift heights to choose from, customers can select the right solution for their specific operation; including pallet 'put aways', order picking or transporting in high density storage warehouses.

Hyster is a leading global supplier of materials handling equipment matched to a vast range of demanding applications, with a reputation for engineering excellence and proven lift truck durability, earned over more than 75

years. With a full range of over 140 models, including warehouse equipment, counterbalanced lift trucks from 1 to 48 tonnes capacity, container handlers and reach stackers, in configurations to match almost any application

The brand prides itself on the extensive, customer-centric research and development that goes's into the production of every new product. Nowhere is this more true than in its class leading range of very narrow aisle trucks.

#### **Product Features**



- 1) Pin type forks, reduce unwanted fork movement and promote better load stability
- 2 Integrated pantograph, with patented Hyster design, enables the truck to work in the smallest of aisles with maximum side clearances. This also allows faster in aisle travel speeds at height.
- Maintenance free actuator, eliminates the need for rotational cylinders and chains.
- 4 210mm turret head designed for 1590kg capacity. One of the smallest yet strongest turret heads on the market. Top and Bottom mounting provides incredible load stability.
- Clear forward visibility and fork tip visibility, whether in the seated or standing position.
- 6 Large cabin space and ergonomic controls keep operators comfortable throughout their shift.

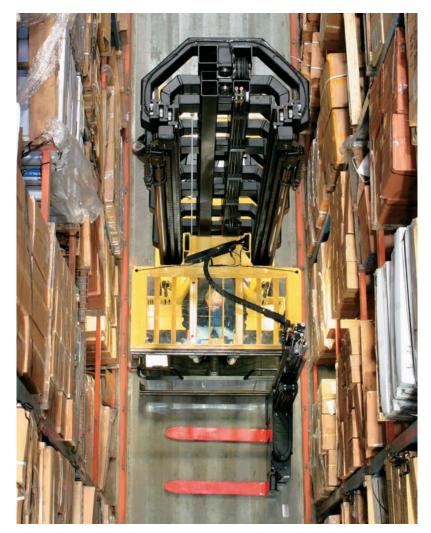
- Operator's compartment comes standard with work lights, cabin light, automotive style cooling fans and swivel seat.
- 8 Large operator foot sensors under the soft rubber mat.



- 9 Flashing light on the underside of the cabin promotes safety.
- Bolt on side bearings and centre concentric bearings allow fast, simple maintenance and adjustment.
- Tri form or Quad form mast available, with lift heights up 17000mm, with minimum mast deflection.
- 12 Fully welded closed chassis creates a ridged structure reducing mast sway.
- Eccentric load axles with load wheel braking on the C1.5M and C1.5L models.
- Cables and hoses are routed inside the mast, providing protection and increased operator visibility.
- 7 different models, with 48V or 80V battery, provide the right machine for the application.
- Patented Hydraulic System, allows the operator to perform different functions simultaneously.
- CANbus electronic system monitors truck operating condition and can anticipate maintenance requirements.
- Automatic load weight sensor, standard on all models.

  Automatically weighs the pallet and then calculates maximum traction speeds at different heights.



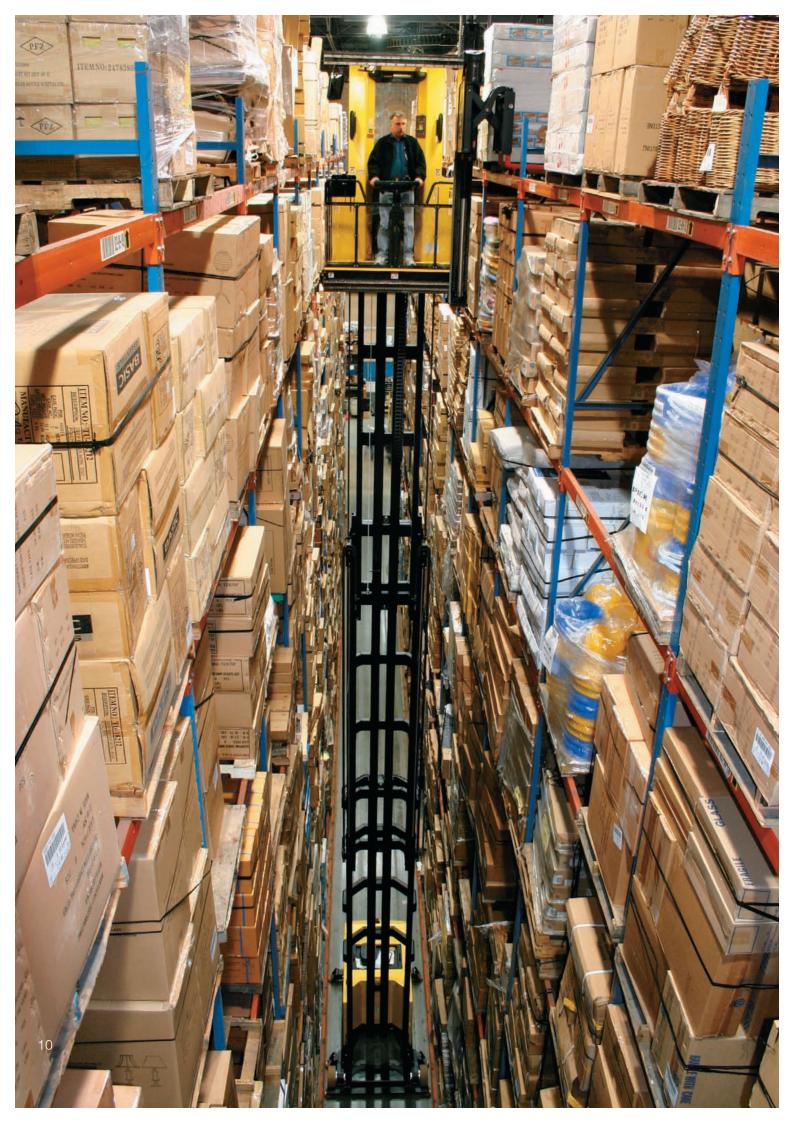




#### **Dependability**

Every Hyster warehouse truck is the product of the most intensive and advanced research, design, testing and manufacturing techniques in the industry. They are built using the most robust, high quality components sourced from around the world. The trucks deliver maximum dependability even in the most difficult applications.

- A stringent reliability testing programme runs throughout the development process: from stress analysis and endurance to thermal and stability testing as well as field tests in customer applications.
- Maintenance free AC motors, the CANbus electronic communication system and thermal management systems consistently deliver superior reliability.
- The tri form or quad-form masts are designed to lift up to 17 000 mm whilst maintaining stability and torsional strength. Uniquely on a product in this class, the design eliminates the need for additional support or bracing.
- Fully welded closed chassis creates a ridged structure which promotes long term durability.



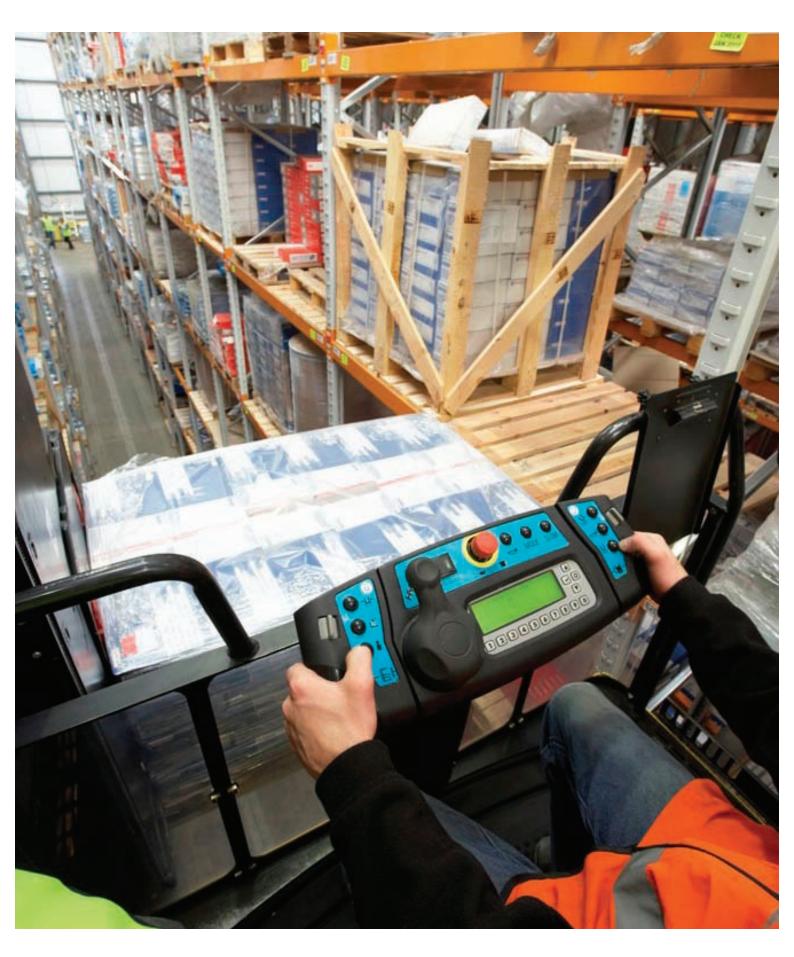


### **Cost of Ownership**

The proven dependability of Hyster VNA trucks is combined with the smart use of modern technology and a strategy of component commonality, to maximize productivity and minimize operational costs.

With a combination of performance and extended battery life, complemented by a strong focus on driver comfort and productivity, the overall result is, quite simply, lower lifetime costs for the customer.

- The advanced CANbus electronic communication system and sealed motors improve maintenance intervals to 1000 hours between services.
- Long battery life keeps the truck working through extended shifts
- Wide range of truck configurations and options allows each customer to select the most productive and cost efficient model for his application.



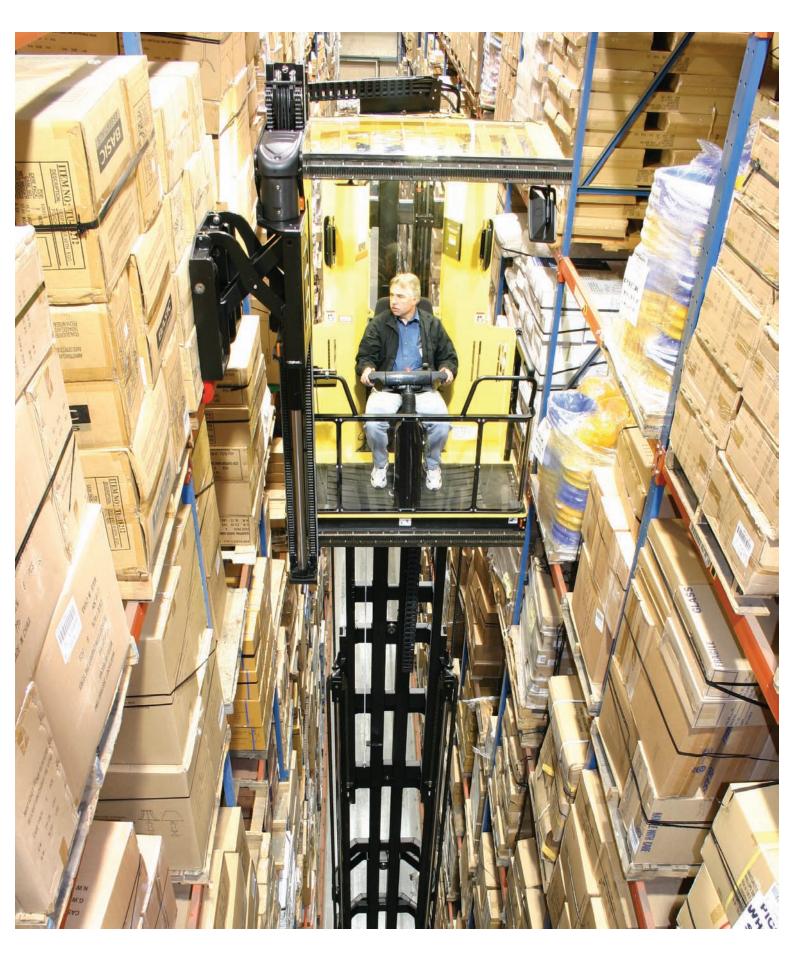




### **Ergonomics**

Working at heights up to 17 000 mm, operators must be comfortable and confident if they are to deliver maximum productivity. The man-up design of Hyster VNA trucks means that operators always work at the height adjacent to the load, forks and racking, which is ideal for load handling and order picking. Advanced operator cab features and controls look after their comfort all shift long.

- Spring-loaded, return to centre seat rotating up to 20%, and adjustable to suit a wide range of operator weights.
- > Increased cab depth to offer more leg room.
- > Fully adjustable operator controls, for standing and seated positions.
- > A choice of forward mounted or seat side controls to suit the application.
- > Large operator foot sensors under the soft rubber mat.
- > Excellent forward and fork visibility.







#### **Productivity**

Innovative, advanced features on the Hyster C series of VNA trucks boost operating performance and efficiency. Powerful AC traction and hydraulic motors deliver fast travel and lift speeds to maximize load handling and throughput.

- 2 x 15kw hydraulic motors (on the 80v models) provide 30kw of power.
- 210 mm turret head, designed to handle 1590 kg capacity loads, allows the truck to work in the smallest of aisles with maximum side clearance.
- Integral pantograph on the turret head eliminates the need for double-biting. Thus reducing the total time to put away each pallet

- Excellent fork tip visibility makes handling easier and keeps load damage to a minimum.
- Load weight sensor monitors the weight of each pallet and automatically adjusts the speed of operation of the truck
- Simultaneous operation of truck functions such as travel, lifting and lowering, traverse and pivot control deliver faster productivity.





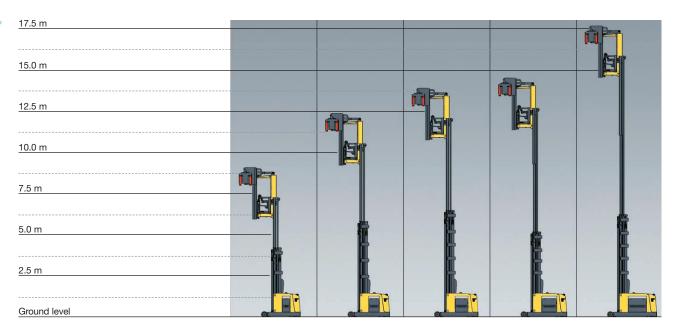


### **Serviceability**

With low maintenance costs and long service intervals Hyster VNA trucks work for the customer whenever they are needed.

- > The highest build quality and the use of the highest quality components results in lower maintenance requirements, saving time and money.
- Diagnostic data is delivered quickly to the dash display, via the CANbus electronic communication system, making it easy to monitor truck operating condition and plan maintenance.
- > Easy service access speeds up maintenance and reduces downtime.
- > 1000 hour service intervals

## **VNA Configurations**



	C1.0	C1.3	C1.3L	C1.3	C1.5S	C1.5M	C1.5L
		48 V			80	) V	
TRIFORM Mast	•	•	•	•	•		
Unique QUAD Mast						•	•
Maximum shift life performance - low duty applications	•	•					
Maximum shift life performance - medium duty applications		•	•				
Maximum shift life performance - heavy duty applications			•		•		
Maximum shift life performance - heavy duty & high travel/lift speeds				•	•		
Maximum productivity - high lift & heavy duty applications						•	
Maximum productivity - very high lift & heavy duty applications							•

Model	C1.0	C1.3	C1.5
Capacity	1000 kg	1 300 kg	1 500 kg
Voltage	48V	48/80V	80V
Chassis Length 48V	3 538 mm	3 698 mm 3 818 mm (LWB)	
Chassis Length 80V		3 698 mm	3 818 mm (SWB) 3 948 mm (MWB) 4 143 mm (LWB)
Maximum Fork Height (1200 mm deep pallet)	8 760 mm	13 400 mm	16 100 mm
Aisle Size	1 650 mm	1 650 mm	1 650 mm
Mast Type	Tri Form 2-stage	Tri Form 2-stage / 3-stage	Tri/Quad Form 2-stage / 3-stage





### Hyster 24/7 support

In today's demanding business environment Warehouse and Logistics operators need a supplier who can understand the needs of their operation, both today and tomorrow.

Hyster and its distribution partner network have the capability to support intensive warehouse operations with value added solutions and dependable products, 24 hours a day, 7 days a week.

#### Including:

- Consultation on the most effective warehouse layout to maximise space utilisation, throughput efficiency and profitability.
- > A comprehensive product line-up to support the widest range of warehouse applications.
- Expert advice on the right mix of warehouse equipment to increase storage and throughput efficiency, and to minimise the cost of fleet ownership.

- > The ultimate in truck dependability leading to low maintenance costs and elimination of unnecessary interruptions to productivity.
- > Trucks equipped to look after the comfort and well being of each truck operator, to ensure optimum productivity.
- The most innovative, cost effective and proven technological solutions, to give each customer's business an advantage.
- The Hyster Warehouse range includes pallet trucks, stackers, reachtrucks, order pickers and very narrow aisle trucks offering solutions to a vast range of customer needs.

Strong Partners. Tough Trucks. For Demanding Operations Everywhere.









#### 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.



00/00/TLC Printed in England Form No. 000000

Hyster Europe, Flagship House, Reading Road North, Fleet, Hants GU51 4WD, England.

Tel: +44 (0) 1252 810261 Fax: +44 (0) 1252 770702 Email: info@hyster.co.uk http://www.hyster.co.uk

A division of NACCO Materials Handling Limited.



Hyster,® **HYSTER**,® & Monotrol® are registered trademarks of Hyster Company in certain countries. Fortens; Pacesetter VSM; DuraMatch; DuraMatch Plus; TouchPoint; TouchControl; EZXchange; HSM & Vista are trademarks of Hyster Company in the United States and in certain countries where rights in unregistered trademarks are recognised.