

**STRONG PARTNERS.  
TOUGH TRUCKS.™**

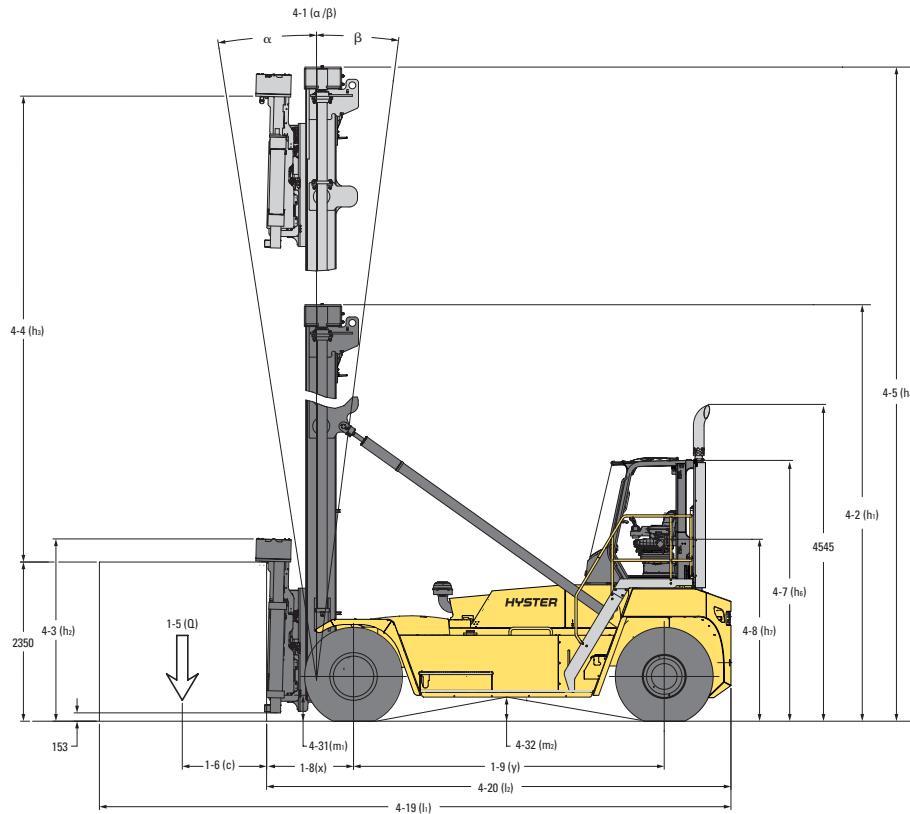


# **H9XM-EC7 TECHNICAL GUIDE**

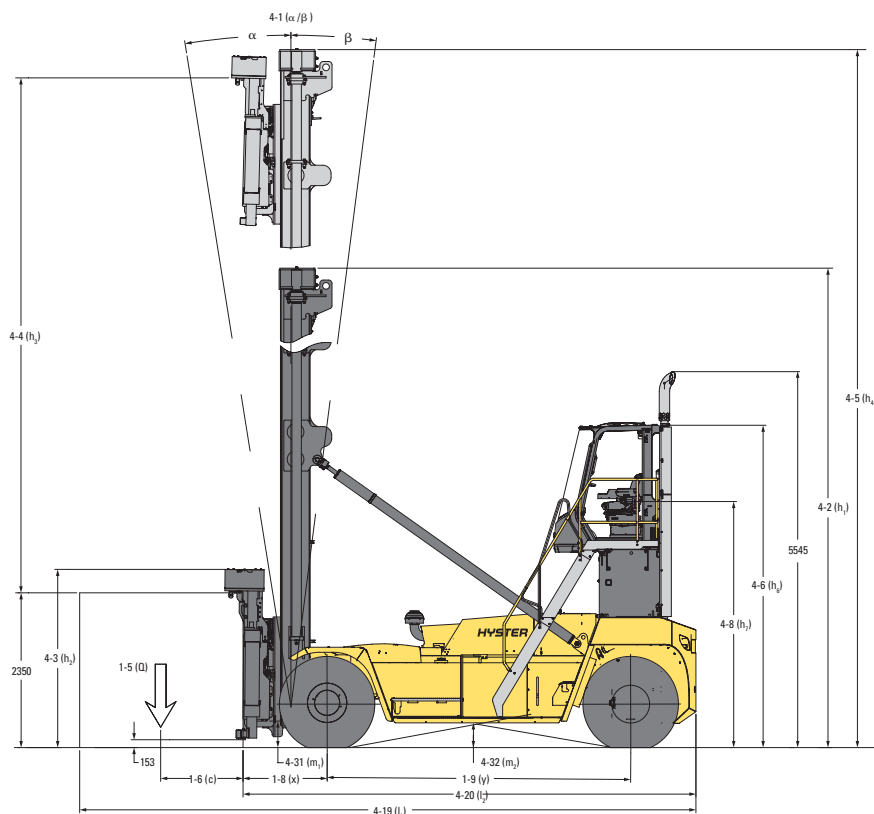
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# > DIMENSIONS

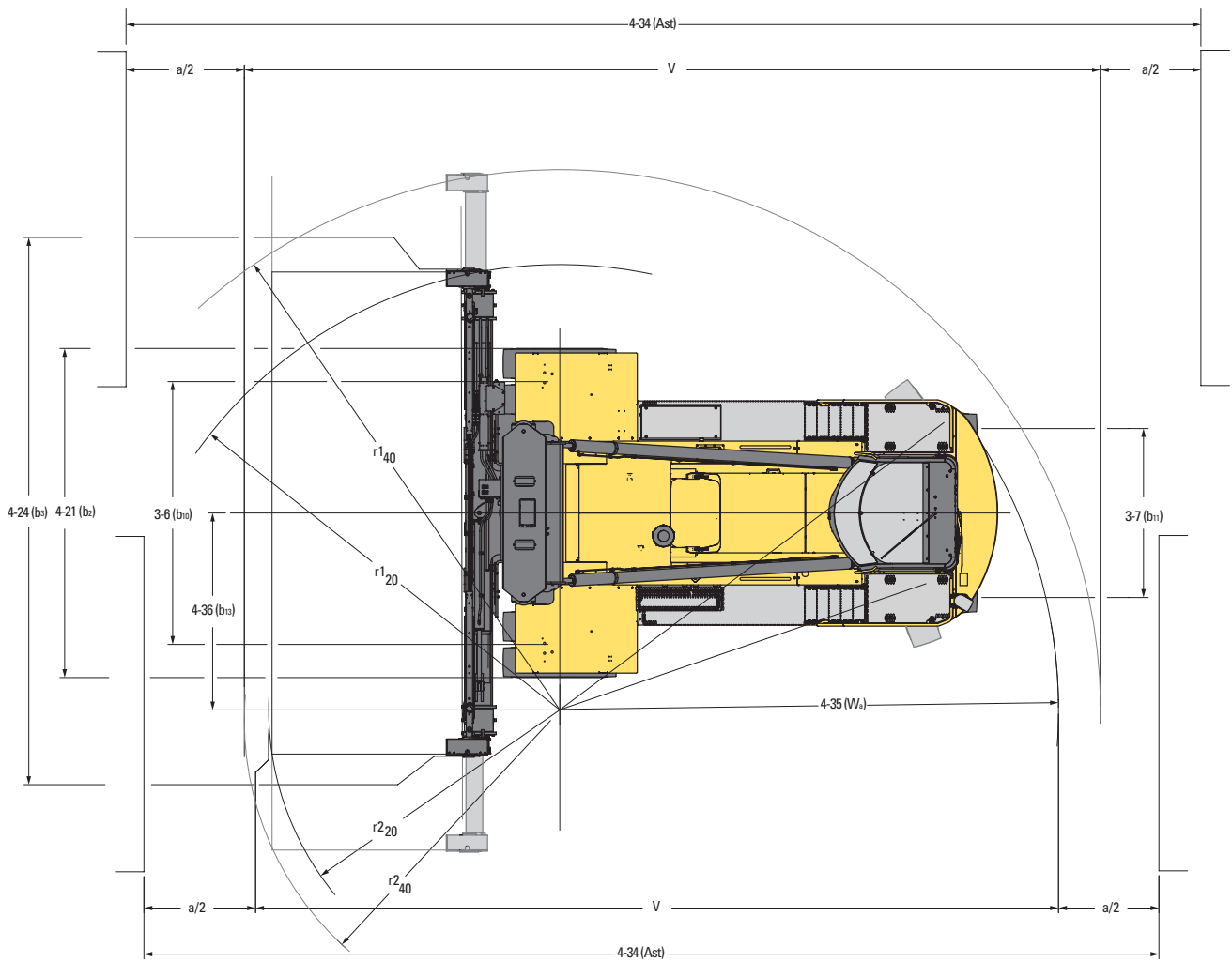
## STANDARD CAB POSITION



## OPTIONAL RAISED CAB POSITION



Note: For raised cab version add 1000mm for h6 and h7.



- $r_1$  = radius of swing of container rear corner
- $r_2$  = radius of swing of container front corner
- $W_a$  = outside turning radius of the truck
- $a$  = total operating clearance:
  - = 200 mm (100 mm each side acc. VDI) see VDI line 4-34-3 and 4-34-4
- $V$  = (theoretical) 90° stacking aisle width, no intrusive stacking:
- $V = r_2 + \text{the larger of } r_1 \text{ or } W_a$
- $Ast$  = (practical) 90° stacking aisle width, no intrusive stacking and with clearance:
- $Ast = V + a$

# > H9XM-EC7 SPECIFICATIONS

GENERAL	1-1	Manufacturer			HYSTER	
	1-2	Model designation			H9XM-EC7	
	1-3	Drive			Diesel	
	1-4	Operator type			Seated	
	1-5	Load capacity at load center, nominal	Q	kg	9,000	
	1-5	Load capacity at load center, max lift (1)	Q	kg	9,000	
	1-6	Load center distance	c <sub>1</sub>	mm	1,220	
	1-8	Load distance	x	mm	1,280	
	1-9	Wheelbase	y	mm	4,500	
	1-10	Stacking height at first row (number x container height)		#	7 x 8' 6"	
1-10	Stacking height at first row (number x container height)		#	6 x 9' 6"		
WT.	2-1	Service weight		kg	38,848	
	2-2	Axle loading with load, front / rear		kg	38,193	9,655
	2-3	Axle loading without load, front / rear		kg	24,193	14,655
WHEELS	3-1	Tyre type			Pneumatic	
	3-2	Tyre size, front			14.00-24 24PR	
	3-3	Tyre size, rear			14.00-24 24PR	
	3-5	Wheels, number front / rear (x = driven wheels)			x4 / 2	
	3-6	Tread, front	b <sub>10</sub>	mm	3,282	
	3-7	Tread, rear	b <sub>11</sub>	mm	2,108	
	DIMENSIONS	4-1	Mast tilt, forward / backward	α/β	deg	4 / 3
4-2		Height, mast lowered	h <sub>1</sub>	mm	10,795	
4-3		Free lift	h <sub>2</sub>	mm	0	
4-4		Lift	h <sub>3</sub>	mm	16,450	
4-4-1		Lift height, minimum (2)	h <sub>3.1.1</sub>	mm	2,350	
4-4-2		Lift height, maximum (2)	h <sub>3.1.2</sub>	mm	18,800	
4-5		Height, mast extended	h <sub>4</sub>	mm	19,020	
4-7		Height of overhead guard (closed cab) (3)	h <sub>6</sub>	mm	3,844	
4-7-2		Height of overhead guard (closed cab w/ strobe light)	h <sub>6</sub>	mm	3,976	
4-7-3		Height of overhead guard (closed cab w/ work lights)	h <sub>6</sub>	mm	4,035	
4-8		Seat height to SIP (4)	h <sub>7</sub>	mm	2,676	
4-19		Overall length	l <sub>1</sub>	mm	9,185	
4-20		Length to face of load	l <sub>2</sub>	mm	6,747	
4-21		Overall width	b <sub>2</sub>	mm	4,110	
4-24		Spreader width, retracted / extended	b <sub>3</sub>	mm	6,084	12,218
4-31		Ground clearance, lowest point	m <sub>1</sub>	mm	236	
4-32		Ground clearance, center or wheelbase	m <sub>2</sub>	mm	383	
4-34-3		Aisle width with 20' Container   REDUCED / FULL stroke (5)	Ast <sub>20</sub>	mm	10,737	10,267
4-34-4		Aisle width with 40' Container   REDUCED / FULL stroke (5)	Ast <sub>40</sub>	mm	14,317	14,019
4-35		Outside turning radius   REDUCED / FULL stroke	W <sub>a</sub>	mm	6,797	6,327
4-36	Internal turning radius   REDUCED / FULL stroke	b <sub>13</sub>	mm	3,438	2,620	
PERFORMANCE	5-1	Travel speed, with / without load		km/h	20	25
	5-1-1	Travel speed, with load locked / without load		km/h	On request	
	5-2	Lifting speed, with / without load		m/s	0.51	0.68
	5-2-1	Lifting speed, with 70% load		m/s	0.60	
	5-3	Lowering speed with / without load		m/s	0.55	0.55
	5-5	Drawbar pull - 1 mph   1.6 km/h, with / without load		kN	148	149
	5-6	Drawbar pull - max, with / without load		kN	178	180
	5-7	Gradeability - 1 mph   1.6 km/h, with / without load (6)		%	33	36
	5-8	Gradeability - max, with / without load (6)		%	41	36
5-9	Acceleration time, with / without load		sec	On request		

ENGINE	7-1	Engine manufacturer / model			Cummins / QSB 6.7 164
	7-1a	Emission legislation			Stage IIIA
	7-2	Engine power rated to ISO 1585		kW	164
	7-2-1	Engine power, maximum		kW	172
	7-3	Rated speed		min <sup>-1</sup>	2,000
	7-3-1	Engine torque @rpm		Nm/min <sup>-1</sup>	949 @ 1500
	7-4	Number of cylinders / displacement		# / cm <sup>3</sup>	6 / 6,690
		Turbocharger		Type	Wastegate
	7-8	Alternator output		Amps	120
	7-9	Electrical system voltage		V	24
7-10	Battery voltage, rated capacity		V / Ah	24 / 102	

DRIVE	8-1	Drive control / Transmission		Type / #	Torque Converter
	8-2	Transmission manufacturer / type		Type / #	ZF 5WG211
	8-4	Transmission speeds forward / backward		#	5 / 3
	8-5	Coupling		Type	Torque Converter
	8-6	Wheel drive / drive axle manufacturer / type		Type / #	AxleTech / PRC 1756W3H
	8-11	Service brake		Type	Oil immersed (wet) disc
	8-12	Parking brake		Type	Spring applied, dry disc on drive axle

SPREADER	9-1	Spreader manufacturer / type		Type / #	Elme / 588TB MPS
	9-1-1	Pile slope, mechanical without PPS		mm	+200 / - 200
	9-1-2	Pile slope, total with PPS		degrees	+/- 6
	9-3	Size of containers		ft	ISO 20' - 40'
	9-4	Side shift	b <sub>a</sub>	mm	+ 600 / - 600
9-4-1	Telescoping time, extend / retract		seconds	14 / 16	

MISC	10-1	Operating pressure for attachments		bar	225
	10-2	Oil volume for attachments		l/m	60
	10-3	Hydraulic tank capacity		l	268
	10-4	Fuel tank capacity		l	350
	10-5	Steering design			Hydraulic power steering
	10-6	Number of steering rotation			5.0
	10-7	Sound pressure level at driver's seat	Lpaz	dB(A)	68.3
10-7-1	Sound pressure level at driver's seat	Lwaz	dB	On request	

### 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.

- (1) Load capacity at highest container positions may be less, depending on truck model, stacking height and tyres.
- (2) Minimum/maximum height of twistlocks.
- (3) With cab mounted work lights add 6"/132 mm.
- (4) With raised cabin position add 39" / 1000 mm.
- (5) Includes 8"/200 mm clearance. FULL / REDUCED steer cylinder stroke.
- (6) Gradeability figures are provided for comparison of tractive performance, but are not intended to endorse the operation of vehicle on the stated inclines.

All specifications and capacities are valid for trucks equipped with a Hyster® container handling spreader for handling ISO containers.

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

### 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.

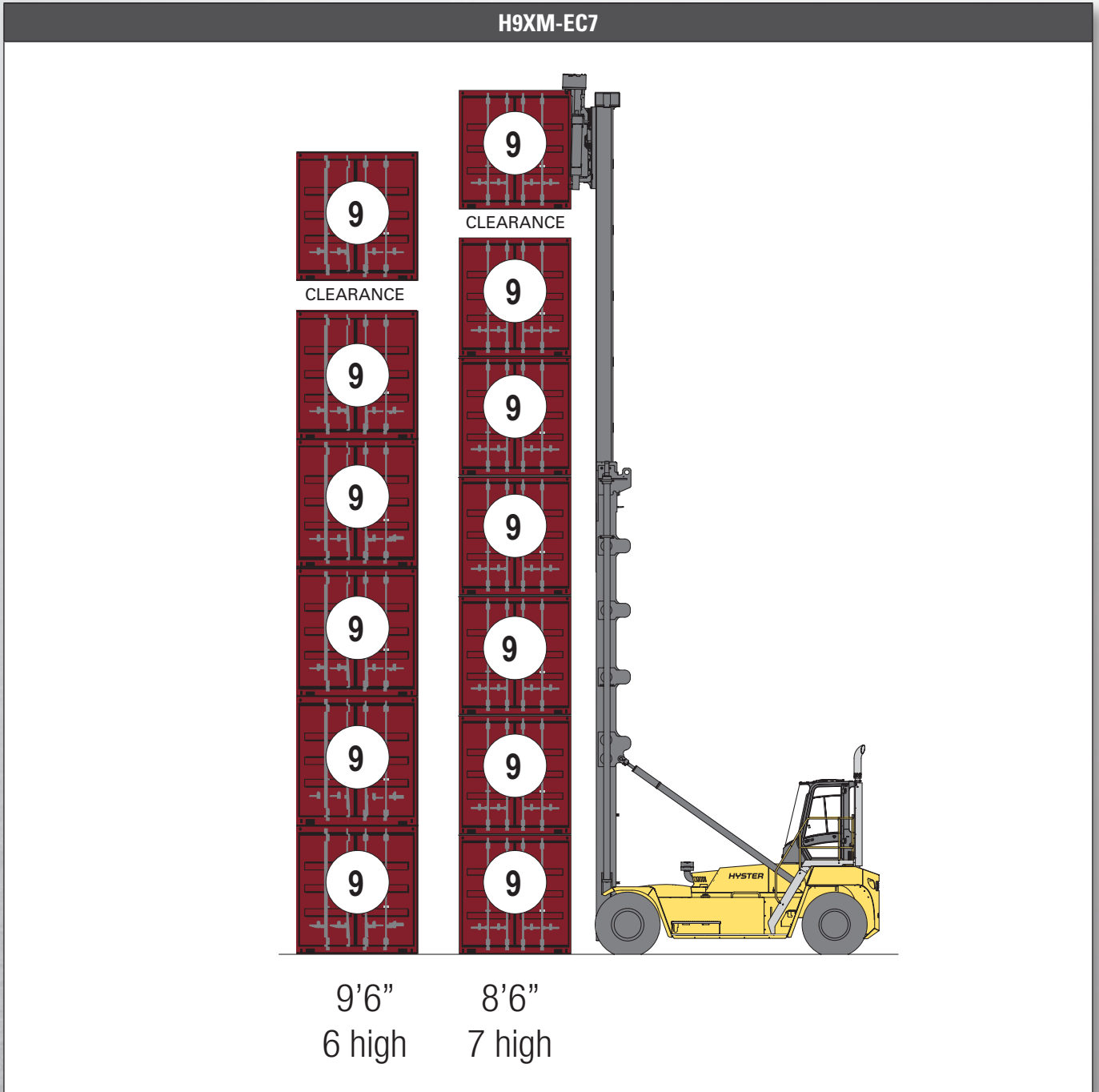
Lift trucks illustrated may feature optional equipment. Values may vary with alternative configurations.

*CERTIFICATION: Hyster lift trucks 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.

## > RATED CAPACITIES AND STACKING HEIGHTS



## > SINGLE CONTAINER SPREADER

<b>SINGLE CONTAINER SPREADER 588 TB</b>		
		<p>Single handling container spreader</p> <ul style="list-style-type: none"> <li>• Vertical Automatic Twistlocks</li> <li>• With adjustable traction speed limiter for laden condition</li> <li>• Suitable for:               <ul style="list-style-type: none"> <li>- 20', 40' or 45' (with 40' twistlock position) ISO containers, Binnencontainers or WTP containers.</li> </ul> </li> </ul> <p>Not suitable for:</p> <ul style="list-style-type: none"> <li>• &gt;2.50m wide "CPC" containers (Cellular Pallet-wide Containers)</li> <li>• Containers with non-ISO corner castings.</li> </ul>

# FEATURES AND OPTIONS



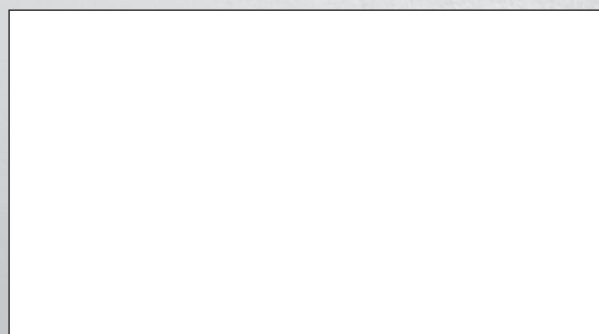
PERFORMANCE	STD	OPT
Cummins QSB 6.7L diesel engine rated 164 hp Tier 3 / 220 kW Stage IIIA	x	
Wastegate turbocharger	x	
120 amp alternator	x	
Powertrain protection system	x	
ZF Transmission 5WG211 5-speeds fwd/3-speeds reverse auto-shifting	x	
AxleTech Drive Axle PRC1756 W3H (162" / 4112 mm across drive tyres)	x	
DRIVE	STD	OPT
Travel speed limiter - unconditional (adjustable)	x	
Traction speed limiter when carrying container (adjustable)	x	
Steer axle with full stroke steer cylinder for tight turning radius	x	
Pneumatic bias ply tyres	x	
LIFT	STD	OPT
On-Demand Load Sensing Hydraulic System	x	
Automatic Throttle-up when lifting (in neutral or inching)	x	
Variable lap mast for low roller forces	x	
2 cylinder / 2 chain design	x	
HANDLING	STD	OPT
Hyster Model 588TB single spreader	x	
Mechanical Pile Slope	x	
ERGONOMICS	STD	OPT
Manual tilt operator compartment for service	x	
Powered tilt operator compartment for service		x
Raised Operator compartment (1000mm)		x
Isolated mounting for low noise and vibration	x	
Operator presence system	x	
Mechanical suspension seat	x	
Cloth seat cover	x	
2-point high visibility seatbelt	x	
Trainer seat with 2-point high visibility seat belt		x
Coat hook	x	
Front, top and rear wipers	x	
"I"-pattern front wiper	x	
Left side handrails, stairway and cabin door	x	
Right side handrails, stairway and cabin door	x	
7" Color digital operator display	x	
Seat-side joystick hydraulic control	x	
Steering wheel with spinner knob	x	
Directional control lever	x	
Interior wide angle mirrors	x	
Heater with 3 speed fan	x	
Telescoping & tilting steering column	x	

Air conditioning	x	
Reading light	x	
Sun shades on top and rear	x	
Recirculation fan	x	
VISIBILITY	STD	OPT
Exterior mirrors mounted to cab	x	
Halogen work lights	x	
LED work lights		x
LED twistlock indicator lights	x	
LED stop/tail/brake lights	x	
Turn signals, hazard & marker lights (LED)	x	
OPERATION	STD	OPT
Electric air horn 112 dBA	x	
Visible alarm – Amber strobe light	x	
Audible alarm – Reverse direction activated 82–102 dB(A), self-adjusting	x	
Seatbelt interlock for engine start	x	
Non-lockable fuel cap	x	
Diesel fuel inlet strainer in filler neck	x	
Hyster Tracker wireless asset management - Access / Verification		x
Hyster Tracker wireless asset management - Monitoring	x	
24 volt electrical system	x	
Engine block heater 240 volt		x
SUPPLEMENTS	STD	OPT
English or Chinese Operator's manual	x	



# HYSTER® DEALERS

Contact your nearest Hyster® Dealership  
by visiting [www.hyster.com.au](http://www.hyster.com.au)



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