

Diesel Forklift

D-9 Series

250D-9

55,000 lbs. capacity



HYUNDAI
MATERIAL HANDLING
NO ONE DELIVERS MORE

YOUR SATISFACTION IS OUR #1 PRIORITY

Hyundai D-9 Series Diesel Forklifts

The D-9 Series diesel forklifts are built to deliver outstanding performance with greater fuel efficiency and enhanced powertrain durability. This reliable workhorse is engineered to handle the toughest loads with greater efficiency, productivity, and operator comfort. All while making servicing faster and easier.



* Some photos may include optional equipment.

ADVANCED FEATURES PROVEN PERFORMANCE THE D-9 SERIES REALLY DELIVERS

Excellent Performance

- Eco-friendly, powerful, 274HP Cummins QSL9 engine
- Fully automatic ZF electronic transmission with 3 forward-reverse shifts
- Wet disc brake & Kessler drive axle with planetary final reduction gears
- 3-stage TS mast (STD)

Enhanced Safety Features

- Auto parking brake
- Real-time notification of rear wheel steering angle
- Operator Presence Sensing System (OPSS)

Comfortable and Safe Driving

- Deluxe cabin equipped with fully automatic air conditioning
- Hydraulic pilot valve lever
- Load weight indicator
- Password starting system

Servicing Made Easy

- One-touch electric motor-driven tilting cabin
- Consumable replacement alerts help safeguard performance
- Engine fault diagnosis

POWER & PERFORMANCE

Rugged Reliability and Optimal Efficiency Are Only the Beginning

The 250D-9 offers robust, yet refined, performance, with increased power and greater fuel economy to bring your operation years of reliable service in even the toughest working conditions.



Powerful and economical Cummins QSL9 Engine

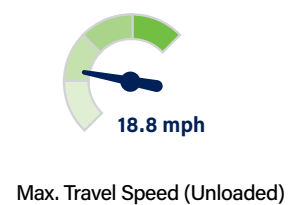
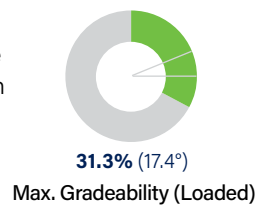
The six-cylinder QSL9 engine is equipped with a Bosch Common Rail fuel system that delivers proven reliability and durability with lower vibrations than other engines. It offers excellent cold start performance and features DOC and SCR emissions aftertreatment systems to meet Tier 4 final standards. The ZF transmission includes optimized fuel injection to improve handling and enhance fuel efficiency. To deliver maximum power, the QSL9 offers high torque at low and medium speeds for increased power.



•274 HP/2,200 rpm
•897 ft. lbs/1,500 rpm

Gradeability and Travel Speed

With its outstanding power, the QSL9 delivers outstanding running performance and exceptional gradeability, ensuring stable operation at high speeds, on rough terrains and slopes.



ZF Fully-Automatic Transmission

Matched with the QSL9 engine, the ZF transmission provides superior acceleration with its high torque even at low speeds. Noise and heat generation have also been reduced. Plus, the transmission status and any system issues can be readily checked via the display cluster.



Drive Axle & Wet Disc Brake

The Kessler high-capacity drive axle features a planetary gear system for outstanding power transmission and the durability to handle sudden changes in torque. The wet type, multi-plate service brake delivers consistent braking power shift after shift.



Engine Mode Control

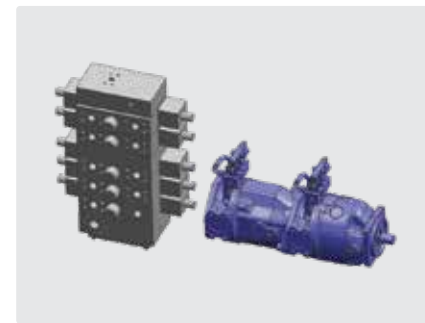
Engine performance can be adjusted to suit the workload, simply by operating a switch mounted on the side panel.

STD mode : Light load operations
(fuel saving mode)

PWR mode : Operations on slope
requiring intense power

Load Sensing Hydraulic System

The high-efficiency hydraulic system includes a Bosch swash plate piston pump and control valve that optimizes energy consumption and increases engine and transmission durability.



Mast Tilting Angle

Tilting speed is improved by combining hydraulic pressure generated from the secondary pump to the primary pump flow rate. The tilting angle of 12 degrees forward and 10 degrees backward increases work efficiency.



Low Engine RPM Conversions

Depending on the need, the driver can convert the engine to a low RPM. The RPM will return to its initial settings value once the engine is stopped and restarted.

Hydraulic Steering Axle

The hydraulic steering system always guarantees smooth and flexible steering, preventing over-run and kick-back. Taper roller bearings and ADI knuckles with excellent strength and wear resistance are used to handle the heaviest loads. The newly added protector prevents damage of rear wheel hub bolts.



3-Stage T/S Mast for High Lifting (OPT)

The 250D-9 offers 3-stage masts of 6 types with lifting height of 15.5-21.3 ft., suitable for the indoor working conditions. Also, the removable free lift cylinder (first cylinder) provides wider visibility.



COMFORTABLE WORKSPACE WITH INTUITIVE MONITORING

The ergonomically designed operator’s compartment is designed to assure greater productivity and comfort.

Ergonomic Operator’s Compartment

The operator’s compartment was designed to provide more space, a wider field of view, and greater comfort. The smooth lever and pedal operation, adjustable tilting steering wheel, suspension seat, and deluxe cabin help to reduce operator fatigue and increase efficiency and productivity.



250D-9

Full Air Suspension Seat (OPT)

Ergonomically designed to support a comfortable posture, the full suspension seat relieves fatigue and offers greater comfort throughout long workdays.

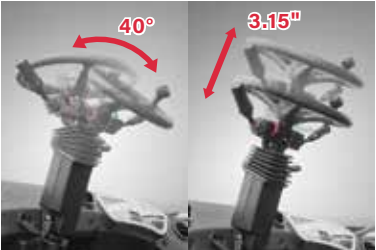


Integrated Communications Controller

Cutting-edge communications technology enhances operator convenience and includes Bluetooth, hands-free cellphone calling, radio communications, and USB/MP3 control functions.

Fully Adjustable Steering Wheel

The steering wheel can be pushed forward or backward, pushed in or out to suit the driver’s body shape, providing an all the more comfortable work environment.



New Centralized Cluster

The TFT LCD color monitor displays real-time driving information and changing vehicle status depending on the work condition, allowing for precise and efficient control for the operator. The operator can choose among various performance modes depending on the working conditions and diagnostic error codes ensure easy troubleshooting.



Main Functions

- | | |
|--|--|
| <ul style="list-style-type: none"> • Urea level gauge • T/M information display • Parking brake indicator • Battery charging failure warning • Brake system overheat warning • Air cleaner filter warning • Machine inclination warning • Load weight indicator • Steering wheel position | <ul style="list-style-type: none"> • Engine coolant temperature warning • Engine check warning lamp • Seatbelt warning • Exchange consumable indicator • Mast tilt angle indicator • High beam indicator • T/M error warning • OPSS indicator • Inching indicator |
|--|--|

Responsive Levers

Responsive levers with the latest hydraulic system enables micromanipulation and excellent performance.

- 5-Lever, 6-Function : STD
- 7-Function : OPT



Ergonomic Pedals

The high-quality floor mat and ergonomically designed pedal arrangement reduce operator fatigue and dramatically improve productivity.



Fully Automatic Air Conditioner

The air conditioner automatically adjusts to the set temperature and provides a more comfortable working environment for the operator.



EXCELLENT VISIBILITY

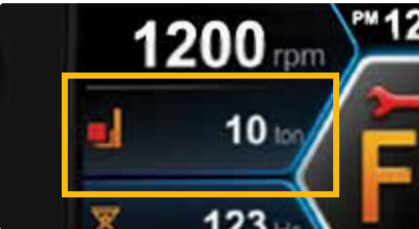
ADVANCED SAFETY

The 250D-9 features an operator’s compartment engineered for safety and comfort. It includes advanced systems designed to safeguard both the operator and those working around the machine. For wider forward visibility, the 250D-9 includes an optimized lift cylinder arrangement, while its panoramic mirror expands the driver’s rear view.



Load Weight Indicator (OPT)

When lifting a load, a change in hydraulic pressure of the lift line is converted to a measurement of weight displayed in real time, and a warning is given in the event of an overload.



Machine Inclination Warning System

The grade (left) and slope (right) sensors are built into the MCU and provide the grade and slope status information of the vehicle connected with the road surface condition in real time. Also, an alarm is emitted when the KS regulation is exceeded.



Steering Wheel Angle

Installed on the kingpin of the rear axle, the steering angle sensor displays its measurement on the large cluster screen, providing the operator with a clear and easily read view of the vehicle's direction.

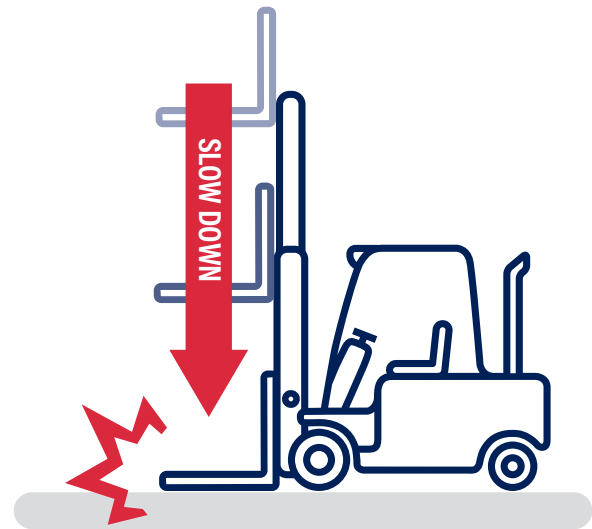


SAFETY FEATURES

The adoption of high sensitivity sensors and advanced safety systems help to prevent the rise of accidents.

Fork Safety Features

The down-safety valve prevents forks from dropping down in case of sudden damage of hydraulic line.



Speed Setting Limit

The operator can set and limit the maximum speed from 6.2 mph to 18.6 mph.

Password Starting System

The operator can set a password to prevent vehicle theft and possible accidents in the event an unauthorized person attempts to use the forklift. (Up to 10 passwords can be set.)

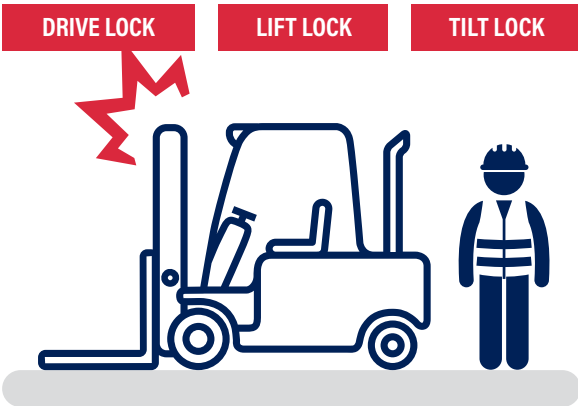
Auto Parking Brake

If the operator leaves the seat while the gear lever is in neutral, the parking brake is automatically engaged for added safety and is only released when the operator returns to the seat.



Operator Presence Sensing System

All mast and drive movements stop functioning when the operator is not in the seat.



Increased Night Work Efficiency

Four work lamps on the upper side of the mast, two headlamps on the frame fender, and two work lamps on the upper side of the counterweight enable efficient nighttime and indoor operations.



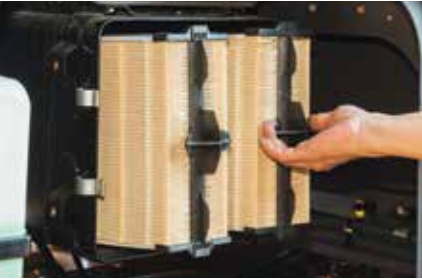
FAST AND EASY MAINTENANCE & CONVENIENCE FEATURES

An ideal arrangement of components ensures easy access and convenience for maintenance.



Double-Filtration Air Cleaner

The large capacity double-filtration air cleaner filter offers a longer life span and simplified maintenance. The operator can access the air filter by simply opening the engine hood.



Cabin Air Cleaner Filter

The air cleaner filter blocks external dust and noise from the cabin, and continuously supplies clean air to the cabin to assure continuous fresh air for the operator.



Automatic Tilting System

The cabin tilting system allows the operator to tilt the cabin with a single switch up to 54 degrees, enabling easy maintenance of key components located under the driver's seat



Up-to-Date Cooling System

Variable speed and remote controlled fans reduce fuel consumption and noise, while the aluminum cooler improves durability and heat output.



Rearview Camera

A rearview camera and monitor are linked to the reverse gear, ensuring safer work behind the forklift.



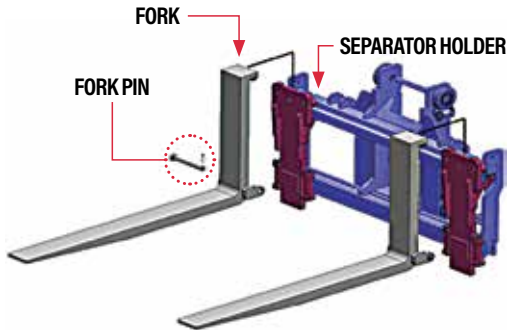
Engine Fault Diagnosis

Details of faults diagnosed by the Engine Control Unit (ECU) are displayed and easily checked on the cluster.



Separator Holder Carriage (OPT)

This important option is designed to improve handling and make switching forks and other attachments fast and easy. For greater utility, it is designed to work with a wide range of attachments.



Battery Master Switch

This system helps prevent possible damage when the battery discharges and during inspection and maintenance of electronic units.



Maintenance Management

Through the cluster, operators and service technicians can check the status of consumables, such as lubricant and filter elements, and replace as needed to help prevent damage to the forklift and its key components, while also assuring maximum productivity and performance.



SPECIFICATIONS (250D-9)

■ The Specifications in this brochure are subject to change

IDENTIFICATION		
Load capacity	lb	55,000
Load center distance	in	48
Maximum lift height	① (in)	159
Lift speed, loaded / unloaded	ft / min	55 / 49
Lowering speed, loaded / unloaded	ft / min	79 / 59
Fork dimension	H x W x L (in)	96 x 10 x 4
Fork-carriage width	④ (in)	116
Mast/fork carriage tilt forward / backward	② / ③ (degrees)	12 / 10
Mast height, extended / lowered	④ / ⑤ (in)	230 / 229.8
Travel speed, unloaded	mph	19.6
Max. gradeability, loaded	%	31.2% / 17.3°
Turning radius	⑥ (in)	228.6
Max. drawbar pull, loaded	lb	46,636
BASIC DIMENSIONS		
Service weight	lb	85,540
Length to face of forks / Overall width	⑦ / ⑧ (in)	250 / 120
Height of overhead guard (cabin)	⑨ (in)	129.1
Ground clearance / Wheelbase	⑩ / ⑪ (in)	12 / 167
Tread, front / rear	⑫ / ⑬ (in)	87 / 84
Tire, front / rear	lb	14 x 24 x 32PR / 14 x 24 x 32PR
ENGINE		
Engine manufacturer / model		Cummins / QSL9
Engine power acc. to ISO 1585	hp @ rpm	274 @ 2,200
Max. torque	ft-lb @ rpm	897 @ 1,500
No. of cylinders / cubic capacity	# / cc	6 / 8,849

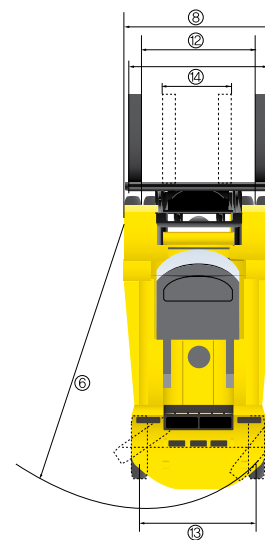
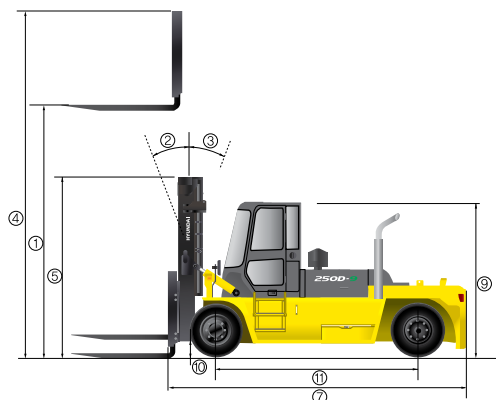
MAST SPECIFICATIONS (250D-9)

Mast Type		Maximum Fork Height		Overall Height (Lowered)		Free Lift Height		Tilt Angle		Load Capacity 47" LC (1,200mm LC)		Truck Weight (Unloaded)	
		in	mm	in	mm	in	mm	Fwd deg	Bwd deg	lb	kg	lb	kg
2-Stage Limited Free Lift	V345	137	3,480	141.5	3,593	5.5	140	12	10	55,000	25,000	84,256.3	38,218
	V400 (STD)	159	4,040	152.4	3,870	5.5	140	12	10	55,000	25,000	85,532.7	38,797
	V450	178.7	4,540	162.2	4,120	5.5	140	12	10	55,000	25,000	86,145.6	39,075
	V500	198.4	5,040	172	4,370	5.5	140	12	10	55,000	25,000	86,789.4	39,367
	V550	218.1	5,540	181.9	4,620	5.5	140	12	10	55,000	25,000	87,404.5	39,646
	V600	237.8	6,040	191.7	4,870	5.5	140	12	10	55,000	25,000	88,691.9	40,230
	V650	257.5	6,540	201.6	5,120	5.5	140	12	10	55,000	24,900	89,382	40,543
	V700	277.2	7,040	211.4	5,370	5.5	140	12	10	54,000	24,450	90,019.2	40,832
3-Stage Full Free Lift	TS470	185.5	4,712	133.9	3,400	29.4	746	10	10	55,000	25,000	90,801.8	41,187
	TS500	197.3	5,012	137.8	3,500	31.3	796	10	10	55,000	24,900	91,172.2	41,355
	TS530	209.1	5,312	141.7	3,600	33.3	846	10	10	54,000	24,600	91,679.2	41,585
	TS560	220.9	5,612	145.7	3,700	35.3	896	10	10	54,000	24,400	92,056.2	41,756
	TS600	236.9	6,016	150.9	3,835	37.9	963	10	10	53,000	24,100	92,567.7	41,988
	TS650	256.4	6,512	157.5	4,000	41.2	1,046	10	10	52,000	23,600	93,215.9	42,282

OPTIONAL FEATURES

Fork (L x W x T) (in)	2,450 x 250 x 110 (STD)	2,700 x 250 x 110	3,150 x 250 x 110 (STD)	3,650 x 250 x 110 (STD)	3,700 x 250 x 110 (STD)
MCV 6-Spool					
Integrated Fork Positioner (Independent) + Side Shift (STD)					
Air Compressor					
Separator Holder Type Fork Carriage					
Hands Free					
Beacon Lamp					

DIMENSIONS



LOAD CAPACITY

