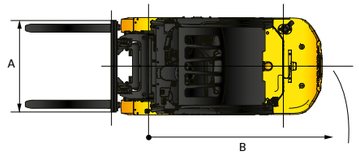
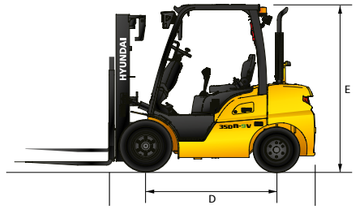
SPECIFICATION





SPECIFICATION						
Model				25D-9V	30D-9V	35DN-9V
Load Capacity			kg	2,500	3,000	3,500
Load Center			mm	500	500	500
Engine			Type	HMC D4HB	HMC D4HB	HMC D4HB
			kW/rpm	47.8/2,300	47.8/2,300	47.8/2,300
PERFORMANCE	Travel Speed, Loaded/Unloaded		km/h	16.4/17.7	17.2/18.8	16.9/18.8
	Lift Speed, Loaded/Unloaded		mm/s	580/610	580/610	480/500
	Lowering Speed, Loaded/Unloaded		mm/s	510/500	550/500	510/480
DIMENSION	Overall Width	A	mm (in)	1,200 (47.2)	1,230 (48.4)	1,230 (48.4)
	Turning Radius	B	mm (in)	2,352 (92.6)	2,427 (95.6)	2,480 (97.6)
	Length to Face of Forks	C	mm (in)	2,622 (103.3)	2,701 (106.4)	2,756 (108.6)
	Wheelbase	D	mm	1,650	1,700	1,700
	Height of OHG (CABIN)	E	mm	2,160 (2,170)	2,180 (2,190)	2,180 (2,190)
TIRE	Tires			Pneumatic	Pneumatic	Pneumatic
	Tire Size, Front			7.00-12-12PR	8.15-15-14PR	8.15-15-14PR
	Tire Size, Rear			6.50-10-12PR	6.50-10-12PR	6.50-10-12PR
	Number (FRxRR)			2x2	2x2	2x2

OPERATION ROOM	
Overhead Guard *25D-9V : 2,160mm, 30D-9V & 35DN-9V : 2,180mm	●
Overhead Guard with Rain Cover *25D-9V : 2,170mm, 30D-9V & 35DN-9V : 2,190mm	○
Cabin Options - One door, Two door	○
Partial Cabin - Front glass with Wiper, Rear glass & Top Rain Cover	○
Air Conditioner and/or Heater	○
Full Suspension Seat + Orange Belt, Seat Switch	●
Non Suspension Seat + Orange Belt	○
Seat Accessories - Back Rest, Seat Switch, Belt Switch, Heat	○
Lever - General	●
Lever - Finger Tip	○
Radio & USB	○
Rear Horn	●
Extinguisher	○
MAST & ATTACHMENT	
2 Stage mast - Standard(V)	●
2 Stage mast - Single full free(VF)	○
3 Stage mast - Single full free(TF), Dual full free(TS)	○
1,200mm Fork	●
Fork Options - 900mm~2,300mm	○
Carriage - Narrow(1,102mm/Hook)	●
Carriage Options	-
- Wide(1,442mm/Hook)	○
- Special(1,214mm/Hook)	-
Jungkyung Side Shift	○
Jungkyung Fork Positioner – Synchronized or Independent	○
HYDRAULICS	
3 Spool MCV + attached piping for V330 mast	●
MCV Options - 4 Spool	○
Attached Piping for All MCVs & Masts	○
Brake - General type	●
Brake - Booster type	○

TIRE	
Tire - Pneumatic(Single)	●
Tire Options	-
- Solid	○
- Non Marking	○
- Front Pneumatic + Rear Solid	○
- Front Solid + Rear Pneumatic	○
- Pneumatic Double or Solid Double tire (15" wheel rim)	○
VISIBILITY	
Lamp - Working Lamp - Front Bulb	●
Lamp - Working Lamp Options - Front LED, Rear LED, Rear Bulb	○
Lamp - Rear Blue Spot	○
Lamp - LED Beacon Lamp	○
Mirror - Mirror - Panorama	●
Mirror - Mirror Options - L/H & R/H Back Mirror, Outside Mirror	○
Camera - Rear Camera only	○
Camera - Front & Rear Camera	○
CONVENIENCE	
Knob-Switch with Direction & Horn	●
Auto Tilt	○
Load Sensor	○
Hydraulic Pressure Display	●
SAFETY	
OPSS - Travel & Mast	●
Master Switch to cut off electricity from battery	●
Hazard Switch	○
OTHERS	
Steel Side Cover	●
Plastic Side Cover	○
Rear Tire Cover + Under Cover	○
Fuel Cap with Key	○
Pre-cleaner	○
Hyd. Oil-VG46	●
Hyd. Oil Options - VG68 for Tropical, VG15 & VG32 for Cold Area	○
Accumulator	○

● STD / ○ OPT

HYUNDAI
MATERIAL HANDLING

PLEASE CONTACT

2020. JUL. Rev. 0

HYUNDAI
MATERIAL HANDLING

MOVING YOU FURTHER

9V SERIES NEW 9V SERIES

25/30D-9V
35DN-9V

Internal Combustion Diesel Engine Forklift Truck



Based on our 9-series diesel engine forklift which has proven its durablility and productivity for a long time, the 9V series meets the EU Stage 5 emission regulations. Also, as an environment-friendly, economical forklift with a high fuel efficiency, the 9V series will meet all your expectations.

* Photo may include optional equipment.

PRODUCT FEATURES
OVERVIEW

ENVIRONMENT-FRIENDLY

- An HMC D4HB 47.8kW diesel engine is mounted, which meets EU-Stage 5 regulations on gas. To optimize fuel consumption, depending on the working conditions, the operator can select the power output between power and standard.

  → The standard mode reduces fuel costs by 14% compared to the power mode.

PRODUCTIVITY & DURABILITY

- Hyundai's new transmission with electric proportional pressure reducing solenoid valve and TCU

  → The shock on start is relieved, the creep speed of 2km/h is satisfied, and an electronic inserting system improves fine control.

  → Regardless of the weight of the vehicle or temperature fluctuation of T/M oil, the starting and driving characteristics remain the same.

  → The delivery capacity of clutch pack torque is increased by 22%, and direction change shock relief is applied.

- To ensure an adequate amount of radiation under DPF conditions, it is designed to expand the area of the counterweight opening and to increase the radiator capacity by 13%.

- A wet disk brake cooled down with HYD boosted and drive axle oil ensures long life and high reliability.

- Hyundai's new drive axle is a planetary reduction gear structure with increased sump capacity.



* Photo may include optional equipment.

ENHANCED SAFETY

- Auto Parking Brake: When the engine stops, the parking brake works automatically to prevent safety accidents caused by human error.
- HAC (Hill start Assist Control) : Backsliding is prevented upon restarting on a slide.
- OPSS System (simultaneously operated with Auto Parking): Driving, lifting, and tilting are restricted when the operator leaves the driver's seat.
- Seat Belt Interlock System : If the operator does not wear the seat belt, operation stops. Option
- Warning on equipment posture : The warning of an accident is given if the forklift exceeds the preset stability range during operation.
- Password setting: Unauthorized use of forklifts is prohibited.
- Standard for setting the max speed of the forklift is applied according to safety speed regulations at the site of use.

OUTSTANDING OPERABILITY (ERGONOMICS)

- Reduced handle diameter and the Danfoss 4th generation Obitrol are applied to improve steering, reduce noise, and improve the reverse rotation jam.
- Deluxe Suspension Seat: Cushion adjustment and ELR seat belt of Grammer seats are used.
- MCU-Integrated new cluster to improve information visibility during operation and simplify parts. Option
- New fingertip system with new MCV, ensures improved response time, feeling and extended fine-tuning possibility. Option
- Front and rear cameras to locate the fork and loads and check the rear situation. Option

EASY SERVICE

- Maintenance of the exhaust gas aftertreatment device is done with screen disassembly only, without weight removal.
- Engine diagnosis without any additional diagnostic tool and consumables replacing interval setting.
- An MCV composed of a descending speed adjustable regulator and spools with minimized internal oil leakage.
- Waterproof and dustproof fuse & relay box to prevent dust or water contamination.
- A remote-type engine oil filter makes engine oil change easier and reduces working time.

ENVIRONMENT-FRIENDLY GREAT PRODUCTIVITY DURABILITY



* Photo may include optional equipment.

Radiator with increased capacity



The area of the counterweight opening is expanded, and the radiator capacity is increased by 13% to realize a stable heat balance. In addition, a fan guard is added for maintenance safety.

Change in specification of dual tire

Option

The specification change of the dual tire to 7.00x12 extends the tire life and improves the vehicle's left and right stability when handling long cargo from side to side. (Expanded full width by 84 mm) When selected, a dual tire-exclusive axle with a longer axial housing is mounted.

Optimized fuel consumption

The choice of engine output in the power mode and standard mode can reduce ownership costs. The economical standard mode reduces fuel costs by 14% compared to the power mode.

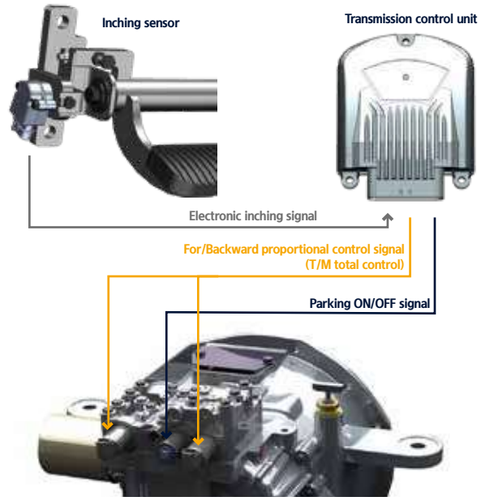
- **Standard Mode :**
  Optimized for low-speed driving and light-load operations
- **Power Mode :**
  Optimized for power driving, ramping, and high-load operations

HMC Engine & DPF



The HMC D4HB engine with optimized displacement for a fork-lift comprises an electronic EGR valve, a common rail, Variable Geometry Turbo-charger (VGT) with an excellent boosting effect, and an aftertreatment (DOC + DPF) device. It also meets the stricter EU Stage 5 regulations. Also, three modes of DPF are available depending on the usage environment.

Hyundai Core Motion's transmission with increased driving comfort and durability



The new transmission of Hyundai Core Motion, which is applied with the electric proportional pressure-reducing solenoid valve, TCU, and enhanced torque delivery capacity of the clutch pack, guarantees a comfortable driver experience.

- **Convenience:**
  Reduced starting shock, 2 km/h creep speed, electronic inching system, and the consistent starting and driving capability regardless of the weight of the vehicle or oil temperature fluctuation.
- **Durability:**
  The delivery capacity of clutch pack torque is increased by 22%, and the direction change shock relief is applied.

Axle and wet disc brake considering durability



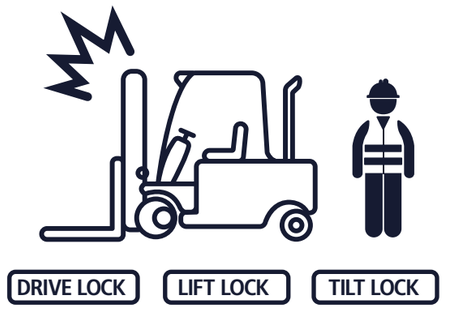
The drive axle is equipped with a planetary reducing gear that is resistant to torque change, and the capacity of the sump has been increased by 46% for better performance and durability of the wet disc brake in high-brake-use environments. Moreover, the wet disc reduces maintenance costs because of enhanced durability.

ENHANCED SAFETY



* Photo may include optional equipment.

OPSS (Operator Presence Sensing System)



The OPSS that restricts driving, lifting, and tilting kicks in when the operator leaves the driver's seat in order to prevent safety accidents. It is simultaneously operated with the auto parking brake to create a safer workplace.

Auto Parking Brake & HAC



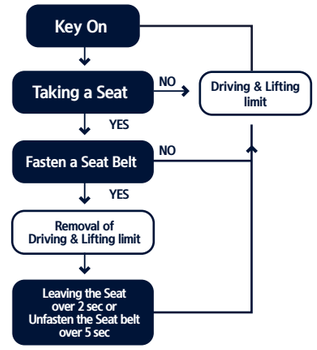
The negative-type auto parking brake operates automatically when power is cut off in order to prevent safety accidents caused by human error, like not operating the parking brake lever, and backsliding is prevented upon restarting on a slide with the Hill start Assist Control (HAC).

Password setting



To prevent theft, breakdown, and safety accidents when the equipment is not in use that may occur when unauthorized people try to use the equipment without the administrator's permission, the operator's password can be set on the cluster to restrict the operation of the equipment.

Seat belt interlock system Option



The seat belt interlock system, which restricts forklift operation when the seat belt – wearing order is not observed or the operator releases the belt while driving, prevents operator injury from safety accidents that may occur when the seat belt is not fastened.

Warning on equipment posture



When the forklift is working on an inclined road surface, the tilt is sensed in the front, rear, and left and right directions of the equipment. A warning is given to the operator if the sensing value exceeds the preset stability range.

Speed limit setting



The operator can set the max. driving speed using the cluster screen connected to the MCU and ECU via CAN communication. The working speed of the mast remains independent of the driving speed limit.

OUTSTANDING OPERABILITY

ERGONOMICS

Open visibility and comfortable driver's seat

The mast, carriage, and head guard are designed to provide the operator with maximum visibility, and the ergonomically designed operator's zone ensures the operator's comfort, leading to increased productivity.

* Photo may include optional equipment.

Visibility enhanced new cluster New



In the new cluster, the size and characteristics of the symbols have been adjusted for better visibility of driving information and safety warnings, and MCU functions are integrated to simplify parts.

- **Key monitoring functions**
  OPSS, maintaining equipment posture, a clock, service hour meter, fuel, temperature, driving direction and transmission level
- **Configuration and Diagnosis**
  maximum driving speed, consumables replacing interval, engine diagnosis, password setting
- **Additional functions** Option
  a rear monitor, load weight indicator, autotilting status

Variable cabin Option



From cabin with air conditioning and heater (1Door / 2Door) to partial cabin(Front&Top, Front&Top&Rear). Various cabin options are available.

Improved response time and fine-tuning of Fingertip Option



The response time (within 0.1 s) and fine-tuning capability of fingertip are improved, thanks to the built-in Dither control and controller current feedback systems, and its control is adaptable to the temperature of the environment.

Improved handling convenience



The diameter of the handle is reduced by 70 mm to minimize the operator's fatigue and the Danfoss 4th generation Obitrol pump is applied to reduce noise and improve the reverse rotation jam of the handle.

Deluxe Grammer seat



The Grammer suspension seat, on which the operator can adjust the sensitivity (response speed) of the cushion according to the operator's weight, creates a comfortable driving environment. Also, for safety, a seat belt with an emergency locking retractor, orange-colored, is applied.

Front and rear cameras Option



With front and rear cameras, the operator can locate the fork and loads and check the rear situation at the same time. When going backward, the rear view is on the cluster screen. The front camera, which is customer installation specifications, is supplied packaged with camera, monitor, harness, and bracket.

EASY SERVICE

* Photo may include optional equipment.

Easy maintenance

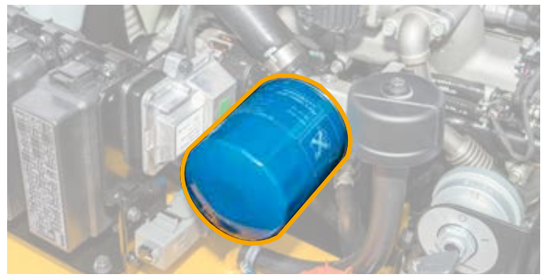
A gas spring – operated steel engine hood provides easy access to periodic maintenance parts, reducing equipment downtime. In addition, the protector added to the gas spring prevents the hood from closing during operation, ensuring safety.

Engine diagnosis and consumable maintenance



Engine failure can be checked in clusters without the need for a separate engine diagnostic tool, and the parts to be replaced are displayed in the cluster during operation when the replacement timing of all consumables requiring periodic maintenance is set in the cluster.

Remote type engine oil filter



The engine oil should be replaced regularly every 500 hours, and the engine oil filter is separated from the engine assembly and configured as a remote type to improve convenience of oil change and minimize working hours.

Convenient maintenance of aftertreatment device



To eliminate the inconvenience of removing the counterweight to inspect the aftertreatment device inside the weight, the opening of the counterweight has been expanded to the maximum extent possible. The aftertreatment device is accessible by removing the protective screen on the back of the counterweight.

Convenient maintenance of HYD control valve



Along with this feature, the lift emergency lowering screw and a descending speed adjustable regulator of the MCV reduce the maintenance frequency and downtime.

Waterproof and dustproof fuse and relay box



The fuses and relays that are vulnerable to contamination are placed inside a box with enhanced waterproof and dustproof functions, and the box itself is placed inside the engine room to reduce maintenance downtime.

LED lamp



LED lamps with semipermanent life are applied to the front and rear work lamps and the rear combination lamps, increasing the inspection cycle and reducing the cost.