

EMPTY Container Handlers '2 on 6' high - 8'6"



Make Model	HYSTER H500HD-EC	Taylor TECSP-156H	Taylor TECSP-157/8	KALMAR DCE90-45 E7	KALMAR DCE100-45 E7	FANTUZZI FDC 25 K7	SMV SL6/7 ECB90
<u>Nominal capacity</u> lbs @ 48 in.	19800	15000	15000	19800	22000	19800	19800
<u>Capacity</u> full lift, '2 on 6' high 8'6" lbs	19800	15000	15000	19800	No data	19800	19800
<u>Liftheight</u> of mast, max. in	647	637	851	649	649	653	657
Liftheight of container in	740	626	842.5	737	737	740	749
Stacking height Single 8'6"	7-high	6-high	8-high	7-high	7-high	7-high	7-high
Single 9'6"	6-high	5-high	7-high	6-high	6-high	6-high	6-high
Double 8'6"	'2 on 6' high	N/A	N/A	'2 on 6' high	'2 on 6' high	'2 on 6' high	'2 on 6' high
Double 9'6"	'2 on 5' high	N/A	N/A	'2 on 5' high	'2 on 5' high	'2 on 5' high	'2 on 5' high
<u>Stability</u> (Forward & Sideways)							
Machine weight (without load) in	79255	66000	93400	80900	89725	81570	82450
Steeraxle weight (with rated load) in	18010	No data	No data	18735	20280	18955	17415
Steeraxle weight (without load) in	29165	22,600	29,800	29100	31965	28660	27995
Wheel base in	177	148	180	177	179	177	177
Drive /Carry height of container in	134	No Data	No Data	145	169	149	141
Machine front width in	162	127.6	162.3	157	177	165	159
<u>Visibility</u>							
Cab position	Rear	Rear	Rear	Rear	Rear	Almost rear	Rear
Placement of lift cylinders	Behind mast	Behind mast	Behind mast	Beside mast	Beside mast	Beside mast	Beside mast
To container engagement points *)	++++	++++	++++	+++	+++	+++	+++
<u>Performance & Speeds</u>							
Lift speed, with- / without load f/m	102/110	70/72	100/100	108/118	108/118	114/118	133/137
Lowering speed, with- / without f/m	96/92	No Data	No Data	118/118	118/118/	102/98	137/137
Average#) of Lifting & Lowering f/m	100	No Data	No Data	116	116	108	135
Drive speed, w. / without load m/h	16/17	11.8/12.1	11.8/12.1	15/16	15/16	16/17	18/18.6
Engine torque lbs-ft@rpm	691.7 @1400	540 @1400	540 @1400	658.5 @ 1400	658.5 @1400	No Data	660 @1500
Engine performance Hp	230	165	165	224 Option 214 Option 233	224 Option 214 Option 233	238	224
<u>Manoeuvrability</u>							
Length incl. spreader (L2) in	264	219	263.5	271	6900	248	6615
Turning radius (Wa) in	239	204	258	248	6300	236	6000
Stacking aisle (Ast) 20' / 40' in		No Data	No Data				
a. Without operating clearance ft	30.8/45.1	No Data	No Data	No data	No data	No data	No data
b. With 200 mm oper. clearance ft	31.5/45.7	No Data	No Data	32.8/45.9	32.6/45.5	No data	32.6/45.5
c. With 10% operating clearance ft	33.9/49.6	No Data	No Data	No data	No data	No data	No data
<u>Standard Equipment</u>							
Tyre size standard	14.00x24	12.00 x 20	14.00 x 24	14.00x24	14.00x24	14.00x24	12.00 x 24
Airconditioning	Standard	No Data	No Data	Option extra	Option extra	Option extra	Option extra
Engine &Transmission protection	Standard	Standard	Standard	Standard	Standard	Standard	Option extra
Autoshift transmission	Standard	Standard	Standard	No info	No info	No info	Option extra
Hydraulic shock absorber	Standard	No Data	No Data	No info	No info	No info	No info
<u>Versatility</u>							
Container Engagement systems	5 versions	1 version	1 version	2 versions	2 versions	2 versions	2 versions
Sideshift movement in	+/- 23.6	+/- 20	+/- 20	+/- 23.6	+/- 23.6	+/- 21.6	+/- 23.6
"Reefer correction"	Yes	No Data	No Data	Yes	Yes	Yes	Option extra
<u>Unique feature(s)</u>							
Mast with '1 to 4' lift ratio	Yes	No	No	No	No	No	Yes
Rear-mounted lift cylinders	Yes	Yes	Yes	No	No	No	No
#) Average of 4 modes: Unladen lift = 110 ft/min., laden lift = 102 ft/min., unladen lowering = 96.4 ft/min., laden lowering = 92.5 ft/min.							

The information shown in this document is the result of side-by-side productivity comparisons of the Hyster 500HD-EH and the equivalent Taylor, Fantuzzi, SMV and Kalmar trucks, as shown in published specifications.

EMPTY Container Handlers '2 on 6' high - 8'6"



Make Model	SVE-Truck ECS-7H
<u>Nominal capacity</u> lbs @ 48 in.	19800
<u>Capacity</u> full lift	No data
<u>Liftheight</u> of mast, max. in	645
Liftheight of container in	No data
Stacking height Single 8'6"	7-high
Single 9'6"	6-high
Double 8'6"	'2 on 6' high
Double 9'6"	'2 on 5' high
<u>Stability</u> (Forward & Sideways)	
Machine weight (without load) lbs	82230
Steeraxle weight (with rated load) lbs	17635
Steeraxle weight (without load) lbs	28215
Wheel base in	165
Drive /Carry height of container in	+/-149
Machine front width in	157
<u>Visibility</u>	
Cab position	Rear
Placement of lift cylinders	Beside mast
To container engagement points *)	+++
<u>Performance & Speeds</u>	
Lift speed, with- / without load f/m	88/104
Lowering speed, with- / without f/m	88/78
Average#) of Lifting & Lowering f/m	90
Drive speed, w. / without load m/h	15/15
Engine torque lbs-ft@rpm	699.8 @ 1300
Engine performance Hp	238
<u>Manoeuvrability</u>	
Length incl. spreader (L2) in	6400
Turning radius (Wa) in	6300
Stacking aisle (Ast) 20' / 40' in	
a. Without operating clearance ft	No data
b. With 200 mm oper. clearance ft	No data
c. With 10% operating clearance ft	No data
<u>Standard Equipment</u>	
Tyre size standard	12.00x24
Airconditioning	Option extra
Engine &Transmission protection	Option extra
Autoshift transmission	Option extra
Hydraulic shock absorber	Option extra
<u>Versatility</u>	
Container Engagement systems	2 versions
Sideshift movement in	No Data
"Reefer correction"	No Data
<u>Unique feature(s)</u>	
Mast with '1 to 4' lift ratio	No
Rear-mounted lift cylinders	No
#) Average of 4 modes: Unladen lift = 110 ft/min., laden lift = 102 ft/min., unladen lowering = 96.4 ft/min., laden lowering = 92.5 ft/min.	

EMPTY CONTAINER HANDLER H400-500 HD/S



- Hyster introduces a new series of Empty Container Handlers for stacking 5-8 high (2 over 6-8'-6")
- Our experience started in 1997, since that time we have produced 370 Empty Container Handlers.
 - Models: H400HD-EC5, H400HD-EC5, H450HD-EC6, H450HDS-EC6 AND H500HD-EC6

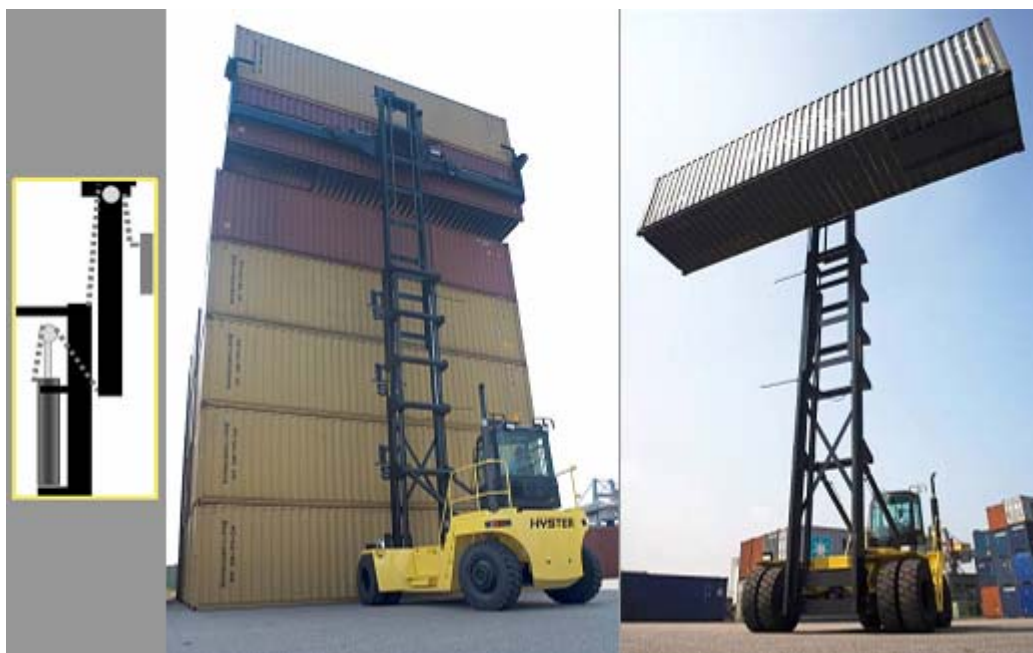
H400-500 HD/S



- The rear-mounted cab gives excellent visibility when stacking 6 high containers. (66.6 ft.)
- A 40' container can easily be viewed through the cab top without visual obstructions.
- Container only needs to be lifted off the ground 11.1 ft. to allow operator unobstructed viewing under the container.



- Outstanding view from the rear
- No obstructions
- A 40' container can be seen through the entire overhead guard!



- 1' to 4' mast
- Hyster "Vista" mast has a unique 1' to 4' lift ratio, which results in shortening the lift cylinders by half to create durability of the cylinder bearings and seals.
- Ultra-wide mast construction, for torsional rigidity and excellent visibility (distance of 49.6 inches between the inner mast channels).
- The tilt cylinders are extreme high-mounted on the mast for added rigidity and truck stability.
- An impressive 102 ft./min, fully laden lift speed
 - The practical 5-mode average lifting speed is 100 ft./min.
- Average of four lifting modes:
 - Unladen lift speed = 108 ft./min
 - Full laden lift speed = 102 ft./min
 - 70% laden load lift speed = 106 ft./min
 - Unladen lowering speed = 92.5 ft./min
 - laden lowering speed = 96 ft./min

Reefer correction & Powered Pile Slope



- Low profile main beams with the horizontal telescoping beams sliding inside each other (not stacked on top of each other). This design results in excellent forward visibility towards the spreader's engagement points, particularly at high lift heights.
- Side shift (standard equipment) side shift movement is a generous ± 24 (48 in. total) for operational flexibility and provides for "reefer correction" possibility.
- Pile slope
 - Mechanical Pile Slope (MPS) is standard at 9 inches built into the vertical heads.
 - Powered Pile Slope (PPS) is optional and provided ± 6 degrees of powered articulation.

Power

Strength



- H400-450HDS-EC Single container handlers:
- Clean diesel engine – complies to “Tier 3” of EPA regulations.
- Engine 197 HP @ only 1800 rpm, maximum torque is 686.6 lb.-ft. @ 1400 rpm.
 - Combined with the S.O.H. (Spicer Off-Highway) TE-13 power shift transmission.
 - With 3-speeds with APC200 “Soft-shift” automatic gear shifting, protective forward-reverse shifting lock-out, and transmission protection system. Also included is a dedicated transmission oil cooler. Audible alarm when in reverse gear.
- H500HD Double container handlers:
 - 230 HP @ only 1800 rpm, maximum torque is 691 lb.-ft. @ 1400 rpm. Combined with TE-17 transmission. Also with APC200 “Soft-shift” auto shift, forward-reverse lock-out, and transmission protection. Dedicated oil cooler, audible alarm in reverse.
- Optional for H400-450HD/S Single container handlers: 230 HP engine and TE-17 transmission.

Power

Strength



- The new “Heavy Duty” frame with .63 inch thick frame members and robust front axle supports.
- The tilt cylinder anchors are tied directly into the rear frame.
- Hyster’s “sandwich” type steer axle, with a single cylinder and non-adjustable tie rods, is renowned for its long life and low maintenance.

Power

Strength



- Large 14.00 x 24 wheels on all models, offer long tire life for low running costs.
- Cooler
 - Tropical cooling system which makes them suitable to work in ambient temperatures up to 122° F.
 - “side-by-side” 3-piece radiator cooler block engine (water and intercooler) and transmission is efficient and easy to clean.
 - A “puller” type fan draws in cleaner air from the top of the machine.
 - Triple Hydraulic system cooler, for the brakes and the hydraulic system is ideally mounted at the front of the machine.

Stability

Visibility

Power

Strength

Benefits of the Hyster H500HD-EC6 Empty Container Handler

Capacity

- * 19800 lbs. @ 48", to full lift height.

Enables lifting heavier (reefer) containers. With the "Double Horizontal Twistlocks" engagement system it is possible to handle 2 x 40' containers in one move.

Stability

- * Front width of 162". (*Side stability*)
- * Ample steeraxle weight. (*Forward stability*)
- * "Sideshift" movement of +/- 23.6 inches as standard.
Helps to avoid off-center loading, which could otherwise affect side stability.

Visibility

- * Rear "mid-high" cab position (as opposed to a higher position).
Low carrying height (133.8 inches) of the container while traveling, for greater forward stability.
- * Ultra-wide mast.
- * Unique rear-mounted hoist cylinders (behind mast channels).
Minimizing obstruction of forward visibility.
- * Low beam spreader.
Unlike stacked beam spreaders, this spreader is designed to improve visibility issues by allowing one beam to slide inside the other. Visibility obstructions have greatly been reduced at the 20' position and above 4 high stacking.

Performance

- * Automatic, self-sensing two-stage hoist system.
*Gives highest lifting speeds, without requiring excessive engine power.
Achieves lowest possible fuel consumption, and prevents engine stalling.*
- * Driver comfort: Auto-shift with forward-reverse lock-out, lowest noise level, filtered cab air inlet.

Maneuverability

- * Excellent turning radius.
Maximum saving of space on the container terminal.

ECH spreader

- Available with 5 different engagement systems:
 - For single container handling: Vertical Twistlocks (with fixed- or sliding head).
 - For double container handling: "Double Horizontal Twistlocks".
The right spreader version for every application.
- Lift interrupt function on partially turned twist locks.
- Over-lowering interrupt function (prevents possible damage to lift chains, header cables & hoses).

Operating costs

- * 24" diameter tires, reduce tire wear.