



# H10.00-12.00XM-12EC

## Empty container handlers, 6 000 - 7 000 kg @ 1 220 mm

#### **Durable truck design**

The H10.00-12.00XM-12EC series offers an optimum combination of rugged lift truck design and new Hyster spreader, to meet the productivity and reliability demands of empty container handling.

In addition to featuring a wide axle (extra wide for the 4-high stacking model) for excellent stability, this series features as standard: Wet disc brakes with oil cooler, load sensitive power steering and an engine and transmission protection system, with engine shut-down. The transmission has a protective lock-out system, preventing shifting from forward to reverse while in 3rd gear.

#### **Exceptional driver comfort**

The spacious Hyster "Vista" cab features excellent all-round visibility thanks to the clever overhead guard design and a side-mounted multi-function dashboard.

A single warning light, positioned centrally on the steering column, alerts the driver to any required action or intervention. This allows the operator to give his full attention to the container-handling task, rather than having to constantly monitor the dashboard and thus improves productivity.

The cab features a fully adjustable suspension seat with seat-mounted armrests, fully adjustable steering column and a choice of proportional pilot operation joystick or lever controls, for improved driver comfort.

This cab also features an exceptionally low noise level at driver's ear to further prevent driver fatigue.

The following options are available to further enhance driver comfort:

The unique Hyster Monotrol pedal; air-conditioning with manual temperature control; air suspension seat; autoshift gear change system with forward/reverse shifting lock-out above a pre-determined speed.

#### A complete spreader

The dedicated Hyster 20'-40' side lift empty container handling spreader is suitable for 8' to 9'6" high and 2 440-2 500 mm wide ISO containers.

The new design is available with a choice of two engagement systems: Vertical twistlocks or suspended hooks.

The spreader features a unique mast over-lowering interrupt system, which prevents further lowering of the mast when the spreader is landed on a container. This is signalled by a blue warning light in the cab and serves to protect the spreader, the header hoses, header cable and lift chains. (Not applicable to 'Suspended Hooks' system).

A lift counter on the spreader enables the number of containers handled to be monitored (not applicable to 'Suspended Hooks' engagement system).

#### Ease of serviceability

Access to the primary systems, such as the electrics, is made easy thanks to the side tilting cab. The gull-wing hood concept provides unrivalled access to the engine.

## H10.00XM-12EC, H12.00XM-12EC

	1.1	Manufacturer		HYSTER		HYSTER		1.1
rics	1.2	Model designation		H10.00XM-12EC		H12.00XM-12EC		1.2 HARACTERISTICS
SIS <sup>-</sup>	1.3	Power: battery, diesel, LPG, electric mains	Diesel		Die	esel	1.3 R	
臣	1.4	Operation: manual, pedestrian, stand, seat, orderpicker		Seat		Se	eat	1.4
SAC	1.5	Load capacity 🔺	Q (kg)	6 000		7 (	000	1.5
CHARACTERIST	1.6	Load centre	c (mm)	1 220		12	220	1.6 <b>H</b>
0	1.8	Load distance	x (mm)		070	1 070		1.0
	1.9	Wheelbase	<i>y</i> (mm)	3 300 3 300				1.9
E	2.1	Unladen weight, including front end kg 21 198		24	695	2.1 ≤		
/EIGHT	2.2	Axle loading with load, front/rear	kg	24 843	3 355	27 081	4 614	2.2
ME	2.3	Axle loading without load, front/rear	kg	12 987	8 211	15 225	9 470	2.1 <b>WEIGHT</b> 2.3
					•			
B	3.1	Tyres: L=pneumatic, V=solid, SE=pneumatic-shaped solid			L	L		3.1 🗲
TYRES	3.2	Tyre size, front			20 / 16PR	12,00 x 20 / 16PR		3.2
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	3.3	Tyre size, rear			20 / 16PR		20 / 16PR	3.3
Ë	3.5	Number of wheels, front/rear (X = driven)		4X	2	4X	2	3.5 °
WHEELS & .	3.6	Track width, front	b <sub>10</sub> (mm)		276		378	3.1 WHEELS 3.3 3.5 & TYRES 3.6 3.7
~	3.7	Track width, rear	b <sub>11</sub> (mm)	2	000	20	000	3.7 00
	4.1	Mast tilt, $\alpha$ = forward/ $\beta$ = back	degrees	5	5	5	5	4.1
	4.2	Height of mast, lowered	h <sub>1</sub> (mm)	5 -	406	6 9	901	4.2
	4.4	Lift height	h <sub>3</sub> (mm)	6 806		9 796		4.4
	4.5	Height of mast, extended	h <sub>4</sub> (mm)	9 295		12 285		4.5
	4.7	Cab height	h <sub>6</sub> (mm)	3 064		3 064		4.7
S	4.8	Seat height h <sub>7</sub> (mm)		1	791	1 791		4.8
NO	4.12	Towing coupling height	h <sub>10</sub> (mm) 684		84	684		4.12
DIMENSIONS	4.19	Overall length	l <sub>1</sub> (mm) 5 443				563	4.19 4.20 4.20
IMIC	4.20	Length to load face	l <sub>2</sub> (mm)	5 277 2 617 225		5 397 3 187 225		4.20
	4.21	Overall width	b <sub>2</sub> (mm)					4.21
	4.31	Ground clearance under mast, with load	m <sub>1</sub> (mm)					4.31
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)		46	272		4.32
	4.33	Aisle width with 20' Container	Ast (mm)		524	9 506		4.33
	4.34	Aisle width with 40' Container	Ast (mm)	14 855		14 849 4 685		4.34
	4.35	Outer turning radius	W <sub>a</sub> (mm)	4 :	4 579		4 685	
	5.1	Travel speed with/without load	km/h	25,9	27,5	25,9	27,5	5.1
NCE	5.2	Lifting speed with/without load	m/sec	0,42	0,62	0,42	0,62	5.2
MA	5.3	Lowering speed with/without load	m/sec	0,47	0,45	0,47	0,46	5.3
ERFORMANCE	5.5	Drawbar pull with/without load	N (at 1,5 km/h)	95 000	90 100	95 000	95 000	5.5 A
ER	5.7	Gradeability with/without load +	% (at 1,5 km/h)	35	47	31	42	5.2 5.3 5.5 5.7 5.7
	5.10	Service brake		Hydraulic		Hydraulic		5.10
	7.1	Engine manufacturer/type		Cummins	QSB 30	Cummins	QSB 30	7.1
ш	7.2	Engine output, in accordance with ISO 1585	kW		16		16	7.2
GIN	7.2.1	Engine torque	Nm/rpm	597	1 500	597	1 500	
ENGI	7.3	Governed speed	rpm	2 300			300	7.2.1 G 7.3 E
	7.4	Number of cylinders/displacement	cm <sup>3</sup>	6	5 900	6	5 900	7.4
	0.4	Transmission		· · · · · ·				0.4
	8.1	Transmission	har	3-speed hydrodynamic		3-speed hydrodynamic		8.1
2	8.2	Working pressure for attachments Oil flow for attachments	bar	165 93,4		165		8.2 8.3
OTHER	8.3 8.4	Noise level (Npaz) inside the Hyster Vista cab (EN12053)	l/min dB (A)		3,4 74	93,4 74		8.3 8.4 0THER
Ö	8.4 8.4.1	Noise level (Lwaz) inside the Hyster Vista Cab (EN 12053)	dB (A)		4 11	74 111		8.4.1
	8.5	Towing coupling type			in	111 Pin		8.5
					0.0			

## Equipment and weight:

Weights (line 2.1) are based on the following specifications:

Complete truck with cab, pneumatic tyres, mast as specified and 20'-40' side lift empty container handling spreader.

## Fuel tank capacity:

H10.00-12.00XM-12EC: 128 litres

#### Truck dimensions





= Centre of gravity of unladen truck

r1 = radius of swing of container rear corner

r<sub>2</sub> = radius of swing of container front corner

a = total operating clearance, a/2 is operating clearance at each side

 $W_a$  = outside turning radius of the truck

v = (theoretical) 90° stacking aisle width, no intrusive stacking

=  $r_2$  + the larger of  $r_1$  or  $W_a$ 

Ast<sub>4</sub> = (practical) 90° stacking aisle, no intrusive stacking and with clearance

= v + a = v + 10%

Model		H10.00XM - 12EC	H12.00XM - 12EC
	d	1 283	1 278
	е	848	968
Dimensions (mm)	f	44°	37°
Dimensions (mm)	g	1 135	1 135
	h	3 463	3 463
	j	1 265	1 481

#### 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.

- Including 10% operating clearance ٠
- Standard, non-reefer container. For rating with reefer containers contact SPED.
- Gradeability figures (line 5.7) + 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 operation on inclines.

All specifications and capacities quoted in the mast and capacity information tables are valid for trucks equipped with a Hyster empty container handling attachment and for handling ISO containers which are 8' wide and 8'-9'6" high.

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#### CE Safety:

This truck conforms to the current EU requirements.

# Spreader options



'3-Colour, 4-lights' container spreader indicator lights are provided (not applicable to 'Suspended Hooks' engagement system) and signal engagement as follows: Left-hand amber light indicates "landed"; green light indicates "locked"; red light indicates "unlocked" and the right-hand amber light indicates "landed".

Two sets of indicator lights are fitted: One set of 4 lights on the left-hand side of the spreader, plus one set of 4 lights in the cab (plus a blue light for the lift interrupt function).

Mechanical interlock (not applicable to 'Suspended Hooks' engagement system) mechanically locks the twistlocks unless the landing pins are properly pushed in.

Lift interrupt (Not applicable to 'Suspended Hooks' engagement system) interrupts the lift mode if the twistlocks are not in a fully locked/unlocked position.

Alternative controls are available as options: Hyster Monotrol pedal, instead of a forward/reverse directional lever and Joystick control for the hydraulic function instead of levers.

A full light kit is fitted, consisting of:

4 front work lights, 2 front head lights, 2 front side lights, 2 rear work/drive lights, 2 combination tail-, stop- and back-up lights, 4 indicators with hazard switch and 2 wide-beam work lights on the Hyster spreader.

#### Engine & transmission protection system H10.00XM-12.00XM-12EC

The new Vista cab features a side-mounted dash display with gauges, which work in conjunction with the Engine and Transmission Protection system, as detailed in the table below:

	Dash display warning lights	Dash display dial	Master steer pod warning light	Intermittent audible warning	Engine shut-down
Park brake	×			×	
Fasten seat belt	×				
Low engine oil pressure	0,41 bar	×	×	×	×
High engine coolant temperature	104°C	×	×	×	×
Low engine coolant level			×		
Fuel system water separator	×				
Engine filter restricted	×				
Glowplug (cylinder heaters) on	×				
Battery charge (alternator)	×				
Low fuel level	10%	×	×		
Hydraulic brake system low pressure	<b>O</b> 89,6 bar		0 <b>x</b>		
Hydraulic brake high oil temperature	<b>O</b> 110°C		<b>o x</b>		
Transmission low oil pressure	10,0 bar	×	×	×	
Transmission high oil temperature	120°C	×	×	×	
Transmission autoshift error		× (LCD)	0 <b>x</b>		
Engine hour meter	<b>o x</b>	× (LCD)			
Engine shut down warning			×	×	×

O Note: Only functions with optional feature

<sup>\*</sup> Note: Fitted to all truck models

## Mast and capacity information

	Vista masts H10.00XM-12EC							
	Stacking height/ container height	Recommended mast lift height/ attachment lift mm	Overall lowered height mm	Maximum under twistlocks/hooks mm	Capacity in kg at 1 220 mm load centre	Sideshift +/- mm		
Vista 3 high	8'6" 9' 9'6"	6 920 6 920 6 920	5 295 5 295 5 295	9 155 9 155 9 155	6 000 ▲ 6 000 ▲ 6 000 ▲	600 600 600		

### Vista masts H12.00XM-12EC

	Stacking height/ container height	Recommended mast lift height/ attachment lift mm	Overall lowered height mm	Maximum under twistlocks/hooks mm	Capacity in kg at 1 220 mm load centre	Sideshift +/- mm
Vista 3 high	9'6" 9'	6 920 6 920 6 920	5 295 5 295 5 295	9 155 9 155 9 155	7 000 ▲ 7 000 ▲ 7 000 ▲	250 250 250
Vista 4 high	9'6" 9'	9 910 9 910 9 910	6 790 6 790 6 790	12 145 12 145 12 145	7 000 ▲ 7 000 ▲ 7 000 ▲	250 250 250



## **Popular options**

- Engine pre-heater
- Electrically powered cab tilt
- Radial tyres
- Air conditioning
- Diesel cab heater
- Open operator's station
- Air suspended seat
- Second seat for training
- Monotrol<sup>®</sup> drive control

- Joystick hydraulic control
- 24V-12V DC-DC convertor
- Application specific spreader
- Hydraulic accumulator
- Back-up alarm or self-adjustable back-up alarm
- Exhaust purifier or spark arrestor
- Automatic greasing
- Load weight indicator
- Special RAL colours

## Highlifts

The rated capacities shown are for trucks equipped with dedicated 20'-40' telescopic empty container attachment and specified masts. Masts above these lift heights are classified as high lift and, depending on the tyre/tread configuration, may require reduced capacity, restricted back tilt or wide tread.

### Warning

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



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