



HR45-27 / HR45-31 / HR45-36 / HR45-40 /
HR45-41S / HR45-41L / HR45-41LS

YardMaster® II Series



The Safe Choice

INDUSTRY LEADER

To be a leader you must surround yourself with leaders. That is why Hyster has developed the new YardMaster® II. With the sharpest turning radius in the container handling business, this reach stacker will turn circles around the competition. Faster lift and lowering speeds, not to mention the commonality that the YardMaster® II shares with the H1050-1150HD-CH loaded container handler makes this unit a leader in the container handling industry.

VISIBILITY AND ERGONOMICS

The HR series features the Hyster ComforCab II, which has been designed to be the industry-leading ergonomic operator compartment, and focuses on optimizing driver comfort and visibility for maximum productivity, through:

- Large windows, fitted with tinted safety glass, offer excellent all-round visibility. This is further enhanced in poor weather conditions by a fresh air inlet, sliding windows, an effective heater and defroster and wipers (with intermittent wipe function) and washers on front, top and rear screens.
- Air-conditioning is integrated into the heating and ventilation system, with manual temperature control. Sunshade screens are fitted on the top and rear windows.
- Joystick controls boom function; lift, lower, extend and retract. Also controls spreader functions: sideshift, rotate, twistlock unlock (locking is automatic), and optional powered pile slope if selected.
- Full-suspension fully adjustable driver's seat with an optional high backrest, seat belt, "park brake off" warning buzzer, operator presence system, map reading light and an air circulation fan.
- Adjustable steering column telescopes in and out plus adjusts up and down.
- Responsive, hydraulic (wet) brakes and an automotive style pedal layout further contribute to driver comfort.
- Wide-view rear view mirrors inside cab, outside rear view mirrors on front fenders. Low noise level of 74 dB(A) driver's ear BITA equivalent. A Powered Sliding Cab is optional on the YardMaster® II.
- Power Assisted Steering.

- The optional Powered Sliding Cab is operated by a switch inside the cab. To save time, this can done while driving and/or lifting.
 - Extra steps and handrails are provided, on the left-hand front fender, to aide cab entry/exit in the forward position. A second set of rear view mirrors, positioned on the front fenders is included with this option.
 - The truck is equipped with a comprehensive set of road and work lights and two orange strobe lights. For further details see under Lights.

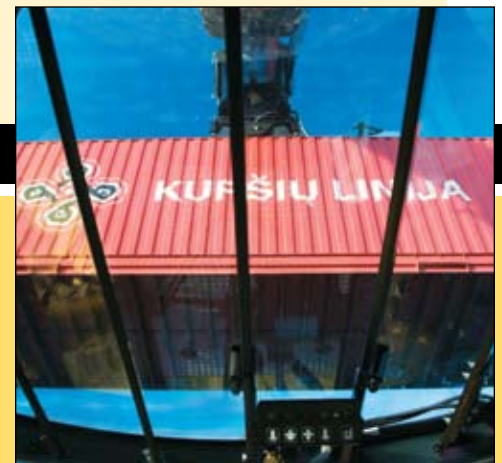
REAR VISIBILITY

Rearward visibility has been greatly improved thanks to:

- The widely spaced rear boom supports, and rear sloping design of the counterweight.
- The size of the counterweight extending out at the rear of the machine has been kept to a minimum.
- The unique 'boomerang' shaped frame, with the pivot point of the boom at the furthest point to the rear.

OPERATOR'S CAB

- Same cab used on the H170-360HD and the H1050-1150HD-CH loaded container handler.
- Large tinted glass promotes excellent visibility.
- Cab is mounted on rubber mounts to reduce shock, noise and vibration
- Sliding cab (manual or optional powered).
- Ergonomically designed console, houses the instrument panel and controls to ensure optimum forward visibility.
- Robust steel frame exceeds industry standards.
- Operator fatigue is reduced by offering a more spacious cab, adjustable suspension seat (mechanical or air ride), adjustable tilt steering wheel, integrated seat and adjustable arm rest, low effort controls includes joystick, and power assisted steering and brakes.
- Wide-angle side view mirrors are located on the top left and right hand corners of the cab.
- Overhead guard uses flat bars at various angles to provide excellent visibility through the guard.
- Load moment indicator 3B6 (optional multi-function color display).
- H-style wiper system on front window.



HYDRAULIC SYSTEM

- Pumps: Two variable-displacement piston pumps with a total performance of maximum 154 gal/min.
- Hyster two-speed system with regenerative function results in high lift speeds.
- Leak-free ORFS (O-ring) type fittings are used throughout the whole machine.
- Filtration: Full-flow return line filter with 10 micron cartridge on the main system, plus in-line pressure filter with 20 micron on power-assist and support systems.
- Large oil cooler for the hydraulic system, suitable for working in ambient temperatures of up to 122°F.
- Hydraulic oil tank: 158 gallon useable volume, with level and temperature gauge and magnetic drain plugs.
- Emergency lowering device, to lower the spreader when the engine is not running.
- Centralized pressure check points with a digital pressure indicator on brake system accumulator.
- Damping system on the longitudinal (forwards / backwards) oscillating movement of the spreader, providing an effective 'controlled sway' of the spreader, under varying load weight and operating conditions. Optional dampening lock is available.

ELECTRICAL SYSTEM

- 24 Volt system, 70 A alternator, battery master switch.
- CANbus diagnostic connection in the cab for engine, transmission, instruments, and load-moment protection system.

EASE OF SERVICING

- The hydraulic oil tank features a gauge for oil level and temperature as well as magnetic drain plugs.
- The cab manually slides on a track (Powered Full Sliding optional) in combination with quickly removable (lightweight aluminum) floor plate sections, which provides excellent access for service work.

ATTACHMENT

The Hyster Telescopic Container spreader, for handling 20'-40' ISO containers, features:

- Wide spaced boom head designed to provide strong support for the Spreader.
- A rotator with two hydraulic oil-immersed brakes and one hydraulic motor.
- Ample rotation angle of +195 / -105 degrees.
- A very smooth and precise rotation function, thanks to the unique Hyster two-speed system allows for smoother rotation. In addition the rotation function is cushioned by a hydraulic accumulator.
- Powered Damping Cylinders (PDC) function, to 'tilt' the spreader forwards and backwards, over +/- 5 degrees, with limited power. Operated by a control knob on the joystick. Facilitates the easier positioning of the spreader onto containers, which are located on sideways (not front to back) sloping trailers.
- Mechanical pile slope allows for sideways articulation of +/- 2.5 degrees, to enable handling of containers on/off sloping trailers (optional powered pile slope feature provides +/- 6 degrees of slope).
- 63" total sideshift movement, 31.5" to each side.
- Pendular floating ISO twistlocks.
- Twistlocks turn automatically to locked position, unlocking is done manually.
- Twistlock indicator lights positioned under the boom, and also inside the cab on the ceiling.
- Twistlock lock-out device helps prevent:
 - Picking up of a container on less than 4 corners.
 - Unlocking when carrying a container.
- Lift interrupt system on partially turned twistlocks, so lifting is possible only when twistlocks are either in the fully locked or in the unlocked position.*
- 4 Lifting eyes on the 4 corners of the end-beams of the telescopic container spreader, for lifting general cargo of minimum 20' (6 m) length. Note: Full capacity use (44 ton) is only allowed in 20' (6 m) or in the 40' (12 m) end-positions of the spreader, not in any in-between positions.
- Options:
 - Wide Twistlock Position (WTP) spreader handles both ISO and WTP containers.
 - Slave attachment for JB Hunt Pin Type container.



FRAME

The frame and boom structures used in the HR series are based on the proven design employed in the Hyster H1050-1150HD-CH.

- The frame is extremely strong and the widely spaced rear supports give rigidity and excellent rearward visibility.
- The pivot points for the boom are positioned right at the back of the frame minimizing boom 'overhang', resulting in a very compact machine, ensuring that the excellent rearward visibility is maintained, even when the boom is raised.
- The rectangular two-stage boom is welded both inside and outside, and telescopes on self-lubricating self-aligning non-metallic bearings.

POWER AND PERFORMANCE

The hydraulic system is very efficient, and features 'Power on Demand' and 'Two-Speed Lift' functions. The result is lifting speeds that are class leading:

- The practical 4-mode average lifting speed is a fantastic 0.41 m/sec. with the standard 300hp (224kw) engine.
- Average of four lifting modes:
Lift speed = 94 ft/min
Laden lift speed = 49 ft/min (with 70% load = 35 ton)
Unladen lowering speed = 88 ft/min
Laden lowering speed = 90 ft/min

**Clean Power Choice**

The Hyster ReachStackers are equipped with the Cummins QSM 11 industrial 6-cylinder in-line turbocharged diesel engine, with charge-air cooling.

The Cummins QSM 11 diesel engine features:

- 10.8 liter capacity.
- Low exhaust emissions which conform to the EPA/CARB Tier 3 emissions standards.
- Tropical cooling: Additional cooling of engine and hydraulic system, for working in ambient temperatures of up to a maximum of 122°F.
- Fuel tank: useable capacity of 174 gallons provides approximately 35 hours of operation before refueling.

Standard Power Package

- Performance 300 hp (224 kw) at 1800 rpm, offering durability for longer periods of peak power performance. Smooth torque of 1110 ft-lbs at 1000-1400 rpm provides excellent acceleration and lugging power, together with low fuel consumption.
- This 300 hp (224 kw) engine is combined with the S.O.H. (Spicer Off-Highway) TE27 4-speed autoshift transmission.
- The wide AxleTech PRC7534 front drive axle offers excellent sideways stability.
- Oil-immersed (wet) brakes on the drive axle feature oil cooling for durability and are virtually maintenance free.

Optional Power Package

- Performance of maximum 365 hp (272 kw) at 1800 rpm is available as an option for heavy duty applications. Maximum torque is 1235 ft-lbs at 1000-1400 rpm.
- Combined with the S.O.H. TE32 4-speed autoshift transmission and an AxleTech PRC7534 Heavy Duty drive axle (with reinforced spindles). This "more power package" results in quicker acceleration, plus 12% higher laden lift speed, and up to 1.2 mph faster laden travel speed.

AIR INTAKE

- YardMaster® II offers a 2-stage air filtration system, enhancing engine life.
- A self-cleaning pre-cleaner and a filter monitoring system alert the operator if the air intake needs attention.
- Commonality between the YardMaster® II and the H1050-1150HD-CH.

TROPICAL COOLING

- A tropical cooling system is standard and offers additional cooling of the engine and hydraulic systems, for working in ambient temperatures of up to maximum 122°F.

TRANSMISSION

Both available S.O.H. transmissions are fitted with the industry leading 'APC200' automatic 'soft-shift' gear change system. This autoshift system features:

- Load-sensitive shifting action.
- A 'soft-shift' characteristic (through electronic 'throttle-back' function during gear change). In addition to providing improved driver comfort, the system eliminates shifting-shocks on the driveline.
- An 'on the move' forward-reverse shifting lock-out function protects the transmission and driveline against overloading, during abrupt direction changes.
- Back-up (reverse driving) alarm.

LIGHTS

8 front work lights (4 on the boom and 2 on the front fenders and 2 rear, all halogen type) 2 front marker lights, 4 direction indicators, 2 tail/stop lights, 2 orange strobe lights (one each side of boom).

2 work lights on the container spreader, directed towards the engagement points.

DRIVE AXLE

- Same Axle Tech drive axle that is used on the H1050-1150HD-CH loaded container handler.
- Drive axle is bolted to the frame of the truck for ease of maintenance
- Multiple wet disc brakes are incorporated in the drive axle to provide excellent control and longer life.
- Brakes are cooled by a separate oil cooler located in the radiator package; cooling oil is filtered as it returns to the tank.

STEER AXLE

- Double-acting, single steering cylinder with nonadjustable tie rods. It is renowned for its long lifespan and low maintenance requirements.
- Steer wheel nut protection (recessed studs) is also standard.
- The Kessler cantilevered axle pivot design offers an unmatched turning radius and a reduction in steer tire wear.

BRAKE SYSTEM

Service Brake: Multiple oil immersed (wet) discs on the drive axle, with cooling system.

- Virtually maintenance-free sealed design.

Parking Brake: Dry disc brake on the drive axle input shaft, spring applied and hydraulically released.

Electronic Load Moment Control System

- With automatic shut-off beyond the rated load-moment.
- Automatic shut-off function on boom lowering and telescope-out.
- Warning lights in the dash board: Green, Orange (at 90% load-moment), Red (at 100% rated load moment).
- Digital display unit, showing actual load, max. rated load, and load distance plus load height.

BOOM

- Two stage telescoping boom is built with high strength steel for greater durability.
- Equalizing valve creates greater lift stability when handling laden containers.
- Hydraulic cylinders extend the boom smoothly.
- Maximum stacking height for 9'6" and 8'6" is 5 high.

PROTECTION SYSTEMS

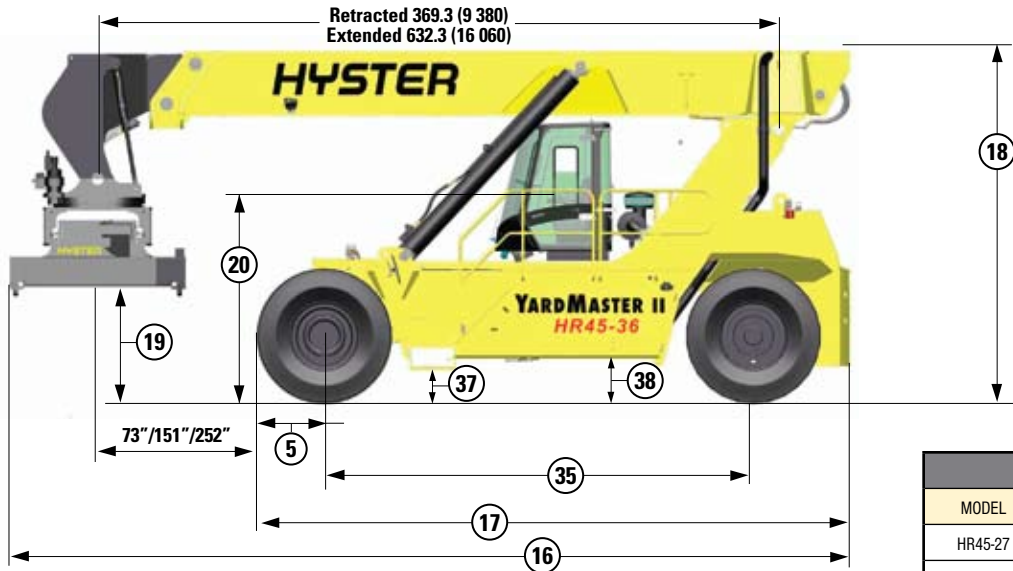
- Engine protection system, acting on low oil pressure and high coolant temperature. The system initially derates the engine power and finally shuts down the engine and features an override function for emergency situations.
- Transmission protection system, acting on high oil temperature, is also standard equipment.
- These systems initially derate the engine power and finally shut down the engine, and feature an override function for emergency situations.

HR45-27, 31, 36, 40, 41S, 41L, 41LS SERIES OPTIONS

- Power pile slope allows heavy ended loads to be easily stabilized.
- 18.00x25 tires or 18.00x33 tires (optional for HR45-27, 34, and 36).
- Color display for the load moment indicator.
- Operator training seat.
- Power sliding cab.
- Power dampening.

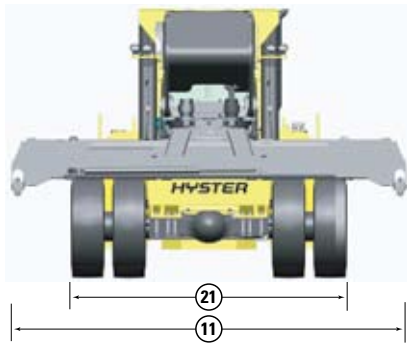


LIFT TRUCK DIMENSIONS

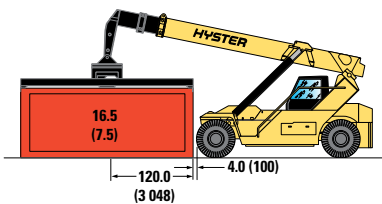


* Attachment without PPS [Deduct 6" (150 mm) with PPS]
 Dimensions: in (mm)

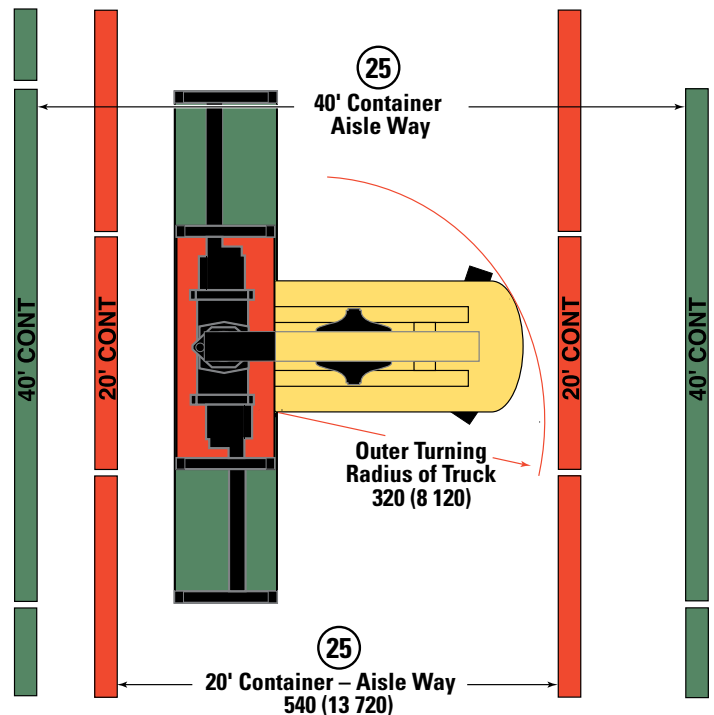
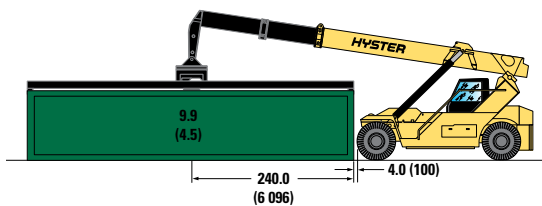
CONTAINER PICKING END TO END		
MODEL	20' (LC 3353 mm)	40' (LC 6400 mm)
HR45-27	70,500 lb/32,000 kg	30,900 lb/14,000 kg
HR45-31	77,200 lb/35,000 kg	35,300 lb/16,000 kg
HR45-36	92,600 lb/42,000 kg	44,100 lb/20,000 kg
HR45-40	99,000 lb/44,900 kg	50,000 lb/22,600 kg
HR45-41S	99,000 lb/44,900 kg	58,000 lb/26,300 kg
HR45-41L	99,000 lb/44,900 kg	58,000 lb/26,300 kg
HR45-41LS	99,000 lb/44,900 kg	67,000 lb/30,300 kg



20'-0" END ON LIFTING CAPACITIES



40'-0" END ON LIFTING CAPACITIES



HR45-27/45-31/45-36CH SPECIFICATIONS

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		GENERAL		
		Hyster	Hyster	Hyster
1	Manufacturer		Hyster	Hyster
2	Model		HR 45-27 CH	HR 45-31CH
3	Capacity, rated	lb. (kg)	99,000 (45,000) / 60,000 (27,000)	99,000 (45,000) / 68,000 (31,000)
	Load Capacity First/Second/Third Row w/Stabilizer Applied (Truck Static)	lb. (kg)	N/A	N/A
4	Load center	in. (mm)	73 (1,865) / 150 (3,815)	73 (1,865) / 150 (3,815)
5	Load distance from front tire / front stabilizer		33 (840) / N/A (N/A)	33 (840) / N/A (N/A)
6	Power type		Turbocharged Diesel	Turbocharged Diesel
7	Operator type		Sit	Sit
8	Tire type, front / rear		Pneumatic / Pneumatic	Pneumatic / Pneumatic
9	Wheels, front / rear (X=driven)		4x / 2	4x / 2
10	Boom lift height, under spreader	in. (mm)	600 (15,260)	600 (15,260)
11	Width of spreader, 20 foot / 40 foot	in. (mm)	237.8 (6042) / 479.3 (12,175)	237.8 (6042) / 479.3 (12,175)
12	Pile slope, mechanical (+/-)	degrees°	+3 / -3	+3 / -3
13	Rotation, hydraulic (+/-)	degrees°	+185 / -95	+185 / -95
14	Side shift, total movement (+/-)	in. (mm)	31.5 (800) / 63.0 (1600)	31.5 (800) / 63.0 (1600)
15	Boom angle, minimum / maximum	degrees°	0 / 59	0 / 59
16	Overall length with attachment, counterweight to boom tip	in. (mm)	455 (11,573)	455 (11,573)
17	Overall length without boom	in. (mm)	317 (8,060)	317 (8,060)
18	Boom height, minimum / maximum	in. (mm)	185 (4700) / 713 (18,110)	185 (4700) / 713 (18,110)
19	Spreader, minimum distance from ground	in. (mm)	53 (1342)	53 (1342)
20	Seat height	in. (mm)	100 (2555)	100 (2555)
21	Width outside drive tire to outside drive tire	in. (mm)	165 (4200)	165 (4200)
23	Turning radius, outer	in. (mm)	320 (8120)	320 (8120)
24	Distance, center front axle to center of load	in. (mm)	123 (3124)	123 (3124)
25	Aisle for 90° stacking, 20 foot / 40 foot, w/10% clearance	in. (mm)	540 (720) / 648 (16,460)	540 (720) / 648 (16,460)
26	Travel speed, NL / RL	mph (km/h)	14 (23.1) / 12 (19.9)	14 (23.1) / 12 (19.9)
27	Lift speed, NL / RL	ft./min (m/s)	94 (0.48) / 49 (0.25)	94 (0.48) / 49 (0.25)
28	Lowering speed, NL / RL	ft./min (m/s)	89 (0.45) / 91 (0.46)	89 (0.45) / 91 (0.46)
29	Drawbar pull, RL @ 1mph	lb. (kN)	84,977 (378)	84,977 (378)
30	Gradeability @ 1mph, RL	Percent %	34	33
31	Total approximate weight, unladen - hoiz. boom, retracted	lb. (kg)	152,935 (69,370)	161,532 (73,270)
32	Axle loading, front / rear unladen - horiz. boom, retracted	lb. (kg)	76,423 (34,738) / 76,190 (34,632)	75,988 (34,540) / 85,206(38,730)
33	Axle loading, front / rear laden	lb. (kg)	202,812 (100,369) / 30,800 (14,001)	220,376 (100,171) / 39,820 (18,100)
34	Size of tires, front / rear	in. (mm)	18.00 x 25	18.00 x 25
35	Wheelbase	in. (mm)	232.0 (5900)	232.0 (5900)
36	Tread, center of wheels, front / rear	in. (mm)	146 (3703) / 119 (3020)	146 (3703) / 119 (3020)
37	Ground clearance lowest point without load	in. (mm)	12 (312)	12 (312)
38	Ground clearance, center wheelbase, NL	in. (mm)	19.0 (495)	19.0 (495)
39	Service brakes, type - drive wheels		Wet Disc Brakes	Wet Disc Brakes
40	Service brakes, type - actuation		Hydraulic	Hydraulic
41	Parking brake, type - drive wheels		Spring Apply / Hydraulic Release	Spring Apply / Hydraulic Release
42	Steering system, rear steer wheels		Hydrostatic	Hydrostatic
43	Power unit, internal combustion engine, water cooled		Cummins QSM11	Cummins QSM11
44	Power unit, rating @ governed RPM		240 @ 1200	240 @ 1200
45	Power unit, peak horsepower @ governed RPM		300 @ 1800	365 @ 1800
46	Power unit, peak torque - @ 1100 RPM	ft.-lbs. (N • m)	1050 (1347)	1050 (1347)
47	Power unit, number of cylinders / displacement	cu. in. (cm3)	Turbo Diesel / 6 / 659 (10,800)	Turbo Diesel / 6 / 659 (10,800)
48	Power unit, fuel consumption (average)	gal.hr. (l/h)	5 (20)	5 (20)
49	Alternator, voltage / amps	V/Ah	24V / 70A	24V / 70A
50	Batteries, voltage / capacity	V/Ah	24 Volt / 215 Ah	24 Volt / 215 Ah
51	Drive axle		Planetary Reduction	Planetary Reduction
52	Gear change type, number of gears forward / reverse		Column Mounted Lever, 4 / 4	Column Mounted Lever, 4 / 4
53	Transmission type		Auto - Powershift	Auto - Powershift
54	Clutch, type		Torque Converter	Torque Converter

CERTIFICATION: These Hyster lift trucks meet design specifications of Part II ANSI B56.1-1969, as required by OSHA Section 1910.178(a)(2) and also comply with Part III ANSI B56.1-revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck.

† **NOTE:** Performance specifications / ratings are for truck equipped as described under Standard Equipment in this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature and condition of the operating area. Specifications are subject to change and the proposed application should be discussed with your authorized Hyster Dealer.

†† Limited by traction. For further information on this dimension, please contact your local Hyster dealer.

HR45-40CH/45-41L SPECIFICATIONS

		Hyster	Hyster
GENERAL	1 Manufacturer		Hyster
	2 Model	HR 45-40 CH	HR 45-41L
	3 Capacity, rated	lb. (kg) 101,000 (46,000) / 88,000 (40,000)	101,000 (46,000) / 90,200 (41,000)
	Load Capacity First/Second/Third Row w/Stabilizer Applied (Truck Static)	lb. (kg) N/A	N/A
	4 Load center	in. (mm) 73 (1865) / 150 (3815)	73 (1865) / 150 (3815)
	5 Load distance from front tire / front stabilizer	36 (930) / N/A (N/A)	36 (930) / N/A (N/A)
	6 Power type	Turbocharged Diesel	Turbocharged Diesel
	7 Operator type	Sit	Sit
	8 Tire type, front / rear	Pneumatic / Pneumatic	Pneumatic / Pneumatic
DIMENSIONS	9 Wheels, front / rear (X=driven)	4x / 2	4x / 2
	10 Boom lift height, under spreader	in. (mm) 600 (15,260)	600 (15,260)
	11 Width of spreader, 20 foot / 40 foot	in. (mm) 237.8 (6042) / 479.3 (12175)	237.8 (6042) / 479.3 (12,175)
	12 Pile slope, mechanical (+/-)	degrees° +3 / -3	+3 / -3
	13 Rotation, hydraulic (+/-)	degrees° +185 / -95	+185 / -95
	14 Side shift, total movement (+/-)	in. (mm) 31.5 (800) / 63.0 (1600)	31.5 (800) / 63.0 (1600)
	15 Boom angle, minimum / maximum	degrees° 0 / 59	0 / 59
	16 Overall length with attachment, counterweight to boom tip	in. (mm) 463 (11,773)	487 (12,373)
	17 Overall length without boom	in. (mm) 328 (8350)	352 (8950)
	18 Boom height, minimum / maximum	in. (mm) 187 (4760) / 716 (18,200)	187 (4760) / 716 (18,200)
	19 Spreader, minimum distance from ground	in. (mm) 56 (1440)	56 (1440)
	20 Seat height	in. (mm) 104 (2645)	104 (2645)
	21 Width outside drive tire to outside drive tire	in. (mm) 165 (4200)	165 (4200)
	23 Turning radius, outer	in. (mm) 328 (8320)	361 (9173)
	24 Distance, center front axle to center of load	in. (mm) 123 (3124)	123 (3124)
	25 Aisle for 90° stacking, 20 foot / 40 foot, w/10% clearance	in. (mm) 548 (13,940) / 648 (16,468)	587 (14,920) / 659 (16,738)
PERFORMANCE	26 Travel speed, NL / RL	mph (km/h) 14 (22.4) / 11 (18.7)	13 (22.3) / 11 (18.7)
	27 Lift speed, NL / RL	ft./min (m/s) 94(0.48) / 49 (0.25)	94 (0.48) / 49 (0.25)
	28 Lowering speed, NL / RL	ft./min (m/s) 89 (0.45) / 91 (0.46)	89 (0.45) / 91 (0.46)
	29 Drawbar pull, RL @ 1mph	lb. (kN) 84,528 (376)	84,078 (374)
	30 Gradeability @ 1mph, RL	Percent % 29	29
WT	31 Total approximate weight, unladen - hoiz. boom, retracted	lb. (kg) 185,519 (84,150)	192,088 (87,130)
	32 Axle loading, front / rear unladen - horiz. boom, retracted	lb. (kg) 77,684 (35,311) / 107,446 (48,839)	80,944 (38,793) / 106,341 (48,337)
	33 Axle loading, front / rear laden	lb. (kg) 226,827 (103,103) / 59,503 (27,047)	228,562 (103,982) / 64,125 (29,148)
	34 Size of tires, front / rear	in. (mm) 18.00 x 33	18.00 x 33
	35 Wheelbase	in. (mm) 232.0 (5900)	263 (6700)
	36 Tread, center of wheels, front / rear	in. (mm) 146 (3703) / 119 (3020)	146 (3703) / 119 (3020)
	37 Ground clearance lowest point without load	in. (mm) 16 (400)	16 (400)
	38 Ground clearance, center wheelbase, NL	in. (mm) 23.0 (585)	23.0 (585)
	39 Service brakes, type - drive wheels	Wet Disc Brakes	Wet Disc Brakes
	40 Service brakes, type - actuation	Hydraulic	Hydraulic
WHEELS & TIRES	41 Parking brake, type - drive wheels	Spring Apply / Hydraulic Release	Spring Apply / Hydraulic Release
	42 Steering system, rear steer wheels	Hydrostatic	Hydrostatic
	43 Power unit, internal combustion engine, water cooled	Cummins QSM11	Cummins QSM11
	44 Power unit, rating @ governed RPM	282 @ 1200	282 @ 1200
	45 Power unit, peak horsepower @ governed RPM	365 @ 1800	365 @ 1800
	46 Power unit, peak torque - @ 1100 RPM	ft.-lbs. (N • m) 1235 (1674)	1235 (1674)
	47 Power unit, number of cylinders / displacement	cu. in. (cm3) Turbo Diesel / 6 / 659 (10,800)	Turbo Diesel / 6 / 659 (10,800)
	48 Power unit, fuel consumption (average)	gal.hr. (l/h) 5 (20)	5 (20)
	49 Alternator, voltage / amps	V/Ah 24V / 70A	24V / 70A
	50 Batteries, voltage / capacity	V/Ah 24 Volt / 215 Ah	24 Volt / 215 Ah
POWERTRAIN	51 Drive axle	Planetary Reduction	Planetary Reduction
	52 Gear change type, number of gears forward / reverse	Column Mounted Lever, 4 / 4	Column Mounted Lever, 4 / 4
	53 Transmission type	Auto - Powershift	Auto - Powershift
	54 Clutch, type	Torque Converter	Torque Converter

HR45-41S/45-41LS SPECIFICATIONS

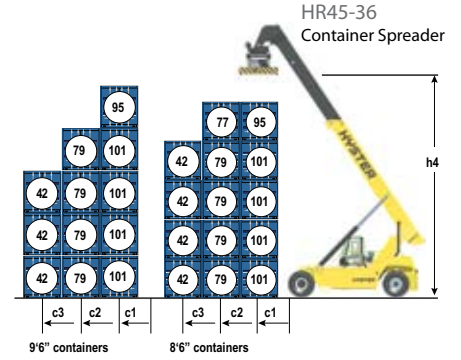
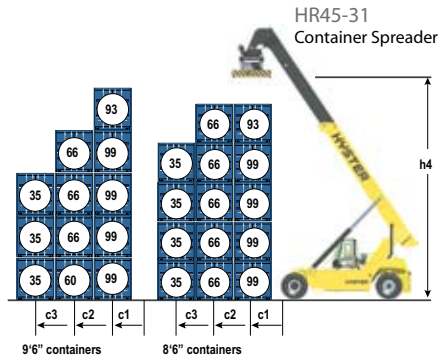
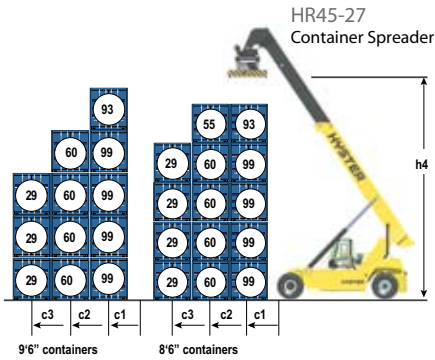
		Hyster	Hyster
GENERAL	1	Manufacturer	Hyster
	2	Model	HR 45-41S
	3	Capacity, rated	101,000 (46,000) / 88,000 (40,000)
		Load Capacity First/Second/Third Row w/Stabilizer Applied (Truck Static)	101,200 (46,000) / 90,200 (41,000) / 57,200 (26,000)
	4	Load center	73 (1865) / 150 (3815)
	5	Load distance from front tire / front stabilizer	36 (930) / 40.5 (1030)
	6	Power type	Turbocharged Diesel
	7	Operator type	Sit
	8	Tire type, front / rear	Pneumatic / Pneumatic
DIMENSIONS	9	Wheels, front / rear (X=driven)	4x / 2
	10	Boom lift height, under spreader	600 (15,260)
	11	Width of spreader, 20 foot / 40 foot	237.8 (6042) / 479.3 (12,175)
	12	Pile slope, mechanical (+/-)	degrees° +3 / -3
	13	Rotation, hydraulic (+/-)	degrees° +185 / -95
	14	Side shift, total movement (+/-)	in. (mm) 31.5 (800) / 63.0 (1600)
	15	Boom angle, minimum / maximum	degrees° 0 / 59
	16	Overall length with attachment, counterweight to boom tip	in. (mm) 463 (11,773)
	17	Overall length without boom	in. (mm) 333 (8450)
	18	Boom height, minimum / maximum	in. (mm) 187 (4760) / 716 (18,200)
	19	Spreader, minimum distance from ground	in. (mm) 56 (1440)
	20	Seat height	in. (mm) 104 (2645)
	21	Width outside drive tire to outside drive tire	in. (mm) 165 (4200)
	23	Turning radius, outer	in. (mm) 328 (8320)
	24	Distance, center front axle to center of load	in. (mm) 123 (3124)
	25	Aisle for 90° stacking, 20 foot / 40 foot, w/10% clearance	in. (mm) 548 (13,940) / 648 (16,468)
PERFORMANCE	26	Travel speed, NL / RL	mph (km/h) 13 (22.3) / 11 (18.7)
	27	Lift speed, NL / RL	ft./min (m/s) 94 (0.48) / 49 (0.25)
	28	Lowering speed, NL / RL	ft./min (m/s) 89 (0.45) / 91 (0.46)
	29	Drawbar pull, RL @ 1mph	lb. (kN) 84,528 (376)
	30	Gradeability @ 1mph, RL	Percent % 29
WHEELS & TIRES	31	Total approximate weight, unladen - hoiz. boom, retracted	lb. (kg) 189,950 (86,160)
	32	Axle loading, front / rear unladen - horiz. boom, retracted	lb. (kg) 82,720 (37,600) / 106,832 (48,560)
	33	Axle loading, front / rear laden	lb. (kg) 231,862 (105,392) / 58,889 (26,768)
	34	Size of tires, front / rear	in. (mm) 18.00 x 33
	35	Wheelbase	in. (mm) 232.0 (5900)
	36	Tread, center of wheels, front / rear	in. (mm) 146 (3703) / 119 (3020)
	37	Ground clearance lowest point without load	in. (mm) 9 (250)
	38	Ground clearance, center wheelbase, NL	in. (mm) 23.0 (585)
	39	Service brakes, type - drive wheels	Wet Disc Brakes
	40	Service brakes, type - actuation	Hydraulic
POWERTRAIN	41	Parking brake, type - drive wheels	Spring Apply / Hydraulic Release
	42	Steering system, rear steer wheels	Hydrostatic
	43	Power unit, internal combustion engine, water cooled	Cummins QSM11
	44	Power unit, rating @ governed RPM	282 @ 1200
	45	Power unit, peak horsepower @ governed RPM	365 @ 1800
	46	Power unit, peak torque - @ 1100 RPM	ft.-lbs. (N • m) 1235 (1674)
	47	Power unit, number of cylinders / displacement	Turbo Diesel / 6 / 659 (10,800)
	48	Power unit, fuel consumption (average)	gal.hr. (l/h) 5 (20)
	49	Alternator, voltage / amps	V/Ah 24V / 70A
	50	Batteries, voltage / capacity	V/Ah 24 Volt / 215 Ah
	51	Drive axle	Planetary Reduction
	52	Gear change type, number of gears forward / reverse	Column Mounted Lever, 4 / 4
	53	Transmission type	Auto - Powershift
	54	Clutch, type	Torque Converter

CERTIFICATION: These Hyster lift trucks meet design specifications of Part II ANSI B56.1-1969, as required by OSHA Section 1910.178(a)(2) and also comply with Part III ANSI B56.1-revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck.

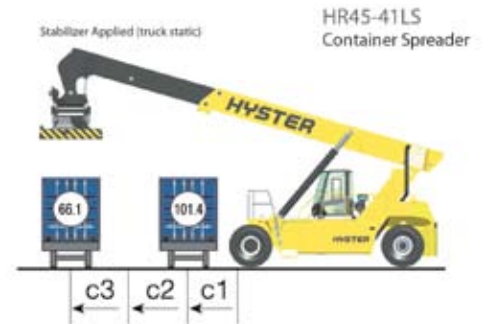
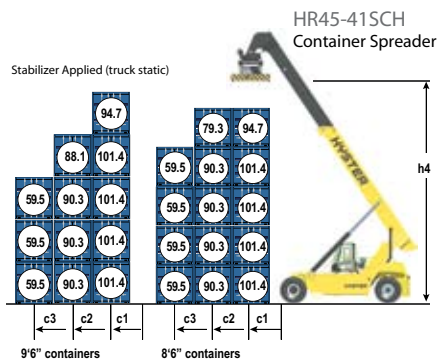
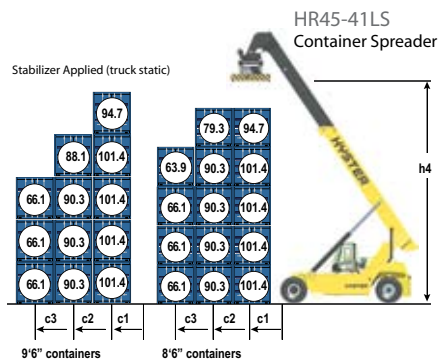
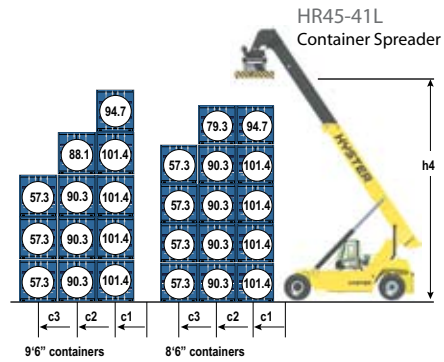
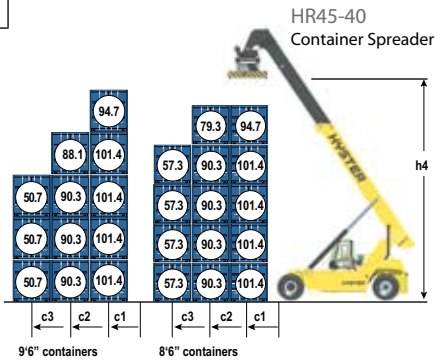
† **NOTE:** Performance specifications / ratings are for truck equipped as described under Standard Equipment in this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature and condition of the operating area. Specifications are subject to change and the proposed application should be discussed with your authorized Hyster Dealer.

†† Limited by traction. For further information on this dimension, please contact your local Hyster dealer.

LIFTING CAPACITY



C1	C2	C3
73"	151"	252"



Note: All load centers c1, c2, c3 are taken from the front face of the (front) tires, deduct 3.9' for load centers taken from the front face of the Stabilizer.

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It's not just about the lift trucks.

Any company worth its weight knows success has just as much to do with the support before and after the sale as the sale itself. We pride ourselves on being more than just a lift truck manufacturer. Through our Dealer Network, we're also fleet managers, parts suppliers, capital procurement specialists and trainers. You'll find that when it comes to service, we do it all.

Hyster® Fleet Services

As much as we'd like for your entire fleet to be Hyster, we know that's not always the case. But just because you also operate other brands doesn't mean we can't manage your lift truck maintenance and replacement plan. We can analyze your current fleet or provide summary of your fleet history and a cost-effective proposal for replacement and scheduled maintenance of all your vehicles. Once this initial review is complete, we'll continue to monitor your fleet to ensure it's performing optimally.

UNISOURCE™ Parts Program

In addition to providing fleet management for a variety of brands, we can also serve as your source of parts for all your lift trucks. With the Hyster UNISOURCE parts and service program, we offer approximately 2 million part number crosses for most brands of materials handling and other in-plant mobile equipment. UNISOURCE also has remanufactured parts that provide the same quality and guarantee but at a lower price. And we can deliver parts to you in less than 24 hours, any day of the week. How's that for convenience?

Rental Products

At Hyster Company, we're always looking for ways to help you keep your productivity up. Through the Hyster Dealer Network, you can access rental equipment for the times when leasing or buying isn't a practical option. Your local Hyster Dealer has access to over 14,000 units that are available for short- or long-term rental. Whether you need one truck to substitute for a vehicle that's being serviced or several lift trucks to accommodate seasonal changes in your business, we'll help you maintain output in a cost-effective manner.

Hyster® Capital

We know that financing new additions to your fleet can sometimes be challenging. That's why your Hyster Dealer has a long list of ways for you to fund your purchase. We are skilled in arranging solutions for special financing requirements, taking the difficulties out of buying the equipment you need. Whether you purchase or lease a new or used lift truck, Hyster Capital offers better service and competitive rates, ensuring you receive the value you deserve.

Special Products Engineering Department (SPED)

In a perfect world, every application could be handled with a standard lift truck. However, in the real world, different materials require different handling. That's why Hyster Company's Special Products Engineering Department (SPED) works with you to customize* your lift trucks. From strobe lights to specially made forks, SPED can provide you with the tools you require to get the job done right.

** May be subject to an additional charge. Contact your local authorized Hyster Dealer for more information.*

Automated Warehouse Solutions

As society's technological capabilities advance, we strive to find practical applications. One of our most recent innovations in that pursuit is our development of automated warehouse solutions. We can help you determine if your operation would benefit from this type of system, which improves inventory accuracy, warehouse productivity and safety records, as it reduces maintenance and overtime.

Operator and Service Training

Hyster Company recognizes that proper training is a key element of a profitable company. That's why your local authorized Hyster Dealer offers a training program for your lift truck operators as well as those who maintain your vehicles. Proper education in running and servicing lift trucks cuts down on the number of repairs and risk of injuries due to accidents while increasing productivity. All of our trainers are professionals with experience in materials handling.



FLEET SERVICES



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