

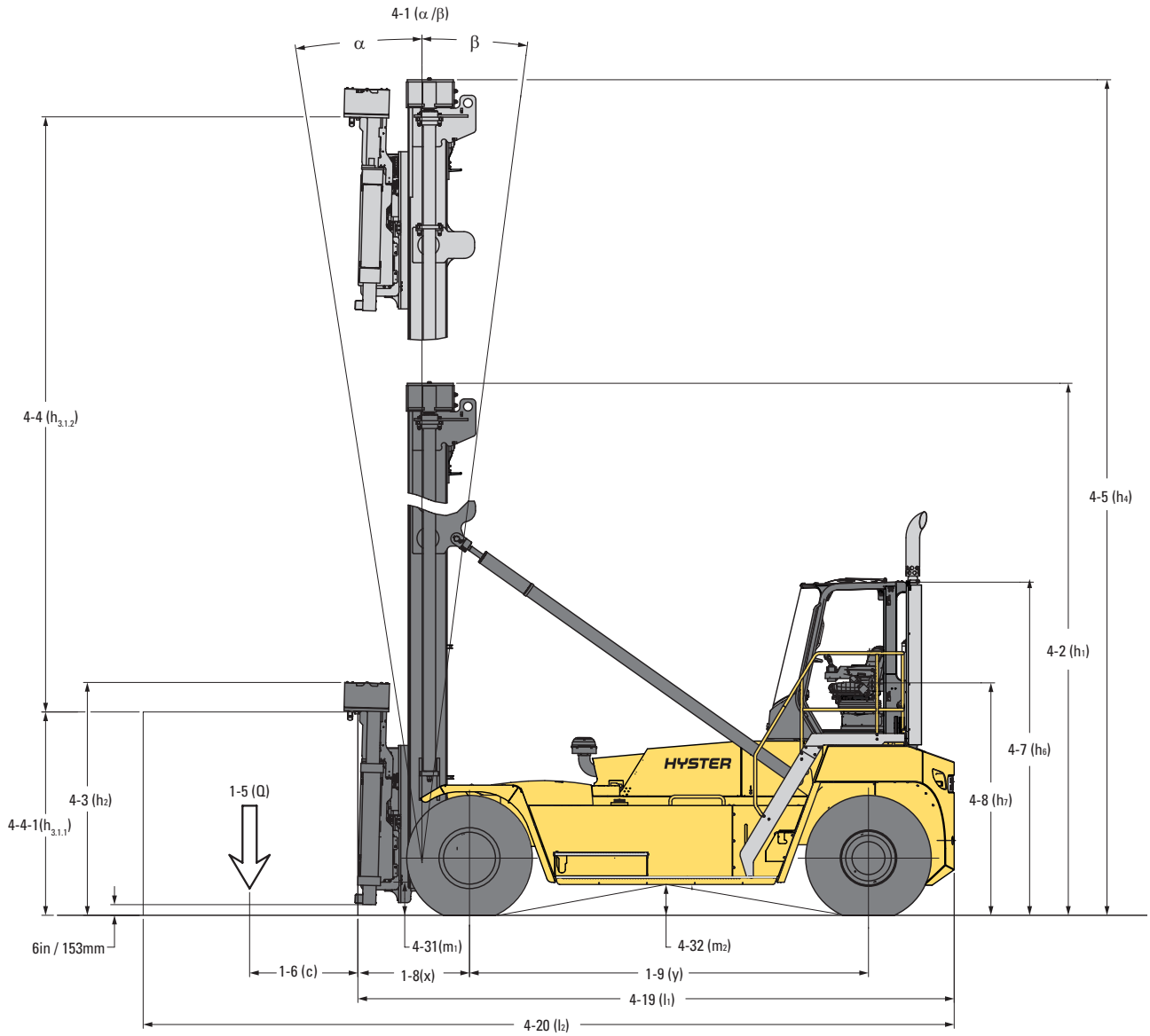


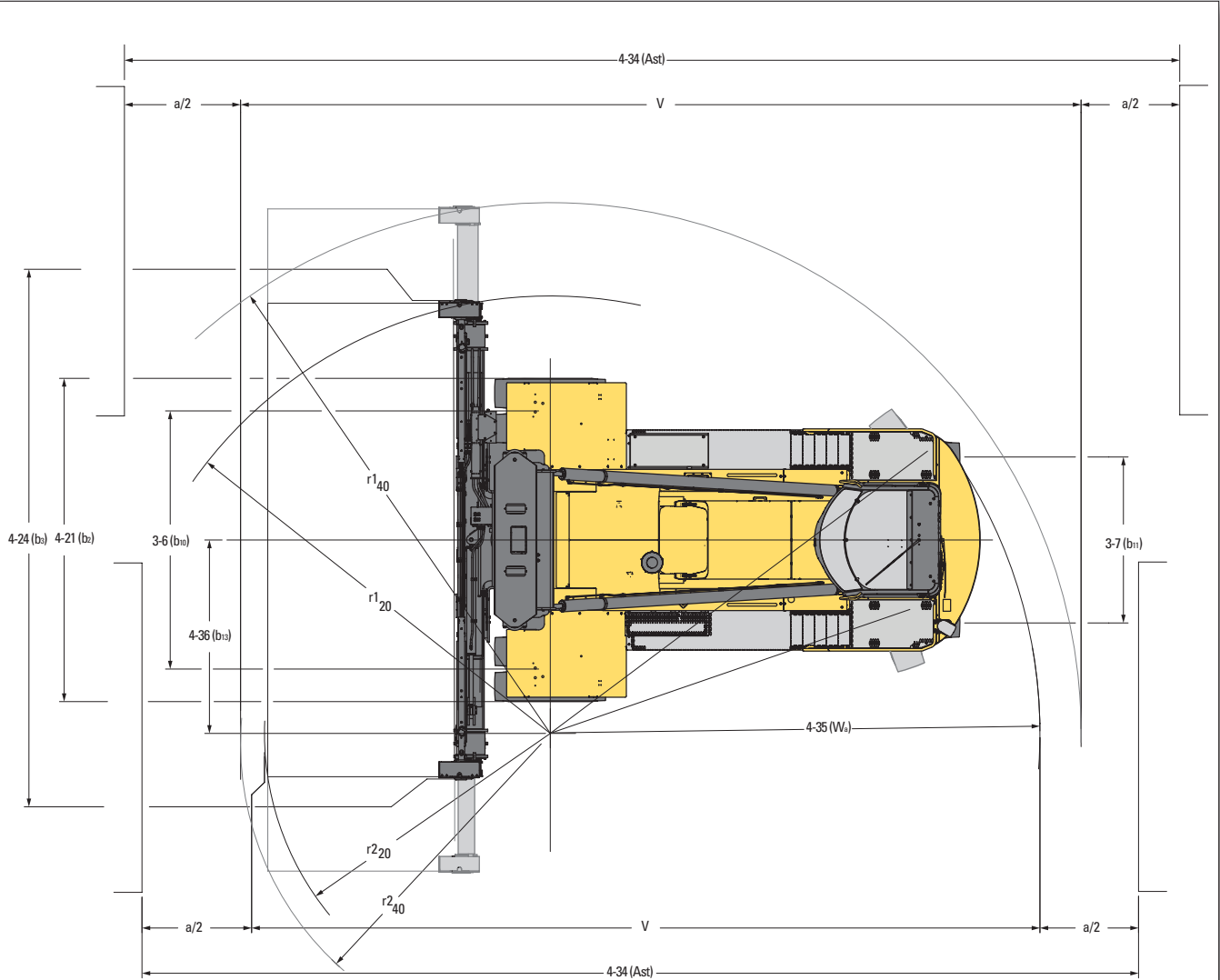
**STRONG PARTNERS.  
TOUGH TRUCKS.™**

# **H180-200XD EC6-8 H200-230XD ECD7-9 SERIES TECHNICAL GUIDE**

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# > DIMENSIONS





- $r_1$  = radius of swing of container rear corner
- $r_2$  = radius of swing of container front corner
- $W_t$  = 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:  
 $V = r_2 + \text{the larger of } r_1, \text{ or } W_t$
- $Ast$  = (practical) 90° - stacking aisle width, no intrusive stacking and with clearance:  
 $Ast = V + a$

# > H180XD-EC6 / H180XD-EC7 / H200XD-EC7 SPECIFICATIONS

			HYSTER				HYSTER				HYSTER						
			H180XD-EC6				H180XD-EC7				H200XD-EC7						
GENERAL	1-1	Manufacturer															
	1-2	Model designation															
	1-3	Powertrain / drive-train															
	1-4	Operator type															
	1-5	Load capacity at load center, nominal (1)	Q	lbs	kg	18,000	8,165	18,000	8,165	20,000	9,072						
	1-5	Load capacity at load center, max lift (1,2)	Q	lbs	kg	18,000	8,165	18,000	8,165	20,000	9,072						
	1-6	Load center	c	in	mm	48	1,220	48	1,220	48	1,220						
	1-8	Load distance	x	in	mm	53	1,357	53	1,357	53	1,357						
	1-9	Wheelbase	y	in	mm	177	4,500	177	4,500	177	4,500						
	1-10-1	Stacking height at first row (number x container height)		#	#	6 x 8' 6"				7 x 8' 6"							
1-10-2	Stacking height at first row (number x container height)		#	#	5 x 9' 6"				6 x 9' 6"								
WT.	2-1	Service weight		lbs	kg	78,392	35,558	81,377	36,912	85,755	38,898						
	2-2	Axle loading with load, front / rear		lbs	kg	78,873	35,776	17,520	7,947	82,135	37,256	17,242	7,821	84,938	38,527	20,820	9,444
	2-3	Axle loading without load, front / rear		lbs	kg	50,563	22,935	27,829	12,623	53,828	24,416	27,551	12,497	53,482	24,259	32,273	14,639
WHEELS	3-1	Tire type				Pneumatic				Pneumatic							
	3-2	Tire size, front				14.00-24 24PR				14.00-24 24PR							
	3-3	Tire size, rear				14.00-24 24PR				14.00-24 24PR							
	3-5	Wheels, number front / rear (x = driven wheels)				x4 / 2				x4 / 2							
	3-6	Tread, front	b <sub>10</sub>	in	mm	129	3,282	129	3,282	129	3,282						
	3-7	Tread, rear	b <sub>11</sub>	in	mm	83	2,108	83	2,108	83	2,108						
	4-1	Mast tilt, forward / backward	α/β	deg	deg	4 / 3				4 / 3							
DIMENSIONS	4-2	Height, mast lowered	h <sub>1</sub>	in	mm	374	9,495	425	10,795	425	10,795						
	4-3	Free lift	h <sub>2</sub>	in	mm	0	0	0	0	0	0						
	4-4	Lift	h <sub>3</sub>	in	mm	545	13,850	648	16,450	648	16,450						
	4-4-1	Lift height, minimum (3)	h <sub>3.1.1</sub>	in	mm	91	2,318	91	2,318	91	2,318						
	4-4-2	Lift height, maximum (3)	h <sub>3.1.2</sub>	in	mm	637	16,168	739	18,768	739	18,768						
	4-5	Height, mast extended	h <sub>4</sub>	in	mm	646	16,420	749	19,020	749	19,020						
	4-7	Height of cabin (with strobe light) (4)	h <sub>6</sub>	in	mm	157	3,976	157	3,976	157	3,976						
	4-7-1	Height of overhead guard (closed cab)		in	mm	151	3,844	151	3,844	151	3,844						
	4-7-3	Height of overhead guard (closed cab w/ strobe light)		in	mm	157	3,976	157	3,976	157	3,976						
	4-7-4	Height of overhead guard (closed cab w/ work lights)		in	mm	159	4,035	159	4,035	159	4,035						
	4-8	Seat height to SIP (4)	h <sub>7</sub>	in	mm	105	2,676	105	2,676	105	2,676						
	4-19	Overall length	l <sub>1</sub>	in	mm	365	9,262	365	9,262	365	9,262						
	4-20	Length to face of load	l <sub>2</sub>	in	mm	269	6,824	269	6,824	269	6,824						
	4-21	Overall width across drive tires	b <sub>2</sub>	in	mm	162	4,110	162	4,110	162	4,110						
	4-24	Width across spreader, retracted/extended	b <sub>3</sub>	in	mm	240	6,084	481	12,218	240	6,084	481	12,218	240	6,084	481	12,218
	4-31	Ground clearance, lowest point	m <sub>1</sub>	in	mm	9	236	9	236	9	236						
4-32	Ground clearance, center or wheelbase	m <sub>2</sub>	in	mm	15	383	15	383	15	383							
4-33	Aisle width with 20' Container   REDUCED / FULL stroke	Ast <sub>20</sub>	in	mm	418	10,614	399	10,144	418	10,614	399	10,144	418	10,614	399	10,144	
4-34	Aisle width with 40' Container   REDUCED / FULL stroke	Ast <sub>40</sub>	in	mm	558	14,180	546	13,875	558	14,180	546	13,875	558	14,180	546	13,875	
4-35	Outside turning radius   REDUCED / FULL stroke	W <sub>3</sub>	in	mm	268	6,797	249	6,327	268	6,797	249	6,327	268	6,797	249	6,327	
4-36	Internal turning radius   REDUCED / FULL stroke	b <sub>13</sub>	in	mm	135	3,438	103	2,620	135	3,438	103	2,620	135	3,438	103	2,620	
PERFORMANCE																	
CUMMINS QSB6.7 TIER 4F ENGINE																	
PERFORMANCE	5-1	Travel speed, with / without load		mph	km/h	12.4	20	15.5	25	12.4	20	15.5	25	12.4	20	15.5	25
	5-2	Lifting speed, with / without load		ft/min	m/s	100	0.51	134	0.68	100	0.51	134	0.68	100	0.51	134	0.68
	5-2-1	Lifting speed, with 70% load		ft/min	m/s	118		0.60		118		0.60		118		0.60	
	5-3	Lowering speed with / without load		ft/min	m/s	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55
	5-5	Drawbar pull - 1 mph   1.6 km/h, with / without load		lbs.	kN	33,497	149	33,721	150	33,272	148	33,721	150	33,272	148	33,497	149
	5-6	Drawbar pull - max, with / without load		lbs.	kN	40,241	179	40,690	181	40,241	179	40,466	180	40,016	178	40,466	180
	5-7	Gradeability - 1 mph   1.6 km/h, with / without load (5)		%	%	37	39	37	39	36	38	36	38	33	36	33	36
	5-8	Gradeability - max, with / without load (5)		%	%	46	39	46	39	44	38	44	38	41	36	41	36
CUMMINS QSB6.7 TIER 3 ENGINE																	
PERFORMANCE	5-1	Travel speed, with / without load		mph	km/h	12.4	20	15.5	25	12.4	20	15.5	25	12.4	20	15.5	25
	5-2	Lifting speed, with / without load		ft/min	m/s	100	0.51	134	0.68	100	0.51	134	0.68	100	0.51	134	0.68
	5-2-1	Lifting speed, with 70% load		ft/min	m/s	118		0.60		118		0.60		118		0.60	
	5-3	Lowering speed with / without load		ft/min	m/s	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55
	5-5	Drawbar pull - 1 mph   1.6 km/h, with / without load		lbs.	kN	33,497	149	33,721	150	33,272	148	33,721	150	33,272	148	33,497	149
	5-6	Drawbar pull - max, with / without load		lbs.	kN	40,241	179	40,690	181	40,241	179	40,466	180	40,016	178	40,466	180
	5-7	Gradeability - 1 mph   1.6 km/h, with / without load (7)		%	%	37	39	37	39	36	38	36	38	33	36	33	36
	5-8	Gradeability - max, with / without load (7)		%	%	46	39	46	39	44	38	44	38	41	36	41	36

# H200XD-EC8 / H200XD-ECD7 / H190XD-ECD8 SPECIFICATIONS



	GENERAL			HYSTER				HYSTER				HYSTER															
				H200XD-EC8				H200XD-ECD7				H190XD-ECD8															
1-1	Manufacturer																										
1-2	Model designation																										
1-3	Powertrain / drive-train			Diesel				Diesel				Diesel															
1-4	Operator type			Seated				Seated				Seated															
1-5	Load capacity at load center, nominal (1)	Q	lbs	kg	20,000	9,072	20,000	9,072	19,000	8,618																	
1-5	Load capacity at load center, max lift (1,2)	Q	lbs	kg	19,956	9,052	20,000	9,072	17,017	7,719																	
1-6	Load center distance	c	in	mm	48	1,220	48	1,220	48	1,220																	
1-8	Load distance	x	in	mm	53	1,357	52	1,309	52	1,309																	
1-9	Wheelbase	y	in	mm	177	4,500	177	4,500	177	4,500																	
1-10-1	Stacking height at first row (number x container height)		#	#	8 x 8' 6"				6+1 x 8' 6"				7+1 x 8' 6"														
1-10-2	Stacking height at first row (number x container height)		#	#	7 x 9' 6"				5+1 x 9' 6"				6+1 x 9' 6"														
2-1	Service weight		lbs	kg	91,463	41,487	87,012	39,468	90,063	40,852																	
2-2	Axle loading with load, front / rear		lbs	kg	88,690	40,229	22,772	10,329	86,421	39,200	20,589	9,339	88,196	40,005	20,867	9,465											
2-3	Axle loading without load, front / rear		lbs	kg	57,236	25,962	34,225	15,524	55,182	25,030	31,830	14,438	58,520	26,544	31,546	14,309											
3-1	Tire type				Pneumatic				Pneumatic				Pneumatic														
3-2	Tire size, front				14.00-R24				14.00-R24				14.00-R24														
3-3	Tire size, rear				14.00-R24				14.00-R24				14.00-R24														
3-5	Wheels, number front / rear (x = driven wheels)				x4 / 2				x4 / 2				x4 / 2														
3-6	Tread, front	b <sub>10</sub>	in	mm	138	3,507	129	3,282	129	3,282			129	3,282													
3-7	Tread, rear	b <sub>11</sub>	in	mm	83	2,108	83	2,108	83	2,108			83	2,108													
4-1	Mast tilt, forward / backward	α/β	deg	deg	4 / 3				4 / 3				4 / 3														
4-2	Height, mast lowered	h <sub>1</sub>	in	mm	476	12,095	374	9,495	425	10,795																	
4-3	Free lift	h <sub>2</sub>	in	mm	0	0	0	0	0	0																	
4-4	Lift	h <sub>3</sub>	in	mm	750	19,050	545	13,850	648	16,450																	
4-4-1	Lift height, minimum (3)	h <sub>3.1.1</sub>	in	mm	91	2,318	97	2,472	97	2,472																	
4-4-2	Lift height, maximum (3)	h <sub>3.1.2</sub>	in	mm	841	21,368	643	16,322	745	18,922																	
4-5	Height, mast extended	h <sub>4</sub>	in	mm	851	21,620	646	16,420	749	19,020																	
4-7	Height of cabin (with strobe light) (4)	h <sub>6</sub>	in	mm	157	3,976	157	3,976	157	3,976																	
4-7-1	Height of overhead guard (closed cab)		in	mm	151	3,844	151	3,844	151	3,844																	
4-7-3	Height of overhead guard (closed cab w/ strobe light)		in	mm	157	3,976	157	3,976	157	3,976																	
4-7-4	Height of overhead guard (closed cab w/ work lights)		in	mm	159	4,035	159	4,035	159	4,035																	
4-8	Seat height to SIP (5)	h <sub>7</sub>	in	mm	105	2,676	105	2,676	105	2,676																	
4-19	Overall length	l <sub>1</sub>	in	mm	365	9,262	363	9,214	363	9,214																	
4-20	Length to face of load	l <sub>2</sub>	in	mm	269	6,824	267	6,776	267	6,776																	
4-21	Overall width	b <sub>2</sub>	in	mm	171	4,335	162	4,110	162	4,110																	
4-24	Spreader width, retracted/extended'	b <sub>3</sub>	in	mm	240	6,084	481	12,218	259	6,566	500	12,700	259	6,566	500	12,700											
4-31	Ground clearance, lowest point	m <sub>1</sub>	in	mm	9	236	9	236	9	236																	
4-32	Ground clearance, center or wheelbase	m <sub>2</sub>	in	mm	15	383	15	383	15	383																	
4-34-3	Aisle width with 20' Container   REDUCED / FULL stroke (6)	Ast <sub>20</sub>	in	mm	418	10,614	399	10,144	416	10,566	397	10,096	416	10,566	397	10,096											
4-34-4	Aisle width with 40' Container   REDUCED / FULL stroke. (6)	Ast <sub>40</sub>	in	mm	558	14,180	546	13,875	566	14,382	554	14,081	566	14,382	554	14,081											
4-35	Outside turning radius   REDUCED / FULL stroke	W <sub>a</sub>	in	mm	268	6,797	249	6,327	268	6,797	249	6,327	268	6,797	249	6,327											
4-36	Internal turning radius   REDUCED / FULL stroke	b <sub>13</sub>	in	mm	135	3,438	103	2,620	135	3,438	103	2,620	135	3,438	103	2,620											
PERFORMANCE														CUMMINS QSB6.7 TIER 4F ENGINE													
5-1	Travel speed, with / without load		mph	km/h	12.4	20	15.5	25	12.4	20	15.5	25	12.4	20	15.5	25											
5-2	Lifting speed, with / without load		ft/min	m/s	91	0.46	122	0.62	91	0.46	122	0.62	91	0.46	122	0.62											
5-2-1	Lifting speed, with 70% load		ft/min	m/s	106		0.54		106		0.54		106		0.54												
5-3	Lowering speed with / without load		ft/min	m/s	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55											
5-5	Drawbar pull - 1 mph   1.6 km/h, with / without load		lbs.	kN	33,047	147	33,497	149	33,272	148	33,497	149	33,047	147	33,497	149											
5-6	Drawbar pull - max, with / without load		lbs.	kN	40,016	178	40,466	180	40,016	178	40,466	180	40,016	178	40,466	180											
5-7	Gradeability - 1 mph   1.6 km/h, with / without load (5)		%	%	31	35	31	35	33	39	33	39	32	38	32	38											
5-8	Gradeability - max, with / without load (5)		%	%	39	35	39	35	40	39	40	39	39	38	39	38											
PERFORMANCE														CUMMINS QSB6.7 TIER 3 ENGINE													
5-1	Travel speed, with / without load		mph	km/h	12.4	20	15.5	25	12.4	20	15.5	25	12.4	20	15.5	25											
5-2	Lifting speed, with / without load		ft/min	m/s	91	0.46	122	0.62	91	0.46	122	0.62	91	0.46	122	0.62											
5-2-1	Lifting speed, with 70% load		ft/min	m/s	106		0.54		106		0.54		106		0.54												
5-3	Lowering speed with / without load		ft/min	m/s	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55											
5-5	Drawbar pull - 1 mph   1.6 km/h, with / without load		lbs.	kN	33,047	147	33,497	149	33,272	148	33,497	149	33,047	147	33,497	149											
5-6	Drawbar pull - max, with / without load		lbs.	kN	40,016	178	40,466	180	40,016	178	40,466	180	40,016	178	40,466	180											
5-7	Gradeability - 1 mph   1.6 km/h, with / without load (7)		%	%	31	35	31	35	33	39	33	39	32	38	32	38											
5-8	Gradeability - max, with / without load (7)		%	%	39	35	39	35	40	39	40	39	39	38	39	38											

# > H210XD-ECD8 / H230XD-ECD8 / H230XD-ECD9 SPECIFICATIONS

				HYSTER				HYSTER				HYSTER					
				H210XD-ECD8				H230XD-ECD8				H230XD-ECD9					
GENERAL	1-1	Manufacturer															
	1-2	Model designation															
	1-3	Powertrain / drive-train															
	1-4	Operator type															
	1-5	Load capacity at load center, nominal (1)	Q	lbs	kg	21,000	9,525	23,000	10,433	22,900	10,387						
	1-5	Load capacity at load center, max lift (1,2)	Q	lbs	kg	21,000	9,525	23,000	10,433	13,600	6,169						
	1-6	Load center distance	c	in	mm	48	1,220	48	1,220	48	1,220						
	1-8	Load distance	x	in	mm	52	1,309	52	1,309	52	1,309						
	1-9	Wheelbase	y	in	mm	177	4,500	177	4,500	177	4,500						
	1-10-1	Stacking height at first row (number x container height)	#	#		7+1 x 8' 6"				7+1 x 8' 6"				8+1* x 8' 6"			
1-10-2	Stacking height at first row (number x container height)	#	#		6+1 x 9' 6"				6+1 x 9' 6"				7+1* x 9' 6"				
WT.	2-1	Service weight		lbs	kg	92,343	41,886	94,461	42,847	97,440	44,198						
	2-2	Axle loading with load, front / rear		lbs	kg	91,324	41,424	22,015	9,986	94,455	42,844	23,005	10,435	97,555	44,250	22,785	10,335
	2-3	Axle loading without load, front / rear		lbs	kg	58,524	26,546	33,817	15,339	58,528	26,548	35,933	16,299	61,785	28,025	35,653	16,172
WHEELS	3-1	Tire type				Pneumatic				Pneumatic				Pneumatic			
	3-2	Tire size, front				14.00-R24				14.00-R24				14.00-R24			
	3-3	Tire size, rear				14.00-R24				14.00-R24				14.00-R24			
	3-5	Wheels, number front / rear (x = driven wheels)				x4 / 2				x4 / 2				x4 / 2			
	3-6	Tread, front	b <sub>10</sub>	in	mm	138	3,507	138	3,507	138	3,507			138	3,507		
	3-7	Tread, rear	b <sub>11</sub>	in	mm	83	2,108	83	2,108	83	2,108			83	2,108		
	3-8	Wheels, number front / rear (x = driven wheels)				x4 / 2				x4 / 2				x4 / 2			
DIMENSIONS	4-1	Mast tilt, forward / backward	α/β	deg	deg	4 / 3				4 / 3				4 / 3			
	4-2	Height, mast lowered	h <sub>1</sub>	in	mm	425	10,795	425	10,795	476	12,095						
	4-3	Free lift	h <sub>2</sub>	in	mm	0	0	0	0	0	0						
	4-4	Lift	h <sub>3</sub>	in	mm	648	16,450	648	16,450	750	19,050						
	4-4-1	Lift height, minimum (3)	h <sub>3.1.1</sub>	in	mm	97	2,472	97	2,472	97	2,472						
	4-4-2	Lift height, maximum (3)	h <sub>3.1.2</sub>	in	mm	745	18,922	745	18,922	847	21,522						
	4-5	Height, mast extended	h <sub>4</sub>	in	mm	749	19,020	749	19,020	851	21,620						
	4-7	Height of cabin (with strobe light) (4)	h <sub>6</sub>	in	mm	157	3,976	157	3,976	157	3,976						
	4-7-1	Height of overhead guard (closed cab)		in	mm	151	3,844	151	3,844	151	3,844						
	4-7-3	Height of overhead guard (closed cab w/ strobe light)		in	mm	157	3,976	157	3,976	157	3,976						
	4-7-4	Height of overhead guard (closed cab w/ work lights)		in	mm	159	4,035	159	4,035	159	4,035						
	4-8	Seat height to SIP (5)	h <sub>7</sub>	in	mm	105	2,676	105	2,676	105	2,676						
	4-19	Overall length	l <sub>1</sub>	in	mm	363	9,214	363	9,214	363	9,214						
	4-20	Length to face of load	l <sub>2</sub>	in	mm	267	6,776	267	6,776	267	6,776						
	4-21	Overall width	b <sub>2</sub>	in	mm	162	4,110	171	4,335	171	4,335						
	4-24	Spreader width, retracted/extended	b <sub>3</sub>	in	mm	259	6,566	500	12,700	259	6,566	500	12,700	259	6,566	500	12,700
4-31	Ground clearance, lowest point	m <sub>1</sub>	in	mm	9	236	9	236	9	236							
4-32	Ground clearance, center or wheelbase	m <sub>2</sub>	in	mm	15	383	15	383	15	383							
4-34-3	Aisle width with 20' Container   REDUCED / FULL stroke (6)	Ast <sub>20</sub>	in	mm	416	10,566	397	10,096	416	10,566	397	10,096	416	10,566	397	10,096	
4-34-4	Aisle width with 40' Container   REDUCED / FULL stroke (6)	Ast <sub>40</sub>	in	mm	566	14,382	554	14,081	566	14,382	554	14,081	566	14,382	554	14,081	
4-35	Outside turning radius   REDUCED / FULL stroke	W <sub>a</sub>	in	mm	268	6,797	249	6,327	268	6,797	249	6,327	268	6,797	249	6,327	
4-36	Internal turning radius   REDUCED / FULL stroke	b <sub>13</sub>	in	mm	135	3,438	103	2,620	135	3,438	103	2,620	135	3,438	103	2,620	
PERFORMANCE	PERFORMANCE																
	CUMMINS QSB6.7 TIER 4F ENGINE																
	5-1	Travel speed, with / without load		mph	km/h	12.4	20	15.5	25	12.4	20	15.5	25	12.4	20	15.5	25
	5-2	Lifting speed, with / without load		ft/min	m/s	91	0.46	122	0.62	91	0.46	122	0.62	91	0.46	122	0.62
	5-2-1	Lifting speed, with 70% load		ft/min	m/s	106		0.54		106		0.54		106		0.54	
	5-3	Lowering speed with / without load		ft/min	m/s	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55
	5-5	Drawbar pull - 1 mph   1.6 km/h, with / without load		lbs.	kN	33,047	147	33,497	149	33,047	147	33,497	149	33,047	147	33,272	148
	5-6	Drawbar pull - max, with / without load		lbs.	kN	40,016	178	40,241	179	39,791	177	40,241	179	39,791	177	40,241	179
	5-7	Gradeability - 1 mph   1.6 km/h, with / without load (7)		%	%	30	37	30	37	29	37	29	37	28	36	28	36
	5-8	Gradeability - max, with / without load (7)		%	%	37	37	37	37	36	37	36	37	35	36	35	36
	PERFORMANCE																
	CUMMINS QSB6.7 TIER 3 ENGINE																
	5-1	Travel speed, with / without load		mph	km/h	12.4	20	15.5	25	12.4	20	15.5	25	12.4	20	15.5	25
	5-2	Lifting speed, with / without load		ft/min	m/s	91	0.46	122	0.62	91	0.46	122	0.62	91	0.46	122	0.62
	5-2-1	Lifting speed, with 70% load		ft/min	m/s	106		0.54		106		0.54		106		0.54	
	5-3	Lowering speed with / without load		ft/min	m/s	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55	108	0.55
5-5	Drawbar pull - 1 mph   1.6 km/h, with / without load		lbs.	kN	33,047	147	33,497	149	33,047	147	33,497	149	33,047	147	33,272	148	
5-6	Drawbar pull - max, with / without load		lbs.	kN	40,016	178	40,241	179	39,791	177	40,241	179	39,791	177	40,241	179	
5-7	Gradeability - 1 mph   1.6 km/h, with / without load (7)		%	%	30	37	30	37	29	37	29	37	28	36	28	36	
5-8	Gradeability - max, with / without load (7)		%	%	37	37	37	37	36	37	36	37	35	36	35	36	

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.

\* Please contact your Hyster dealer / manufacturer.

GENERAL	1-1	Manufacturer				HYSTER	
	1-2	Model designation				H180-200XD EC6-9 / H200-230-ECD7-9	
	1-3	Powertrain / drive-train				Diesel	

ENGINE	7-1	Engine manufacturer / model			Cummins / QSB 6.7		Cummins / QSB 6.7	
	7-1a	EPA / CE compliance			Tier 3 / Stage IIIA		Tier 4F / Stage IV	
	7-2	Engine power output according to ISO 1585	hp	kW	220	164	225	168
	7-2-1	Engine power output - Peak	hp	kW	231	172	231	172
	7-3	Rated speed	rpm	1/min	2,200		2,200	
	7-3-1	Engine torque @rpm (1/min)	lb-ft	N-m	700 @ 1500	949 @ 1500	770 @ 1500	1,044 @ 1500
	7-4	Number of cylinders / displacement	# / cm <sup>3</sup>		6 / 408	6 / 6,690	6 / 480	6 / 6,690
		Turbocharger	Type		Wastegate, water cooled		Variable geometry, water cooled	
	7-8	Alternator output	Amps		120		120	
	7-9	Electrical system voltage	V		24		24	
7-10	Battery voltage, rated capacity	V / Ah		24 / 102		24 / 102		

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

MISC	10-3	Hydraulic tank capacity	gal	l	71	268	71	268
	10-4	Fuel tank capacity	gal	l	92	350	92	350
	10-4-1	DEF/AdBlue Tank capacity	gal	l	N/A		10	38
	10-5	Steering design			Hydrostatic		Hydrostatic	

**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) Raised cabin may result in reduced capacity since the "carry" height will be higher.
- (2) Load capacity at highest container positions may be less, depending on truck model, stacking height and tires.
- (3) Minimum/maximum height of twist-locks
- (4) With raised cabin position add 39" / 1000 mm
- (5) Gradeability figures are provided for comparison of tractive performance, but are not intended to endorse the operation of vehicle on the stated inclines.

All capacities are according to EN1459.  
All specifications and capacities are valid for trucks equipped with a Hyster® container handling spreader for handling ISO containers.

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



# RATED CAPACITIES AND STACKING HEIGHTS

(shown in 1,000 lbs.)

H180XD-EC6	H180XD-EC7	H200XD-EC7
<p>8'6" containers</p>	<p>8'6" containers</p>	<p>8'6" containers</p>

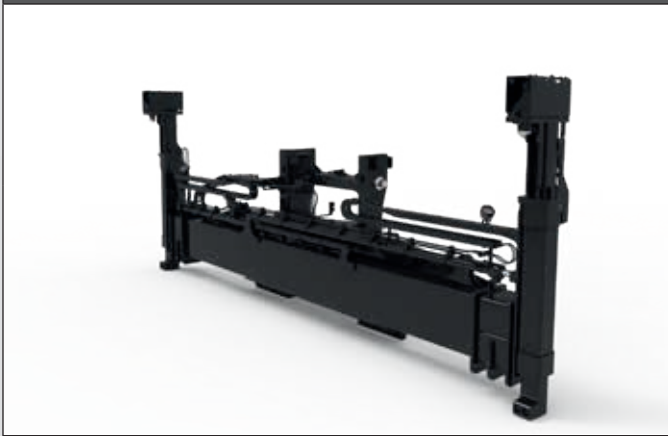
H200XD-EC8	H200XD-ECD7	H190XD-ECD8
<p>8'6" containers <sup>^</sup> deduct 300 lbs for PPS</p>	<p>8'6" containers</p>	<p>8'6" containers</p>

H210XD-ECD8	H230XD-ECD8	H230XD-ECD9
<p>8'6" containers</p>	<p>8'6" containers</p>	<p>8'6" containers</p>





## SINGLE CONTAINER SPREADER 588 TB



Single handling container spreader with Vertical Twist-locks

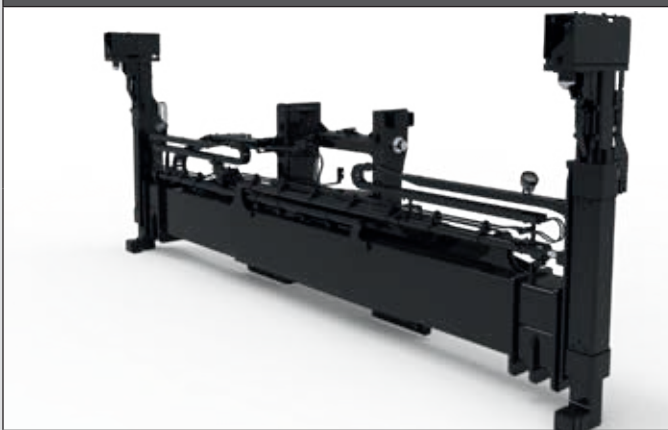
Suitable for:

- 20' or 40' ISO containers of 8' (2.44 m)
- WTP (Wide Twist-lock Position) containers
- Approx. 2.45-2.50 m wide "pallet-wide" 20' or 40' containers, with ISO-like 'chamfered' corner castings

Not suitable for:

- US "Domestic" containers
- Approx. 2.45-2.60 m wide "CPC" containers (Cellular Pallet-wide Containers) with non-ISO corner castings
- Mechanical Pile Slope (standard) +/- 8.1 in (+/- 205mm)
- Powered Pile Slope (optional) +/- 6 degrees
- Sideshift +/- 23.6 in (+/- 600 mm)

## SINGLE CONTAINER SPREADER 586 TB



Single container handling spreader with Vertical Twist-locks

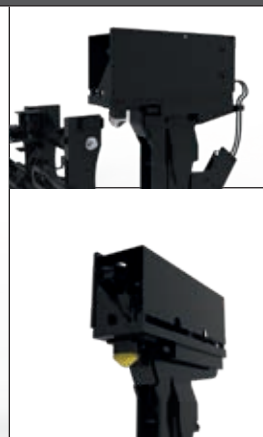
Removable "inset" container blocks

Suitable for:

- 20' or 40' ISO containers of 8' (2.44 m)
- WTP (Wide Twist-lock Position) containers
- US "Domestic" containers
- Approx. 2.45-2.50 m wide "pallet-wide" 20' or 40' containers, with ISO-like 'chamfered' corner castings
- Approx. 2.45-2.60 m wide "CPC" containers (Cellular Pallet-wide Containers) with non-ISO top corners castings

- Mechanical Pile Slope (standard) +/- 8.1 in (+/- 205mm)
- Powered Pile Slope (optional) +/- 6 degrees
- Sideshift +/- 23.6 in (+/- 600 mm)

## SINGLE CONTAINER SPREADER 589 TB



Single container handling spreader with Vertical Twistlocks

Forward Reach function on the twist-locks (3.9"-6.9" / 100-176 mm)

Suitable for:

- 20' or 40' ISO containers of 8' (2.44 m)
- WTP (Wide Twist-lock Position) containers
- US "Domestic" containers
- Approx. 2.45-2.50 m wide "pallet-wide" 20' or 40' containers, with ISO-like 'chamfered' corner castings
- Approx. 2.45-2.60 m wide "CPC" containers (Cellular Pallet-wide Containers) with non-ISO top corners castings

- Mechanical Pile Slope (standard) +/- 8.1 in (+/- 205mm)
- Powered Pile Slope (optional) +/- 6 degrees
- Sideshift +/- 23.6 in (+/- 600 mm)

## DOUBLE CONTAINER SPREADER 584 LD



Double handle container spreader:

- Picking container(s) at the front (hooks) and side (clamps) of the corner castings
- Available with speed limitation features for laden/unladen condition
- Powered Pile Slope (standard) +/- 6 degrees
- Sideshift +/- 23.6in (+/- 600mm)

# FEATURES AND OPTIONS

## ENGINE – TIER 4 FINAL

Cummins QSB 6-cylinder diesel engine delivers 225 hp rated (231 hp peak) and 770 lb-ft of maximum torque. EPA Tier 4 Final compliant engine features cooled exhaust gas recirculation (EGR) technology with selective catalytic reduction (SCR) and an integrated diesel exhaust fluid (DEF) delivery system. A 2-stage diesel oxidation catalyst (DOC) is also included for particulate matter (PM) reduction. Innovative selectable ECO performance modes offer excellent fuel economy and maximum productivity providing up to 15% fuel consumption reduction versus previous Tier 3 powered trucks.

Hibernate idle saves fuel by lowering engine speed when functions are not being used. Also includes:

- Variable geometry turbocharger, water cooled
- 120 amp alternator
- Automatic throttle-up on hoist enables engine to run in most efficient rpm range.

- Standard diffuser for exhaust temperature reduction

## OPTIONAL ENGINE – TIER 3 (Not available in US and Canada)

Cummins QSB 6-cyl. diesel engine delivers rated 220 hp (230 hp peak) and 700 lb-ft of maximum torque. EPA Tier 3 compliant. Also includes:

- Wastegate turbocharger, water cooled
- 120 amp alternator

## CONTAINER ATTACHMENT

Single-handling models are equipped with Hyster® model 586TB spreader featuring vertical twistlocks, removable blocks for handling wider domestic containers, 24" (600mm) of sideshift in each direction and +/- 8" (+/- 205mm) of mechanical pile slope. Double-handling models are equipped with Hyster® model 584LD spreader featuring horizontal hooks and side clamps, 24" (600mm) of sideshift in each direction, +/- 6° of powered pile slope.

## HYDRAULIC SYSTEM

Hyster on-demand load-sensing hydraulic system pumps oil only when required, and can pump at lower engine rpm.

- Saves fuel
- Reduces heat
- Extends component and oil life
- Quieter operation

## ELECTRICAL SYSTEM

- Sealed Deutsch connectors
- CANbus system for easy diagnostics of engine, transmission, hydraulics and spreader

## OPERATOR AREA

- Ergonomically designed hydraulic controls and direction control lever are within easy reach
- 7" full color, touchscreen Integrated Performance Display tracks all truck activity and is integrated with Hyster Tracker telemetry system
- Telescopic, easily adjustable steer column with foot pedal
- Several mechanical and air suspension seat options are available

PERFORMANCE	STD	OPT
Cummins QSB 6.7L diesel engine rated 225 hp tier 4F / 168 kW stage IV*	x	
Cummins QSB 6.7L diesel engine rated 220 hp tier 3 / 164 kW stage IIIA*	x	
Tier 4 / Stage IV compliant	x	
Tier 3 / Stage IIIA compliant	x	
Wastegate turbocharger, water cooled*	x	
Variable geometry turbocharger, water cooled*	x	
Hibernate idle	x	
Hydraulically driven on-demand cooling fan*	x	
120 amp alternator	x	
Performance modes selectable in Integrated Performance Display*	x	
Powertrain protection system	x	
Heavy duty air intake	x	
High mount exhaust	x	
ZF transmission 5WG211 5-spd fwd/3-spd reverse auto-shifting	x	
AxleTech drive axle PRC1756 W3H (162" / 4112 mm across drive tires) with wet disc brakes*	x	
AxleTech drive axle PRC1756 W3H (171" / 4335 mm across drive tires) with wet disc brakes*	x	
DRIVE	STD	OPT
Travel speed limiter - unconditional and customer adjustable		x
Travel speed limiter when carrying container (adjustable)	x	
Travel speed limiter when in unlocked condition		x
Travel speed limiter based on container carry and tilt position		x
Steer axle with full stroke steer cylinder for tight turning radius	x	
Steer axle with reduced stroke steer cylinder for longer tire life		x
14.00-24 24PR pneumatic bias ply drive and steer tires	x	
14.00-24 24PR pneumatic radial drive and steer tires		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	
Hydraulic accumulator	x	
Hydraulic system temperature protection with performance de-rate		x
HANDLING	STD	OPT
Hyster 586TB single spreader, with removable blocks for ISO or wide containers	x	
Hyster 588TB single handling 20-40ft empty container spreader with vertical twist-locks		x
Hyster 589TB single spreader, with hydraulically adjustable head for ISO or wide containers		x
Hyster 584LD double handling 20-40ft empty container spreader with hooks and side clamps**	x	
Mast lift height sensor		x
Mechanical pile slope	x	
Powered pile slope		x
Automatic one-touch extend/retract (20'/40') for spreader		x
Mast tilt indicator - mechanical		x
ERGONOMICS	STD	OPT
Enclosed operator cabin	x	
Powered tilt operator compartment for service		x
Manual tilt operator compartment for service	x	
Raised cabin height		x
Cabin automatic tip-up (for high stacking)		x
Isolated cabin mounting for low noise and vibration	x	
Operator presence system	x	
Mechanical suspension seat	x	
Air suspension seat		x

\*Standard or optional in select markets or on select models.

\*\*Standard on double handling models only.

# FEATURES AND OPTIONS <

<b>ERGONOMICS (continued)</b>	<b>STD</b>	<b>OPT</b>
Deluxe air suspension seat		x
Low backrest seat	x	
High backrest seat		x
Armrest on left side	x	
Cloth seat cover	x	
Vinyl seat cover		x
Seat heating		x
Seat ventilation		x
2-point high visibility seatbelt	x	
3-point high visibility seatbelt		x
Lateral seat sliding mechanism		x
Floor mat	x	
Dome interior light	x	
Front, top and rear wipers	x	
“H”-pattern front wiper		x
“I”-pattern front wiper	x	
Left side handrails, stairway and cabin door	x	
Right side handrails, stairway and cabin door	x	
Wire mesh installed on top of operator compartment		x
7” Integrated Performance Display	x	
Dual 7” Integrated Performance Displays		x
Joystick hydraulic control integrated in control arm	x	
Steering wheel with spinner knob	x	
Directional control lever on steering column	x	
Directional control on joystick		x
Park brake - manual	x	
Park brake - automatic		x
Interior wide angle mirrors	x	
Heater with adjustable speed fan	x	
Telescoping & tilting steering column	x	
USB outlet inside armrest	x	
24-12 DC converter with 1 socket and 2 USB outlets	x	
24-12 DC converter with 2 sockets and 2 USB outlets		x
Air conditioning		x
Automatic climate control		x
Reading light		x
Sun shades on top and rear		x
Sun visors front window		x
Cloth trainer seat with 2-point seatbelt		x
Recirculation fan	x	
Accessory mounting bar on cab front right pillar		x
Document holder on cab front right pillar		x
Heated top- and/or rear window		x
Radio preparation with 2 speakers and antenna		x
<b>VISIBILITY</b>	<b>STD</b>	<b>OPT</b>
Top window with armoured glass - FOPS certified	x	
Steel bars under armoured glass top window		x
External wide angle mirrors mounted on rear of front fenders	x	

Exterior mirrors mounted to handrails		x
Rear view camera system		x
Radar object detection system		x
Halogen work lights	x	
High performance LED work lights		x
Four halogen head lights mounted on front fenders	x	
Four forward work lights mounted on the cabin	x	
Two rearward work lights mounted on the cabin	x	
LED twistlock indicator lights	x	
LED stop/tail/brake lights	x	
Turn signals, hazard & marker lights (LED)		x
2 additional LED spreader work lights pointed towards the twistlocks		x
<b>APPEARANCE</b>	<b>STD</b>	<b>OPT</b>
Hyster yellow paint base truck	x	
Special paint base truck		x
<b>OPERATION</b>	<b>STD</b>	<b>OPT</b>
Air horn 112 dBA	x	
Visible alarm – amber strobe light	x	
Audible alarm – reverse direction activated 82–102 dB(A)	x	
Forward motion alarm		x
Blue LED spotlight - rear		x
Seatbelt interlock for engine start and truck operation		x
Air conditioning shut-off with open door		x
Automatic engine shutdown with timer		x
Delayed engine shutdown for turbo cooldown	x	
Lockable battery disconnect switch	x	
Battery jump start connector (NATO plug)		x
Truck start with key switch and start button	x	
Operator password (display) for truck start	x	
Fuses partially replaced by electric circuit breakers		x
Non-lockable fuel cap	x	
Lockable fuel cap		x
Hyster Tracker wireless asset management - access / verification		x
Hyster Tracker wireless asset management - monitoring	x	
Auto greasing system for spreader		x
Auto greasing system for base truck, outer mast with centralized greasing system for inner mast		x
Centralized greasing system for top end mast		x
24 volt electrical system	x	
Engine block heater 110 or 240 volt		x
Steer wheel lug nut protection	x	
Front and/or rear mud guards		x
<b>SUPPLEMENTAL</b>	<b>STD</b>	<b>OPT</b>
Literature package	x	
Operator’s manual	x	
CE certification		x
Warranty: 12 months / 2,000 hours parts & labor manufacturer’s warranty	x	


\*Standard or optional in select markets or on select models.

\*\*Standard on double handling models only.



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Part No. H180-230XDEC/TG  
6/2020 Litho in U.S.A.

Visit us online at [www.hyster.com](http://www.hyster.com) or call us at **1-800-HYSTER-1**.

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