

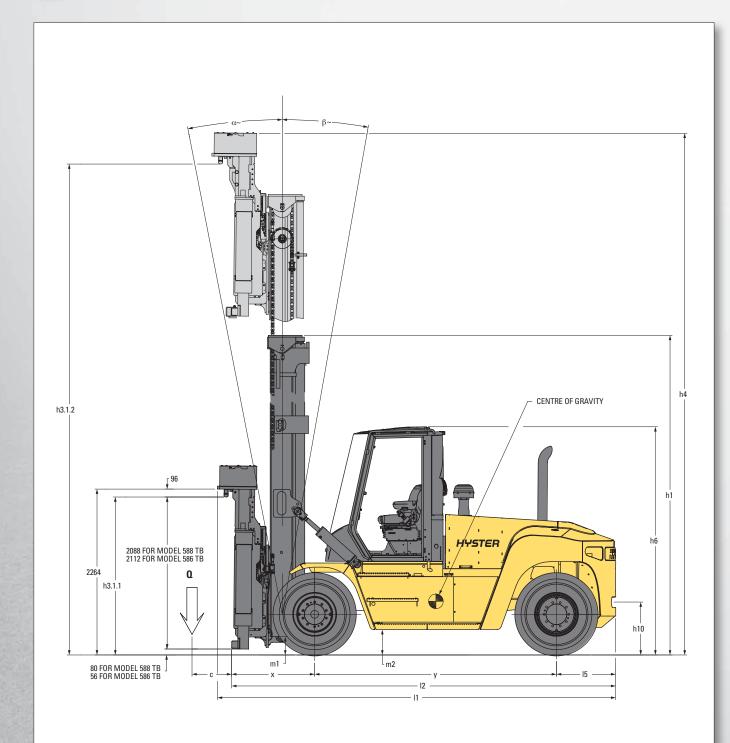


# H6-7XD-EC3-4 SERIES TECHNICAL GUIDE





### **DIMENSIONS**



= Centre of gravity of unladen truck

 $A_{ST} = W_a + x + I_6 + a \text{ (if } b_{12}/2 < b_{13}\text{)}$ 

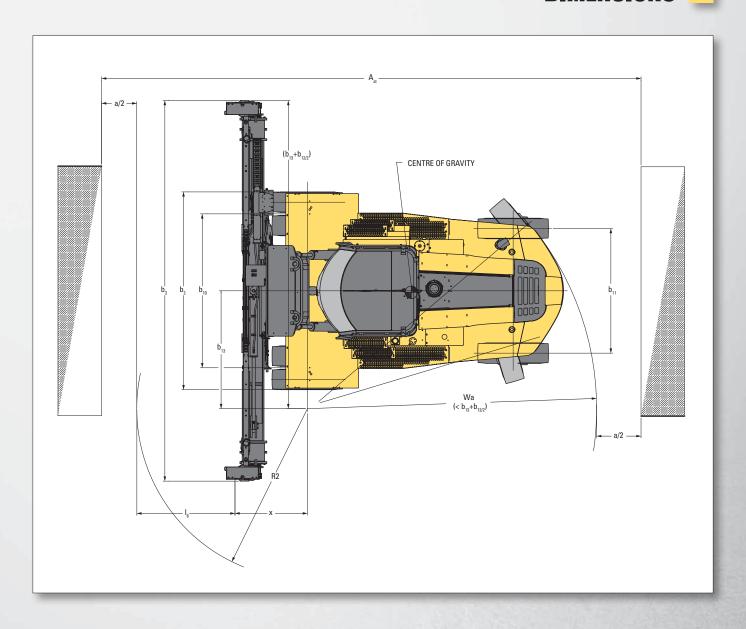
 $\begin{array}{lll} A_{ST} & = & W_a + ((I_6 + x)^{\Lambda 2} + (b_{12}/2 - b_{13})^{\Lambda 0.5} + a \text{ (if } b_{12}/2 > b_{13} \text{ and } W_a > b_{13+} \, b_{12}/2) \\ A_{ST} & = & b_{13} + b_{12}/2 \, ((I_6 + x)^{\Lambda 2} + (b_{12}/2 - b_{13})^{\Lambda 0.5} + a \text{ (if } b_{12}/2 > b_{13} \text{ and } W_a < b_{13+} \, b_{12}/2) \end{array}$ 

a = Minimum operating clearance = 10% of A<sub>ST</sub>

(VDI standard = 200 mm BITA recommendation = 300 mm)

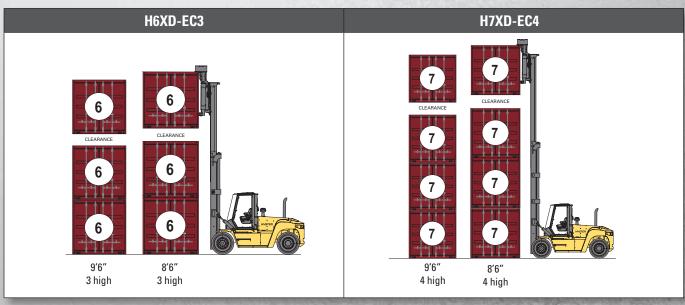
 $l_6$  = load lengths  $b_{12}$  = load width





## RATED CAPACITIES AND STACKING HEIGHTS <





### **H6XD-EC3 / H7XD-EC4 SPECIFICATIONS**

	11				1	TED	111/0	TED.	
GENERAL	1-1	Manufacturer			HYS		HYS		
	1-2	Model designation			H6XD-EC3  Diesel		H7XD-EC4		
	1-3	Powertrain / drivetrain					Diesel		
	1-4	Operator type			Seated		Seated		
	1-5	Rated capacity / rated load	Q	kg	6,000		7,000		
	1-6	Load centre distance	С	mm	1,2	20	1,220		
	1-8	Load distance (588 TB spreader / 586 TB spreader)	х	mm	1,133	1,210	1,133	1,210	
	1-9	Wheelbase	У	mm	3,3	300	3,3	00	
	1-10-1	Stacking height at first row (number x container height, in feet)	У	mm	3 X	8'6"	4 X	8'6"	
	1-10-2	Stacking height at first row (number x container height, in feet)	У	mm	3 X	9'6"	4 X 9'6"		
	2-1	Service weight (1)		kg	22,	736	25,1	049	
ξ	2-2	Axle loading with load, front / rear		kg	24,340	4,396	27,441	4,608	
	2-3	Axle loading without load, front / rear		kg	14,062	8,674	15,450	9,599	
	3-1	Tyre type			Pneu	matic	Pneumatic		
, a	3-2	Tyre size, front			12.00-2	0 20PR	12.00-20 20PR		
日萬日	3-3	Tyre size, rear			12.00-2	0 20PR	12.00-20 20PR		
WHEELS	3-5	Wheels, number front / rear (x = driven wheels)			4	2	4	2	
	3-6	Tread, front	b <sub>10</sub>	mm	1,8	42	1,8	42	
	3-7	Tread, rear	b <sub>11</sub>	mm	2,0	00	2,0	00	
	4-1	Mast tilt, forward / backward	α/β	deg	5°	6°	5°	6°	
	4-2	Height, mast lowered	h <sub>1</sub>	mm	5,1	93	6,6	93	
	4-3	Free lift	h <sub>2</sub>	mm	(	)	(	)	
	4-4-1	Spreader distance from ground to twistlocks, minimum.	h <sub>3.1.1</sub>	mm	2,151		2,151		
	4-4-2	Spreader distance from ground to twistlocks, maximum.	h <sub>3.1.2</sub>	mm	9,061		12,061		
	4-5	Height of mast, extended (unloaded) - top of spreader	h <sub>4</sub>	mm	9,459		12,459		
	4-7	Height of overhead guard (open cab)	h <sub>6</sub>	mm	3,083		3,083		
	4-7-1	Height of overhead guard (closed cab)	h <sub>6</sub>	mm	3,110		3,1	10	
	4-7-2	Height of overhead guard (closed cab w/ aircon)	h <sub>6</sub>	mm	3,110		3,1	10	
	4-7-3	Height of overhead guard (closed cab w/ strobe light)	h <sub>6</sub>	mm	3,2	05	3,2	05	
	4-7-4	Height of overhead guard (closed cab w/ work lights)	h <sub>6</sub>	mm	3,2	59	3,2	59	
ွ	4-7-5	Height of overhead guard (closed cab w/ aircon & strobe light)	h <sub>6</sub>	mm	3,2	35	3,2	35	
DIMENSIONS	4-8	Seat height to SIP	h <sub>7</sub>	mm	1,903		1,9	03	
NS.	4-12	Coupling height	h <sub>10</sub>	mm	717		71	7	
ĮΞ	4-16	Overhang	I <sub>5</sub>	mm	809		809		
	4-19	Overall length (588 TB spreader / 586 TB spreader)	l <sub>1</sub>	mm	5,455	5,532	5,455	5,532	
	4-20	Length to face of side lift spreader (588 TB spreader / 586 TB spreader)	l <sub>2</sub>	mm	5,242	5,319	5,242	5,319	
	4-21	Overall width	b <sub>2</sub>	mm	2,5	41	2,5	41	
	4-24	Attachment width, retracted/extended	b <sub>3</sub>	mm	6,106	12,238	6,106	12,238	
	4-30	Sideshift	b <sub>8</sub>	mm	40	00	400		
	4-32	Ground clearance, centre of wheelbase	m <sub>2</sub>	mm	34	11	341		
	4-34-3- <u>1</u>	Aisle width with 20' container, with 200 mm operating clearance (588 TB / 586 TB)	Ast <sub>20</sub>	mm	8,996	9,087	8,996	9,087	
		Aisle width with 20' container, with 10% operating clearance (588 TB / 586 TB)	Ast <sub>20</sub>	mm	9,676	9,776	9,676	9,776	
		Aisle width with 40' container, with 200 mm operating clearance (588 TB / 586 TB)	Ast <sub>40</sub>	mm	13,783	13,845	13,783	13,845	
	4-34-3-2	Aisle width with 20' container, with 10% operating clearance (588 TB / 586 TB)	Ast <sub>40</sub>	mm	14,942	15,009	14,942	15,009	
	4-35	Outside turning radius	Wa	mm	4,5	84	4,5	84	
	4-36	Internal turning radius	b <sub>13</sub>	mm	1,8	90	1,8	90	
	5-1	Travel speed, with / without load (2)		km/h	27.4	29.0	27.4	29.0	
빙	5-2	Lifting speed, with / without load		m/s	0.58	0.60	0.58	0.60	
MA	5-3	Lowering speed with / without load		m/s	0.50	0.48	0.50	0.48	
E S	5-5	Drawbar pull - 1.6 km/h   1 mph, with / without load		kN	109	110	109	110	
PERFORMANCE	5-5-1	Drawbar pull - stall, with / without load		kN	122	123	121	122	
	5-7	Gradeability - 1.6 km/h   1 mph, with / without load		%	42	36	37	35	
	5-7-1	Gradeability - stall, with / without load		%	48	36	42	35	
10000	1701	The second secon		1000					

#### 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.

- Based on Stage IV engine and and 588TB spreader
- Travel speed laden limited at 25 km/h as factory default
- Stage IV engine based on low mount exhaust

All capacities are according to EN1551.

Specification data is based on VDI 2198.

Safety: This truck conforms to the current EU and ANSI requirements.

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.

### **POWERTRAINS** <



_	1								
1-1 1-2 1-3	Manufacturer			HYSTER					
1-2	Model designation			H6XD-EC3 / H7XD-EC4					
1-3	Powertrain / drivetrain			Diesel					
7-1	Engine manufacturer / model			Cummins / QSB 6.7					
7-1a	EPA / CE compliance			Stage IV					
7-2	Engine power output according to ISO 1585		kW	122					
7-2-1	Engine power output - Peak		kW	125					
7-3 7-3-1	Rated speed		min <sup>-1</sup>	2,300					
	Engine torque @rpm (1/min)		Nm/min <sup>-1</sup>	732 @ 1,500					
7-4	Number of cylinders / displacement		# / cm3	6 / 6,700					
7-8	Alternator output		Amps	120					
7-9	Electrical system voltage		V	24					
7-10	Battery voltage, rated capacity		V / Ah	24 / 102					
8-1	Drive control / Transmission		Type / #	Hydrodynamic transmission					
8-2	Transmission manufacturer / type		Type / #	ZF / WG161					
8-4	Transmission speeds forward / backward		#	3/3					
8-5	Coupling		Туре	Torque Converter					
8-6	Wheel drive / drive axle manufacturer / type		Type / #	Kessler D81					
8-11	Service brake		Туре	Oil immersed (wet) disc					
8-12	Parking brake		Туре	Spring applied, dry disc on drive axle					
10-1	Operating pressure for attachments		bar	22.5					
10-2	Oil volume for attachments		I/m	100					
10-3	Hydraulic tank capacity		ı	140					
10-4	Fuel tank capacity		1	158					
10-4-1	DEF/AdBlue Tank capacity		ı	19					
10-4-1 10-5	Steering design			Hydraulic power steering					
10-6	Number of steering rotation			4.5					
10-7	Sound pressure level at driver's seat (3)	Lpaz	dB(A)	TBC					
10-7-1	Sound power level during the working cycle (3)	Lwaz	dB	105.1					
10-/-1									

### SINGLE CONTAINER SPREADER <



### **SINGLE CONTAINER SPREADER 586 TB**







Single container handling spreader Vertical Twistlocks

Removable "inset" container blocks Suitable for:

- 20' or 40' ISO containers of 8' (2.44 m) width
- WTP (Wide Twistlock Position) containers
- Approx. 2.45-2.60 m wide "CPC" containers (Cellular Pallet-wide Containers) with non-ISO top corners castings.
- With speed limitation for laden/unladen.

### **SINGLE CONTAINER SPREADER 588 TB**







#### Single handling container spreader Vertical Twistlocks.

#### Suitable for:

- 20' or 40' ISO containers of 8' (2.44 m) width
- Approx. 2.45-2.50 m wide "pallet-wide" 20' or 40' containers, with ISO-like 'chamfered' corner castings.
- · With speed limitation for laden/unladen.

#### Not suitable for:

- Approx. 2.45 2.60 m wide "CPC" containers (Cellular Pallet-wide Containers) with non-ISO corner castings.
- Approx. 2.45 2.50 m wide "pallet-wide" 20' or 40' containers, with ISO-like 'chamfered' corner castings.



## MAST AND CAPACITY INFORMATION

#### H6XD-EC3 - H7XD-EC4 RATED CAPACITY KG@ 1220 MM LOAD CENTRE

	Lift height h <sub>3</sub> + s (mm)	Lowered height h <sub>1</sub> (mm)	Extended height h4 (mm)	Mast weight (kg)	596TB Spr	eader (kg)	588TB Spreader (kg)	
					H6XD-EC3	H7XD-EC4	H6XD-EC3	H7XD-EC4
EC3	7000	6910	8648	4076	6,000	-	6,000	-
EC4	10000	9910	11648	5205	-	7,000	-	7,000

### > FEATURES AND OPTIONS

PERFORMANCE	STD	ОРТ
Cummins QSB 6.7L diesel engine rated 122 kW Stage IV / 164 hp Tier 4F	Х	
Stage IV / Tier 4 compliant	Х	
Variable geometry turbocharger, water cooled*	Х	
Hibernate Idle	Х	
Hydraulically driven on-demand cooling fan	Х	
120 amp alternator	Х	
Powertrain protection system	Х	
Heavy duty air intake	Х	
Heavy duty air intake (raised)		Х
Low mount exhaust (below chassis)	Χ	
High mount exhaust		Χ
ZF Transmission WG161 3-speeds forward/3-speeds reverse auto-shifting	Х	
Kessler D81 drive axle with wet disc brakes	Х	
DRIVE	STD	0PT
Travel speed limiter - unconditional (adjustable)	Χ	
Traction speed limiter when carrying container (adjustable)	Χ	
Travel Speed Limiter pre-set to 10 mph / 16 km/h		Χ
Travel Speed Limiter pre-set to 12 mph / 20 km/h		Χ
12.00 - 20 20PR Trelleborg Pneumatic Bias Ply drive and steer tyres	Χ	
12.00 - R20 Michelin XZM Radial drive and steer tyres		Χ
12.00 - R20 Trelleborg Radial drive and steer tyres		Χ
12.00 - 20 Pneumatic Shaped Solid drive and steer tyres		Χ
LIFT	STD	ОРТ
111cc Dual Pump Hydraulic System	Х	
On-Demand Load Sensing Hydraulic System	Х	
Automatic Throttle-up when lifting (in neutral or inching)	Х	
Variable lap mast for low roller forces	Х	
2 Stage Non Free Lift mast	Χ	
Mast tilt - 5° Forward / 6° Back	Χ	
Hydraulic Accumulator		Χ
Pressure Compensated Lowering	Χ	
Hydraulic system temperature protection		Χ
HANDLING	STD	ОРТ
Hyster Model 586TB single spreader, with removable blocks for ISO or wide containers		Х
Hyster Model 588TB single spreader	Χ	
CANBus spreader controls	Χ	
Mechanical Pile Slope	Х	
•		

ERGONOMICS	STD	ОРТ
Full steel cab operator compartment	Х	
Powered tilt operator compartment for service		Х
Manual tilt operator compartment for service	Х	
Isolated cabin mounting for low noise and vibration	Х	
Operator presence system	Х	
Mechanical suspension seat	Х	
Air suspension seat		Х
Deluxe air suspension seat		Х
Low backrest seat	Х	
High backrest seat		Х
Cloth seat cover		Х
Vinyl seat cover	Х	
Seat heating		Х
2-point high visibility seatbelt	Х	
3-point high visibility seatbelt		Х
Floor mat	Х	
Coat hook	Х	
Front, top and rear wipers	Х	
"H"-pattern front wiper		Х
"I"-pattern front wiper	Х	
Front and rear window defrosters	Х	
Laminated glass operator compartment front window		Х
Tinted operator compartment windows (all)		Х
Tinted operator compartment top window		Х
Right side door	Х	
Vertical steel bar front window guard		Х
Operator shield wire mesh		Х
Multifunction display panel	Х	
Seat-side joystick hydraulic control	Х	
Steering wheel with spinner knob	Х	
Directional control lever	Х	
Hyster Monotrol pedal directional control		Х
Directional control switch (integrated in joystick)	Х	
Self-setting park brake		Х
Manual park brake	Х	
Interior wide angle mirrors	Х	
Heater with 3 speed fan	Х	
Diesel fueled cabin heater		Х
Telescoping & tilting steering column	Х	

### FEATURES AND OPTIONS <

ERGONOMICS (continued)	STD	ОРТ
DC/DC converter 24 volt/12 volt with socket		Х
DC/DC converter 24 volt/12 volt 2nd 12 volt socket		Х
Climate control		Х
Reading light		Х
Sun shades on top and rear		Х
Trainer seat		Х
Recirculation fan		Х
Accessory mounting post		Х
Heated top window		Х
Radio preparation set-up (wiring, two speakers and antenna)		Х
Rear axle load indicator		Х
Bluetooth radio with 2 speakers and antenna		Х
VISIBILITY	STD	ОРТ
Exterior mirrors mounted to cab		Х
Rear view camera system		Х
Radar object detection system		Х
Halogen work lights	X	
LED work lights	<del>  ^</del>	Х
High Performance LED work lights		Х
Two head lights mounted on front fenders	X	
Four work lights mounted on the outer mast	X	
Four forward work lights mounted on the cabin	+ ~	Х
Two rearward work lights mounted on the cabin	X	
LED twistlock indicator lights	X	
LED stop/tail/brake lights	X	
Turn signals, hazard and marker lights (LED)	X	
OPERATION	STD	ОРТ
Electric horn 105 dBA	X	• • •
Visible alarm – Amber strobe light		Х
Audible alarm – Reverse direction activated 82–102 dB(A), self-adjusting		Х
Audible alarm – Reverse direction white noise		Х
Forward / reverse motion alarm		Х
Pedestrian awareness light (continuous)		Х
Pedestrian awareness light (directional)		Х
Seatbelt interlock for engine start		Х
Hydraulic load weighing system		Х
Tyre pressure monitoring system		Х
Lockable battery disconnect switch	Х	
Battery jump start connector (NATO plug)		Х
Engine shutdown activated on Idle or Empty seat		Х
Key switch start	Х	
Key switch start with seat belt interlock for engine start and operation		Х
Fuses partially replaced by Electric circuit breakers	1	Х
Non-lockable fuel cap	Х	
Lockable fuel cap		Х
Diesel fuel inlet strainer in filler neck		Х

OPERATION (continued)	STD	OPT
Hyster Tracker wireless asset management system		Х
Hyster Tracker wireless asset management - Access / Verification		Х
Hyster Tracker wireless asset management - Monitoring		Х
Auto greasing system for basic truck and outer mast		Х
Auto greasing system for base truck		Х
Centralised greasing provision for upper chain sheaves	Х	
24 volt electrical system	Х	
Engine block heater 110 and 240 volt		Х
Steer wheel lug nut protection		Х
Front mud flaps		Х
Rear mud flaps		Х
4 Lifting eyes - 2 front and 2 rear		Х
APPEARANCE	STD	ОРТ
Hyster yellow paint base truck	Х	
Special paint base truck		Х
Operator compartment special paint (outside only)		Х
Operator compartment special paint (complete cabin)		Х
Hazard warning striping on counterweight		Х
SUPPLEMENTAL	STD	ОРТ
Literature package	Х	
Operator's manual	Х	
CE certification*	Х	
Warranty: 12 Months / 2,000 Hours Parts & Labour manufacturer's warranty		Х
Warranty: 12 Months / 2,000 Hours Parts manufacturer's warranty	Х	

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

### 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.





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