

STRONG PARTNERS. TOUGH TRUCKS.™



BE80-100ZHD SERIES

ENCLOSED END RIDER

WWW.HYSTER.COM



BE80-100ZHD SERIES

THE ENCLOSED END RIDER DEFINES PRODUCTIVITY

Featuring electric power steering and a tight turning radius, the Hyster® BE80-100Z^{HD} enclosed end rider is one of the most productive trucks in the industry. Trucks that are heavily used during extended shifts must be extremely durable. By understanding the demands of heavy duty applications, Hyster has engineered the BE80-100Z^{HD} series to take on your most demanding cross-docking and transport applications.

To do so, we started with you, our customer, to understand your business, your challenges and your expectations. With our customers' needs in mind, we started from the ground up to build an enclosed end rider that won't flinch at the industry's toughest challenges. To find out just how tough these trucks are, we put them to the test; and when we were done, we asked our customers to do the same. In the end, the Hyster® BE80-100ZHD met the challenges of some of our most demanding customers.





ADVANCED DEPENDABILITY

TESTED AND PROVEN.

Every detail of the BE80-100Z^{HD} series was meticulously designed and rigorously engineered to create the toughest truck for your demanding applications. Hyster performed an accelerated lift test of the full undercarriage linkage system:

- We tested the enclosed end riders ourselves, then we asked our customers to do the same. In a real-world, high-duty cycle application, our heavy duty linkage proved that it could endure over 1,000+ hours of use.*
- Our complete linkage system lifted a total of 1.1 billion lbs. without failure.

In test after test, the results are clear: The BE80-100 Z^{HD} truck can compete with any enclosed end rider in the industry. This truck series delivers dependability, productivity, operator comfort and ease of maintenance that exceeds the industry's highest standards.

DURABLE COMPONENTS

The Hyster® BE80-100Z^{HD} series can stand up to the ongoing demands of daily operations. When your heavy duty application demands that a truck runs dependably in demanding environments, you can be certain that the enclosed end rider rises to the challenge and handles the pressure.

- The enclosed end rider's load bearing dual caster wheels can support a wide range of floor conditions, featuring a polyurethane spring block that helps to reduce wear and tear. The fully serviceable design is easy to adjust, meaning less downtime and reduced replacement costs.
- The fully boxed frame provides superior rigidity and durability. The reinforced, thick bumper protects the truck from damage.
- The brushless design of the AC traction motor provides improved reliability and maintenance intervals.
- By increasing load wheel contact area, the optional tandem load wheels offer extended load wheel life under an increased load.
- Larger drive tires result in easier transitions over dock plates and across expansion joints, reducing wear and vibration.
- * This test was performed without additional undercarriage lubrication to prove the extremes that our enclosed end riders can handle before needing service. Hyster recommends following proper maintenance procedures to maximize truck life.

Note: Always follow recommended maintenance intervals.







Large drive tire



Aluminum-bronze HTX bushings (BE100Z^{HD})



BUILT FOR LOW MAINTENANCE

One of the best ways to keep your profits up is to keep your equipment costs down. The Hyster® BE80-100ZHD lift truck is designed to operate at the peak of efficiency so you can take your money straight to the bank.

- High efficiency AC traction motor requires no service.
- Electro-mechanical park brake has no service requirements.
- · Dual wheel quick-adjust load bearing caster provides support for the drive tire, helping to increase drive tire life.
- · Electric power steering eliminates potential leak points and is efficient to service, helping to reduce down time.
- Controller absorbs excess current during hydraulic motor activation to extend motor life.
- · Easily accessible lube fittings and serviceable bushings at all pivot points reduce wear and extend component life.
- CANbus communication system helps reduce wear by simplifying truck wiring—fewer wires mean fewer potential failure points.

ACCESS TO MAJOR COMPONENTS

Access to the traction controller, drive motor, and hydraulic power unit is provided through the quick release service door with latch. The service door can be easily opened and closed via a latch inside the operator compartment, providing access to the following components:

- · Traction/Hoist controller and main fuse
- Drive motor
- · Speed sensor
- Steer motor
- · Steer proximity switch
- · Hydraulic power unit and tank
- · Main wire harness and power cables





i³ TECHNOLOGY™



Hyster® i³ Technology™ integrates commonality among Hyster® warehouse products and simplifies the way in which operators and technicians alike handle and service the truck. The Integrated Intelligent Interface ties together functionality, software, diagnostic codes, similar interfaces and is Hyster Tracker compatible. This technology allows operator input to optimize performance to suit operator skill level. It also provides setup and diagnostic menus for service technicians.



TRACKER

Take your fleet operation to the next level with wireless asset management from Hyster. Hyster Tracker provides a scalable solution for fleets. From monitoring truck utilization to limiting operator access. Hyster Tracker allows you to track your fleet at your fingertips.





SUPPORTING CUSTOMERS WITH WORLD-CLASS PARTS & SERVICE

Four Parts Distribution Centers strategically located around the world provide a full range of original equipment and aftermarket parts that help maintain our customers' uptime. In fact, our Guaranteed Availability Program ensures that parts that are normally required in the first 2 years of operation will be available from your Hyster® parts dealer within 24 hours or they are free.* We also take that commitment into the field with the Hyster CERTECH® Certification training program. This technical training program provides both systems level as well as product-specific education to ensure lift trucks are repaired right the first time.

* Contact your local dealer for program details.



EXCEPTIONAL ERGONOMICS

TOUGH ON THE INSIDE, COMFORTABLE ON THE OUTSIDE.

- Backrest provides comfortable back support.
- Contoured, fully padded compartment curbs fatigue in the back, hip, elbow and knees and aids in operator balance.
- Multi-function control handle is contoured and adjustable. Thumb-actuated fork raise/lower switch can be manipulated without releasing grip on the handle shaft.
- Four programmable performance modes let operators tailor truck performance to the application or their skill level.
- Cushioned floor mat rests on four isolator mounts which are bolted to the drive frame to reduce shock from dock plates and expansion joints.
- Our standard storage compartment, combined with the optional batterymounted convenience tray, provides 84% more storage than the leading
 competitor. There's plenty of room for virtually anything an operator may
 need during the shift, for example two standard stretch wrap rolls, barcode
 labels or papers. The built-in bungee cord will prove useful for securing loose
 items such as pick tickets.

MULTI-70NFD OPERATOR PRESENCE FLOOR SYSTEM

The cushioned floor mat features a center brake switch and an exclusive multi-zoned operator presence floor system. This system creates an environment that allows the operator to move his or her feet comfortably within the compartment of the truck and to keep a more natural stance during operation, helping to reduce fatigue throughout the work day.

FLECTRIC POWER STEERING

The electric power steering system features a significant reduction in steer effort which is adjustable based on application needs. Adjustable steering tiller makes comfort and handling a priority, and provides the ability for operators with varying physical strength to perform the same material handling operations with less effort while reducing fatigue.



Contoured, fully padded operator compartment





Multi-zoned operator presence floor system



Adjustable steering tiller



The contoured multifunction control handle offers three adjustable positions and allows fingertip control of lift/lower, travel and horn functions

>

ENHANCED PRODUCTIVITY



Features such as tight turning radius, electric power steering and intuitive control handle design allow the Hyster® BE80-100Z^{HD} enclosed end riders to maneuver quickly and easily within tight spaces. Pace-setting, programmable acceleration and travel speeds allow more loads to be moved per hour. And a high-performance hydraulic system, coupled with the advanced pallet entry-exit system, produces outstanding cycle times.

ACHIEVE MAXIMUM EFFICIENCY

With our "Extended Shift" feature, your truck is not only working hard, it's working smart. With this feature engaged, the enclosed end rider is operating with maximum efficiency allowing it to run longer between battery changes. When the "Extended Shift" feature is disengaged, your truck operates in high-performance mode for quicker acceleration and higher travel speeds.

Programmable performance modes let operators tailor truck performance to the application or their skill level. The smart design of the BE80-100Z^{HD} series provides improved torque, increased travel speeds and allows for smoother acceleration and directional changes.

EFFORTLESS OPERATION

When your operator is in a comfortable working environment, less attention is given to fatigue, and productivity increases. Standard electric power steering provides adjustable steer effort to suit the application. The steer system is easy to maintain and efficient to service, helping to reduce down time.

An optional ultrasonic work light sensor is especially geared to the loading and unloading of enclosed transport trucks. The work light sensor can automatically turn the LED lights on or off to illuminate the forks when necessary, helping to prevent unnecessary use.





Quick-adjust dual caster wheels



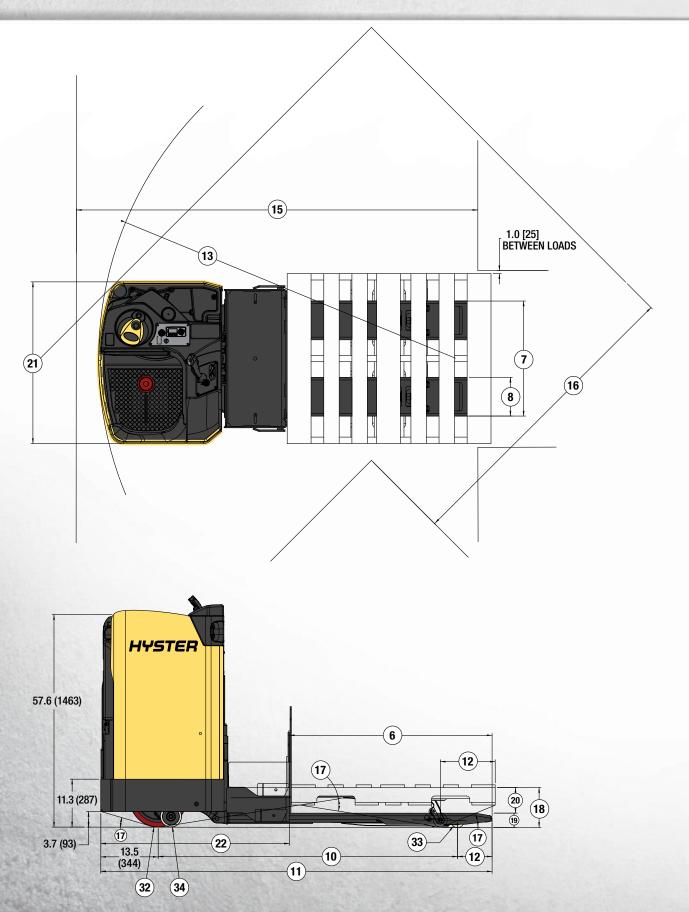
Optional LED work light with ultrasonic sensor

MOVE EVEN MORE WITH THE 10,000 LB. CAPACITY TRUCK

The Hyster® 10,000 lb. enclosed end rider is the highest capacity rider pallet jack in the forklift industry. With the larger 10,000 lb. capacity, the operator can move up to 25% more product per cycle than an 8,000 lb. truck, increasing throughput and productivity.

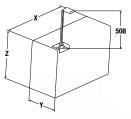
By adding 160" quad pallet forks, the Hyster® BE100Z^{HD} enclosed end rider accommodates up to eight pallets per cycle. The hydraulic pump motor has been increased from 1.5kW to 2.2kW, and the hydraulic cylinder has increased in diameter. Tandem load wheels on extended fork tips increase contact area, reducing pressure by over 40%, therefore extending load wheel life.





Circled dimensions correspond to the line numbers on the tabulated chart inside the Technical Guide. Dimensions are in inches (millimeters).

BATTERY SPECIFICATIONS										
Number of Cells	Cell Size	Plates per Cell	Capacity 6 Hr Rate	В	Weight					
				"X"	"Υ"	"Z"	vveigiit			
			amp hr (kwh)	in (mm)	in (mm)	in (mm)	lb (kg)			
12	75	11	375 (8.7)	26.5 (673)	13.0 (330)	23.3 (592)	825 (374)			
12	85	11	425 (9.9)	26.5 (663)	13.0 (330)	23.3 (592)	865 (392)			
12	75	13	450 (10.5)	30.9 (785)	13.0 (330)	23.3 (592)	987 (448)			
12	85	13	510 (11.9)	30.9 (785)	13.0 (330)	23.3 (592)	1035 (469)			
12	100	13	600 (14.0)	30.9 (785)	13.0 (330)	26.2 (665)	1200 (544)			
12	125	13	750 (17.6)	30.9 (785)	13.0 (330)	31.0 (787)	1500 (680)			
12	155	13	930 (21.5)	30.9 (785)	13.0 (330)	31.0 (787)	1500 (680)			



(1) Voltage: 24V (2) Battery Connector: — SB 175 Red (std) / SB 175 Grey (opt) — SB 350 Red (opt)/ SB 350 Grey (opt) (3) Battery Lead: Length 20" (508mm), Position "B", 1/0 AWG (4) Battery Cover Required

	1 Manufacturer					Hyster				
	2 Model Designation		BE80Z ^{HD}							
	3 Battery Type				24 Volt					
	4 Operator Type	7 71		Stand Ride						
4	5 Rated Capacity – Lifting		lb (kg)	8000 (3629)						
GENERAL	6 Fork Length – Nominal		in (mm)	48 (1219)	54 (1372)	60 (1524)	84 (2134)	93 (2362)		
員	Fork Length – Actual		in (mm)	47.8 (1213)	53.7 (1365)	59.8 (1518)	83.8 (2128)	92.8 (2357)		
٠	7 Fork Overall Width		in (mm)	27.1 (688)	27.1 (688)	27.1 (688)	28 (710)	28 (710)		
	8 Individual Fork Width		in (mm)	9.1 (232)	9.1 (232)	9.1 (232)	10 (254)	10 (254)		
		Raised	in (mm)	35.3 (896)	41.3 (1048)	47.3 (1201)	56.3 (1430)	56.3 (1430)		
	Load Distance (Face of Battery Box or Opt. Backrest to Center of Load Wheels)	Lowered	in (mm)	39.6 (1007)	45.6 (1159)	51.7 (1312)	60.6 (1540)	60.6 (1540)		
	10 Wheelbase**	Raised	in (mm)	66.5 (1689)	72.5 (1842)	78.5 (1994)	87.5 (2222)	87.5 (2222)		
	TO WHICHBUSE	Lowered	in (mm)	70.5 (1791)	76.5 (1944)	82.5 (2096)	91.5 (2324)	91.5 (2324)		
	11 Overall Length	Raised	in (mm)	92.7 (2354)	98.7 (2506)	104.7 (2659)	128.7 (3269)	137.7 (3498)		
	Oronan Zongun	Lowered	in (mm)	92.2 (2341)	98.1 (2493)	104.2 (2646)	128.2 (3256)	137.2 (3485)		
	12 Center of Load Wheel to Tip of Forks	Raised	in (mm)	12.5 (317)	12.5 (317)	12.5 (317)	27.5 (698)	36.5 (927)		
		Lowered	in (mm)	8.1 (206)	8.1 (206)	8.1 (206)	23.1 (588)	32.2 (817)		
	13 Outside Turning Radius	Raised	in (mm)	80.0 (2033)	86.0 (2186)	92.0 (2338)	101.1 (2567)	101.1 (2567)		
		Lowered	in (mm)	84.1 (2135)	90.1 (2288)	105.2 (2673)	105.0 (2668)	105.0 (2668)		
NS.	15 Right Angle Stack*	Raised	in (mm)	95.2 (2418)	106.2 (2697)	105.6 (2683)	131.0 (3328)	140.4 (3566)		
DIMENSIONS	16 Equal Intersecting Aisle*	Raised	in (mm)	70.2 (1782)	73.3 (1862)	76.5 (1942)	82.0 (2084)	82.9 (2105)		
Ë	17 Grade Clearance	Chassis	%	29						
		Center of Wheelbase	%	29	26	25	21	21		
		Forks	%	37	37	37	17	13		
	18 Overall Lift Height	Top of Forks	in (mm)	9.3 (235)						
	19 Lowered Height	Top of Forks	in (mm)	3.3 (84)						
	20 Total Lift		in (mm)			5.9 (151)				
	21 Truck Overall Width		in (mm)	38.0 (967)						
	22 Chassis Length	Raised	in (mm)	44.9 (1141)						
		Lowered		44.4 (1128)						
	23 Battery Compartment (Standard / With Bat	Battery Compartment (Standard / With Battery Rollers)			32 x 13.4 x OPEN (813 x 340 x OPEN) / 31 x 13.4 x OPEN (787 x 340 x OPEN)					
병		Max Travel Speed - Chassis First (No Load / Rated Load)			9.0 / 6.5 (14.5 / 10.5)					
PERFORMANCE		Max Travel Speed - Forks First (No Load / Rated Load)		7.0 / 6.5 (11.3 / 10.5)						
뚦	26 Number of Speeds	·		Infinitely Variable						
뚪	27 Traction Motor Control Method Type			AC Transistor						
	28 Service Brake Type				Electro-Mechanical					
WHEELS		Drive Tire – Size / Type (Number of Wheels)			13.5 x 5.5 x 8.0 / Polyurethane (1)					
풀	Load Wheel/Trail Wheel – Size/Type (# of Wheels)(# of Bearings per Wheel)		in	3.25" x 6.5" / Polyurethane (2) (2)						
>	34 Caster Wheel – Size / Type (Number of WI	in	5.0" x 2.0" / Poly (2) Adj. w/ Poly Spring Block							
	35 Type			Lead Acid						
E	Ampere Hours - Maximum			930						
BATTERY	37 Ampere Hours - Minimum			375						
m m	•			1500 (680)						
	39 Minimum Weight			825 (374)						

Above specifications, unless otherwise listed, are for a standard truck without optional equipment.

^{*} Right Angle Stack and Equal Intersecting Aisle are calculated using a 40" wide pallet flush with fork tips.

^{**} Subtract 12.9mm if equipped with Tandem Load Wheels.



BE80-100ZHD SPECIFICATIONS

BE100Z ^{HD}					
10000 (4536)					
160 (4064) 192 (4877)					
9 (4063) 191.9 (4875)					
(710) 28 (710)					
(254) 10 (254)					
106.0 (2694)					
5 (2806) 110.5 (2806) 1 (2400) 183.1 (4650)					
1 (3490) 183.1 (4650)					
1 (3591) 187.0 (4751)					
236.9 (6016)					
1 (5191) 236.3 (6003)					
(1369) 40.3 (1023)					
(1257) 35.9 (911) 9 (3834) 196.6 (4994)					
3 (3934) 190.6 (4994) 2 (3934) 200.6 (5094)					
0 (5232) 230.0 (5824) 6 (2912) 120.5 (3061)					
120.5 (5001)					
15 13					
9 12					
J 12					
9.3 (235) 3.3 (84)					
5.9 (151)					
38.0 (967)					
44.9 (1141)					
44.4 (1128) 32 x 13.4 x OPEN (813 x 340 x OPEN) / 31 x 13.4 x OPEN (787 x 340 x OPEN)					
9.0 / 6.5 (14.5 / 10.5)					
7.0 / 6.5 (11.3 / 10.5)					
Infinitely Variable					
AC Transistor Electro-Mechanical					
13.5 x 5.5 x 8.0 / Polyurethane (1)					
3.25" x 6.5" / Polyurethane (2) (2) 3.25" x 5.0" / Poly (4)(2)					
5.0" x 2.0" / Poly (2) Adj. w/ Poly Spring Block					
Lead Acid					
930					
N					

Above specifications, unless otherwise listed, are for a standard truck without optional equipment.

^{*} Right Angle Stack and Equal Intersecting Aisle are calculated using a 40" wide pallet flush with fork tips.

^{**} Subtract 12.9mm if equipped with Tandem Load Wheels.

STANDARD EQUIPMENT

48" long heavy duty boxed fork construction, reinforced fork tips

27" fork spread

Standard construction operating temperatures:

+32°F to +120°F

Smooth polyurethane drive tire – 90 durometer

- 13.5" x 5.5"

Single polyurethane load wheels - 3.25" x 6.5"

Heavy duty casters – urethane block loaded – 5" x 2" dual

polyurethane wheel Adjustable steer handle

Pallet exit rollers and runners/entry blades

Pallet entry rollers (standard tip forks only)

On-board software

- Program, test and diagnose
- No handset required
- Password protected

32.0" x 13.4" open battery compartment

Key ignition switch

Electro-mechanical park brake

Electronic horn

Electric power steering

Flush pallet stop

Heavy duty, long life lift linkage with lubrication fittings

- "X" groove style greaseable pivot bushings
- Hardened, bolt retained flag linkage pins
- Knock-out load wheel axles

Operating manual

UL Classification "E"

12 months / unlimited hour manufacturer's warranty

36 months / 6,000 hour powertrain warranty

Lifetime main frame warranty

OPTIONAL EQUIPMENT

Keyless toggle ignition switch

Fork lengths:

- 54" long forks standard tip
- 60" long forks standard tip
- 84" long forks extended tip
- 93" long forks extended tip
- 96" long forks extended tip
- 144" long forks extended tip
- 144" long forks short wheelbase extended tip
- 160" long forks extended tip (BE100ZHD only)

Pallet entry bar (BE80Z^{HD} only)

Application/Environmental Construction

- Cooler/Freezer Package:
 - Operating temperatures: 0° F to +120° F
- Wash Down Package:
 - Operating temperatures: 0° F to +120° F
- SubZero operating temperatures:
 - -40°F to +120°F

Drive tire

- Red polyurethane "X" groove 85 durometer– 13.5" x 5.5"
- Red polyurethane 85 durometer 13.5" x 5.5"
- Vulkollan polyurethane 90 durometer 13.5" x 5.5"

Load wheels

- Single, dual and tandem
- 2 bearing and 4 bearing
- Standard bearing and sealed bearing

Heavy duty casters - sealed wheel

Load backrest

- 48" high (pivoting or bolt-on)
- 60" high (pivoting or bolt-on)
- 72" high (bolt-on)

Convenience tray (battery mounted)

RF terminal power supply - 24-volt

DC converter with automotive style 12-volt outlet

Work light sensor

Audible alarm

Fan

Strobe light

Telemetry display

Accessory pole (short and long)

INNOVATIVE TRUCKS ENGINEERED TO MEET THE MOST DEMANDING APPLICATIONS

For more than 80 years, Hyster has been conquering the world's most demanding applications. In the 1920's Hyster started as a manufacturer of lifting machines used in the rigorous logging industry of the United States' Pacific Northwest. A few years later the first forklift trucks were invented and the Hyster brand quickly gained its reputation for rugged quality. Hyster® lift trucks are designed to lower your cost of operations. Every truck we make — gasoline, LPG, diesel and electric — is purpose-built to excel in its application. Every truck is also backed by an unmatched network of specialists.



Dealer Network — Our Dealer Network can offer the expertise of fleet managers, parts suppliers, capital procurement specialists and trainers. Hyster's carefully chosen dealers fully understand customer applications, assist in selecting the right lift truck and provide fast, reliable support.



Hyster Fleet Services — Even if you operate other brands, we can manage your maintenance and replacement plan. We can offer complete fleet analysis, fleet history summary and a cost-effective proposal for replacement and scheduled maintenance.



Parts — With genuine Hyster® replacement parts and UNISOURCE™ parts for all makes of lift trucks, we are your one-stop source for lift truck parts. In fact, we offer more than 7 million part number crosses for most brands of materials handling and other in-plant mobile equipment.



Rental Products — When leasing or buying isn't a practical option, we have access to more than 14,000 units for short- and long-term rental. We'll help you maintain output in a cost-effective manner.



Hyster Capital — We can arrange 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 superior service and competitive rates.



Special Products Engineering Department (SPED) — Different materials require different handling. That's why we can work with you to customize your lift trucks. From strobe lights to specially made forks, SPED has the tools to help you get the job done right.



Operator Training — Proper education in operating lift trucks minimizes the risk of injuries due to accidents while increasing productivity. Hyster offers OSHA-compliant materials that support the training of qualified operators.



Service — Your local Hyster® dealer offers a flexible, customized and comprehensive maintenance plan based on each lift truck's operation environment. Hyster service programs offer scheduled inspections and maintenance, along with quick, responsive service dispatched to your location.



Hyster Company P.O. Box 7006 Greenville, North Carolina 27835-7006 Part No. BE80-100ZHD/B 3/2016 Litho in U.S.A.

Visit us online at www.hyster.com or call us at 1-800-HYSTER-1.

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