

[WWW.HYSTER.COM](http://WWW.HYSTER.COM)

**HEAVY DUTY FORKLIFT TRUCK**  
**PRODUCT BROCHURE**



# H 190-400XD SERIES

---



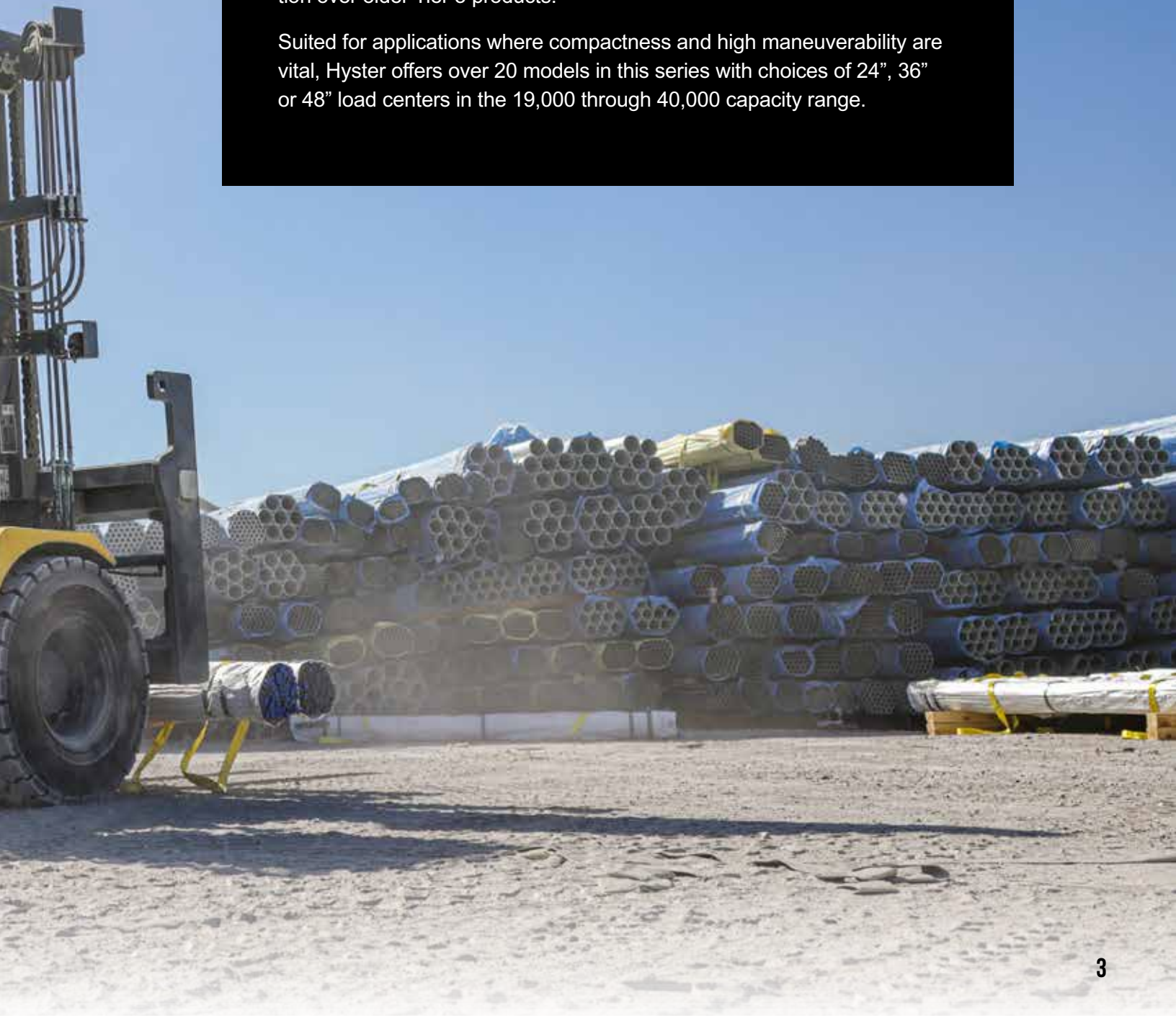
# H190-400XD SERIES

---

The Hyster® H190-400XD series has been developed, tested extensively and refined to provide outstanding performance in pipe handling, general cargo, breakbulk, lumber, concrete, steel, oil & gas, produce and other heavy duty industries and applications.

The Tier 4 Final powertrain features an emission reduction package that includes cooled exhaust gas recirculation (EGR), a selective catalytic reduction (SCR) system for nitrogen oxide (NOx) reduction, a diesel oxidation catalyst (DOC) and a diesel exhaust fluid (DEF) delivery system. These efficient features deliver up to 20% lower fuel consumption over older Tier 3 products.

Suited for applications where compactness and high maneuverability are vital, Hyster offers over 20 models in this series with choices of 24", 36" or 48" load centers in the 19,000 through 40,000 capacity range.



# BUILT TO BE TOUGH

## MAST AND FRONT END DESIGN

The 2-stage mast and carriage are designed for heavy duty applications. A wider inner mast channel and relocation of the chains to the outside of the mast provides excellent forward visibility through the mast.

Robust mast design for the 19,000 through 40,000 lb range incorporates decreased mast deflection and increased stiffness than comparable competitors' masts with overhead tilt.

The mast on the H190-400XD series incorporates a variable load roller lap design, which increases roller lap at the carrying height, resulting in reduced load roller forces. The overall lowered height is reduced while maintaining maximum lift height. Featuring maintenance free chain sheave bearings, the chains are located on the outside of the mast for increased forward visibility through the mast.



## HEAVY DUTY DRIVE AXLE

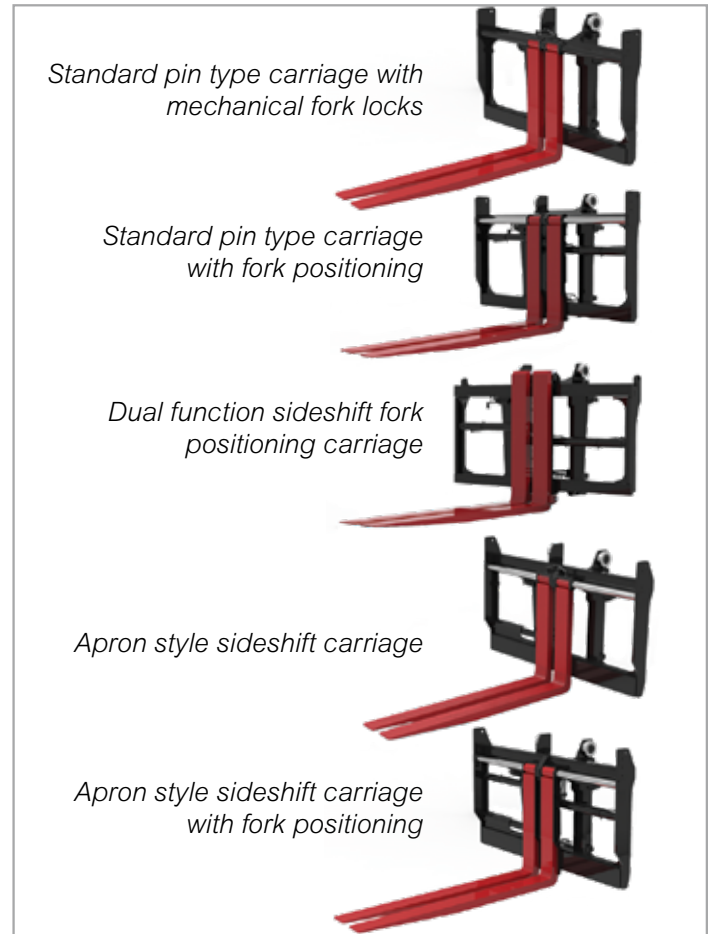
Hyster has incorporated robust and dependable drive axles in this series. The Kessler D61 drive axle is installed on the H190-280XD forklift models, and the Kessler D81 on all other models in the series (see technical guide). The Kessler D81 reduces truck width by 2" (51mm) to allow for easier truck transportation if needed. Both axles are specifically designed for heavy duty materials handling applications.

## CARRIAGE & FORK OPTIONS

The carriages are designed with a wide opening to increase forward visibility of the fork tips at ground level and most frequent loading heights. The top bar and side plates are manufactured from high strength steel. Greaseable load roller bearings help to remove wear particles from the roller body.

Full-rated capacity is provided with standard and apron style sideshift carriages. There is only a minimal de-rate on Dual Function Sideshift Fork Positioning (DFSSFP) carriages. Base carriages can be ordered.

Pin type forks have longer shanks to spread load forces. Quick disconnect hook type forks or integrated forks (on specific models) are available for the DFSSFP carriage. Industry specific attachments are available — pin type forks are designed specifically for the lumber industry, and a lumber stabilizer is also available.



## SMALLER FOOTPRINT, GREATER CAPACITY

Ideal for compact operating conditions, Hyster® offers 5 short wheelbase models with all of the features of the standard wheelbase models including masts, carriages and fork options.

- 114" and 138" short wheelbase models offer compact size with excellent maneuverability.
- Shorter wheel base design does not compromise fuel tank capacity, hydraulic tank capacity, travel speeds or key performance characteristics.



*Application images may reflect previous cab and truck design.  
Forks shown are designed for the lumber industry.*

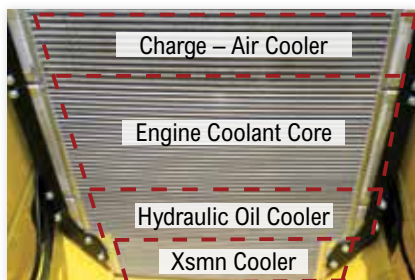
# LOW MAINTENANCE. HIGH PERFORMANCE.

The Hyster® H190-400XD series trucks are designed with the service technician in mind. Gull-wing hoods provide quick access to key components, and daily checks don't require tilting the cab. A tilting cab provides easy access to hydraulic components in seconds. Galvanized, broad, slip-resistant running boards and placement of after treatment on the outside of the truck foster quick daily checks, while a large access bay enables easy radiator cleaning.



## COOLING SYSTEM

- High capacity cooling system is designed for high temperature ambient conditions up to 113°F (45°C)
- Cooling cores, which have increased in size by 20% compared to previous series, are packaged such that cool overhead air is drawn in and channeled across cores
- Louvered cooling fins for maximum air flow to radiator
- Fan diameter increased compared to previous series reducing fan RPMs during normal use providing lower noise levels and fuel consumption.
- Ample space in front of cooler cores enables effective maneuvering of service tools and equipment during service checks
- Easier to clean than stacked radiator configurations



*Quad-core configuration enables efficient cooling*

## LONGER SERVICE INTERVALS

Major engine and drivetrain components are engineered to operate on 500-hour service intervals. Hydraulic oil changes can occur every 3,000 hours, and up to 10,000 hours with hydraulic fluid sampling, helping to keep the truck in operation with longer intervals between oil changes or servicing, thus helping decrease downtime and boosting machine productivity. A hydraulic sight gauge makes at-a-glance fluid level checks easier.

## AUTOMATIC GREASING SYSTEM

Optional automatic greasing system provides greasing of the mast tilt pins, frame tilt pins, steer axle spindles and tie-rods, and load rollers on the outer mast simplifying the routine truck maintenance. Wheel bearings permanently run in an oil bath eliminating greasing maintenance intervals and increasing overall component life.

## ON-BOARD DIAGNOSTICS

CANbus on-board diagnostics in an automotive-style layout with fuses centrally located on the side console provide easy servicing and troubleshooting. Error codes are provided on the integrated performance display for quick and effective identification of service items while enabling rapid implementation of remedies, reducing downtime and reducing the mean time for repairs.

## AFTER TREATMENT

With the relocation of the after treatment unit to the outside of the forklift (plus the addition of a temperature sensor to control fan airflow over the engine), the overall engine compartment temperature has decreased by 77-86 degrees Fahrenheit. This allows for easier access for maintenance and improved heat rejection.



After treatment access with vent (top) and without vent (bottom)

## FUSE WARNING LIGHTS

With the press of a button, an LED light next to the fuse itself will identify the broken fuse. Without fuse warning lights, each fuse would need to be looked up individually by number, or each fuse would require removal one by one (trial and error) to determine which is broken.



## ADJUSTABLE MAXIMUM STEERING ANGLE

Tire repair and replacement is the second largest cost of operation expense. With this industry exclusive feature, the customer can adjust steering behaviors:

- Maximum steering angle gives freedom of maneuverability when tire wear is not a concern (default configuration).
- Reduced steering angle decreases friction resulting in reduced tire wear and cost.



# HYSTER MAKES OPERATOR COMFORT A PRIORITY



## CAB COMFORT

With the largest cabin entry area in the industry, the operator cabin on the Hyster H190-400XD series provides ample space for operators of any size to easily and more comfortably enter and exit the cabin. Once inside, operators enjoy the comfort of a spacious cockpit style cabin that keeps all truck information and controls within reach.

The ergonomically designed, seat-mounted control arm is fully adjustable and includes a wrist cushion and TouchPoint™ mini-levers to help reduce fatigue when operating the hydraulics. The reliable CANBUS controls for all main components and modular design of the control arm makes it possible to cover almost any possible truck configuration while being easily serviceable.

The 7" full color, touchscreen Integrated Performance Display tracks all truck activity, allows for easy access to change or calibrate truck settings and is integrated with Hyster Tracker™ telemetry system. The display also offers high-level onboard diagnostics allowing for advanced and quick troubleshooting.

A variety of seat configurations are offered to suit operator preference including mechanical or air suspension, cloth or vinyl cover, lumbar support and ventilated or heated seats. The air conditioning system can be pre-set for automatic climate control and the unique high and rear louvers provide direct air flow toward the operator.



## FORWARD AND REARWARD VISIBILITY

Open carriage design, mast chains mounted on the outside of the mast low cowl and increased space between mast channels and valve block location enable enhanced forward view of fork tips at travel and load height.

Curved, scratch resistant, tempered glass front and rear windshields, armored glass top window and one piece steel-framed glass doors provide operators with excellent all-around visibility. On the exterior, sloping counterweights enhance visibility of steer tires for improved maneuverability and reduced tire gouging.



*The operator has a clear view of the fork tips when in the operator seat*



## AUTO-SHIFTING TRANSMISSION WITH TRUE INCHING

These trucks are equipped with proven and reliable ZF 3-speed auto-shift transmissions paired with Cummins engines to provide true inching capability and not declutch like some of the competitors' trucks. Equipped with an inching brake pedal that when depressed part way permits the truck to move forward and back in a slow controlled manner and allows high-speed hoist at low ground speed. The auto-shift transmissions enable smooth shifts that enhance the longevity of the drivetrain and operator comfort by reducing jolt, translating into better controllability and less operator fatigue.



# MORE VALUE FOR LOWER COST OF OWNERSHIP

## INTEGRATED SYSTEMS DESIGN

Both the Tier 4 Cummins QSB 6.7L engine and the QSB 4.5L engine are paired with the ZF WG-161 transmission. (The Cummins QSB 6.7L engine is available as part of an optional Tier 3 package on all H190-400XD series trucks.) Innovative ECO modes: Hi-P provides maximum performance and good fuel economy; ECO e-Lo provides improved fuel consumption with slightly reduced performance levels.

## ON-DEMAND HYDRAULICS

The Hyster® load sensing hydraulic system delivers flow only when required. A variable displacement pump, capable of more oil displacement even at low pump speeds, means the engine can run at lower speeds. The system consumes up to 10% less fuel and produces less heat than a typical fixed displacement hydraulic system.

## OPTIONAL EMPTY SEAT ENGINE SHUTDOWN

After an operator leaves the seat, the truck automatically shuts down. Factory preset to 15 minutes, the setting is easily adjustable within a 3-15 minute window by the customer.

## ON-DEMAND COOLING

- Features proportional hydraulic driven cooling fan which draws power only when cooling is required, unlike direct drive fans which draw high levels of power at all times.
- Reduces accessory loads on the powertrain, consumes less fuel and lowers noise levels.

## AUTOMATIC THROTTLE-UP

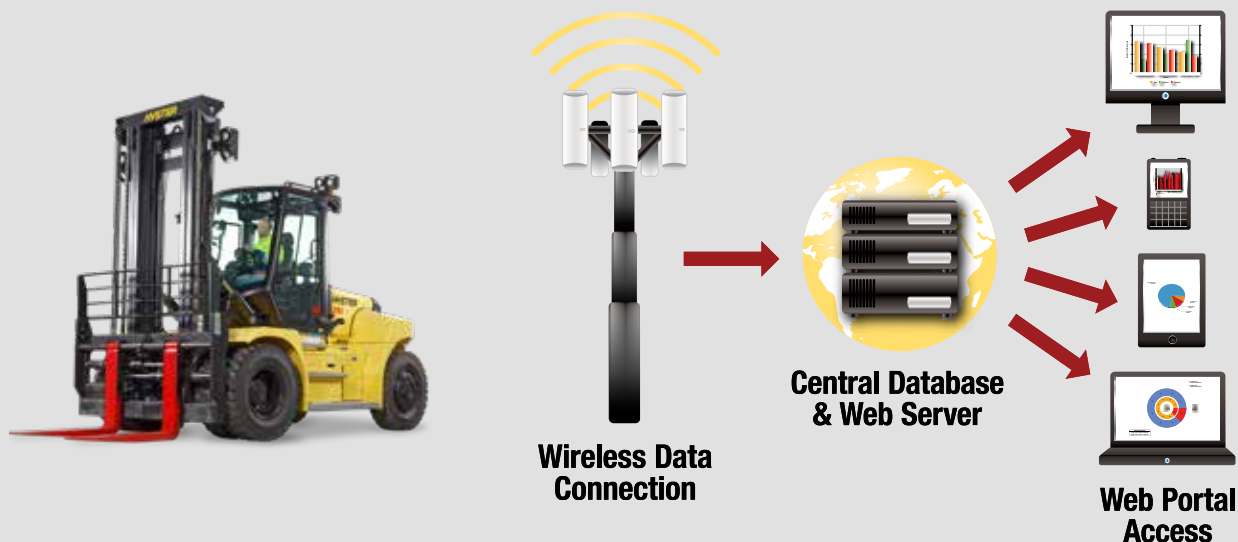
Automatic throttle-up provides automatic response to lift and tilt inputs from the operator when the lift lever or joystick is activated while the truck is in neutral. A single-touch lever or joystick-controlled rev-up keeps the engine in the most efficient range, delivering good fuel economy.

## OPTIONAL TRACTION SPEED LIMITER

Unconditional traction speed limiter is factory pre-set to 10 mph to suit varying site limitations. Loaded traction speed limiter limits traction speeds when a specified load weight is sensed on the forks. Factory pre-set to 10 mph and activates at 10% rated load. Traction speed limiter settings are adjustable by your Hyster® dealer.


# HYSTER TRACKER™ - WIRELESS ASSET MANAGEMENT

Take your fleet operation to the next level with wireless asset management from Hyster, standard on all Hyster Big Trucks. 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.





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

© Hyster Company. 2023, all rights reserved. Hyster and  are trademarks of Hyster-Yale Group, Inc.  
Hyster products are subject to change without notice. Trucks may be shown with optional equipment.