Sit-Down, Counterbalanced IC, Cushion Tire *FORTIS*® Line

S135-155FT Series

STRONG PARTNERS. TOUGH TRUCKS.™

S135-155FT SERIES

The S135-155FT is more than a new lift truck series. It represents a transformation in how lift trucks are designed, built and acquired. Drawing on Hyster Company's legacy of strength, durability and toughness, the Fortis® concept simplifies lift truck purchases with a two-tiered system of preconfigured engine-transmission bundles. Fortis means you maximize your purchasing power by buying only the features you need for your application. Using a truck from the S135-155FT series means low cost of operations, dependability and owning a unit that's still going strong long after the day's work is done.

THE HYSTER™ S135-155FT SERIES ADVANTAGE

The S135-155FT series is configured to provide the right lift truck for your application. Our truck packages with multiple powertrain combinations to choose from assure of lowering your cost of operations will be lowered. Each configuration offers improved efficiency, advanced dependability and simple serviceability.

	FORTIS®	FORTIS® ADVANCE
DESIGN INTENT		
Investment	Lowest Upfront Investment	Minimized Operating Costs
POWERTRAIN CONFIGURATION		
Engine	GM 4.3L, 103 HP	GM 4.3L, 103 HP
Transmission (Speeds)	Standard electronic powershift (2F/2R)	DuraMatch™ (3F/2R)
Brakes	Oil-cooled wet disc brakes	Oil-cooled wet disc brakes
Cooling System	Combi-cooler radiator	Combi-cooler radiator
Hydraulics	Cowl mounted levers	Cowl mounted levers


HYSTER

Trucks shown with optional equipment.

S135-155FT

A. Overhead Guard (OHG)
The unique grid-style pattern improves visibility while protecting operators and strengthening the truck's structure. The front, curved OHG leg design affords greater shoulder clearance for easier operator entry and exit.

B. Hydraulic Controls
The Hyster® Fortis® line of lift trucks offers two configurations that employ cowl mounted levers or TouchPoint™ mini-levers to provide you unsurpassed, low effort, tactile control of all hydraulic functions.

C. Exclusive VISTA® Mast
High strength hot-rolled steel mast channels and flush-faced design improve capacity retention at high lifts. Compact cast steel cross members optimize visibility and rigidity. Six 3-inch full-face load rollers roll on the web and the flange simultaneously, eliminating the need for side thrust rollers or wear plugs.

D. Tilt Steer Column
The infinitely adjustable tilt steer column accommodates operators easily. Assisted by a gas-spring and an easy-to-reach lever, obtaining your preferred position is simple. The standard 12-inch steering wheel with integrated spinner knob reduces fatigue while providing more knee room. And it goes lock-to-lock in just 4 turns for superior efficiency, maneuverability and control.

E. Pacesetter VSM™
The computer "brain" of the Fortis® line of lift trucks manages all vehicle systems to optimize performance and significantly increase overall reliability and enhance diagnostic capabilities for maximum uptime.

F. Hassle-Free Hydraulics
Use of leak-free O-ring face seals helps maximize uptime. In-tank filter increases hydraulic fluid filtration by 60% for particles down to 10 microns, significantly extending component life and creating a cleaner overall operation.

G. Carriage
The Fortis S135-155FT features a robust 48" Canted roller hook carriage with excellent visibility and the strength to handle long forks or tough attachment applications.

H. Heavy-duty Drive Axle
The full floating design of the planetary drive axle lets the axle housing, not the shafts, carry the weight of the load, enhancing dependability and reliability for a longer service life.

I. Oil-Cooled Wet Disc Brakes
Provide excellent stopping power and extremely long service life. Brakes are completely sealed from water and dirt making them ready for your harshest environments.

J. Drivetrain Mounting
The Hyster Fortis line of lift trucks has a fully isolated drivetrain through the use of elastomeric mounts for the engine and transmission. The result is a new standard in smooth riding comfort.

K. Removable Floor Plate
One piece, steel floor plate is easily removed to provide incredible service access. A molded rubber floor mat seals the floor area to reduce noise and vibration for a more comfortable ride.

L. Hydrostatic Steer Axle
The elastomeric-mounted Hyster designed cast ductile iron steer axle with transverse, double-acting hydraulic cylinder, tapered roller spindle- support bearings and non-adjustable tie rods provide maximum durability and superior steering control for easy maneuvering and low maintenance.

M. Counterweight
The superior design permits a significant increase in airflow to assist the Fortis line of lift trucks to run cooler, even in extreme temperatures and environments.

N. Engine Cover
The tough engine cover is made of a durable, crack-resistant, thermoset polyester resin reinforced with glass. Hinged at the rear, it offers superior service access to the engine compartment with an opening angle of 85 degrees.

O. EZXchange™ Bracket
This optional bracket swings out from over the top of the counterweight and the gas-spring assisted fuel cylinder lowers into a reclined and locked position, providing a stable platform for quick, easy LP tank replacement.

P. Brake/Backup Lights
For superior functionality, the optional Hyster LED brake/backup lights resist vibration and offer extremely long life.

Q. Fatigue-Reducing Operator Compartment
Ergonomically designed compartment plays a big role to enhance overall productivity. Entry and exit are made easy by the optimized step height with non-slip step tread, soft touch contoured hand grip and rounded hood. Repositioned foot pedals provide improved floor space, while better engine cooling keeps operators more comfortable. Infinitely adjustable tilt steer column accommodates any size operator. A formed fiberglass liner provides increased noise supression for a more comfortable ride.

ADVANCED DEPENDABILITY

Decrease Downtime By Up To 30%

Approximately 70% of industrial lift truck downtime results from problems with the powertrain, brakes, electrical system, cooling system or hydraulic system. With the S135-155FT, many of these mechanical issues become a thing of the past as design advances have reduced downtime by up to 30%.

Toughest Powertrain

- Pacesetter VSM™ industrial onboard computer monitors and protects the engine powertrain to maximize the S135-155FT series uptime.
- Transmission gears and shafts are up to 15% stronger to handle even the most demanding duty cycle.
- Electronically controlled powershift transmissions have state-of-the-art clutch packs that are stronger and larger and provide up to 3 times the life.
- Hyster® tough brakes are self-adjusting and self-energizing to provide optimal performance and lengthened service life.

Industrial Strength Electronics

- CANbus communications network reduces wiring complexity, providing superior dependability.
- Non-mechanical, Hall-Effect sensors and switches are designed to outlast the life of the truck.
- Proven tough, Pacesetter VSM industrial onboard computer manages truck operation to maintain world-class dependability to maximize uptime.
- IP66 sealed electrical connectors keep out water and debris, so you can powerwash our trucks.
- Smart, one-way routing path for wire harnesses ensures consistent high-quality assembly while increasing durability and simplifying maintenance when needed.

Exceptional Cooling

- Standard Combi-cooler radiator provides 4-row aluminum core for additional transmission oil cooling capacity for the most demanding and intensive applications.
- Soft rubber isolator mounted radiators increase reliability and durability to significantly extend service life.
- A superior counterweight tunnel design coupled with a “pusher” type fan and enhanced shroud design improves airflow and significantly reduces the recirculation of hot air to maximize cooling capabilities.

Hassle-Free Hydraulics

- Leak-free O-ring face seal fittings reduce leaks for enhanced reliability.
- A 10-micron high-performance in-tank filtration system captures 99.5% of hydraulic system debris, significantly extending component life.
- Smart placement of the control valve and hydraulic lines away from heat sources reduces operating temperature, extending the life of seals and hoses for unbeatable reliability.

Save over $2,464 In Operating Costs Per Lift Truck – Each Year

Lowering operating costs in all types of applications is what the Hyster® S135-155FT Fortis® series does best. With up to a 30% decrease in downtime, the Hyster S135-155FT Fortis series is an exceptionally smart choice. The S135-155FT series features 2 truck packages with multiple powertrain configurations that provide improved efficiency, while enhancing reliability and superior serviceability to reduce your operating costs.

World-Class Efficiency

- Auto Deceleration System extends brake life by up to 60% by automatically slowing the truck when the accelerator pedal is released. (Fortis® Advance)
- Controlled power reversal feature virtually eliminates tire spin, increasing tire life by up to 50%. This feature is programmable to match the needs from delicate to more aggressive settings for maximum productivity. (Fortis Advance)
- Electronic hydraulic control valve precisely manages hydraulic pressure and flow to supply exactly the right amount of power for each function, reducing fuel consumption.
- Cummins Diesel engine features 500 hour service intervals.
- Hydraulic oil change interval extended from 2,000 to 4,000 hours.
- Improved engine options provide excellent performance with advanced combustion technology that enhances fuel economy.

Advanced Dependability

- **Toughest Powertrain:** Electronic controlled transmissions reduce shock loading; clutch packs with 3 times the life; 15% stronger gears and shafts; and Hyster oil-cooled wet disc brakes all work to provide unmatched reliability.
- **Industrial Strength Electronics:** CANbus communications, non-mechanical sensors and switches and IP66 rated sealed connections mean electrical problems are a thing of the past.
- **Industry's Best Cooling:** The S135-155FT series' superior airflow and heavy-duty cooling systems keep heat in check, while providing world-class dependability in even the harshest of environments.
- **Hassle-free Hydraulics:** Leak-free O-ring face seal fittings at all high pressure connection points, superior filtration (10 micron) system and smart placement of valve and lines take the worry out of hydraulics.

Superior Serviceability

- Pacesetter VSM™ continuously monitors fluid levels and powertrain, reducing daily service checks and preventing major repairs.
- Unmatched service access: Rear-opening one-piece hood (opens up 85 degrees) and easy-to-remove one-piece floor plate (no tools required) provide industry's best cowl to counterweight service access.
- Daily checks are easily accessed and performed.
- State-of-the-art onboard diagnostics reduce repair time and minimize expensive parts swapping.
- Standard oil-cooled wet disc brakes virtually eliminate brake maintenance.

DOWNTIME IS COSTLY

Estimated Costs per Downtime Event:	
Repair Costs (parts & labor)	$ 500
Idle Operator Costs	+ $ 60
Truck Rental Costs	+ $ 120
Administrative Costs	+ $ 50
TOTAL COST (per Downtime Event)	$ 730
Additional Costs:	+ $
Lost Productivity and Sales	$???

Assumptions:
1. Operator Cost = $15.00/hr.
2. Average Length of Downtime Event = 4 hrs.

SUPERIOR ERGONOMICS

Superior Operator Comfort

- Low noise level at the operator's ear lessens driver fatigue, improving driver satisfaction for an overall increase in productivity.
- Isolated drivetrain minimizes the effect of powertrain vibration and road-born shocks to increase operator comfort all shift long.
- Rear drive handle mounted on overhead guard leg (optional) provides an excellent hand hold for reverse driving while giving ready access to the auxiliary horn button for use when approaching cross-aisles and pedestrian traffic areas.
- An infinitely adjustable steer column and optional full suspension swivel seat assures the right fit for any operator.
- Easy-to-use 3-point entry design of operator compartment uses a large molded hand grip and open non-slip step with a low step height to minimize muscle/joint strain during entry/exit.
- Adjustable armrest that accompanies the optional TouchPoint™ E-hydraulic control moves with the seat and telescopes forward/vertical in one simple movement to provide greater flexibility in achieving a more custom position.
- A swingout bracket frees the LP tank from over the counterweight to simplify changeout.
- Optional EZXchange™ bracket also lowers the tank on its stable platform to minimize arm and back strain for even easier changeouts.
- Choice of 5 different seats enables a more customizable level of operator comfort by its enhanced design and adjustable features.

Precise, Effortless Operation

- Improved brake pedal layout and the reduced braking requirements of the Auto Deceleration System significantly reduce operator fatigue. (Fortis® Advance)
- 12-inch steering wheel with spinner knob improves steering response, increasing control and efficiency while minimizing shoulder strain with only 4 turns lock-to-lock.
- Controlled rollback on ramps contributes to lower driver fatigue and significantly enhances truck and load control on ramps. (Fortis Advance)

Performance At-A-Glance

- Advanced dash display uses a non-reflective, backlit LCD screen and 21 indicator lights provide performance at-a-glance in all lighting conditions.
- Easy-to-use onboard diagnostics through the advanced dash display provide fast and accurate troubleshooting for first-time fixes.
- Optional premium monitoring package reports air and hydraulic oil filter restrictions and low engine coolant levels.

Increase Throughput and Sales Volume While Reducing Operating Costs

Productivity means moving more of your loads in less time with less cost. The Hyster® Fortis® series has been proven to lead the industry in productivity through performance, ergonomics (operator comfort and control), service, uptime and dependability.

Performance Customized For Your Application

- S135-155FT series choice of high output engines, performance transmissions, hydraulic controls and cooling system options allows you to customize your truck to optimize the productivity in your application.
- Both engine choices provide enhanced fuel efficiency so you can get more loads moved on a single tank.
- Pacesetter VSM™ industrial onboard computer enables you to adjust and optimize the performance of your S135-155FT trucks.
- Patented DuraMatch™ transmission provides breakthrough features that include the Auto Deceleration System, controlled rollback on ramps, controlled power reversals to move loads more efficiently with less operator fatigue and product damage.
- With the exceptional cooling and its ability for extended draw bar pull, the S135-155FT series will continue to perform when other lift trucks may fail.

ESTIMATED ANNUAL LIFT TRUCK OPERATOR COSTS

Costs Related To Fatigue	Average Annual Cost Per Lift Truck Operator
Absenteeism[1] Turnover[2] Lift Truck and Property Damage[3] Workers Compensation[4] Productivity/Lost Sales	$6,862
Potential Savings Level	**Average Annual SAVINGS Per Lift Truck Operator**
Savings at 10% - 20%	$686 - $1,372

1 Absentee cost based on national average as published in Facility Management safety study, 2003.
2 Average turnover cost according to U.S. Dept. of Labor 2002, 30% of income at $15/hour for 2,000 hours per year.
3 Lift Truck and Property Damage based on data from NMHG Fleet Services.
4 Workers Compensation costs are average costs for high and low fatigue environments according to 2004 Shiftwork Practices Survey.

Superior Operator Control

- Superior ergonomic features like more foot and leg room, 2 choices of hydraulic controls, infinitely adjustable steer column, integrated dashboard display, 12-inch steering wheel with spinner knob, Auto Deceleration System, EZXchange™ tank bracket (optional), 5 choices of seats and the rear drive handle enable your operator to maximize productivity.

Superior Serviceability

- Complete cowl-to-counterweight access, daily service checks easily located and accessed, the integral dashboard display's onboard diagnostic capabilities and reduced service requirements significantly minimize service times to maximize uptime.

EXTRAORDINARY SUPPORT

The Fortis® line of lift trucks represents a breakthrough in how Hyster® lift trucks are being designed, built and acquired. But even the toughest, most durable machine with moving parts will need service at some point. As your strong partners, we are committed to delivering extraordinary aftermarket support to the S135-155FT series that includes a parts availability program which is the fastest and most comprehensive in the industry today – to keep your materials moving at the speed of business today and tomorrow.

Objective:
- To provide world-class product support unparalleled in the industry.

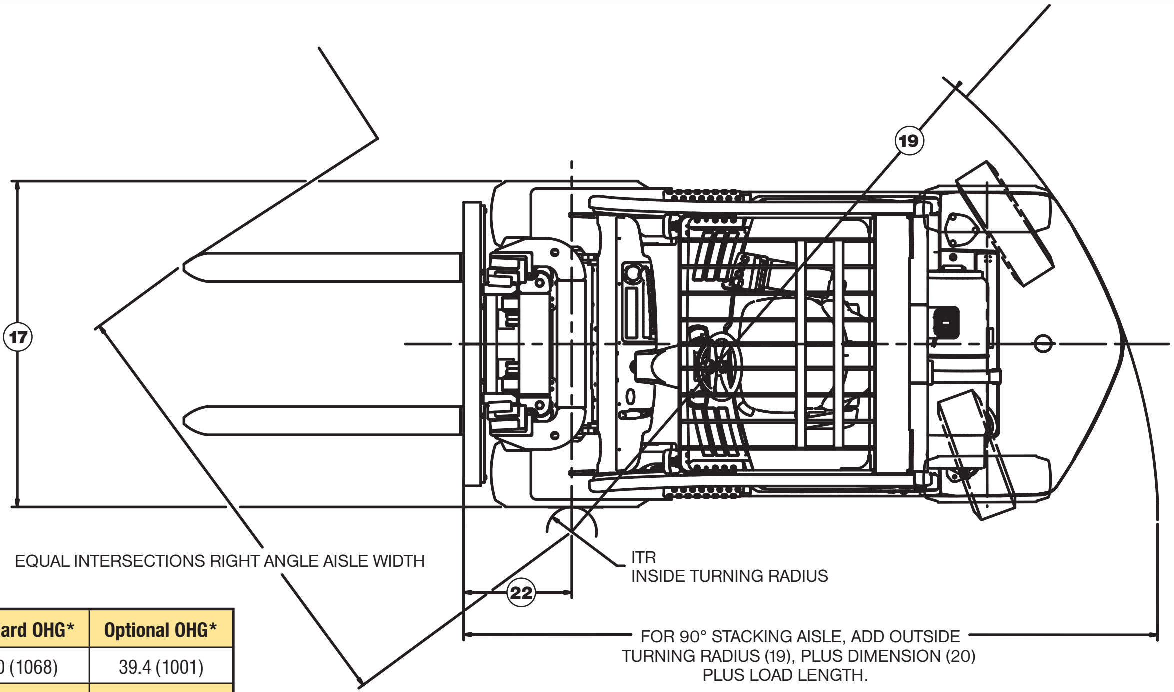
Performance Plus™ Parts Guarantee:
- Off-the-shelf availability guarantee on the parts commonly required in the first two years of use.
- Simply stated, if “Performance Parts” are not available from your local Authorized Hyster Dealer within 1 business day from the date of order – they are free.*
- Please contact your local Hyster Dealer for the details.

Industry’s Best Warranty:
- One year/2,000 hours on full truck.
- Two years/4,000 hours on powertrain.

Best In Class Serviceability:
- Designed to be one of the fastest and easiest lift trucks to service.
- State-of-the-art on-board and PC-based diagnostics available.
- Significantly reduced regular service requirements.

Most Experienced Dealer Network:
- Over 230 dealer locations in North America.
- Dealers average over 30 years of materials handling experience.
- Over 2,500 trained service technicians.
- Rental fleet of over 14,000 lift trucks.

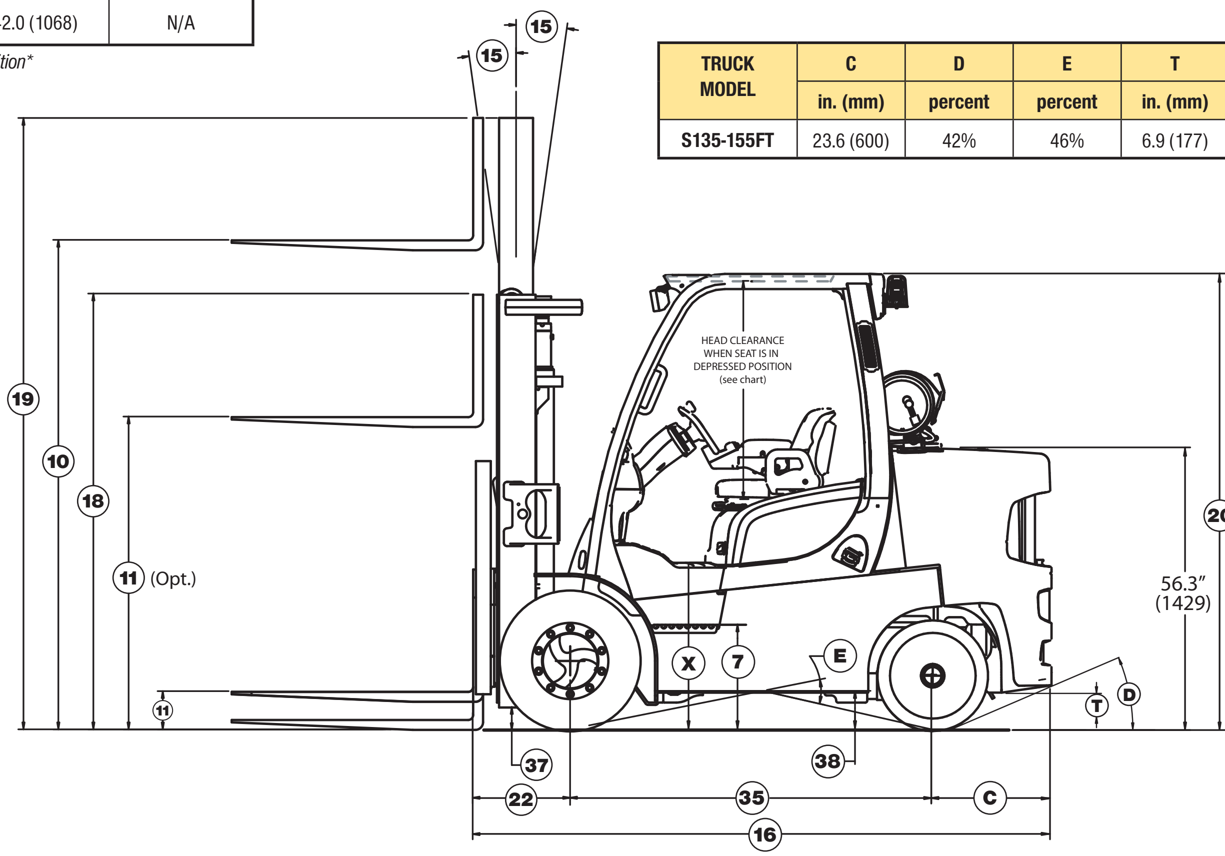
**Contiguous 48 states of the U.S.A. only*



Seat Type	Standard OHG*	Optional OHG*
Non-Suspension	42.0 (1068)	39.4 (1001)
Full-Suspension	41.8 (1062)	N/A
Swivel Full-Suspension	42.0 (1068)	N/A

*Seat in depressed position**

TRUCK MODEL	C	D	E	T	X
	in. (mm)	percent	percent	in. (mm)	in. (mm)
S135-155FT	23.6 (600)	42%	46%	6.9 (177)	33.2 (844)



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

S135FT SPECIFICATIONS

Section	No.	Item	Condition	Units								
GENERAL	1	Manufacturer			Hyster Company		Hyster Company		Hyster Company		Hyster Company	
	2	Model designation			S135FT		S135FT		S135FT		S135FT	
	2a	Power Train - Engine Transmission			GM 4.3L		GM 4.3L		GM 4.3L		GM 4.3L	
	2b	Brand Names for Transmissions			Electronic Powershift				Duramatch™			
	3	Load capacity		lbs/kg	13,500	6,000	13,500	6,000	13,500	6,000	13,500	6,000
	4	Load center		in/mm	24	610	24	610	24	610	24	610
	5	Drive Power Type: Gas, Diesel, LPG			Gas		LP		Gas		LP	
	6	Operation: Seated rider			Seated Rider		Seated Rider		Seated Rider		Seated Rider	
	7	Step Height		in (mm)	20.9 (531)		20.9 (531)		20.9 (531)		20.9 (531)	
	8	Tires: P=pneumatic, C=cushion, SC=supercushion			Cushion		Cushion		Cushion		Cushion	
	9	Number of wheels, front/rear (X = driven)			2/2		2/2		2/2		2/2	
		Track width, front		in (mm)	44.6 (1133)		44.6 (1133)		44.6 (1133)		44.6 (1133)	
		Track width, rear		in (mm)	46.9 (1192)		46.9 (1192)		46.9 (1192)		46.9 (1192)	
DIMENSIONS	10	Lift height, w/LBR (TOF) (Rounded Down)		in (mm)	133 (3400)		133 (3400)		133 (3400)		133 (3400)	
	11	Standard Free lift height (Rounded Down)		in (mm)	6 (160)		6 (160)		6 (160)		6 (160)	
	11A	Optional Free lift w/LBR (TOF) (Rounded Down)		in (mm)	50 (1295)		50 (1295)		50 (1295)		50 (1295)	
		Optional Free lift w/o LBR (TOF) (Rounded Down)		in (mm)	56 (1425)		56 (1425)		56 (1425)		56 (1425)	
	12	Fork carriage width Standard Carriage		in (mm)	48.0 (1219)		48.0 (1219)		48.0 (1219)		48.0 (1219)	
	13	Fork dimensions		in (mm)	6 X 2.5 X 48 (150 X 60 X 1219)		6 X 2.5 X 48 (150 X 60 X 1219)		6 X 2.5 X 48 (150 X 60 X 1219)		6 X 2.5 X 48 (150 X 60 X 1219)	
		Fork Spacing – Std Carriage – Minimum inside to inside edge		in (mm)	6.3 (160)		6.3 (160)		6.3 (160)		6.3 (160)	
	14	Fork Spacing – Std Carriage – Maximum outside to outside edge		in (mm)	43.7 (1109)		43.7 (1109)		43.7 (1109)		43.7 (1109)	
	15	Mast tilt, forward / back		degrees	6F/10B		6F/10B		6F/10B		6F/10B	
	16	Overall length (length to face of forks)		in (mm)	115.4 (2930)		115.4 (2930)		115.4 (2930)		115.4 (2930)	
	17	Overall width		in (mm)	56.6 (1438)		56.6 (1438)		56.6 (1438)		56.6 (1438)	
	18	Height of Standard mast, lowered (Rounded Up)		in (mm)	107 (2697)		107 (2697)		107 (2697)		107 (2697)	
	19	Height of mast, extended w/o load backrest (Rounded Up)		in (mm)	181 (4575)		181 (4575)		181 (4575)		181 (4575)	
	19A	Height of mast, extended w/ load backrest (Rounded Up)		in (mm)	183 (4632)		183 (4632)		183 (4632)		183 (4632)	
	20a	Height to top of Std. overhead guard (high) (Rounded Up)		in (mm)	91 (2302)		91 (2302)		91 (2302)		91 (2302)	
	20b	Height to top of overhead guard (low) (Rounded Up)		in (mm)	88 (2235)		88 (2235)		88 (2235)		88 (2235)	
		Towing coupling height		in (mm)	15.3 (388)		15.3 (388)		15.3 (388)		15.3 (388)	
	21	Outer turning radius		in (mm)	101.8 (2585)		101.8 (2585)		101.8 (2585)		101.8 (2585)	
		Inner turning radius		in (mm)	4.3 (108)		4.3 (108)		4.3 (108)		4.3 (108)	
	22	Load distance (load face-ctr of wheel to face of forks – frnt overhang) 2 stage mast		in (mm)	19.7 (500)		19.7 (500)		19.7 (500)		19.7 (500)	
		Load distance (load face-ctr of wheel to face of forks – frnt overhang) 3 stage mast		in (mm)	21.0 (534)		21.0 (534)		21.0 (534)		21.0 (534)	
	23	Right angle stack with pallets (with pallet W=42in, L=48in)		in (mm)	169.4 (4304)		169.4 (4304)		169.4 (4304)		169.4 (4304)	
		Right angle stack (add length of load)		in (mm)	121.5 (3085)		121.5 (3085)		121.5 (3085)		121.5 (3085)	
	24	90° intersecting aisle (with pallet W=42in, L=48in)		in (mm)	91.2 (2317)		91.2 (2317)		91.2 (2317)		91.2 (2317)	
PERFORMANCE	25	Travel speed	laden/unladen	mph (km/hr)	12.7/12.3 (20.5/19.8)		12.7/12.3 (20.5/19.8)		13.2/12.7 (21.3/20.6)		13.2/12.7 (21.3/20.6)	
	26A	Lifting speed (2LFL)	laden/unladen	ft/min (m/sec)	104.3/104.3 (0.53/0.53)		104.3/104.3 (0.53/0.53)		104.3/104.3 (0.53/0.53)		104.3/104.3 (0.53/0.53)	
	26C	Lifting speed (3FFL)	laden/unladen	ft/min (m/sec)	100.4/100.4 (0.51/0.51)		100.4/100.4 (0.51/0.51)		100.4/100.4 (0.51/0.51)		100.4/100.4 (0.51/0.51)	
	27A	Lowering speed (2LFL)	laden/unladen	ft/min (m/sec)	110.2/84.6 (0.56/0.43)		110.2/84.6 (0.56/0.43)		110.2/84.6 (0.56/0.43)		110.2/84.6 (0.56/0.43)	
	27C	Lowering speed (3FFL)	laden/unladen	ft/min (m/sec)	100.4/70.9 (0.51/0.36)		100.4/70.9 (0.51/0.36)		100.4/70.9 (0.51/0.36)		100.4/70.9 (0.51/0.36)	
	28A	Maximum drawbar pull	laden/unladen	lbs (kg)	10071/4519 (4568/2050)		10858/4519 (4925/2050)		10000/4519 (4536/2050)		10000/4519 (4536/2050)	
	28B	Drawbar pull @ 1.0 mph or 1.6 km/h	laden/unladen	lbs (kg)	8161/4519 (3702/2050)		8880/4519 (4028/2050)		10000/4519 (4536/2050)		10000/4519 (4536/2050)	
	28C	Drawbar pull @ 3.0 mph or 4.8 km/h	laden/unladen	lbs (kg)	5193/4519 (2356/2050)		5688/4519 (2580/2050)		5553/4519 (2519/2050)		5733/4519 (2600/2050)	
		Gradeability max	laden/unladen	%	32.2	24.0 ††	35.0	24.0 ††	32.0	24.0 ††	32.0	24.0 ††
	29A	Gradeability @ 1.0 mph or 1.6 km/h	laden/unladen	%	25.6	24.0 ††	28.1	24.0 ††	32.0	24.0 ††	32.0	24.0 ††
	29B	Gradeability @ 3.0 mph or 4.8 km/h	laden/unladen	%	15.9	15.9 ††	17.6	24.0 ††	17.0	24.0 ††	17.6	24.0 ††
WT.	31	Unladen weight (w/ std equipment: mast, carriage, forks, etc.)		lb (kg)	19040 (8635)		19160 (8690)		19040 (8635)		19160 (8690)	
	32a	Axle loading laden w/ std option configuration	front/rear	lb (kg)	29500/3040 (13380/1380)		29510/3150 (13385/1430)		29500/3040 (13380/1380)		29510/3150 (13385/1430)	
	32b	Axle loading unladen w/ std option configuration	front/rear	lb (kg)	7830/11210 (3550/5085)		7840/11320 (3555/5135)		7830/11210 (3550/5085)		7840/11320 (3555/5135)	
WHEELS & TIRES	33	Tire size-front			28 X 12 X 22		28 X 12 X 22		28 X 12 X 22		28 X 12 X 22	
	34	Tire size-rear			22 X 8 X 16		22 X 8 X 16		22 X 8 X 16		22 X 8 X 16	
	35	Wheelbase		in (mm)	72 (1830)		72 (1830)		72 (1830)		72 (1830)	
	37	Ground clearance under mast, laden		in (mm)	4.4 (113)		4.4 (113)		4.4 (113)		4.4 (113)	
	38	Ground clearance at centre of wheelbase		in (mm)	7.4 (188)		7.4 (188)		7.4 (188)		7.4 (188)	
	39	Brakes Service – Method of Control/Operation			Hydraulic Wet Disc/Foot		Hydraulic Wet Disc/Foot		Hydraulic Wet Disc/Foot		Hydraulic Wet Disc/Foot	
	40	Brakes Park – Method of Control/Operation			Mechanical/Hand		Mechanical/Hand		Mechanical/Hand		Mechanical/Hand	
TRANS. & POWER UNIT	41	Battery Type			Maintenance Free		Maintenance Free		Maintenance Free		Maintenance Free	
	42	Battery Volts/Cold Cranking Amps			12V / 475		12V / 475		12V / 475		12V / 475	
	43	Engine manufacturer/type			GM Gas		GM LP		GM Gas		GM LP	
	44	Engine output, in accordance with ISO1585		hp (KW)	96.6 (72) @ 2400 rpm		103.3 (77) @ 2400 rpm		96.6 (72) @ 2400 rpm		103.3 (77) @ 2400 rpm	
	45	Torque		ft-lb (N-m)	210 (285) @ 2400 rpm		225 (305) @ 2400 rpm		210 (285) @ 2400 rpm		225 (305) @ 2400 rpm	
	46	Number of cylinders/displacement		No./cc (ci)	V6/4302 (262)		V6/4302 (262)		V6/4302 (262)		V6/4302 (262)	
	47A	Gear change type			Powershift		Powershift		Elec. Controlled Powershift		Elec. Controlled Powershift	
	47B	Transmission: Number of speeds forward/reverse			2F/2R		2F/2R		3F/2R		3F/2R	
	49	Hydraulic Tank – capacity (drain & refill)		gal (liters)	16.3 (61.8)		16.3 (61.8)		16.3 (61.8)		16.3 (61.8)	
	50	Fuel Tank – Capacity (Gasoline- or Diesel-Powered Units Only)		gal (liters)	18.5 (70)		18.5 (70)		18.5 (70)		18.5 (70)	
	51	Working pressure for attachments		psi (bar)	2200 (153)		2200 (153)		2200 (153)		2200 (153)	

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 Company Dealer.*

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

Section	No.	Item	Condition	Units	Model 1		Model 2	
GENERAL	1	Manufacturer			Hyster Company		Hyster Company	
	2	Model designation			S135FT		S135FT	
	2a	Power Train - Engine Transmission			Cummins 4.5L		Cummins 4.5L	
	2b	Brand Names for Transmissions			Electronic Powershift		Duramatch™	
	3	Load capacity		lbs/kg	13,500	6,000	13,500	6,000
	4	Load center		in/mm	24	610	24	610
	5	Drive Power Type: Gas, Diesel, LPG			Diesel		Diesel	
	6	Operation: Seated rider			Seated Rider		Seated Rider	
	7	Step Height		in (mm)	20.9 (531)		20.9 (531)	
	8	Tires: P=pneumatic, C=cushion, SC=supercushion			Cushion		Cushion	
	9	Number of wheels, front/rear (X = driven)			2/2		2/2	
		Track width, front		in (mm)	44.6 (1133)		44.6 (1133)	
		Track width, rear		in (mm)	46.9 (1192)		46.9 (1192)	
DIMENSIONS	10	Lift height, w/LBR (TOF) (Rounded Down)		in (mm)	133 (3400)		133 (3400)	
	11	Standard Free lift height (Rounded Down)		in (mm)	6 (160)		6 (160)	
	11A	Optional Free lift w/LBR (TOF) (Rounded Down)		in (mm)	50 (1295)		50 (1295)	
		Optional Free lift w/o LBR (TOF) (Rounded Down)		in (mm)	56 (1425)		56 (1425)	
	12	Fork carriage width Standard Carriage		in (mm)	48.0 (1219)		48.0 (1219)	
	13	Fork dimensions		in (mm)	6 X 2.5 X 48 (150 X 60 X 1219)		6 X 2.5 X 48 (150 X 60 X 1219)	
		Fork Spacing – Std Carriage – Minimum inside to inside edge		in (mm)	6.3 (160)		6.3 (160)	
	14	Fork Spacing – Std Carriage – Maximum outside to outside edge		in (mm)	43.7 (1109)		43.7 (1109)	
	15	Mast tilt, forward / back		degrees	6F/10B		6F/10B	
	16	Overall length (length to face of forks)		in (mm)	115.4 (2930)		115.4 (2930)	
	17	Overall width		in (mm)	56.6 (1438)		56.6 (1438)	
	18	Height of Standard mast, lowered (Rounded Up)		in (mm)	107 (2697)		107 (2697)	
	19	Height of mast, extended w/o load backrest (Rounded Up)		in (mm)	181 (4575)		181 (4575)	
	19A	Height of mast, extended w/ load backrest (Rounded Up)		in (mm)	183 (4632)		183 (4632)	
	20a	Height to top of Std. overhead guard (high) (Rounded Up)		in (mm)	91 (2302)		91 (2302)	
	20b	Height to top of overhead guard (low) (Rounded Up)		in (mm)	88 (2235)		88 (2235)	
		Towing coupling height		in (mm)	15.3 (388)		15.3 (388)	
	21	Outer turning radius		in (mm)	101.8 (2585)		101.8 (2585)	
		Inner turning radius		in (mm)	4.3 (108)		4.3 (108)	
	22	Load distance (load face-ctr of wheel to face of forks – front overhang) 2 stage mast		in (mm)	19.7 (500)		19.7 (500)	
		Load distance (load face-ctr of wheel to face of forks – front overhang) 3 stage mast		in (mm)	21.0 (534)		21.0 (534)	
	23	Right angle stack with pallets (with pallet W=42in, L=48in)		in (mm)	169.4 (4304)		169.4 (4304)	
		Right angle stack (add length of load)		in (mm)	121.5 (3085)		121.5 (3085)	
	24	90° intersecting aisle (with pallet W=42in, L=48in)		in (mm)	91.2 (2317)		91.2 (2317)	
PERFORMANCE	25	Travel speed	laden/unladen	mph (km/hr)	12.9/12.4 (20.7/20.0)		13.0/12.5 (20.9/20.2)	
	26A	Lifting speed (2LFL)	laden/unladen	ft/min (m/sec)	96.5/104.3 (0.49/0.53)		96.5/104.3 (0.49/0.53)	
	26C	Lifting speed (3FFL)	laden/unladen	ft/min (m/sec)	92.5/102.4 (0.47/0.52)		92.5/102.4 (0.47/0.52)	
	27A	Lowering speed (2LFL)	laden/unladen	ft/min (m/sec)	110.2/84.6 (0.56/0.43)		110.2/84.6 (0.56/0.43)	
	27C	Lowering speed (3FFL)	laden/unladen	ft/min (m/sec)	100.4/70.9 (0.51/0.36)		100.4/70.9 (0.51/0.36)	
	28A	Maximum drawbar pull	laden/unladen	lbs (kg)	10589/4519 (4803/2050)		10000/4519 (4536/2050)	
	28B	Drawbar pull @ 1.0 mph or 1.6 km/h	laden/unladen	lbs (kg)	8071/4519 (3661/2050)		10004/4519 (4538/2050)	
	28C	Drawbar pull @ 3.0 mph or 4.8 km/h	laden/unladen	lbs (kg)	5050/4519 (2291/2050)		5600/4519 (2540/2050)	
		Gradeability max	laden/unladen	%	34.1	24.0 ††	32.0	24.0 ††
	29A	Gradeability @ 1.0 mph or 1.6 km/h	laden/unladen	%	25.3	24.0 ††	32.0	24.0 ††
	29B	Gradeability @ 3.0 mph or 4.8 km/h	laden/unladen	%	15.8	24.0 ††	17.2	24.0 ††
WT.	31	Unladen weight (w/ std equipment: mast, carriage, forks, etc.)		lb (kg)	19350 (8775)		19350 (8775)	
	32a	Axle loading laden w/ std option configuration	front/rear	lb (kg)	29600/3250 (13425/1475)		29600/3250 (13425/1475)	
	32b	Axle loading unladen w/ std option configuration	front/rear	lb (kg)	7930/11420 (3595/5180)		7930/11420 (3595/5180)	
WHEELS & TIRES	33	Tire size-front			28 X 12 X 22		28 X 12 X 22	
	34	Tire size-rear			22 X 8 X 16		22 X 8 X 16	
	35	Wheelbase		in (mm)	72 (1830)		72 (1830)	
	37	Ground clearance under mast, laden		in (mm)	4.4 (113)		4.4 (113)	
	38	Ground clearance at centre of wheelbase		in (mm)	7.4 (188)		7.4 (188)	
	39	Brakes Service – Method of Control/Operation			Hydraulic Wet Disc/Foot		Hydraulic Wet Disc/Foot	
	40	Brakes Park – Method of Control/Operation			Mechanical/Hand		Mechanical/Hand	
TRANS. & POWER UNIT	41	Battery Type			Maintenance Free		Maintenance Free	
	42	Battery Volts/Cold Cranking Amps			12V/900		12V/900	
	43	Engine manufacturer/type			Cummins Diesel		Cummins Diesel	
	44	Engine output, in accordance with ISO1585		hp (KW)	77.8 (58) @ 2050 rpm		77.8 (58) @ 2050 rpm	
	45	Torque		ft-lb (N-m)	225 (305) @ 1300 rpm		225 (305) @ 1300 rpm	
	46	Number of cylinders/displacement		No./cc (ci)	4/4500 (275)		4/4500 (275)	
	47A	Gear change type			Powershift		Elec. Controlled Powershift	
	47B	Transmission: Number of speeds forward/reverse			2F/2R		3F/2R	
	49	Hydraulic Tank – capacity (drain & refill)		gal (liters)	16.3 (61.8)		16.3 (61.8)	
	50	Fuel Tank – Capacity (Gasoline- or Diesel-Powered Units Only)		gal (liters)	18.5 (70)		18.5 (70)	
	51	Working pressure for attachments		psi (bar)	2200 (153)		2200 (153)	

S155FT SPECIFICATIONS

GENERAL	1	Manufacturer			Hyster Company		Hyster Company		Hyster Company		Hyster Company	
	2	Model designation			S155FT		S155FT		S155FT		S155FT	
	2a	Power Train - Engine Transmission			GM 4.3L		GM 4.3L		GM 4.3L		GM 4.3L	
	2b	Brand Names for Transmissions			Electronic Powershift				Duramatch™			
	3	Load capacity		lbs/kg	15,500	7,000	15,500	7,000	15,500	7,000	15,500	7,000
	4	Load center		in/mm	24	610	24	610	24	610	24	610
	5	Drive Power Type: Gas, Diesel, LPG			Gas		LP		Gas		LP	
	6	Operation: Seated rider			Seated Rider		Seated Rider		Seated Rider		Seated Rider	
	7	Step Height		in (mm)	20.9 (531)		20.9 (531)		20.9 (531)		20.9 (531)	
	8	Tires: P=pneumatic, C=cushion, SC=supercushion			Cushion		Cushion		Cushion		Cushion	
	9	Number of wheels, front/rear (X = driven)			2/2		2/2		2/2		2/2	
		Track width, front		in (mm)	44.6 (1133)		44.6 (1133)		44.6 (1133)		44.6 (1133)	
		Track width, rear		in (mm)	46.9 (1192)		46.9 (1192)		46.9 (1192)		46.9 (1192)	
DIMENSIONS	10	Lift height, w/LBR (TOF) (Rounded Down)		in (mm)	133 (3400)		133 (3400)		133 (3400)		133 (3400)	
	11	Standard Free lift height (Rounded Down)		in (mm)	6 (160)		6 (160)		6 (160)		6 (160)	
	11A	Optional Free lift w/LBR (TOF) (Rounded Down)		in (mm)	50 (1295)		50 (1295)		50 (1295)		50 (1295)	
		Optional Free lift w/o LBR (TOF) (Rounded Down)		in (mm)	56 (1425)		56 (1425)		56 (1425)		56 (1425)	
	12	Fork carriage width Standard Carriage		in (mm)	48.0 (1219)		48.0 (1219)		48.0 (1219)		48.0 (1219)	
	13	Fork dimensions		in (mm)	6 X 2.5 X 48 (150 X 60 X 1219)		6 X 2.5 X 48 (150 X 60 X 1219)		6 X 2.5 X 48 (150 X 60 X 1219)		6 X 2.5 X 48 (150 X 60 X 1219)	
		Fork Spacing – Std Carriage – Minimum inside to inside edge		in (mm)	6.3 (160)		6.3 (160)		6.3 (160)		6.3 (160)	
	14	Fork Spacing – Std Carriage – Maximum outside to outside edge		in (mm)	43.7 (1109)		43.7 (1109)		43.7 (1109)		43.7 (1109)	
	15	Mast tilt, forward / back		degrees	6F/10B		6F/10B		6F/10B		6F/10B	
	16	Overall length (length to face of forks)		in (mm)	115.4 (2930)		115.4 (2930)		115.4 (2930)		115.4 (2930)	
	17	Overall width		in (mm)	56.6 (1438)		56.6 (1438)		56.6 (1438)		56.6 (1438)	
	18	Height of Standard mast, lowered (Rounded Up)		in (mm)	107 (2697)		107 (2697)		107 (2697)		107 (2697)	
	19	Height of mast, extended w/o load backrest (Rounded Up)		in (mm)	181 (4575)		181 (4575)		181 (4575)		181 (4575)	
	19A	Height of mast, extended w/ load backrest (Rounded Up)		in (mm)	183 (4632)		183 (4632)		183 (4632)		183 (4632)	
	20a	Height to top of Std. overhead guard (high) (Rounded Up)		in (mm)	91 (2302)		91 (2302)		91 (2302)		91 (2302)	
	20b	Height to top of overhead guard (low) (Rounded Up)		in (mm)	88 (2235)		88 (2235)		88 (2235)		88 (2235)	
		Towing coupling height		in (mm)	15.3 (388)		15.3 (388)		15.3 (388)		15.3 (388)	
	21	Outer turning radius		in (mm)	101.8 (2585)		101.8 (2585)		101.8 (2585)		101.8 (2585)	
		Inner turning radius		in (mm)	4.3 (108)		4.3 (108)		4.3 (108)		4.3 (108)	
	22	Load distance (load face-ctr of wheel to face of forks – front overhang) 2 stage mast		in (mm)	19.7 (500)		19.7 (500)		19.7 (500)		19.7 (500)	
		Load distance (load face-ctr of wheel to face of forks – frnt overhang) 3 stage mast		in (mm)	21.0 (534)		21.0 (534)		21.0 (534)		21.0 (534)	
	23	Right angle stack with pallets (with pallet W=42in, L=48in)		in (mm)	169.4 (4304)		169.4 (4304)		169.4 (4304)		169.4 (4304)	
		Right angle stack (add length of load)		in (mm)	121.5 (3085)		121.5 (3085)		121.5 (3085)		121.5 (3085)	
	24	90° intersecting aisle (with pallet W=42in, L=48in)		in (mm)	91.2 (2317)		91.2 (2317)		91.2 (2317)		91.2 (2317)	
PERFORMANCE	25	Travel speed	laden/unladen	mph (km/hr)	12.7/12.3 (20.5/19.8)		12.7/12.3 (20.5/19.8)		13.2/12.7 (21.3/20.6)		13.2/12.7 (21.3/20.6)	
	26A	Lifting speed (2LFL)	laden/unladen	ft/min (m/sec)	104.3/104.3 (0.53/0.53)		104.3/104.3 (0.53/0.53)		104.3/104.3 (0.53/0.53)		104.3/104.3 (0.53/0.53)	
	26C	Lifting speed (3FFL)	laden/unladen	ft/min (m/sec)	100.4/100.4 (0.51/0.51)		100.4/100.4 (0.51/0.51)		100.4/100.4 (0.51/0.51)		100.4/100.4 (0.51/0.51)	
	27A	Lowering speed (2LFL)	laden/unladen	ft/min (m/sec)	110.2/84.6 (0.56/0.43)		110.2/84.6 (0.56/0.43)		110.2/84.6 (0.56/0.43)		110.2/84.6 (0.56/0.43)	
	27C	Lowering speed (3FFL)	laden/unladen	ft/min (m/sec)	100.4/70.9 (0.51/0.36)		100.4/70.9 (0.51/0.36)		100.4/70.9 (0.51/0.36)		100.4/70.9 (0.51/0.36)	
	28A	Maximum drawbar pull	laden/unladen	lbs (kg)	10004/4316 (4538/1958)		10813/4316 (4905/1958)		10000/4316 (4536/1958)		10004/4316 (4538/1958)	
	28B	Drawbar pull @ 1.0 mph or 1.6 km/h	laden/unladen	lbs (kg)	8093/4316 (3671/1958)		8813/4316 (3997/1958)		10004/4316 (4538/1958)		10004/4316 (4538/1958)	
	28C	Drawbar pull @ 3.0 mph or 4.8 km/h	laden/unladen	lbs (kg)	5148/4316 (2335/1958)		5643/4316 (2560/1958)		5440/4316 (2468/1958)		5643/4316 (2560/1958)	
		Gradeability max	laden/unladen	%	29.0	21.6 ††	31.5	21.6 ††	29.1	21.6 ††	29.1	21.6 ††
	29A	Gradeability @ 1.0 mph or 1.6 km/h	laden/unladen	%	23.1	21.6 ††	25.3	21.6 ††	29.1	21.6 ††	29.1	21.6 ††
	29B	Gradeability @ 3.0 mph or 4.8 km/h	laden/unladen	%	14.2	21.6 ††	15.9	21.6 ††	15.4	21.6 ††	16.0	21.6 ††
WT.	31	Unladen weight (w/ std equipment: mast, carriage, forks, etc.)		lb (kg)	20940 (9500)		21060 (9550)		20940 (9500)		21060 (9550)	
	32a	Axle loading laden w/ std option configuration	front/rear	lb (kg)	33110/3330 (15020/1510)		33120/3440 (15025/1560)		33110/3330 (15020/1510)		33120/3440 (15025/1560)	
	32b	Axle loading unladen w/ std option configuration	front/rear	lb (kg)	8240/12700 (3740/5760)		8250/12810 (3740/5810)		8240/12700 (3740/5760)		8250/12810 (3740/5810)	
WHEELS & TIRES	33	Tire size-front			28 X 12 X 22		28 X 12 X 22		28 X 12 X 22		28 X 12 X 22	
	34	Tire size-rear			22 X 8 X 16		22 X 8 X 16		22 X 8 X 16		22 X 8 X 16	
	35	Wheelbase		in (mm)	72 (1830)		72 (1830)		72 (1830)		72 (1830)	
	37	Ground clearance under mast, laden		in (mm)	4.4 (113)		4.4 (113)		4.4 (113)		4.4 (113)	
	38	Ground clearance at centre of wheelbase		in (mm)	7.4 (188)		7.4 (188)		7.4 (188)		7.4 (188)	
	39	Brakes Service – Method of Control/Operation			Hydraulic Wet Disc/Foot		Hydraulic Wet Disc/Foot		Hydraulic Wet Disc/Foot		Hydraulic Wet Disc/Foot	
	40	Brakes Park – Method of Control/Operation			Mechanical/Hand		Mechanical/Hand		Mechanical/Hand		Mechanical/Hand	
TRANS. & POWER UNIT	41	Battery Type			Maintenance Free		Maintenance Free		Maintenance Free		Maintenance Free	
	42	Battery Volts/Cold Cranking Amps			12V / 475		12V / 475		12V / 475		12V / 475	
	43	Engine manufacturer/type			GM Gas		GM LP		GM Gas		GM LP	
	44	Engine output, in accordance with ISO1585		hp (KW)	96.6 (72) @ 2400 rpm		103.3 (77) @ 2400 rpm		96.6 (72) @ 2400 rpm		103.3 (77) @ 2400 rpm	
	45	Torque		ft-lb (N-m)	210 (285) @ 2400 rpm		225 (305) @ 2400 rpm		210 (285) @ 2400 rpm		225 (305) @ 2400 rpm	
	46	Number of cylinders/displacement		No./cc (ci)	V6/4302 (262)		V6/4302 (262)		V6/4302 (262)		V6/4302 (262)	
	47A	Gear change type			Elec. Controlled Powershift		Elec. Controlled Powershift		Elec. Controlled Powershift		Elec. Controlled Powershift	
	47B	Transmission: Number of speeds forward/reverse			2F/2R		2F/2R		3F/2R		3F/2R	
	49	Hydraulic Tank – capacity (drain & refill)		gal (liters)	18.5 (70)		18.5 (70)		18.5 (70)		18.5 (70)	
	50	Fuel Tank – Capacity (Gasoline- or Diesel-Powered Units Only)		gal (liters)	16.3 (61.8)		16.3 (61.8)		16.3 (61.8)		16.3 (61.8)	
	51	Working pressure for attachments		psi (bar)	2200 (153)		2200 (153)		2200 (153)		2200 (153)	

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 Company Dealer.

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

S155FT SPECIFICATIONS

Section	No.	Item	Condition	Unit	Hyster Company		Hyster Company	
GENERAL	1	Manufacturer			Hyster Company		Hyster Company	
	2	Model designation			S155FT		S155FT	
	2a	Power Train - Engine Transmission			Cummins 4.5L		Cummins 4.5L	
	2b	Brand Names for Transmissions			Electronic Powershift		Duramatch™	
	3	Load capacity		lbs/kg	15,500	7,000	15,500	7,000
	4	Load center		in/mm	24	610	24	610
	5	Drive Power Type: Gas, Diesel, LPG			DSL		DSL	
	6	Operation: Seated rider			Seated Rider		Seated Rider	
	7	Step Height		in (mm)	20.9 (531)		20.9 (531)	
	8	Tires: P=pneumatic, C=cushion, SC=supercushion			Cushion		Cushion	
	9	Number of wheels, front/rear (X = driven)			2/2		2/2	
		Track width, front		in (mm)	44.6 (1133)		44.6 (1133)	
		Track width, rear		in (mm)	46.9 (1192)		46.9 (1192)	
DIMENSIONS	10	Lift height, w/LBR (TOF) (Rounded Down)		in (mm)	133 (3400)		133 (3400)	
	11	Standard Free lift height (Rounded Down)		in (mm)	6 (160)		6 (160)	
	11A	Optional Free lift w/LBR (TOF) (Rounded Down)		in (mm)	50 (1295)		50 (1295)	
		Optional Free lift w/o LBR (TOF) (Rounded Down)		in (mm)	56 (1425)		56 (1425)	
	12	Fork carriage width Standard Carriage		in (mm)	48.0 (1219)		48.0 (1219)	
	13	Fork dimensions		in (mm)	6 X 2.5 X 48 (150 X 60 X 1219)		6 X 2.5 X 48 (150 X 60 X 1219)	
		Fork Spacing – Std Carriage – Minimum inside to inside edge		in (mm)	6.3 (160)		6.3 (160)	
	14	Fork Spacing – Std Carriage – Maximum outside to outside edge		in (mm)	43.7 (1109)		43.7 (1109)	
	15	Mast tilt, forward / back		degrees	6F/10B		6F/10B	
	16	Overall length (length to face of forks)		in (mm)	115.4 (2930)		115.4 (2930)	
	17	Overall width		in (mm)	56.6 (1438)		56.6 (1438)	
	18	Height of Standard mast, lowered (Rounded Up)		in (mm)	107 (2697)		107 (2697)	
	19	Height of mast, extended w/o load backrest (Rounded Up)		in (mm)	181 (4575)		181 (4575)	
	19A	Height of mast, extended w/ load backrest (Rounded Up)		in (mm)	183 (4632)		183 (4632)	
	20a	Height to top of Std. overhead guard (high) (Rounded Up)		in (mm)	91 (2302)		91 (2302)	
	20b	Height to top of overhead guard (low) (Rounded Up)		in (mm)	88 (2235)		88 (2235)	
		Towing coupling height		in (mm)	15.3 (388)		15.3 (388)	
	21	Outer turning radius		in (mm)	101.8 (2585)		101.8 (2585)	
		Inner turning radius		in (mm)	4.3 (108)		4.3 (108)	
	22	Load distance (load face-ctr of wheel to face of forks – front overhang) 2 stage mast		in (mm)	19.7 (500)		19.7 (500)	
		Load distance (load face-ctr of wheel to face of forks – front overhang) 3 stage mast		in (mm)	21.0 (534)		21.0 (534)	
	23	Right angle stack with pallets (with pallet W=42in, L=48in)		in (mm)	169.4 (4304)		169.4 (4304)	
		Right angle stack (add length of load)		in (mm)	121.5 (3085)		121.5 (3085)	
	24	90° intersecting aisle (with pallet W=42in, L=48in)		in (mm)	91.2 (2317)		91.2 (2317)	
PERFORMANCE	25	Travel speed	laden/unladen	mph (km/hr)	12.9/12.4 (20.7/20.0)		13.0/12.5 (20.9/20.2)	
	26A	Lifting speed (2LFL)	laden/unladen	ft/min (m/sec)	88.6/104.3 (0.45/0.53)		88.6/104.3 (0.45/0.53)	
	26C	Lifting speed (3FFL)	laden/unladen	ft/min (m/sec)	84.6/102.4 (0.43/0.52)		84.6/102.4 (0.43/0.52)	
	27A	Lowering speed (2LFL)	laden/unladen	ft/min (m/sec)	110.2/84.6 (0.56/0.43)		110.2/84.6 (0.56/0.43)	
	27C	Lowering speed (3FFL)	laden/unladen	ft/min (m/sec)	100.4/70.9 (0.51/0.36)		100.4/70.9 (0.51/0.36)	
	28A	Maximum drawbar pull	laden/unladen	lbs (kg)	10544/4316 (4783/1958)		10000/4316 (4536/1958)	
	28B	Drawbar pull @ 1.0 mph or 1.6 km/h	laden/unladen	lbs (kg)	8003/4316 (3630/1958)		10000/4316 (4536/1958)	
	28C	Drawbar pull @ 3.0 mph or 4.8 km/h	laden/unladen	lbs (kg)	5000/4316 (2268/1958)		5525/4316 (2506/1958)	
		Gradeability max	laden/unladen	%	30.7	21.6 ††	29.1	21.6 ††
	29A	Gradeability @ 1.0 mph or 1.6 km/h	laden/unladen	%	22.9	21.6 ††	29.1	21.6 ††
	29B	Gradeability @ 3.0 mph or 4.8 km/h	laden/unladen	%	14.1	21.6 ††	15.7	21.6 ††
WT.	31	Unladen weight (w/ std equipment: mast, carriage, forks, etc.)		lb (kg)	21250 (9640)		21250 (9640)	
	32a	Axle loading laden w/ std option configuration	front/rear	lb (kg)	33210/3540 (15065/1605)		33210/3540 (15065/1605)	
	32b	Axle loading unladen w/ std option configuration	front/rear	lb (kg)	8340/12910 (3785/5855)		8340/12910 (3785/5855)	
WHEELS & TIRES	33	Tire size-front			28 X 12 X 22		28 X 12 X 22	
	34	Tire size-rear			22 X 8 X 16		22 X 8 X 16	
	35	Wheelbase		in (mm)	72 (1830)		72 (1830)	
	37	Ground clearance under mast, laden		in (mm)	4.4 (113)		4.4 (113)	
	38	Ground clearance at centre of wheelbase		in (mm)	7.4 (188)		7.4 (188)	
	39	Brakes Service – Method of Control/Operation			Hydraulic Wet Disc/Foot		Hydraulic Wet Disc/Foot	
	40	Brakes Park – Method of Control/Operation			Mechanical/Hand		Mechanical/Hand	
TRANS. & POWER UNIT	41	Battery Type			Maintenance Free		Maintenance Free	
	42	Battery Volts/Cold Cranking Amps			12V/900		12V/900	
	43	Engine manufacturer/type			Cummins Diesel		Cummins Diesel	
	44	Engine output, in accordance with ISO1585		hp (KW)	77.8 (58) @ 2050 rpm		77.8 (58) @ 2050 rpm	
	45	Torque		ft-lb (N-m)	225 (305) @ 1300 rpm		225 (305) @ 1300 rpm	
	46	Number of cylinders/displacement		No./cc (ci)	4/4500 (275)		4/4500 (275)	
	47A	Gear change type			Elec. Controlled Powershift		Elec. Controlled Powershift	
	47B	Transmission: Number of speeds forward/reverse			2F/2R		3F/2R	
	49	Hydraulic Tank – capacity (drain & refill)		gal (liters)	18.5 (70)		18.5 (70)	
	50	Fuel Tank – Capacity (Gasoline- or Diesel-Powered Units Only)		gal (liters)	16.3 (61.8)		16.3 (61.8)	
	51	Working pressure for attachments		psi (bar)	2200 (153)		2200 (153)	

S155FT SPECIFICATIONS

S135-155FT MAST DIMENSIONS

Maximum Fork Height (TOF) †	Overall Lowered Ht.	Overall Extended Height w/ Load Backrest	Free-Lift (TOF) w/o Load Backrest	Approximate Total Wt. of Standard Equipped Truck S135FT with NL	S155FT with NL
in. (mm)	in. (mm)	in. (mm)	in. (mm)	lbs. (kg)	lbs. (kg)
2-STAGE LIMITED FREE-LIFT (LFL) VISTA® MAST					
94 (2400)	87 (2197)	143 (3632)	6 (160)	18740 (8500)	20640 (9360)
133 (3400)	107 (2697)	183 (4648)	6 (160)	19040 (8635)	20940 (9500)
173 (4400)	126 (3197)	222 (5639)	6 (160)	19490 (8840)	21390 (9700)
3-STAGE FULL FREE-LIFT (FFL) VISTA® MAST					
149 (3800)	88 (2227)	198 (5029)	44 (1125)	19590 (8885)	21500 (9750)
185 (4700)	100 (2527)	234 (5944)	56 (1425)	19850 (9005)	21750 (9865)
220 (5600)	112 (2827)	269 (6833)	67 (1725)	20100 (9115)	22000 (9980)

† Lift heights over 171.5" (4356 mm) maximum fork height are considered highlifts and require reduced capacity and restricted back tilt.
Total approximate weights listed include mast, standard carriage, load backrest extension and 70 lbs. LP tank and tank bracket.
RL = Rated Load NL = No Load

STANDARD EQUIPMENT

Fortis® Package

Complete truck equipped with:

- GM 4.3L, V-6 emissions compliant engine
- Electronic powershift transmission
  - Hydraulic inching
  - Electronic shift control
  - 2 speeds forward, 2 speeds reverse
- Oil-cooled wet disc brakes
- MONOTROL® pedal
- 2-Stage limited free-lift (LFL) VISTA® mast with maximum fork height of 133" (2400 mm)
- 48.0" (1219 mm) wide hook-type carriage with 48.0" (1219) tall load backrest extension
- 48.0" (1219 mm) long forks
- 6 degrees forward and 10 degrees backward mast tilt
- 3-function hydraulic control valve
- Integrated dashboard display includes:
  - LCD Display:
    - Fuel level (Gasoline or Diesel only)
    - Hour meter
    - Coolant Temperature
    - Clock
    - Messages
  - Service Indicator Lights:
    - Alternator
    - Transmission oil temperature
    - Engine oil pressure
    - Brake fluid level
    - Fasten seatbelt
    - Low fuel level
    - Engine malfunction
    - System malfunction
    - Park brake
    - Coolant temperature
    - Forward, reverse and neutral direction indicators
- Hydrostatic power steering
- Non-suspension vinyl seat
- Electronic horn
- Adjustable steer column
- Rubber floor mat
- High air intake
- Integral tie downs
- Operator restraint system
- Combi-cooler radiator
- Single pedal inch brake
- Cowl-mounted hydraulic control levers
- Swing out LPG tank bracket
- 91" (2302 mm) Tall overhead guard
- 12 months / 2,000 hours manufacturer's warranty
- 24 months / 4,000 hours manufacturer's powertrain warranty
- Operator's manual
- UL Classification LP

Fortis® Advance Package

Complete truck equipped with:

- GM 4.3L, V-6 emissions compliant engine
- DuraMatch™ transmission
  - Electronic inching
  - Electronic shift control
  - Auto deceleration system
  - Controlled power reversal
  - Controlled roll back on ramps
  - 3 speeds forward, 2 speeds reverse
- Oil-cooled wet disc brakes
- MONOTROL® pedal
- 2-Stage limited free-lift (LFL) VISTA® mast with maximum fork height of 133" (2400 mm)
- 48.0" (1219 mm) wide hook-type carriage with 48.0" (1219) tall load backrest extension
- 48.0" (1219 mm) long forks
- 6 degrees forward and 10 degrees backward mast tilt
- 3-function hydraulic control valve
- Integrated dashboard display includes:
  - LCD Display:
    - Fuel level (Gasoline or Diesel only)
    - Hour meter
    - Coolant Temperature
    - Clock
    - Messages
  - Service Indicator Lights:
    - Alternator
    - Transmission oil temperature
    - Engine oil pressure
    - Brake fluid level
    - Fasten seatbelt
    - Low fuel level
    - Engine malfunction
    - System malfunction
    - Park brake
    - Coolant temperature
    - Forward, reverse and neutral direction indicators
- Hydrostatic power steering
- Non-suspension vinyl seat
- Electronic horn
- Adjustable steer column
- Rubber floor mat
- High air intake
- Integral tie downs
- Operator restraint system
- Combi-cooler radiator
- Single pedal inch brake
- Cowl-mounted hydraulic control levers
- Swing out LPG tank bracket
- 91" (2302 mm) Tall overhead guard
- 12 months/2000 hours manufacturer's warranty
- 24 months/4000 hours manufacturer's powertrain warranty
- Operator's manual
- UL Classification LP

OPTIONS

- 4.5L Cummins Diesel Engine
- High intensity LED lights (brake/tail/back-up)
- Powertrain protection system
- Premium monitoring
- High air intake with precleaner
- Accumulator
- Keyless start (with auxiliary key switch)
- Auto deceleration system (N/A with Fortis Package)
- Controlled power reversal feature (N/A with Fortis Package)
- Controlled roll back on ramps (N/A with Fortis Package)
- Optional short height overhead guard
- Powertrain protection system
- Paper Applications kit
- Vented hood
- Swing-out, drop-down EZXchange™ LPG tank bracket
- Return to set tilt
- TouchPoint™ hydraulic mini-levers with fully adjustable armrest
- Rear drive handle with horn button
- Full suspension seat - vinyl or cloth
- Swivel full-suspension seat - vinyl or cloth
- Impact monitor
- Load weight display
- Operator pre-shift checklist
- Dual-inch brake pedals (N/A with Fortis Package)
- Operator password protection
- Audible Reverse activated 82-102 dB(A) self-adjusting alarm
- Visible amber strobe light - continuously activated, overhead guard mounted
- Parts publications - printed or CD, serial number specific
- UL Classification LPG, D, DS
- Various light packages:
  - Two brake/back-up lights
  - Two front and one rear work lights
  - Two front, one rear work light and two brake/tail/back-up lights
- Various tire options
- Non-marking and lug tread tires

STANDARD FEATURES AND OPTIONS

CAPACITY:
Model S135FT: 13,500 lbs. at 24.0” (6,000 kg at 610 mm) load center
Model S155FT: 15,500 lbs. at 24.0” (7,000 kg at 610 mm) load center

RATED CAPACITIES ARE FOR TRUCKS EQUIPPED WITH:
- 3-Stage full free-lift (FFL) VISTA® mast to 171.5” (4,356 mm) maximum fork height
- 48.0” (1,219 mm) hook-type carriage with 48.0” (1,219 mm) long forks
- 48.0” Tall load backrest extension (LBE)

MASTS
Masts are available in 2-stage limited free lift (LFL) and 2- or 3-stage full free-lift (FFL) VISTA® masts.

Masts show nested-channel design and full-radius, angled load rollers provides increased capacity at height while affording shorter overall length.

CARRIAGE
Carriages are hook-type, ITA Class IV mounting. Overall width without load backrest extension (LBE) is 47.3” (1201 mm); with LBE is 48.0”. Minimum inside-to-inside edge fork spacing is 6.3” (160 mm). Maximum outside-to-outside edge fork spacing is 43.7” (1109 mm).

FORKS
S135-155FT lift trucks feature: 2.5” x 6” x 48.0” to 72.0” (60 x 150 x 1219 mm) long pallet forks.

Polished and full bottom tapered forks are also available.

ENGINE
GM 4.3L severe duty emissions compliant engine features:
- Cast iron block and cylinder heads with hardened intake valve and exhaust valve seats, and hydraulic lifters
- Electronically controlled LPG fuel system
- Drive-by-wire throttle control
- Electronic governor
- Engine Control Unit (ECU)
- Three-way catalytic converter exhaust system
- 4.3L engine produces 103 horsepower

Cummins 4.5L diesel engine features:
- Cast iron block and heads
- Spin-on full flow oil filter
- Rotary-style fuel injection pump with direct injection
- Heavy-duty air cleaner with pre-cleaner
- Forged steel crankshaft
- Four valves/cylinder
- Oil-cooled pistons
- Electromechanical fuel control
- Fuel filter with water separator
- 4.5L engine produces 78 horsepower

TRANSMISSION
- Standard Electronic Powershift: 2 speed forward/2 speed reverse range powershift, hydraulic inching (requires no adjustment), electric shift control, neutral start switch, and anti-restart protection
- DuraMatch™: All of the features of the standard electronic transmission plus 3 speed forward/2 speed reverse version Auto Deceleration System, electronic inching, controlled power reversal, controlled roll back on ramps

COOLING SYSTEM
- All models feature square-wave anti-clog Combi-cooler
- All radiators utilize cross-flow aluminum cores, pusher type fans and permanently lubricated water pumps
- “Knife-edge” type fan shrouds that direct air flow through the counterweight air passages
- 15 psi operating system pressure
- Combi-cooler contains an externally mounted transmission oil cooler to aid in heat dissipation

ELECTRICAL SYSTEM
- CANbus electrical system simplifies truck wiring and enhances truck dependability
- IPP 66 sealed automotive style electrical connectors
- Standardized wire routing, all wires are color coded, and marked with numbers for easy identification
- Vehicle System Manager (VSM) directly or indirectly controls all electrical functions except those controlled by the Engine Control Unit (ECU)
- 12-volt maintenance free battery provides 475 (900 Diesel) cold cranking amps (cca) for easy starts
- Onboard diagnostics monitoring and feedback

HYDRAULIC SYSTEM
Manual Hydraulic Control Valve & Electro-Hydraulic Controls Available
- Hydraulic lift system relief operates at 3400 psi (23.4 Mpa)
- Tilt and auxiliary systems have 2,200 psi (15.5 Mpa) relief pressure in all valve variations
- Hydraulic system is protected by a replaceable 10-micron element in-tank filter assembly
- Hydraulic breather filter includes an anti-splash baffle and is rated at three micron
- O-Ring face seal fittings with captive O-Ring grooves are used on all high pressure connections
- Emergency lowering valve allows load to be lowered in the event of battery power loss
- 100 Mesh suction line strainer

STEER AXLE / STEER SYSTEM
- Equal-area, double-ended, hydrostatic steering cylinder is mounted in cast ductile iron axle frame
- Elastomeric axle mounts absorb shock and allow lubrication free articulation
- Axle assembly utilizes synthetic boots and seals to retain lubricants and shield components against destructive grit and reduce lube points
- Wheel hubs rotate on large, tapered roller bearings
- Top spindle bearings lubricated through easy access lube fittings
- Hydrostatic steer system provides smooth, precise steering with only 4 turns lock-to-lock

BRAKES
- Oil-cooled wet disc brakes provide extremely long service life and are protected from dirt and moisture
- Hydraulically boosted single circuit master cylinder with sealed fluid reservoir and magnetic fluid level sensor
- Ratchet-type, hand-activated parking brake lever allows controlled application

OPERATOR COMPARTMENT
- Cowl-mounted hydraulic control levers
- TouchPoint™ electro-hydraulic seat side mini-levers
- 12-Inch textured steering wheel with spinner knob
- Automotive style foot controls with single braking/inching pedal (dual pedals are optional)
- Integrated dashboard display is backlit, allowing easy visibility under all lighting conditions
- Grid-style overhead guard offers superb visibility at extended heights
- Infinitely adjustable tilt steer column
- Optimal entry step height on both sides of the truck
- MONOTROL® pedal controls engine speed and truck direction, freeing operator’s hands to operate steering and hydraulic levers

Special attachments, equipment or accessories not listed above may be available through Applications Engineering for specific application requirements.

FLEET SERVICES

UNISOURCE™

HYSTER CAPITAL
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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 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.

HYSTER COMPANY UL REGISTERED FIRM ISO 9001:2000 A12435

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