



D100S-9 / D120S-9 / D140S-9 / D160S-9 / DV160S-9

9-SERIES FORKLIFTS

Pneumatic Diesel 10.0 to 16.0 ton capacity

Euro Stage V



Features overview

Customer satisfaction is important to us, and with the new 9-Series internal combustion forklifts, satisfaction is guaranteed. They provide great power, excellent performance, driving comfort, reliability and outstanding fuel efficiency.

MAXIMUM PRODUCTIVITY

- Fuel-efficient engine
- Multi torque mode (ECO/STD/power)
- Oil-cooled disc brakes
- Auto throttle up

SAFETY

- Excellent visibility
- Guardian Stability System
- LED lights
- Rear object detection system

OPTIMAL ERGONOMICS

- Significantly lower noise level
- Centralized and ergonomically positioned switches for all functions
- Large 7" full color display
- Heater and full automatic air conditioning

EXCELLENT RELIABILITY

- New steer axle equipped with taper roller bearings for better durability
- Mud guard
- Integrated Vehicle Control Unit

GREAT SERVICEABILITY

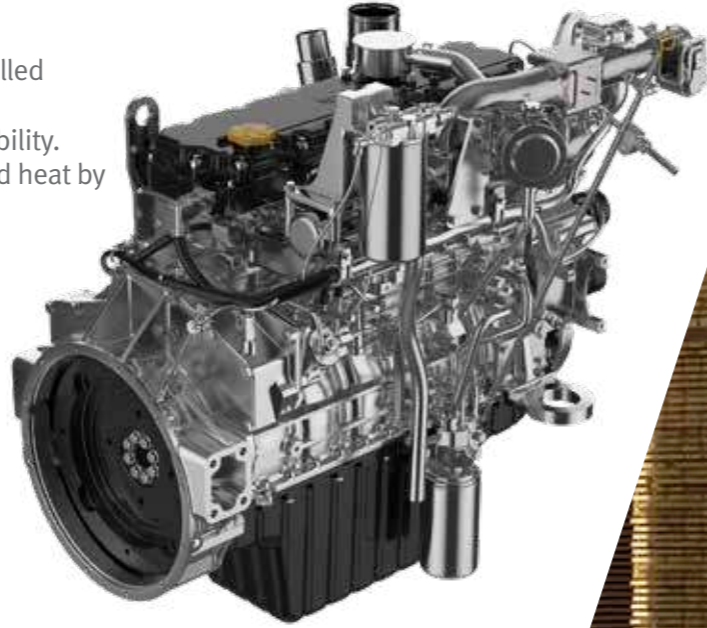
- Extended service interval for key components
- Integrated fuse/relay junction box
- Electric tilting cabin



Maximum Productivity

Doosan engine DL06V(P) Stage V **NEW**

- Stage V engine implementation
 - Exhaust soot cleaning solution; DPF installed
 - Automatic DPF regeneration
- Increased combustion efficiency and durability.
 - Improved fuel efficiency by 5%, decreased heat by 20%.
- Cold start-up under low temperature
- Power mode available (ECO/STD/power)



High-performance & highly efficient ZF full automatic 3-speed 3WG171 transmission

- Large capacity ZF 3-Speed 3WG171 transmission with large capacity
 - Improved power transmission efficiency by stator freewheel
 - Excellent driving performance and traction
 - 5% higher fuel efficiency compared to previous models
- Optimized power matching between the engine with the transmission
 - Remarkable engine responsiveness, powerful performance and soft gearshift
- Efficient maintenance through the self-diagnosis system



Load sensing hydraulic system **NEW**

Uses only the necessary volume of oil depending- on the load, leading to lower fuel consumption and less heating during long-distance driving. This series performs excellently during driving and complex operations.

Strong and durable drive axle

The use of the heavy duty front axle in combination with the electric parking brake enhances the durability and safety. The oil-cooled disc brakes (OCDB) ensure reliable braking performance at very low maintenance costs.



Auto throttle up **NEW**

When using any hydraulic function, engine RPM is increased allowing for a smoother hydraulic function without increasing the accelerator.



Safety



Hill Start Assist (HSA)

Automatically activates the parking brake when stopping on a slope and deactivates it when the accelerator pedal is pressed. This prevents the machine from rolling back on a slope and driving stability is greatly improved.



LED lights

NEW

LED headlight for low beam/high beam is standard which is the first time in the industry. This guarantees clear visibility and efficiency. It helps to reduce maintenance costs and prevent hazards/accidents.



Auto-tilt leveling **OPTION**

By pressing a button on the tilting handle, the mast returns to vertical position automatically.

GSS
Guardian Stability System



Rear object detection system **OPTION**

NEW

When a pedestrian or object is detected in the operating area, a beeping sound will alert the operator and pedestrians.



Electric parking brake

The parking brake can be operated by pressing a switch and is also automatically activated when the speed is below 3 km/h.

Front/rear view camera **OPTION**

Workplace safety is ensured by maximizing front/rear visibility.



Blue safety light **OPTION**

Projects a blue spot on the floor to alert pedestrians.



Excellent visibility **NEW**

The re-designed all-open cabin that provides the operator optimal visibility at any time from all angles. This enhances workability and safety.



Optimal Ergonomics



Integrated type 7" multi-functional display panel **NEW**

The largest mounted display in its class provides excellent operability and visibility.

- Front and rear view camera **OPTION**
- PIN code
- Integrated maintenance management program
- Weight indicator **OPTION**
- Diagnostic function
- Located on A-pillar which is handy for the operator to see



Fingertip controls **OPTION**

Ergonomically designed fingertip controller ensures accurate and fine control with less fatigue and improved efficiency.

Convenient and user friendly heating, ventilation and air-conditioning (HVAC) system **NEW**

This system offers integrated heating/cooling/ventilation control, allowing automatic heating/cooling temperature control (full automatic temperature control). The all-in-one heating/air conditioning system with its twin evaporators provides excellent performance.



image can include optional equipment



Centralized switches **NEW**

All control switches are arranged in one place, which is more convenient for the operator to use the truck. In addition, each control switch includes a status indicator to show the actual function status. Double USB ports and a power jack are as standard available.

Sun visor



Steering wheel providing fore-/backwards and up/down adjustment

Air suspension seat **OPTION**

71dBA*

*noise level at driver's ear, depending on model



Significantly lower noise level **NEW**

The over-pressurized cabin prevents dust from entering

- 2 large air filters clean the air
- Very low noise and vibration level inside the cabin for upgraded operator comfort

image can include optional equipment

Excellent reliability



Fan Driving System **OPTION** **NEW**

The fan speed varies in accordance with the coolant and brake oil temperature to minimise energy loss. The fan reverse function keeps the radiator clean.



Junction Box **NEW**

The electronic components are centralized. Service can be done quickly and easily.



Centralized Pressure Detection Port **OPTION** **NEW**

The pump, brake, and steering pressure measurement ports are independently built-in and centralized for easier pressure checking.



Cockpit tilting (Auto/Manual) **NEW**

Automatic/manual cockpit tilt functions are available and the cabin can be opened up to 60° with a simple switch, making inspection and maintenance quick and easy.

Hood open angle **NEW**

The wide open angle make it more convenient to service the truck.



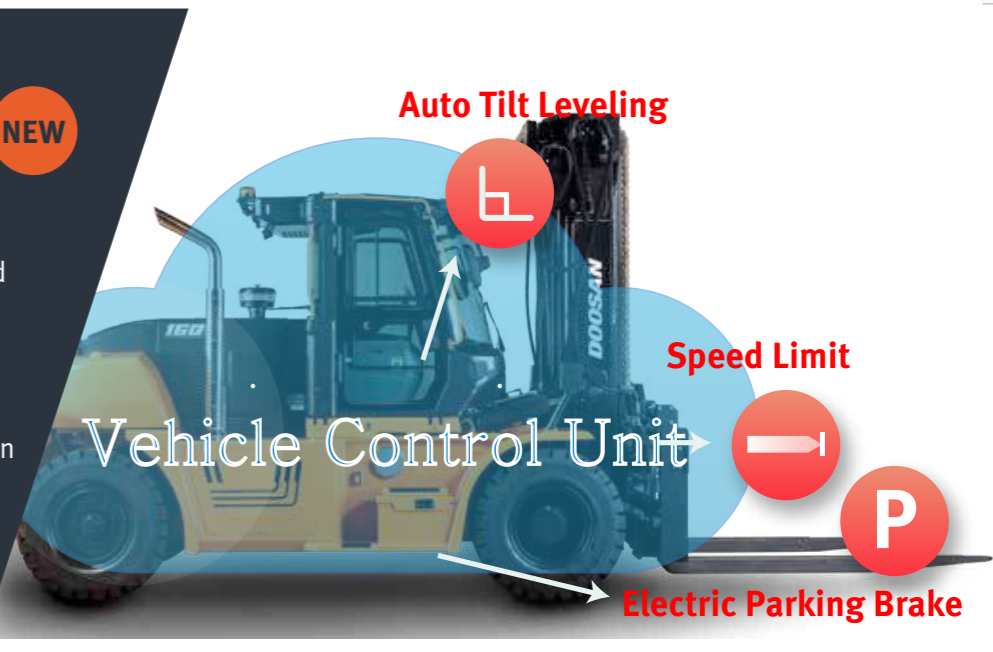
NEW

Heavy duty steering axle

Equipped with tapered rollers and spherical bearings to ensure the highest durability even in harsh applications.

Integrated type vehicle control unit (VCU) **NEW**

This smart, innovative system offers the integrated control of various decentralized control units in combination with CAN communication, enabling vehicle diagnostics and management as well as various safety and comfort functions on demand. The system can be updated when new functions are available.



Auto Tilt Leveling

Speed Limit

Vehicle Control Unit

Electric Parking Brake

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LIFTING YOUR DREAMS



Main Specifications

		D100S-9	D120S-9
Engine manufacturer		Doosan	Doosan
Engine type		DL06	DL06
Engine power according to DIN ISO1585	kW	128.7	128.7
Rated speed	min-1	2,100	2,100
Torque at 1/min	N•m	725.7	725.7
Travel speed, loaded/unloaded	km/h	36/41	35/40
Lift speed, loaded/unloaded	mm/s	460/490	450/490
Drawbar pull, loaded (@ 1.6km/h)	kg	11,544	11,474
Gradeability, loaded(@ 1.6km/h)	%	51	44
Fuel tank capacity	l	195	195
Sound level at the driver's ear (according to EN 12 053)	dB(A)	71	71
Height of cabin	mm	2,950	2,950
Ground clearance, loaded, below mast	mm	240	240
Ground clearance, center of wheelbase	mm	315	315
Load Distance: center of driveaxle to fork	mm	755	770
Wheelbase	mm	3,000	3,000
Service weight	kg	15,300	16,300
Height of seat	mm	1,800	1,800
Length to forkface	mm	4,490	4,500
Overall width	mm	2,350	2,350
Turning radius	mm	4,255	4,255

	D140S-9	D160S-9	DV160S-9
Engine manufacturer	Doosan	Doosan	Doosan
Engine type	DL06	DL06	DL06
Engine power according to DIN ISO1585	128.7	128.7	139.7
Rated speed	2,100	2,100	2,100
Torque at 1/min	725.7	725.7	784.5
Travel speed, loaded/unloaded	30/35	29/34	34/39
Lift speed, loaded/unloaded	410/460	400/460	390/460
Drawbar pull, loaded (@ 1.6km/h)	12,534	12,464	12,504
Gradeability, loaded(@ 1.6km/h)	43	38	32.4
Fuel tank capacity	235	235	200
Sound level at the driver's ear (according to EN 12 053)	71	71	71
Height of cabin	2,980	2,980	2,980
Ground clearance, loaded, below mast	235	235	200
Ground clearance, center of wheelbase	345	345	345
Load Distance: center of driveaxle to fork	815	815	985
Wheelbase	3,250	3,250	3,750
Service weight	18,300	19,300	23,523
Height of seat	1,830	1,830	1,830
Length to forkface	4,830	4,830	5,555
Overall width	2,490	2,490	2,540
Turning radius	4,545	4,545	5,115

Standard Features and Optional Extras

Standard
Optional

SAFETY

Electric Parking Brake	Standard
Operator Sensing System (OSS)	Standard
Hill Start Assist (HSA)	Standard
Speed Limit	Standard
Rear view mirror (LH/RH)	Standard
Guardian Stability System (GSS)	Optional
Seat Belt Interlock	Optional
Safety light (always on or activated by gear)	Optional
4th lever interlock for attachment	Optional
Front camera, rear view camera	Optional
Weight indicator (hydraulic/load cell)	Optional
Auto tilt leveling	Optional
Rear object detection system with beep sound	Optional

ERGONOMICS

Full cabin	Standard
Suspension seat with arm rest	Standard
7" multi functional display (full color)	Standard
Telescopic steering column (with tilting)	Standard
Rear grab bar with horn	Standard
Power jack & USB port	Optional
Fingertip (3-way, 4-way, 5-way)	Optional
Heater & air conditioner	Optional
Audio (DAB type Radio, MP3)	Optional

* Remark : This list is based on factory data. Standard or optional can vary for specific countries.

PRODUCTIVITY

3-speed ZF transmission (Autoshift)	Standard
Closed Center Load Sensing (CCLS)	Standard
Auto Throttle up	Standard
Oil-cooled disc brakes	Standard
Multi torque mode (eco/STD)	Standard
Front and rear combination LED lights (with hazard switch)	Standard
Front 2 LED Light (on operator compartment)	Optional
Rear 2 LED Light (on operator compartment)	Optional
Additional 2 front LED lights (on mast)	Optional
Additional 1 Rear LED (on counterweight)	Optional
Strobe light (above/below)	Optional
Rotating strobe light (above, LED)	Optional




DURABILITY

Anti-moisture electric connectors	Standard
1/2" attachment hose	Standard
Under Protection (engine Guard)	Standard
Under protection (belly plate)	Optional
Mud guard (front/rear tires)	Optional

SERVICEABILITY

Junction box	Standard
Manual tilting	Standard
Automatic tilting	Standard
Battery disconnect switch	Optional
Hydraulic pressure check package	Optional
Tankless air compressor	Optional
Automatic reversible cooling fan	Optional



-  Production Subsidiary
-  Sales Subsidiary
-  Parts Depot Center

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