

H28XD-CH & H32XD-CH SERIES



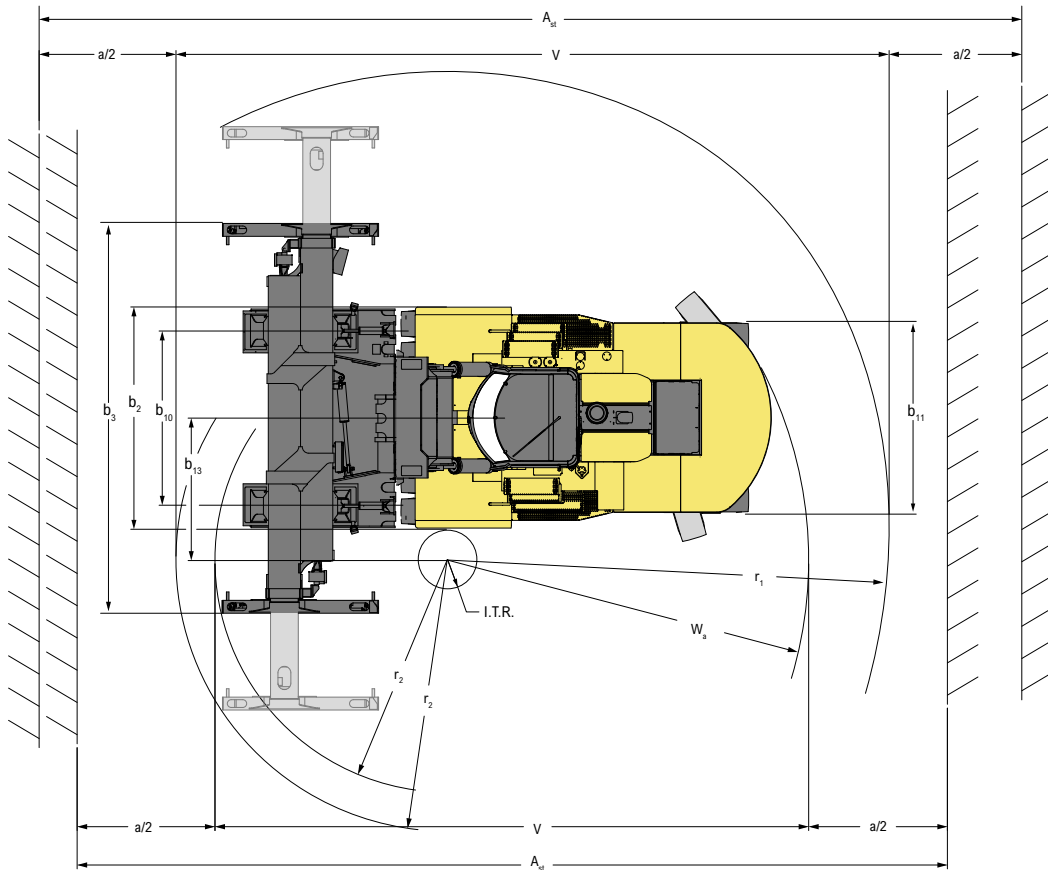
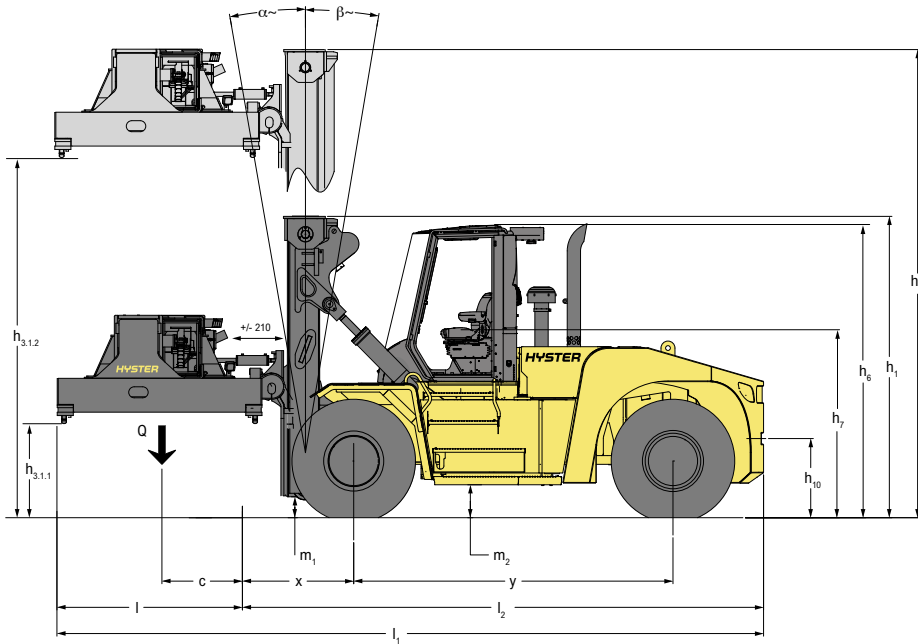
CONTAINER HANDLER


PRODUCT TECHNICAL GUIDE



WWW.HYSTER.COM

TRUCK DIMENSIONS



 = Centre of gravity of unladen truck

$$A_{ST} = W_a + x + l_6 + a \text{ (if } b_{12}/2 < b_{13}\text{)}$$

$$A_{ST} = W_a + ((l_6 + x)^2 + (b_{12}/2 - b_{13})^{0.5} + a \text{ (if } b_{12}/2 > b_{13} \text{ and } W_a > b_{13} \cdot b_{12}/2)$$

$$A_{ST} = b_{13} + b_{12}/2 \cdot ((l_6 + x)^2 + (b_{12}/2 - b_{13})^{0.5} + a \text{ (if } b_{12}/2 > b_{13} \text{ and } W_a < b_{13} \cdot b_{12}/2)$$

a = Minimum operating clearance = 10% of A_{ST}
(VDI standard = 200 mm BITA recommendation = 300 mm)

l_6 = load lengths

b_{12} = load width

H28XD-CH / H32XD-CH SPECIFICATIONS

			HYSTER					
			H28XD-CH		H32XD-CH			
GENERAL	1.1	Manufacturer	HYSTER					
	1.2	Model designation	H28XD-CH		H32XD-CH			
	1.3	Powertrain / drivetrain	Diesel					
	1.4	Operator type	Seat					
	1.5	Rated capacity / rated load	Q	kg	26,400	24,120	31,000	28,200
	1.6	Load centre distance	c	mm	1,220 / 1,430			
	1.8	Load distance (1)	x	mm	957			
	1.9	Wheelbase	y	mm	4,315		4,825	
	1.10.1	Container Stacking Height 9ft 6"	2 high					
	1.10.2	Container Stacking Height 8ft 6"	2 high					
WEIGHT	2.1	Service weight (2)		kg	51,553		51,806	
	2.2	Axle loading, laden front / rear		kg	72,084	5,869	77,054	5,752
	2.3	Axle loading, unladen front / rear		kg	32,365	19,188	32,067	19,739
WHEELS	3.1	Tyres: L = Pneumatic, V = solid, SE = Pneumatic Shape Solid	Pneumatic					
	3.2	Tyres size, front	16.00 - 25 32PR					
	3.3	Tyres size, rear	16.00 - 25 32PR					
	3.5	Wheels, number front / rear (x = driven wheels)	x 4 / 2					
	3.6	Track width, front	b ₁₀	mm	2,424			
	3.7	Track width, rear	b ₁₁	mm	2,338			
DIMENSIONS	4.1	Mast tilt : forward / backwards	α/β	deg	6 / 10			
	4.2	Height of mast lowered (unloaded) (3)	h ₁	mm	5,659			
	4.3	Free lift	h ₂	mm	0			
	4.4	Lift	h ₃	mm	6,115			
	4.4.1	Spreader distance from ground to twistlocks min./max (4)	h ₁₃	mm	1,257 / 7,372			
	4.5	Height of mast extended (unloaded)	h ₄	mm	8,716			
	4.7	Height of overhead guard (open cab)	h ₆	mm	3,495			
	4.7.1	Height of overhead guard (closed cab)	h ₆	mm	3,522			
	4.7.2	Height of overhead guard (closed cab w/ airco)	h ₆	mm	3,522			
	4.7.3	Height of overhead guard (closed cab w/ strobe light)	h ₆	mm	3,619			
	4.7.4	Height of overhead guard (closed cab w/ work lights)	h ₆	mm	3,671			
	4.7.5	Height of overhead guard (closed cab w/ airco & strobe light)	h ₆	mm	3,649			
	4.8	Seat height (Seat Index Point, ISO 5353) (5)	h ₇	mm	2,292			
	4.12	Coupling height	h ₁₀	mm	1,031			
	4.19	Overall length	l ₁	mm	8,747		9,257	
	4.20	Length to face of forks	l ₂	mm	6,309		6,819	
	4.21	Overall width truck	b ₂	mm	3,340			
	4.23	Carriage type	Dedicated carriage for ISO top lift spreader					
	4.24	Carriage width	b ₃	mm	3,390			
	4.31	Ground clearance, under mast (w/o load)	m ₁	mm	227			
	4.32	Ground clearance, centre of wheelbase	m ₂	mm	502			
	4.33.1	Load size	w x l	mm	20 ft x 9ft 6"			
	4.34.1.1	Load size	Ast	mm	10,569		11,267	
	4.34.1.2	Aisle width (a=10%)	Ast	mm	9,608		10,243	
	4.34.1.3	Aisle width (a=0)	Ast	mm	9,808		10,443	
	4.33.2	Aisle width (a=200 mm)	w x l	mm	40 ft x 9ft 6"			
	4.34.2.1	Aisle width (a=10%)	Ast	mm	14,981		15,120	
	4.34.2.2	Aisle width (a=0)	Ast	mm	13,619		13,745	
	4.34.2.3	Aisle width (a=200 mm)			13,819		13,945	
	4.35	Outside turning radius	W _a	mm	6,185		6,848	
4.36	Internal turning radius (6)	b ₁₃	mm	2,589		3,013		
PERFORMANCE	5.1	Travel speed laden/unladen T3 (7)		km/h	25 / 25			
	5.2	Lifting speed laden/unladen 90cc T3		m/s	0.27 / 0.29			
	5.3	Lowering speed laden/unladen		m/s	0.50 / 0.50			
	5.5	Drawbar pull laden/unladen @ 1.6 km/hour T3		kN	196 / 201		195 / 201	
	5.6	Drawbar pull laden/unladen @ stall T3		kN	239 / 244		238 / 243	
	5.7	Gradeability laden/unladen @ 1.6 km/hour T3 (8)		%	27 / 42		25 / 42	
	5.8	Gradeability laden/unladen @ stall T3 (8)		%	33 / 42		31 / 42	
	SPREADER	9.1	Manufacturer / type	ELME 812				
9.2		Design	Top lift spreader					
9.3		Size of containers	feet	20' & 40'				
9.4		Side shift	b ₈	mm	+/- 217			
9.5		Pile slope spreader	° / type	deg	+/- 3.0 / mechanical			
9.6		Rotation	°	deg	+/- 4.5			
9.7		Longitudinal adjustment		mm	+/- 210			
9.8		Telescoping time, extend / retract		s	12 / 12			

(1) Centre of drive axle to front face of spreader

(2) Weights are based on the following specifications: Complete truck with cab, pneumatic tyres, mast as specified, carriage as specified and 20' – 40' spreader.

(3) Unladen with new tyres

(4) Spreader, distance from ground to twistlocks.

(5) Full suspension seat in depressed position

(6) Distance centre truck to centre of internal turning radius

(7) Travel speed laden/unladen limited at 25 km/h as factory default

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

MAST AND CAPACITY INFORMATION - 28-32T

H28XD-CH

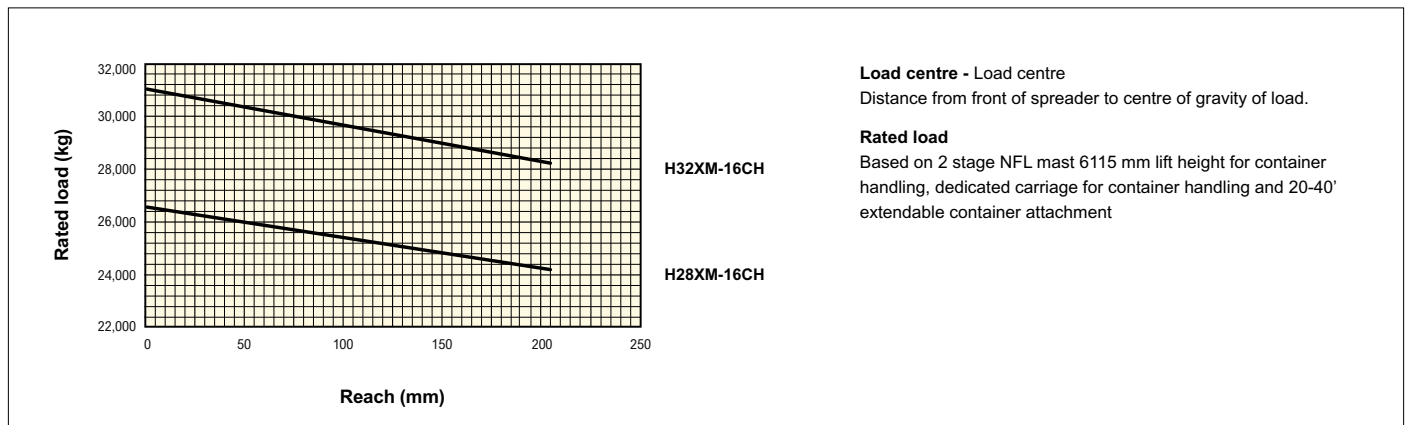
	Stacking height	Lift height h_3 (mm)	Min. under twistlock $h_{3.1.1}$ (mm)	Max. under twistlock $h_{3.1.2}$	Lowered height h_1	Extended height h_4 (mm)	Side shift b_3 (mm)	Tilt fwd/bwd ($^\circ$)	Overall width b_2 (mm)	Capacity spreader retracted	Capacity spreader extended
										c_1 @ 1.430 mm	c_1 @ 1.640 mm
										(kg)	
2 STAGE NFL	2 high 8'6"	6,115	1,239	7,354	5,659	8,716	+/- 216	6/10	3,340	26,400	24,120
	2 high 9'6"	6,115	1,239	7,354	5,659	8,716	+/- 216	6/10	3,340	26,400	24,120
	3 high 9'6"	9,145	1,239	10,384	7,174	11,746	+/- 216	6/10	3,340	26,300	23,680
	4 high 8'6"	9,755	1,239	10,994	7,479	12,356	+/- 216	6/10	3,340	25,740	23,380

H32XD-CH

	Stacking height	Lift height h_3 (mm)	Min. under twistlock $h_{3.1.1}$ (mm)	Max. under twistlock $h_{3.1.2}$	Lowered height h_1	Extended height h_4 (mm)	Side shift b_3 (mm)	Tilt fwd/bwd ($^\circ$)	Overall width b_2 (mm)	Capacity spreader retracted	Capacity spreader extended
										c_1 @ 1.430 mm	c_1 @ 1.640 mm
										(kg)	
2 STAGE NFL	2 high 8'6"	6,115	1,239	7,354	5,659	8,716	+/- 216	6/10	3,340	31,000	28,200
	2 high 9'6"	6,115	1,239	7,354	5,659	8,716	+/- 216	6/10	3,340	31,000	28,200
	3 high 9'6"	9,145	1,239	10,384	7,174	11,746	+/- 216	6/10	3,340	31,000	27,800
	4 high 8'6"	9,755	1,239	10,994	7,479	12,356	+/- 216	6/10	3,340	30,640	27,720

Based on 18.00 - 33 tyre w/o load; radius 880 mm

RATED CAPACITIES



Load centre - Load centre

Distance from front of spreader to centre of gravity of load.

Rated load

Based on 2 stage NFL mast 6115 mm lift height for container handling, dedicated carriage for container handling and 20-40' extendable container attachment

NOTES:

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. Inform your dealer of the nature and condition of the intended operating area when purchasing your Hyster® truck.

All capacities are according to EN1551.

NOTICE:

Care must be exercised when handling elevated loads. Operators must be trained and must read, understand and follow the instructions contained in the Operating Manual.

All values are nominal values and they are subject to tolerances.

For further information, please contact the manufacturer.

Hyster products are subject to change without notice.

Lift trucks illustrated may feature optional equipment.

Values may vary with alternative configurations.

CERTIFICATION: Hyster lift trucks meet the design and construction requirements of B56.1-1969, per OSHA Section 1910.178(a)(2), and also comply with the B56.1 revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck. Performance specifications are for a truck equipped as described under Standard Equipment on this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature, condition of the operating area, proper service and maintenance of the vehicle. If these specifications are critical, the proposed application should be discussed with your dealer.

NOTE: Specifications, unless otherwise listed, are for a standard truck without optional equipment.

Specification data is based on VDI 2198.



Safety: Truck with Stage V engine conforms to the current EU requirements.

GENERAL	1.1	Manufacturer			HYSTER	
	1.2	Model designation			H28XD-CH	H32XD-CH
	1.3	Power: Battery, Diesel, LPG, Electric mains			Diesel	
ENGINE	7.1	Engine manufacturer / model			Cummins / QSB 6.7	Mercedes Benz / OM936
	7.1.1	EPA / CE Compliance			Stage IIIA / IV	Stage V
	7.2	Engine output according to ISO 1585		kW@rpm	194	180
	7.2.1	Max engine output according to ISO 1585		kW@rpm	201	180
	7.3	Rated speed		min ⁻¹	2,200	
	7.3.1	Torque at 1/min		Nm / min ⁻¹	990 @ 1,500	1000 @ 1200-1600
	7.4	Number of cylinders / displacement		# / cm ³	6 / 6,690	6 / 7,698
	7.5	Fuel consumption in accordance to VDI		l/h	Call	
	7.8	Alternator		A	120	100
	7.10	Battery voltage/nominal capacity		V / Ah	24 / 102	
MISC	10.1	Working pressure for attachments		bar	22.5	
	10.2	Oil volume for attachments		l/m	100	
	10.3	Hydraulic oil tank, capacity		l	274	
	10.4	Fuel tank, capacity		l	364	
	10.4.1	DEF tank, capacity (Stage IV only)		l	38	
	10.5	Steering design		Type	Hydraulic power steering	
	10.6	Number of steering rotation			6	
	10.7	Sound pressure level at the driver's seat LpAZ EN12053 (1)	Lpaz	dB(A)	Call	
	10.7.1	Sound power level during the workcycle LwAZ EN12053 (2)	Lwaz	dB(A)	Call	
	10.8	Towing coupling, type DIN			Yes / Pin	

DRIVETRAIN	8.1	Type of drive unit		Type	Torque Converter	
	8.6	Transmission manufacturer / type		Type	ZF - 5WG211	
	8.4	Wheel drive / drive axle manufacturer / type		#	Axle Tech PRC3806W4H	
	8.5	Service brake		Type	Oil immersed disc	
	8.5	Parking brake		Type	Dry disc on drive axle	

- (1) Measured according to the test cycles and based on the weighting values contained in EN12053.
(2) Data available on request, as values are dependent on application

STANDARD EQUIPMENT AND OPTIONS

PERFORMANCE	STD	OPT
Mercedes 6R1000 7.7L Stage V Diesel Engine: Rated/Peak Power 241hp / 180kW	X	
Cummins QSB 6.7L Stage IIIA / IV Diesel Engine: Rated Power 260hp / 194kW - Peak Power 270hp / 201kW		X
ZF WG211 5-Speed Transmission with 5 Speeds Forward and 3 Speeds Reverse	X	
DRIVE	STD	OPT
Pneumatic Radial Drive Tyres - Michelin XZM / 16.00-R25		X
Pneumatic Radial Steer Tyres - Michelin XZM / 16.00-R25		X
Pneumatic Radial Spare Wheel - Michelin XZM / 16.00-R25		X
Steer Wheel Lug Protection Rings	X	
Conditional Travel Speed Limiter pre-set to 10 mph (16km/h) - Adjustable - Based on load weight		X
Pneumatic Bias Ply Drive Tyres - Continental ContainerMaster / 16.00-25 32PR	X	
Pneumatic Bias Ply Steer Tyres - Continental ContainerMaster / 16.00-25 32PR	X	
Spare Wheel - Continental ContainerMaster / 16.00 x 25-32	X	
LIFT	STD	OPT
2 Stage Non Free Lift Mast - 187" (6155mm) Maximum Lift Height - 171" (5660mm) Overall Lowered Lift Height - for 2-high stacking of 9'6" containers	X	
2 Stage Non Free Lift Mast - 364" (9255mm) Maximum Lift Height - 283" (7175mm) Overall Lowered Lift Height - for 3-high stacking of 9'6" containers		X
2 Stage Non Free Lift Mast - 388" (9860mm) Maximum Lift Height - 295" (7480mm) Overall Lowered Lift Height - for 4-high stacking of 9'6" containers		X
Mast Tilt - 6° Forward / 10° Back	X	
Hyster® 812 20-40ft Telescopic Spreader	X	
Dedicated Carriage	X	
Hydraulic Spreader Stop at 30-ft Position		X
7 Functions (5 Auxiliary) Hydraulic Control Valve	X	
7 Function Hose Group (5 Auxiliary)	X	

HANDLING	STD	OPT
Automatic Hydraulic Spreader Stop at 20-40ft Position		X
Spreader Guides located at end of Spreader End Beams	X	
Automated One-touch Spreader Extend/Retract (20'-40')		X
Overlowering Protection		X
4 Lifting Eyes Located under Centre Beam of Spreader		X
ERGONOMICS	STD	OPT
Enclosed Operator Cabin with Heating	X	
Enclosed Operator Cabin with Automatic Climate Control		X
Automatic Climate Control off with open door		X
Manual Tilt Operator Compartment for Service Access	X	
Powered Tilt Operator Compartment for Service Access		X
Top Window with Armoured Glass (FOPS Certified)	X	
Top Window with Armoured Glass and Steel Bars (FOPS Certified)		X
Mechanical Full Suspension Cloth Seat	X	
Mechanical Full Suspension Vinyl Seat		X
Air Suspension Seat with Cloth Cover		X
Air Suspension Seat with Vinyl Cover		X
Deluxe Air Suspension Seat with Cloth Cover		X
Deluxe Air Suspension Seat with Vinyl Cover		X
Deluxe Air Suspension Seat with Cloth Cover and Heating		X
Deluxe Air Suspension Seat with Cloth Cover, Heating and Ventilation		X
Seat Belt - High-Visibility (Red) - 2 Point	X	
Seat Belt - High-Visibility (Red) - 3 Point		X
High and Adjustable Seat Backrest		X
Lateral Sliding Mechanism for Operator Seat		X
I-pattern Wiper on Front Window	X	
H-pattern Wiper on Front Window		X
Reading Light		X

STANDARD EQUIPMENT AND OPTIONS

ERGONOMICS (continued)	STD	OPT
Sun Roller Screens for Top and Rear Windows		X
2 Sun Visors for Front Window		X
Radio Preparation with 2 Speakers and Antenna		X
Bluetooth Radio with 2 Speaker and Antenna		X
Heated Top Window		X
Heated Rear Window		X
Heated Top and Rear Window		X
Trainer Seat with Cloth Cover and 2-point Seatbelt		X
Recirculation Fan		X
Sun Roller Screens for Top and Rear Windows		X
Interior Dome Light	X	
Dimmable Interior Light		X
Accessory Mounting Bracket on A-Pillar		X
Document Holder		X
7" Integrated Performance Display	X	
Armrest on Leftside	X	
Joystick Hydraulic Controls- Non Clamp	X	
Lever Shift Direction Control - Mounted on Left Hand Side of Steering Column		X
Directional Control on Joystick	X	
2 External Wide Angle Mirrors mounted on Cab Handrail	X	
Emergency Hydraulic Stop on Armrest		X
Tyre Pressure Monitoring System		X
Load Weight Indicator		X
Performance Modes Selectable in Display	X	
Coolant level warning on display	X	
Coolant level warning on display and Sight glass		X
Preventative Maintenance Reminder		X
DC/DC 24/12V Converter with 1 Power Socket and 2 USB Outlets		X
DC/DC 24/12V Converter with 2 Power Sockets and 2 USB Outlets		X
Audible Alarm - Reverse Direction Activated - Self-Adjusting 82-102 dB(A)	X	
Amber Strobe Light - Ignition and Switch Activated	X	
Blue LED Spotlight - Rear - Reverse Direction Activation		X
VISIBILITY	STD	OPT
4 Halogen Work Lights Cab Mounted Front	X	
4 LED Work Lights Cab Mounted Front		X
4 High Performance LED Work Lights Cab Mounted Front		X
2 Halogen Cab Mounted Rear	X	
2 LED Cab Mounted Rear		X
2 High Performance LED Cab Mounted Rear		X
2 Halogen Drive Lights Front Fenders	X	
2 LED Drive Lights Front Fenders		X
2 LED Rearward Cluster with Stop, Tail and Reverse Lights	X	
Directional Lights on Front Fender and Rear Cluster	X	
OPERATION	STD	OPT
Electronic Horn 105 db(A)	X	
Air Horn 112 db(A)		X
Truck Start - Key Switch - without Seatbelt Interlock		X
Truck Start - Key Switch - with Seatbelt Interlock		X
Truck Start - Key Switch with Start Button - without Seatbelt Interlock	X	
Truck Start - Key Switch with Start Button and Seatbelt Interlock		X
Truck Start - Key Switch with Start Button - with Seatbelt Interlock on Sequence	X	
Operator Password in Display - Required for Truck Start		X
Tyre Pressure Monitoring System (SPED)		X
Engine Block Heater - 230V		X
Fuel Cap - Non Lockable	X	
Fuel Cap - Lockable		X
Jump Start Connector to Battery		X
Park Brake - Manual	X	
Park Brake - Automatic		X
Hydraulic System Temperature Protection with Performance De-rate		X

OPERATION (continued)	STD	OPT
Automatic Engine Shutdown with Timer		X
Travel Speed Limiter - Unconditional and Customer Adjustable - pre-set to 10mph (16km/h)		X
Delayed engine shutdown for turbo cooldown		X
Conditional Travel Speed Limiter pre-set to 10 mph (16km/h) - Adjustable - Based on load weight	X	
Fuses Partially Replaced by Electric Circuit Breakers		X
Stainless Steel Strainer In Fuel Neck		X
Hyster Tracker Wireless Monitoring - EMEA	X	
Hyster Tracker Wireless Verification		X
Hyster Tracker Wireless Monitoring - Wifi		X
Hyster Tracker Wireless Access HID Prox Card Reader		X
Hyster Tracker Wireless Access ISO Prox Card Reader		X
Hyster Tracker Wireless Access iClass MiFare Prox Card Reader		X
4 Lifting Eyes - 2 Front and 2 Rear		X
Automatic Greasing System for Base Truck		X
Automatic Greasing System for Mast		X
Automatic Greasing System for Spreader		X
Centralised Greasing System for Top End Outer Mast		X
Front and Rear Mud Flaps		X
Rear View Camera System with Rear-Mounted Display		X
Rear View Camera System with Front-Mounted Display		X
Belly Pan		X
Extra Insulation Kit for Sound and Temperature		X
Hydraulic Accumulator in Lift Circuit		X
Visual Mast Tilt Indicator (Mechanical)		X
Pressure Compensated Lowering		X
APPEARANCE	STD	OPT
Hyster yellow paint base truck	X	
Special paint base truck		X
Operator compartment special paint (outside only)		X
Hazard warning striping on counterweight		X
SUPPLEMENTAL	STD	OPT
Literature package and labels		X
Operator's manual	X	
CE certification		X
Warranty: 12 Months / 2,000 Hours Parts manufacturer's warranty		X
Warranty: 24 Months / 4,000 Hours Parts manufacturer's warranty	X	
Extended Protection Plan 36 Months / 6,000 Hours		X
Extended Protection Plan 60 Months / 10,000 Hours		X

* Standard or optional in selected markets. Other options available through Special Products Engineering Department (SPED). Contact Hyster for details.

Range of 2 Stage NFL Masts



DEDICATED CARRIAGE FOR TOP PICK
20' - 40' TELESCOPIC SPREADER 812



ELME 812 TOP LIFT SPREADER FOR DEDICATED CH CARRIAGE






HYSTER EUROPE
Centennial House, Building 4.5, Frimley Business Park,
Frimley, Surrey, GU16 7SG, United Kingdom

Visit us online at www.hyster.com or call us at **+44 (0) 1276 538500**.

HYSTER-YALE UK LIMITED trading as Hyster Europe.

Registered Address: Centennial House, Building 4.5, Frimley Business Park, Frimley, Surrey GU16 7SG, United Kingdom.

Registered in England and Wales. Company Registration Number: 02636775.

© HYSTER-YALE UK LIMITED. 2022, all rights reserved. Hyster and  are trademarks of Hyster-Yale Group, Inc.

Hyster products are subject to change without notice. Trucks may be shown with optional equipment.



Safety: This truck conforms to the current EU requirements