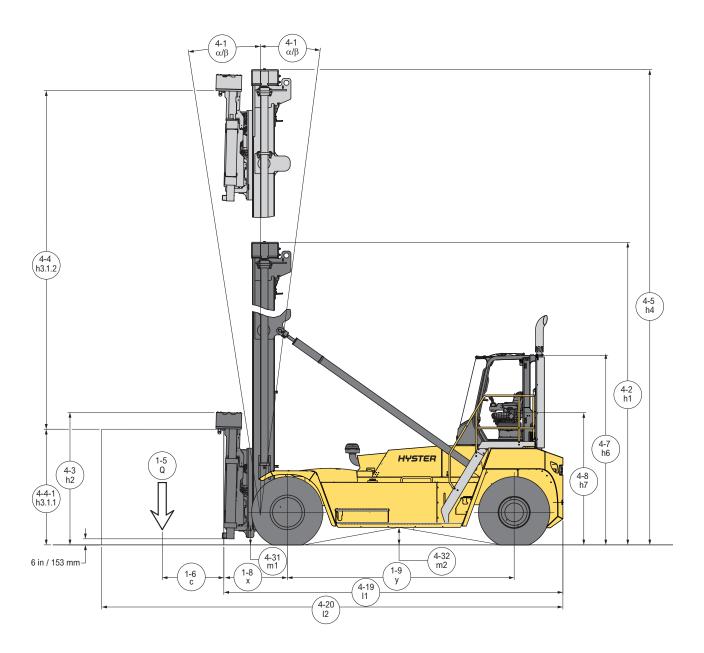
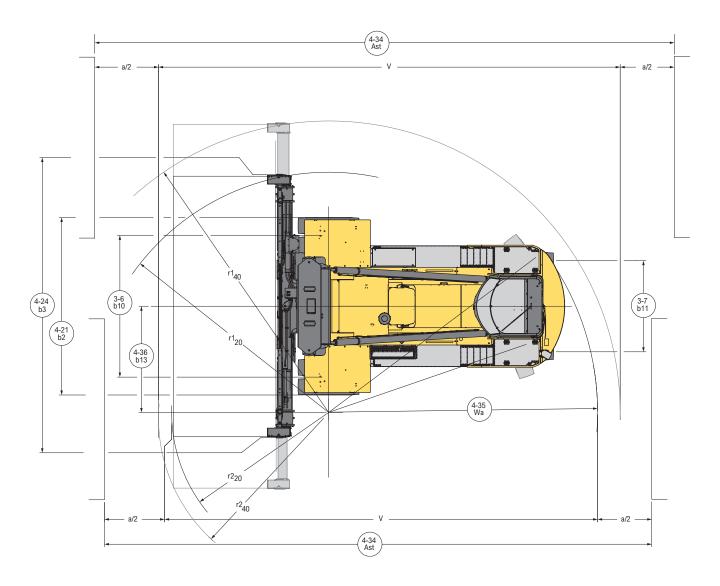


EMPTY CONTAINER HANDLER PRODUCT TECHNICAL GUIDE





DIMENSIONS



- 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) $90 \sim$ stacking aisle width, no intrusive stacking and with clearance:
- Ast = V + a

H180XD-EC6 | H180XD-EC7 SPECIFICATIONS

	4.4	Manufacturer					LIVO	TED			111//	OTED	
	1-1 1-2	Manufacturer Model designation					H180X	TER O ECE				STER XD-EC7	
	1-3	Powertrain / drivetrain						esel				esel	
	1-4	Operator type						ated				ated	
	1-5	Load capacity at load center, nominal (1)	Q	lb	kg	18	000		165	18,		8,1	65
GENERAL	1-5-1	Load capacity at load center, max lift (1,2)	Q	lb	kg		000		165	18,		8,1	
ä										,			
9	1-6	Load center	С	in	mm		8		219	4		1,2	
	1-8	Load distance	Х	in	mm		3		357	5		1,3	
	1-9 1-10-1	Wheelbase Stacking height at first row (number x container height)	У	in #	mm	Ti	77 6 x		500	17		4,5 8'6"	000
	1-10-2	, ,		#				9'6"				9'6"	
	2-1	0 0 (0)				70		1	442	01		1	704
탏	2-1	Service weight		lb	kg	78,	130	ან,	443	81,	J00	36,	/ 0
WEIGHT	2-2	Axle loading with load, front / rear		lb	kg	79,111	17,029	35,884	7,724	82,356	16,733	37,356	7,590
_	2-3	Axle loading without load, front / rear		lb _	kg	50,806	27,333	23,045	12,398	54,051	27,037	24,517	12,264
	3-1	Tire type		Ту	pe			matic				umatic	
တ	3-2	Tire size, front						24 24PR				24 24PR	
WHEELS	3-3 3-5	Tire size, rear Number of tires, front / rear (X driven)		#	ļ +			24 24PR / 2				24 24PR 1 / 2	
₹	3-6	Tread, front	b10	in **		11	29		282	11	29	3,2	100
					mm								
	3-7	Tread, rear	b11	in	mm	8	3	,	108	8		2,1	08
	4-1	Mast tilt, forward / backward	α/β	Deg	1	0.		/ 3	105	46		/3	705
	4-2 4-3	Height, mast lowered Freelift	h1 h2	in in	mm mm		74)		195 0	42	25)	10,	795)
	4-4	Lift	h3	in	mm		45		850	64		16,	
	4-4-1	Lift minimum (3)	h3	in	mm		1		314	9		2,3	
	4-4-2	Lift maximum (3)	h3	in	mm	636		16,164		739		18,764	
	4-5	Height, mast extended	h4	in	mm		646		16,420		749		020
	4-7-1	Height of overhead guard (closed cab)		in	mm		152		3,864		152		64
	4-7-3	Height of overhead guard (closed cab w/ strobe light)		in	mm		57		996	157		3,9	
	4-7-4	Height of overhead guard (closed cab w/ work lights)		in	mm	10	60	4,0)55	160		4,0	55
S	4-8	Seat height to SIP (4)	h7	in	mm	105		2,6	668	105		2,6	68
ő	4-19	Overall length	I1	in	mm	365 9,262		262	36	35	9,2	62	
DIMENSIONS	4-20	Length to face of spreader	12	in	mm	269 6,824		6,8	324	269		6,8	24
									110				
툽	4-21	Overall width across drive tires	b2	in	mm	10	62	4,1		16	62	4,1	10
DIA	4-21 4-23	Overall width across drive tires Width across spreader, retracted / extended	b2 b1.20	in in	mm mm	10 240	62 481	6,084	12,218	240	62 481	4,1 6,084	10 12,218
DIN						240		6,084			481		12,218
NIO	4-23	Width across spreader, retracted / extended		in	mm	240 +/-	481	6,084	12,218	240	481 24	6,084	12,218 600
VIO	4-23 4-30	Width across spreader, retracted / extended Sideshift	b1.20	in in	mm mm	240 +/-	481 24	6,084	12,218 600	240 +/-	481 24	6,084	12,218 600 86
VIO	4-23 4-30 4-31	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance	b1.20 m1	in in in	mm mm mm	240 +/-	481 24	6,084	12,218 600 36	240 +/-	481 24	6,084 +/-6	12,218 600 86
VIO	4-23 4-30 4-31 4-32	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke	b1.20 m1 m2	in in in in	mm mm mm	240 +/- 9	481 24 9	6,084 +/-	12,218 600 36 83	240 +/- §	481 24) 5	6,084 +/-(23	12,218 600 86 33
VIO	4-23 4-30 4-31 4-32	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance	b1.20 m1 m2	in in in in	mm mm mm	240 +/- 9	481 24 9	6,084 +/-	12,218 600 36 83	240 +/- §	481 24) 5	6,084 +/-(23	12,218 600 86 33
VIO	4-23 4-30 4-31 4-32 4-33	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke	b1.20 m1 m2 Ast20	in in in in	mm mm mm mm	240 +/- 9 1 423	481 24 9 5 401	6,084 +/- 23 36 10,751	12,218 600 36 83 10,188	240 +/- § 1 423	481 24 9 5 401	6,084 +/-6 23 38 10,751	12,218 600 86 33 10,188
VIO	4-23 4-30 4-31 4-32 4-33 4-34	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke	m1 m2 Ast20 Ast40 Wa	in in in in in in in in in	mm mm mm mm mm	240 +/- 5 1 423 558 273	481 24 9 5 401 546 251	6,084 +/- 2: 3i 10,751 14,180 6,934	12,218 600 36 33 10,188 13,875 6,371	240 +/- 5 1 423 558 273	481 24 9 5 401 546 251	6,084 +/-(23 38 10,751 14,180 6,934	12,218 500 56 33 10,188 13,875 6,371
VIO	4-23 4-30 4-31 4-32 4-33 4-34	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke	b1.20 m1 m2 Ast20 Ast40	in in in in in	mm mm mm mm mm	240 +/- 5 1 423 558	481 24 5 401 546 251 111	6,084 +/- 23 36 10,751 14,180	12,218 600 36 33 10,188 13,875	240 +/- 5 1 423 558	481 24 5 5 401 546 251 111	6,084 +/-(23 38 10,751 14,180	12,218 600 66 33 10,188 13,875
VIO	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, reduced / full stroke	m1 m2 Ast20 Ast40 Wa	in in in in in in in in in	mm mm mm mm mm	240 +/- 5 1 423 558 273	481 24 5 401 546 251 111	6,084 +/- 2; 3; 10,751 14,180 6,934 3,674	12,218 600 36 33 10,188 13,875 6,371	240 +/- 5 1 423 558 273	481 24 5 5 401 546 251 111	6,084 +/-(23 38 10,751 14,180 6,934 3,674	12,218 500 56 33 10,188 13,875 6,371
NIG	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, reduced / full stroke TIER 3 Travel speed, with / without load Lifting speed, with / without load	m1 m2 Ast20 Ast40 Wa	in in in in in	mm mm mm mm mm mm	240 +/- 5 1 423 558 273 145	481 24 5 5 401 546 251 111 TIER 3 / S 15.5 132	6,084 +/- 2: 3; 10,751 14,180 6,934 3,674 3,674 3,674 20 0.51	12,218 600 36 33 10,188 13,875 6,371 2,818 25 0.67	240 +/- \$ 1 423 558 273 145	481 24 5 401 546 251 111 TIER 3 / 15.5 132	6,084 +/-(25 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51	12,218 300 36 33 10,188 13,875 6,371 2,818
VIO	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36 5-1 5-2 5-3	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, reduced / full stroke TIER 3 Travel speed, with / without load Lifting speed, with / without load Lowering speed with / without load	m1 m2 Ast20 Ast40 Wa	in in in in in in in mph ft/min ft/min	mm	240 +/- - - - - - - - - - - - - - - - - - -	481 24 5 5 401 546 251 111 TIER 3 / S 15.5 132 108	6,084 +/- 2: 3; 10,751 14,180 6,934 3,674 3,674 20 0.51 0.55	12,218 600 36 83 10,188 13,875 6,371 2,818 25 0.67 0.55	240 +/- \$ 1 423 558 273 145 12.4 100 108	481 24 5 401 546 251 111 TIER 3 / 15.5 132 108	6,084 +/-(25 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55	12,218 300 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55
VI O	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36 5-1 5-2 5-3 5-5	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, reduced / full stroke TIER 3 Travel speed, with / without load Lifting speed, with / without load Lowering speed with / without load Drawbar pull - 1 mph (1.6 km/h), with / without load	m1 m2 Ast20 Ast40 Wa	in i	mm mm mm mm mm mm mm km/h m/s kN	240 +/- - - - - - - - - - - - - - - - - - -	481 24 3 5 401 546 251 111 TIER 3 / S 15.5 132 108 33,700	6,084 +/- 2: 3; 10,751 14,180 6,934 3,674 3,674 20 0.51 0.55 149	12,218 600 36 83 10,188 13,875 6,371 2,818 25 0.67 0.55 150	240 +/- \$ 1 423 558 273 145 12.4 100 108 33,400	481 24 5 401 546 251 111 TIER 3/ 15.5 132 108 33,700	6,084 +/-(25 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55 148	12,218 500 56 53 10,188 13,875 6,371 2,818 25 0.67 0.55 150
	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36 5-1 5-2 5-3 5-5 5-6	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, reduced / full stroke	m1 m2 Ast20 Ast40 Wa	in i	mm	240 +/- 5 1 423 558 273 145 12.4 100 108 33,400 40,300	481 24 3 5 401 546 251 111 TIER 3 / S 15.5 132 108 33,700 40,600	6,084 +/- 2: 3; 10,751 14,180 6,934 3,674 3,674 20 0.51 0.55 149 179	12,218 600 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 181	240 +/- \$ 1 423 558 273 145 12.4 100 108 33,400 40,200	481 24 5 401 546 251 111 TIER 3 / 15.5 132 108 33,700 40,500	6,084 +/-(25 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55 148 179	12,218 300 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 180
	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36 5-1 5-2 5-3 5-5 5-6 5-7	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, reduced / full stroke	m1 m2 Ast20 Ast40 Wa	in i	mm km/h m/s kN kN	240 +/- 	481 24 3 5 401 546 251 111 TIER 3 / S 15.5 132 108 33,700 40,600 7	6,084 +/- 2: 3; 10,751 14,180 6,934 3,674 TAGE IIIA 20 0.51 0.55 149 179	12,218 600 36 83 10,188 13,875 6,371 2,818 25 0.67 0.55 150 181	240 +/- \$ 1 423 558 273 145 12.4 100 108 33,400 40,200	481 24 9 5 401 546 251 111 TIER 3/ 15.5 132 108 33,700 40,500 6	6,084 +/-(25 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55 148 179	12,218 300 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 180 8
	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36 5-1 5-2 5-3 5-5 5-6	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, re	m1 m2 Ast20 Ast40 Wa	in i	mm km/h m/s kN kN	240 +/- 	481 24 3 5 401 546 251 111 TIER 3 / S 15.5 132 108 33,700 40,600 7 6	6,084 +/- 2: 3; 10,751 14,180 6,934 3,674 TAGE IIIA 20 0.51 0.55 149 179	12,218 600 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 181	240 +/- \$ 1 423 558 273 145 12.4 100 108 33,400 40,200	481 24 3 5 401 546 251 111 TIER 3/ 15.5 132 108 33,700 40,500 6 5	6,084 +/-(23 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55 148 179	12,218 300 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 180
	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36 5-1 5-2 5-3 5-5 5-6 5-7 5-8	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, re	m1 m2 Ast20 Ast40 Wa	in i	mm km/h m/s m/s kN kN kN	240 +/- 	481 24 3 5 401 546 251 111 TIER 3 / S 15.5 132 108 33,700 40,600 7 6 TIER 4 /	6,084 +/- 2: 3; 10,751 14,180 6,934 3,674 TAGE IIIA 20 0.51 0.55 149 179 3	12,218 600 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 181	240 +/- \$ 1 423 558 273 145 12.4 100 108 33,400 40,200	481 24 3 5 401 546 251 111 TIER 3 / 15.5 132 108 33,700 40,500 6 5 TIER 4 /	6,084 +/-(23 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55 148 179 3 STAGE IV	12,218 300 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 180 8
PERFORMANCE	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36 5-1 5-2 5-3 5-5 5-6 5-7 5-8	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, re	m1 m2 Ast20 Ast40 Wa	in i	mm km/h m/s m/s kN kN kN kM kM/h	240 +/- -	481 24 3 5 401 546 251 111 TIER 3 / \$ 15.5 132 108 33,700 40,600 7 6 TIER 4 / 15.5	6,084 +/- 2: 3; 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55 149 179 3 3 STAGE IV	12,218 600 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 181	240 +/- \$ 1 423 558 273 145 12.4 100 108 33,400 40,200 3 4	481 24 3 5 401 546 251 111 TIER 3/ 15.5 132 108 33,700 40,500 6 5 TIER 4/ 15.5	6,084 +/-(23 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55 148 179 3 STAGE IV 20	12,218 300 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 180 8
	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36 5-1 5-2 5-3 5-5 5-6 5-7 5-8	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, re	m1 m2 Ast20 Ast40 Wa	in i	mm km/h m/s m/s kN kN kN	240 +/- -	481 24 3 5 401 546 251 111 TIER 3 / S 15.5 132 108 33,700 40,600 7 6 TIER 4 /	6,084 +/- 2: 3; 10,751 14,180 6,934 3,674 TAGE IIIA 20 0.51 0.55 149 179 3	12,218 600 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 181	240 +/- \$ 1 423 558 273 145 12.4 100 108 33,400 40,200	481 24 3 5 401 546 251 111 TIER 3 / 15.5 132 108 33,700 40,500 6 5 TIER 4 /	6,084 +/-(23 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55 148 179 3 STAGE IV	12,218 300 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 180 8
	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36 5-1 5-2 5-3 5-5 5-6 5-7 5-8 5-1 5-2	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, reduced / full stroke TIER 3 Travel speed, with / without load Lifting speed, with / without load Lowering speed with / without load Drawbar pull - 1 mph (1.6 km/h), with / without load Drawbar pull - 1 mph (1.6 km/h), with / without load Gradeability - 1 mph (1.6 km/h), with / without load (5) Gradeability - max, with / without load (5) TIER 4 Travel speed, with / without load Lifting speed, with / without load Lifting speed, with / without load	m1 m2 Ast20 Ast40 Wa	in i	mm km/h m/s kN kN kN kN kM km/h m/s	240 +/- 9 1 423 558 273 145 12.4 100 108 33,400 40,300 3 4	481 24 3 5 401 546 251 111 TIER 3 / \$ 15.5 132 108 33,700 40,600 7 6 TIER 4 / 15.5 132	6,084 +/- 2: 36 10,751 14,180 6,934 3,674 TAGE IIIA 20 0.51 0.55 149 179 3 3 STAGE IV 20 0.51	12,218 600 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 181 19	240 +/- § 1 423 558 273 145 12.4 100 108 33,400 40,200 3 4	481 24 3 5 401 546 251 111 TIER 3 / 15.5 132 108 33,700 40,500 6 5 TIER 4 / 15.5 132	6,084 +/-(23 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55 148 179 3 STAGE IV 20 0.51	12,218 300 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 180 8
	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36 5-1 5-2 5-3 5-5 5-6 5-7 5-8 5-1 5-2 5-3 5-5 5-6	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, reduced / full stroke Internal turning radius, reduced / full stroke Internal turning radius, reduced / full stroke ITER 3 Travel speed, with / without load Lowering speed with / without load Drawbar pull - 1 mph (1.6 km/h), with / without load Drawbar pull - max, with / without load Gradeability - 1 mph (1.6 km/h), with / without load (5) TIER 4 Travel speed, with / without load Lifting speed, with / without load Lowering speed with / without load Lowering speed with / without load Lowering speed with / without load	m1 m2 Ast20 Ast40 Wa	in i	mm km/h m/s kN kN 66 66 km/h m/s m/s	240 +/- 9 1 423 558 273 145 12.4 100 108 33,400 40,300 34 12.4 100 108	481 24 3 5 401 546 251 111 TIER 3 / S 15.5 132 108 33,700 40,600 7 6 TIER 4 / 15.5 132 108	6,084 +/ 2: 3i 10,751 14,180 6,934 3,674 TAGE IIIA 20 0.51 0.55 149 179 3 STAGE IV 20 0.51 0.55 151 182	12,218 600 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 181 19 19 25 0.67 0.55 150 181	240 +/- 55 1 423 558 273 145 12.4 100 108 33,400 40,200 3 4 12.4 100 108	481 24 3 5 401 546 251 111 TIER 3 / 1 15.5 132 108 33,700 40,500 6 5 TIER 4 / 1 15.5 132 108	6,084 +/-(23 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55 148 179 3 3 STAGE IV 20 0.51	12,218 300 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 180 8 8 8
	4-23 4-30 4-31 4-32 4-33 4-34 4-35 4-36 5-1 5-2 5-3 5-5 5-6 5-7 5-8	Width across spreader, retracted / extended Sideshift Ground clearance, lowest point Ground clearance, center of wheelbase Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke Outside turning radius, reduced / full stroke Internal turning radius, re	m1 m2 Ast20 Ast40 Wa	in i	mm mm mm mm mm mm mm mm mm km/h m/s kN	240 +/	481 24 3 5 401 546 251 111 TIER 3 / S 15.5 132 108 33,700 40,600 7 6 TIER 4 / 15.5 132 108 34,300	6,084 +/- 2: 3; 10,751 14,180 6,934 3,674 5TAGE IIIA 20 0.51 0.55 149 179 3 3 STAGE IV 20 0.51 1.55	12,218 600 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 181 199 25 0.67 0.55 150 181	240 +/- 55 1 423 558 273 145 12.4 100 108 33,400 40,200 3 4 12.4 100 108 33,900	481 24 24 5 401 546 251 111 TIER 3 / 15.5 132 108 33,700 40,500 6 5 TIER 4 / 15.5 132 108 34,200 41,100 7	6,084 +/-(23 38 10,751 14,180 6,934 3,674 STAGE IIIA 20 0.51 0.55 148 179 3 STAGE IV 20 0.51 0.55	12,218 300 36 33 10,188 13,875 6,371 2,818 25 0.67 0.55 150 180 8 8 8

H200XD-EC7 | H200XD-EC8 SPECIFICATIONS

	4.4	Manufacturer					LIVO	TED			LIVO	TED	
	1-1 1-2	Manufacturer Model designation					H200X	TER D-FC7				TER (D-EC8	
	1-3	Powertrain / drivetrain						esel				esel	
	1-4	Operator type						ated				ated	
귤	1-5	Load capacity at load center, nominal (1)	Q	lb	kg	20,0	20,000)72	20,000		9,072	
GENERAL	1-5-1	Load capacity at load center, max lift (1,2)	Q	lb	kg	20,0	000	9,0)72	19,	956	9,0	52
GE	1-6	Load center	С	in	mm	4	8	1,2	219	4	8	1,2	19
	1-8	Load distance	х	in	mm	5	3	1,3	357	5	3	1,3	57
	1-9	Wheelbase	у	in	mm	17	77	4,5	500	17		4,5	00
		Stacking height at first row (number x container height)		7				8'6"				8'6"	
	1-10-2	0 0 (0 7		7				9'6"				9'6"	
눞	2-1	Service weight		lb	kg	85,4	149	38,	759	91,	051	41,3	300
WEIGHT	2-2	Axle loading with load, front / rear		lb	kg	85,156	20,294	38,626	9,205	88,857	22,194	40,305	10,067
	2-3	Axle loading without load, front / rear		lb	kg	53,707	31,742	24,361	14,398	57,406	33,645	26,039	15,261
	3-1	Tire type		Ту	pe			c Bias Ply				c Bias Ply	
တ	3-2 3-3	Tire size, front Tire size, rear						24 24PR 24 24PR				24 24PR 24 24PR	
WHEELS	3-5	Number of tires, front / rear (X driven)		#	l ⊭			/2			14.00-2 x4		
Š	3-6	Tread, front	b10	in	mm	12			282	13		3,5	07
	3-7	Tread, rear	b11	in	mm	8			108	8		2.108	
	4-1	Mast tilt, forward / backward	α/β	Deg			4	/ 3			4	/ 3	
	4-2	Height, mast lowered	h1	in	mm	42	25	10,	795	47	76	12,0	095
	4-3	Freelift	h2	in	mm	(0)	C	
	4-4 4-4-1	Lift	h3	in	mm	64			450	75		19,0	
	4-4-1	Lift minimum (3) Lift maximum (3)	h3 h3	in in	mm	91 2,314		91 841		2,314 21,364			
		()			mm	739 18,764			841 851				
	4-5	Height, mast extended	h4	in	mm	749 152		19,020 3,864		152		21,620 3,864	
	4-7-1 4-7-3	Height of overhead guard (closed cab) Height of overhead guard (closed cab w/ strobe light)		in in	mm mm	157		3,996		157		3,996	
	4-7-4	Height of overhead guard (closed cab w/ strobe light) Height of overhead guard (closed cab w/ work lights)		in	mm	16		4,055		160		4,0	
S	4-8	Seat height to SIP (4)	h7	in	mm	105		2,668		105		2,668	
NO.	4-19	Overall length	l1	in	mm			9,2	262	36	35	9,2	62
DIMENSIONS	4-20	Length to face of spreader	12	in	mm	269 6,824		324	26	69	6,8	24	
	4-21	Overall width across drive tires	b2	in	mm	16	62	4,1	110	17	71	4,3	35
	4-23	Width across spreader, retracted / extended	b1.20	in	mm	240	481	6,084	12,218	240	481	6,084	12,218
	4-30	Sideshift		in	mm	+/-		+/-	600	+/-24		+/-6	300
	4-31	Ground clearance, lowest point	m1	in	mm	9)	23	36	(9	236	
	4-32	Ground clearance, center of wheelbase	m2	in	mm	1	5	38	83	1	5	38	33
	4-33	Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke	Ast20	in	mm	423	401	10,751	10,188	423	401	10,751	10,188
	4-34	Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke	Ast40	in	mm	558	546	14,180	13,875	558	546	14,180	13,875
	4-35	Outside turning radius, reduced / full stroke	Wa	in	mm	273	251	6,934	6,371	273	251	6,934	6,371
	4-36	Internal turning radius, reduced / full stroke	b13	in	mm	145	111	3,674	2,818	145	111 TIED 2 / 6	3,674	2,818
	5-1	TIER 3 Travel speed, with / without load		mph	km/h	12.4	TIER 3 / 8 15.5	TAGE IIIA 20	25	12.4	TIER 3 / 8 15.5	TAGE IIIA 20	25
	5-2	Lifting speed, with / without load		ft/min	m/s	100	13.3	0.51	0.67	91	120	0.46	0.61
	5-3	Lowering speed with / without load		ft/min	m/s	108	108	0.55	0.55	108	108	0.55	0.55
	5-5	Drawbar pull - 1 mph (1.6 km/h), with / without load		lb	kN	33,200	33,600	148	149	33,100	33,500	147	149
	5-6	Drawbar pull - max, with / without load		lb	kN	40,100	40,500	178	180	40,000	40,400	178	180
INCE	5-7	Gradeability - 1 mph (1.6 km/h), with / without load (5)		9,	6	3	3	3	66	3	1	3	5
PERFORMANCE	5-8	Gradeability - max, with / without load (5)		9	6	4	1	3	6	3	9	3	5
RFO		TIER 4		1				STAGE IV				STAGE IV	
E	5-1	Travel speed, with / without load		mph ft/min	km/h	12.4	15.5	20	25	12.4	15.5	20	25
	5-2 5-3	Lifting speed, with / without load Lowering speed with / without load		ft/min ft/min	m/s m/s	100 108	132 108	0.51 0.55	0.67 0.55	91 108	120 108	0.46 0.55	0.61 0.55
	5-5 5-5	Drawbar pull - 1 mph (1.6 km/h), with / without load		lb	kN	33,800	34,100	150	152	33,700	34,000	150	151
	5-6	Drawbar pull - max, with / without load		lb	kN	40,700	41,000	181	183	40,600	40,900	181	182
	5-7	Gradeability - 1 mph (1.6 km/h), with / without load (7)		9	6	3	4	3	6	3	2	3	5
	5-8	Gradeability - max, with / without load (7)		9	6	4.	2	3	66	3	9	3	5

H200XD-ECD7 | H190XD-ECD8 SPECIFICATIONS

	1-1	Manufacturer					HYS1	rer Ter			HYS	STER		
	1-2	Model designation					H200XD					D-ECD8		
	1-3	Powertrain / drivetrain					Dies					esel		
	1-4	Operator type					Seat					ated		
	1-5	Load capacity at load center, nominal (1)	Q	lb	kg	20,0	000	9,0	72	19,0	000	8,6	18	
₽.	1-5-1	Load capacity at load center, max lift (1,2)	Q	lb	kg	20,0	000	9,0	72	17,0	017	7,7	19	
GENERAL	1-6	Load center	С	in	mm	48	8	1,2	19	4	8	1,2	19	
GE	1-8	Load distance	х	in	mm	52	2	1,3	09	5	2	1,3	09	
	1-9	Wheelbase	у	in	mm	17	7	4,5	00	17	77	4,5	000	
	1-10-1	Stacking height at first row (number x container		#	+		6 + 1 x	, 8'6"			7 + 1	x 8'6"		
	1-10-1	height)		"			0.17				,	X 0 0		
	1-10-2	Stacking height at first row (number x container height)		#	ŧ		5 + 1 x	(9'6"			6 + 1	x 9'6"		
-	2-1	Service weight		lb	kg	86,6	397	39,3	325	89,7	704	40,6	389	
WEIGHT	2-2	Axle loading with load, front / rear		lb	kg	86,637	20,062	39,298	9,100	88,386	20,318	40,091	9,216	
×	2-3	Axle loading without load, front / rear		lb	kg	55,400	31,297	25,129	14,196	58,714	30,990	26,632	14,057	
	3-1	Tire type		Ту		00,100	Pneumatic		1 1,100	55,111		ic Bias Ply	1 1,001	
	3-2	Tire size, front		,			14.00-24					24 24PR		
S.I.S	3-3	Tire size, rear					14.00-24	4 24PR			14.00-	24 24PR		
WHEELS	3-5	Number of tires, front / rear (X driven)		#	ŧ		x4 /	2			χ4	1/2		
3	3-6	Tread, front	b10	in	mm	12	19	3,2	82	12	29	3,2	82	
	3-7	Tread, rear	b11	in	mm	83	3	2,1	08	8	3	2,1	08	
	4-1	Mast tilt, forward / backward	α/β	Degi	rees		4/	3			4	/3		
	4-2	Height, mast lowered	h1	in	mm	37	'4	9,4	95	425		10,795		
	4-3	Freelift	h2	in	mm	0)	()	()	()	
	4-4	Lift	h3	in	mm	54		13,850		648		16,450		
	4-4-1	Lift minimum (3)	h3	in	mm	97		2,472		97		2,472		
	4-4-2	Lift maximum (3)	h3	in	mm	64	643		16,322		745		922	
	4-5	Height, mast extended	h4	in	mm	64		16,4	120	749		19,0		
	4-7-1	Height of overhead guard (closed cab)		in	mm	15		3,8		152		3,8		
	4-7-3	Height of overhead guard (closed cab w/ strobe light)		in	mm	15		3,9		157 160		3,9		
	4-7-4	Height of overhead guard (closed cab w/ work lights)		in	mm	16		4,0				4,0		
SNO	4-8 4-19	Seat height to SIP (4)	h7	in	mm	105 363		2,6		105 363		2,6		
ISI	4-19	Overall length	11 12	in in	mm	26		9,2		26		9,2 6,7		
DIMENSIONS	4-20	Length to face of spreader			mm			6,7						
	4-21	Overall width across drive tires	b2 b1.20	in in	mm	16 259	500	4,1 6,566	12,700	259	500	4,1 6,566	12,700	
	4-23	Width across spreader, retracted / extended Sideshift	01.20	in	mm mm	239 +/-;		+/-6		+/-		+/-6		
	4-31	Ground clearance, lowest point	m1	in	mm	9		23		.,		23		
	4-32	Ground clearance, center of wheelbase	m2	in	mm	15		38		1		38		
		Aisle width with 20' Container; no operating clearance												
	4-33	* REDUCED / FULL stroke	Ast20	in	mm	421	399	10,703	10,140	421	399	10,703	10,140	
	4-34	Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke	Ast40	in	mm	566	554	14,382	14,081	566	554	14,382	14,081	
	4-35	Outside turning radius, reduced / full stroke	Wa	in	mm	273	251	6,934	6,371	273	251	6,934	6,371	
	4-36	Internal turning radius, reduced / full stroke	b13	in	mm	145	111	3,674	2,818	145	111	3,674	2,818	
		TIER 3				40.1	TIER 3 / ST		0.5	46.1	i	STAGE IIIA	0.5	
	5-1 5-2	Travel speed, with / without load		mph ft/min	km/h	12.4	15.5	20	25	12.4	15.5	20	25	
	5-2 5-3	Lifting speed, with / without load Lowering speed with / without load		ft/min ft/min	m/s m/s	91 108	120 108	0.46 0.55	0.61 0.55	91 108	120 108	0.46 0.55	0.61 0.55	
	5-5	Drawbar pull - 1 mph (1.6 km/h), with / without load		lb	kN	33,200	33,600	148	149	33,200	33,500	148	149	
	5-6	Drawbar pull - max, with / without load		Ib	kN	40,100	40,400	178	180	40,000	40,400	178	180	
岁	5-7	Gradeability - 1 mph (1.6 km/h), with / without load (5)		%		33		3		3		3		
PERFORMANCE	5-8	Gradeability - max, with / without load (5)		%		40		3		3		3		
FOR		TIER 4					TIER 4 / S	TAGE IV			TIER 4/	STAGE IV		
~		T 1 1 20 7 20 7 1 1		mph	km/h	12.4	15.5	20	25	12.4	15.5	20	25	
Ä	5-1	Travel speed, with / without load												
PER	5-2	Lifting speed, with / without load		ft/min	m/s	91	120	0.46	0.61	91	120	0.46	0.61	
PEF	5-2 5-3	Lifting speed, with / without load Lowering speed with / without load		ft/min ft/min	m/s	108	108	0.55	0.55	108	108	0.55	0.55	
PEF	5-2 5-3 5-5	Lifting speed, with / without load Lowering speed with / without load Drawbar pull - 1 mph (1.6 km/h), with / without load		ft/min ft/min lb	m/s kN	108 33,800	108 34,100	0.55 150	0.55 152	108 33,700	108 34,100	0.55 150	0.55 151	
PER	5-2 5-3 5-5 5-6	Lifting speed, with / without load Lowering speed with / without load Drawbar pull - 1 mph (1.6 km/h), with / without load Drawbar pull - max, with / without load		ft/min ft/min lb	m/s kN kN	108 33,800 40,700	108 34,100 41,000	0.55 150 181	0.55 152 182	108 33,700 40,600	108 34,100 41,000	0.55 150 181	0.55 151 182	
PER	5-2 5-3 5-5	Lifting speed, with / without load Lowering speed with / without load Drawbar pull - 1 mph (1.6 km/h), with / without load		ft/min ft/min lb	m/s kN kN	108 33,800	108 34,100 41,000	0.55 150	0.55 152 182	108 33,700	108 34,100 41,000	0.55 150 181	0.55 151 182	

H210XD-ECD8 | H230XD-ECD8 | H230XD-ECD9 SPECIFICATIONS

	1-1	Manufacturer Madel designation					HYS		D8			HYSTER H230XD-EC8			HYSTER H230XD-ECD9			
	1-2 1-3	Model designation Powertrain / drivetrain					H210XI Die				Die				Diesel			
	1-4	Operator type					Sea				Sea					ated		
١.	1-5	Load capacity at load center, nominal (1)	Q	lb	kg	21,0	000	9,5	525	23,0	000	10,	433	22,	900	10,	,387	
RAI	1-5-1	Load capacity at load center, max lift (1,2)	Q	lb	kg	21,0	000	9,5	525	23,000		10,	433	13,600		6,169		
GENERAL	1-6	Load center	С	in	mm	4		1,2		48		,	219	48		1,219		
9	1-8	Load distance	Х	in	mm	5.		1,3		52		1,309		52 177		1,309		
	1-9	Wheelbase Stacking height at first row (number x	У	in	mm	17		4,5	000	17			500	17			500	
	1-10-1	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)		#	<u>!</u>		6 + 1	x 9'6"			6 + 1	x 9'6"			7 + 1	x 9'6"		
-	2-1	Service weight		lb	kg	91,9	975	41.7	719	94,0	196	42	681	97,	030	44	.012	
WEIGHT	2-2	Axle loading with load, front / rear		lb	kg	91,516	21,458	41,511	9,733	94,644	22,452	42,930	10,184	97,718	22,212	44,324	10.075	
Š	2-3	Axle loading without load, front / rear		lb	kg	58,720		26,635	15,084	58,722		26,636	16,045	61,954		28,102	15,910	
	3-1	Tire type		Тур			Pneumation		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Pneumation			.,	Pneumati			
10	3-2	Tire size, front					14.00-2	4 24PR			14.00-2	4 24PR			14.00-2	24 24PR		
WHEELS	3-3	Tire size, rear					14.00-2				14.00-2					24 24PR		
¥	3-5	Number of tires, front / rear (X driven)	1.40	. #		4.0	x4			4.0	x4		-0-		x4			
	3-6	Tread, front	b10	in	mm	13		3,5		13		,	507		38	,	507	
	3-7	Tread, rear	b11	in	mm	8		2,1	80	8:			108	8	3		108	
	4-1 4-2	Mast tilt, forward / backward Height, mast lowered	α/β h1	Degr in	rees mm	42	4 /	3	795	42	4 /		795	A.	76	/ 3	.095	
	4-3	Freelift	h2	in	mm			10,		12			0	- (0	
	4-4	Lift	h3	in	mm	64	18	16,4	450	64	18	16,	450	75	50	19,	,050	
	4-4-1	Lift minimum (3)	h3	in	mm	9		2,4		9			172		7		472	
	4-4-2	Lift maximum (3)	h3	in	mm	74		18,		74			922	84			,522	
	4-5	Height, mast extended	h4	in	mm	749		19,		74			020	851		21,620		
	4-7-1	Height of overhead guard (closed cab) Height of overhead guard		in	mm	152		3,8	864	152		3,864		152		3,864		
	4-7-3	(closed cab w/ strobe light)		in	mm	157		3,9	96	157		3,996		15	157		996	
	4-7-4	Height of overhead guard (closed cab w/ work lights)		in	mm	160		4,0)55	160		4,055		16	160		055	
Š	4-8	Seat height to SIP (4)	h7	in	mm	10)5	2,6	68	105		2,668		10	105		668	
DIMENSIONS	4-19	Overall length	l1	in	mm	363		9,2	14	363		9,214		363		9,214		
le i	4-20	Length to face of spreader	12	in	mm	26	57	6,7	76	26	57	6,7	776	26	67	6,	776	
	4-21	Overall width across drive tires	b2	in	mm	17	'1	4,3	35	17	'1	4,3	335	17	71	4,:	335	
	4-23	Width across spreader, retracted / extended	b1.20	in	mm	259	500	6,566	12,700	259	500	6,566	12,700	259	500	6,566	12,700	
	4-30	Sideshift		in	mm	+/-	24	+/-(500	+/-	24	+/-	600	+/-	24	+/-	600	
	4-31	Ground clearance, lowest point	m1	in	mm	9)	23	36	g)	2	36	9	9	2	36	
	4-32	Ground clearance, center of wheelbase	m2	in	mm	1	5	38	33	1:	5	3	83	1	5	3	83	
	4-33	Aisle width with 20' Container; no operating clearance * REDUCED / FULL stroke	Ast20	in	mm	421	399	10,703	10,140	421	399	10,703	10,140	421	399	10,703	10,140	
	4-34	Aisle width with 40' Container; no operating clearance * REDUCED / FULL stroke	Ast40	in	mm	566	554	14,382	14,081	566	554	14,382	14,081	566	554	14,382	14,081	
	4-35	Outside turning radius, reduced / full stroke	Wa	in	mm	273	251	6,934	6,371	273	251	6,934	6,371	273	251	6,934	6,371	
	4-36	Internal turning radius, reduced / full stroke	b13	in	mm	145	111	3,674	2,818	145	111	3,674	2,818	145	111	3,674	2,818	
		TIER 3					TIER 3 / S	TAGE IIIA			TIER 3 / S	TAGE IIIA			TIER 3 / S	TAGE III		
	5-1	Travel speed, with / without load		mph	km/h	12.4	15.5	20	25	12.4	15.5	20	25	12.4	15.5	20	25	
	5-2	Lifting speed, with / without load		ft/min	m/s	91	120	0.46	0.61	91	120	0.46	0.61	91	120	0.46	0.61	
	5-3 5-5	Lowering speed with / without load Drawbar pull - 1 mph (1.6 km/h),		ft/min	m/s kN	108 33,100	108 33,500	0.55 147	0.55 149	108 33,000	108 33,400	0.55 147	0.55 149	108 33,000	108 33,400	0.55	0.55	
	5-6	with / without load Drawbar pull - max, with / without load		lb	kN	40,000	40,300	178	179	39,900	40,300	177	179	39,800	40,300	177	179	
#	5-7	Gradeability - 1 mph (1.6 km/h),		%		3		3		2			7		8		36	
PERFORMANCE	5-8	with / without load (5) Gradeability - max, with / without load (5)		%		3		3		3			37		5		36	
FOR		TIER 4					TIER 4 / S				TIER 4 / S					STAGE IV		
PER	5-1	Travel speed, with / without load		mph	km/h	12.4	15.5	20	25	12.4	15.5	20	25	12.4	15.5	20	25	
	5-2	Lifting speed, with / without load		ft/min	m/s	91	120	0.46	0.61	91	120	0.46	0.61	91	120	0.46	0.61	
	5-3	Lowering speed with / without load Drawbar pull - 1 mph (1.6 km/h),		ft/min	m/s	108	108	0.55	0.55	108	108	0.55	0.55	108	108	0.55	0.55	
	5-5	with / without load		lb	kN	33,600	34,000	150	151	33,600	34,000	149	151	33,500	33,900	149	151	
	5-6	Drawbar pull - max, with / without load Gradeability - 1 mph (1.6 km/h),		lb	kN	40,500	40,900	180	182	40,400	40,900	180	182	40,400	40,800	180	182	
	5-7	with / without load (7)		%		3		3		3			37		9		36	
	5-8	Gradeability - max, with / without load (7)		%	0	3	8	3	7	36		37		35		3	36	

POWERTRAINS

	1-1	Manufacturer			HYS	TER	HYS	STER	HYSTER		HYSTER		
	1-2	Model designation			H180-200	XD-EC6-8	H180-200	OXD-EC6-8	H190-230)	(D-ECD7-9	H190-230XD-ECD7-9		
	1-3	Power type			Die	sel	Di	esel	Diesel		Diesel		
	7-1	Engine manufacturer / model			Cummins	/ QSB 6.7	Cummins	Cummins / QSB 6.7		Cummins / QSB 6.7		s / QSB 6.7	
	7-1a	EPA Tier Compliance			Tier 3 / 9	Stage IIIA	Tier 4 /	Stage IV	Tier 3 / S	Stage IIIA	Tier 4 /	Stage IV	
	7-2	Engine power - rated	hp	kW	220@2200	164@2200	225@2200	168@2200	220@2200	164@2200	225@2200	168@2200	
빌	7-2-1	Engine power - peak	hp	kW	231@2000	172@2000	233@2000	174@2000	231@2000	172@2000	233@2000	174@2000	
ENGINE	7-3	Rated speed	rpm	rpm	2,2	200	2,	200	2,2	200	2,	200	
	7-3-1	Engine torque @ rpm (1.min)	lb-ft	N-m	700@1500	949@1500	770@1500	1,044@1500	700@1500	949@1500	770@1500	1,044@1500	
	7-4	Number of cylinders / displacement	# / in3	#/cm3	6 / 408	6 / 6,690	6 / 408	6 / 6,690	6 / 408	6 / 6,690	6 / 408	6 / 6,690	
	х	Turbocharger	T	ype	Wastegate, v	vater-cooled		geometry, -cooled	Wastegate, v	vater-cooled		geometry, -cooled	
	7-8	Alternator output	Ar	mps	1:	20	1	20	12	20	1	20	
	7-9	Electrical system voltage	V		24		2	24	2	4	24		
	7-10	Battery voltage, nominal capacity	V / Ah		24 / 102		24	/ 102	24 /	102	24	/ 102	
	8-0	Drive control / transmission	Type		Powershift Transmission		Powershift Transmission		Powershift T	ransmission	Powershift	Transmission	
	8-1	Type of drive unit	Type		Torque (Converter	Torque Converter		Torque C	onverter	Torque	Converter	
	8-2	Transmission manufacturer / type	Type		ZF 5V	/G211	ZF 5WG211		ZF 5W	/G211	ZF 5\	NG211	
DRIVE	8-2-1	Transmission speeds forward / backward	#		5	/3	5/3		5 /	/3	5	/3	
۵	8-3	Wheel drive / drive axle manufacturer / type	T	ype	AxleTech / Pl	RC 1756W3H	AxleTech / P	RC 1756W3H	AxleTech / Pf	RC 1756W3H	AxleTech / F	PRC 1756W3H	
	8-11	Service brake	T	ype	Oil immersed (wet) disc		Oil immersed (wet) disc		Oil immerse	d (wet) disc		ed (wet) disc	
	8-12	Parking brake	T	ype	Spring applied, dry disc on drive axle		Spring applied, dry disc on drive axle		Spring appli on driv	ed, dry disc ve axle	Spring appliding driv	ed, dry disc on e axle	
	9-1	Spreader manufacturer / type	T	ype	Elme / 58	6TB MPS	Elme / 586TB MPS		Elme / 584LD PPS		Elme / 584LD PPS		
œ	9-1-1	Pile slope, mechanical	in	mm	+/- 8.1	+/- 205	+/- 8.1	+/- 205	+/- 7.6	+/- 192	+/- 7.6	+/- 192	
ADE	9-1-2	Pile slope total, powered	Deç	grees	+/	- 6	+,	/- 6	+/-	- 6	+	/- 6	
SPREADER	9-3	Size of containers		ft	ISO 20	' & 40'	ISO 20	0' & 40'	ISO 20	' & 40'	ISO 2	0' & 40'	
•	9-4	Sideshift (total)	in	mm	+/- 23.6	+/- 600	+/- 23.6	+/- 600	+/- 23.6	+/- 600	+/- 23.6	+/- 600	
	9-4-1	Telescoping time, extend / retract	sec	sec	14	/ 16	14	/ 16	14 /	/ 16	14	/ 16	
	10-1	Operating pressure for attachments	psi	MPa	3,263	22.5	3,263	22.5	3,263	22.5	3,263	22.5	
	10-2	Oil volume for attachments	gpm	l/m	16	60	16	60	16	60	16	60	
ပ	10-3	Hydraulic tank capacity	gal	1	71	268	71	268	71	268	71	268	
MISC	10-4	Fuel tank capacity	gal	I	92	350	92	350	92	350	92	350	
	10-4-1	DEF/AdBlue Tank capacity	gal		N/A	N/A	10	38	10	38	10	38	
	10-5	Steering design		ype	,	static		ostatic	Hydro			ostatic	
	10-6	Number of steering rotations		#	5	.0	Ę	5.0	5.0		5.0		

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 EN1551.

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.

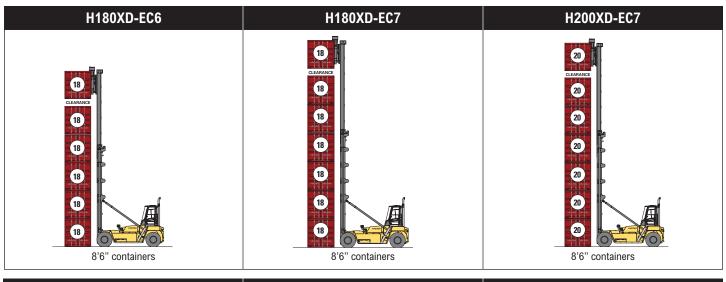
Lift trucks illustrated may feature optional equipment. Values may vary with alternative configurations.

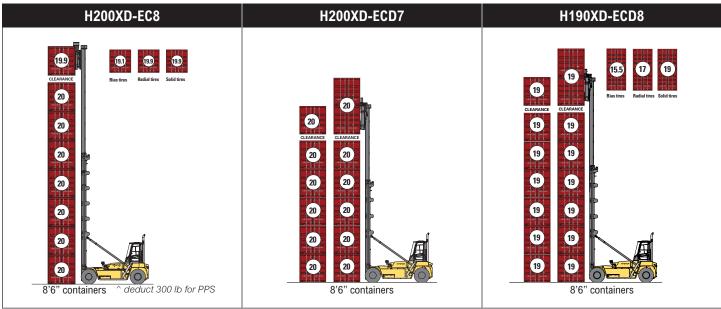
CERTIFICATION: Hyster lift trucks meet the design and construction requirements of B56.1-1969, per OSHA Section 1910.178(a)(2), and also comply with the B56.1 revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck. Performance 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.

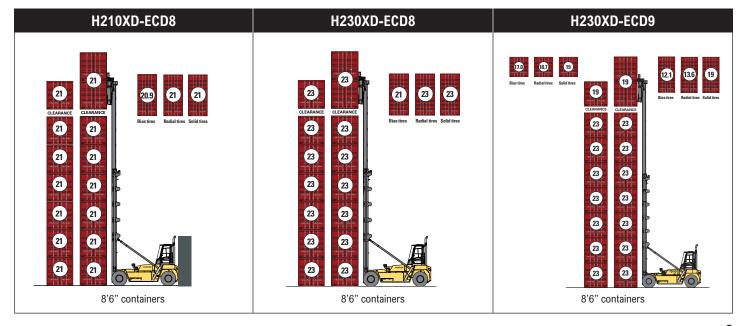
 ${\it NOTE: Specifications, unless otherwise listed, are for a standard truck without optional equipment.}$

Specification data is based on VDI 2198.

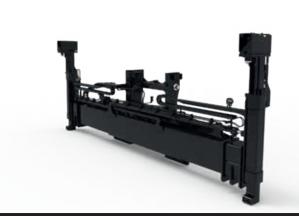
RATED CAPACITIES AND STACKING HEIGHTS (SHOWN IN 1,000LB)







SINGLE CONTAINER SPREADER 588 TB







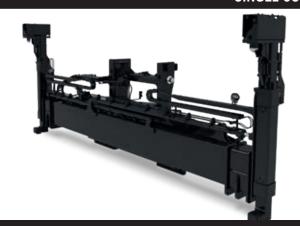
Single handling container spreader with Vertical Twist-locks

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
- 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

PERFORMANCE	STD	OP
	חופ	OP1
Cummins QSB 6.7L diesel engine rated 225 hp tier 4F / 168 kW stage IV*	х	
Cummins QSB 6.7L diesel engine rated 220 hp tier 3 / 164 kW stage IIIA*	х	
Tier 4 / stage IV compliant*	х	
Tier 3 / stage IIIA compliant*	х	
Wastegate turbocharger, water cooled*	х	
Variable geometry turbocharger, water cooled*	х	
Hibernate idle	х	
Hydraulically driven on-demand cooling fan*	х	
120 amp alternator	Х	
Performance modes selectable in Integrated Performance Display*	х	
Powertrain protection system	х	
Heavy duty air intake	х	
High mount exhaust	х	
ZF transmission 5WG211 5-spd fwd / 3-spd reverse auto-shifting	х	
AxleTech drive axle PRC1756 W3H (162" / 4112 mm across drive tires) with wet disc brakes*	х	
AxleTech drive axle PRC1756 W3H (171" / 4335 mm across drive tires) with wet disc brakes**	х	
DRIVE	STD	OP ⁻
Travel speed limiter - unconditional and customer adjustable		х
Travel speed limiter when carrying container (adjustable)	х	
Travel speed limiter when in unlocked condition		х
Travel speed limiter based on container carry and tilt position		х
Steer axle with full stroke steer cylinder for tight turning radius	х	
Steer axle with reduced stroke steer cylinder for longer tire life		х
14.00-24 24PR pneumatic bias ply drive and steer tires	Х	
14.00-24 24PR pneumatic radial drive and steer tires		х
14.00-24 pneumatic shaped solid drive and steer tires		х
14.00 R24 pneumatic tubeless radial drive and steer tires		Х
LIFT	STD	OP.
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 cylinder / 2 chain design	х	
Hydraulic accumulator	Х	
Hydraulic system temperature protection with performance de-rate		х
HANDLING	STD	OP.
Hyster 586TB single spreader, with removable blocks for ISO or wide containers	х	
Hyster 588TB single handling 20-40ft empty container spreader with vertical twist-locks*		х
Hyster 589TB single spreader, with hydraulically adjustable head for ISO or wide containers		х
Hyster 584LD double handling 20-40ft empty container spreader with hooks and side clamps**	х	
Mast lift height sensor		Х
Mechanical pile slope	х	
Powered pile slope		х
Automatic one-touch extend/retract (20'/40') for spreader		х
Mast tilt indicator - mechanical		Х

ERGONOMICS	STD	OPT
Enclosed operator cabin	х	
Powered tilt operator compartment for service		Х
Manual tilt operator compartment for service	х	
Raised cabin height		х
Cabin automatic tip-up (for high stacking)		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
Armrest on left side	х	
Cloth seat cover	х	
Vinyl seat cover		х
Seat heating		Х
Seat ventilation		х
2-point high visibility seatbelt	х	
3-point high visibility seatbelt		х
Lateral seat sliding mechanism		Х
Floor mat	х	
Dome interior light	х	
Front, top and rear wipers	х	
"H"-pattern front wiper		Х
"I"-pattern front wiper	х	
Left side handrails, stairway and cabin door	х	
Right side handrails, stairway and cabin door	х	
Wire mesh installed on top of operator compartment		Х
7" Integrated Performance Display	х	
Dual 7" Integrated Performance Displays**		х
Joystick hydraulic control integrated in control arm	х	
Steering wheel with spinner knob	Х	
Directional control lever on steering column	х	
Directional control on joystick		Х
Park brake - manual	х	
Park brake - automatic		Х
Interior wide angle mirrors	х	
Heater with adjustable speed fan	х	
Telescoping & tilting steering column	х	
USB outlet inside armrest	Х	
24-12 DC converter with 1 socket and 2 USB outlets	Х	
24-12 DC converter with 2 sockets and 2 USB outlets	.,	Х
Air conditioning		X
Automatic climate control		X
Reading light		X
Sun shades on top and rear		X
- Call Charles of top and four		~

^{*}Standard or optional in select markets or on select models.
**Standard on double handling models only.

FEATURES AND OPTIONS

ERGONOMICS (CONTINUED)	STD	OPT
Sun visors front window		х
Cloth trainer seat with 2-point seatbelt		х
Recirculation fan	х	
Accessory mounting bar on cab front right pillar		Х
Document holder on cab front right pillar		х
Heated top window		х
Radio preparation with 2 speakers and antenna		х
VISIBILITY	STD	OPT
Top window with armoured glass	х	
Steel bars under armoured glass top window		х
External wide angle mirrors mounted on rear of front fenders	х	
Exterior mirrors mounted to handrails		х
Rear view camera system		х
Radar object detection system		х
Halogen work lights	х	
High performance LED work lights		х
Four halogen head lights mounted on front fenders	х	
Four forward work lights mounted on the cabin	х	
Two rearward work lights mounted on the cabin	х	
LED twistlock indicator lights	х	
LED stop / tail / brake lights	х	
Turn signals, hazard & marker lights (LED)		х
2 additional LED spreader work lights pointed towards the twistlocks		х
APPEARANCE	STD	OPT
Hyster yellow paint base truck	х	
Special paint base truck		Х
OPERATION	STD	OPT
Air horn 112 dBA	х	
Visible alarm – amber strobe light	х	

OPERATION (CONTINUED)	STD	OPT
Audible alarm – reverse direction activated 82–102 dB(A)	х	
Forward motion alarm		х
Blue LED spotlight - rear		х
Seatbelt interlock for engine start and truck operation		х
Air conditioning shut-off with open door		х
Automatic engine shutdown with timer		х
Delayed engine shutdown for turbo cooldown	х	
Lockable battery disconnect switch	х	
Battery jump start connector (NATO plug)		х
Truck start with key switch and start button	х	
Operator password (display) for truck start	х	
Fuses partially replaced by electric circuit breakers		х
Non-lockable fuel cap	х	
Lockable fuel cap		х
Hyster Tracker™ wireless asset management - access / verification		Х
Hyster Tracker™ wireless asset management - monitoring	Х	
Auto greasing system for spreader		Х
Auto greasing system for base truck, outer mast with centralized greasing system for inner mast		х
Centralized greasing system for top end mast		х
24 volt electrical system	х	
Engine block heater 110 or 240 volt		х
Steer wheel lug nut protection	х	
Front and / or rear mud guards		х
SUPPLEMENTAL	STD	OPT
Literature package	Х	
Operator's manual	х	
CE certification		х
Warranty: 12 months / 2,000 hours parts & labor manufacturer's warranty	х	



Hyster Company P.O. Box 7006 Greenville, North Carolina 27835-7006

© 2025 Hyster-Yale Materials Handling, Inc., all rights reserved. Hyster and \mathbb{H} are trademarks of Hyster-Yale Materials Handling, Inc. Hyster products are subject to change without notice. Trucks may be shown with optional equipment and/or features not available in all regions.

^{*}Standard or optional in select markets or on select models.

^{**}Standard on double handling models only.