



7 Series Forklifts

Diesel 6.0 to 9.0 tonne capacity Euro Stage IV





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AUTHORISED DEALER

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Lifting Your Dreams

About Doosan

Values that drive our future growth

Trust in people is the foundation upon which Doosan has built its century of success

Over the past 100 years Doosan has always put people first, based on the management philosophy outlined by our first Chairman, Too Pyung Park, that "business is not meant to make profits, but to help people grow".

This philosophy continues to spur Doosan's corporate development, with global competitiveness originating from our most valuable resource—our people.

Doosan, Korea's oldest but fastest growing company

Established in 1896, Doosan is Korea's oldest company, but has grown at its most rapid pace in the last 10 years.

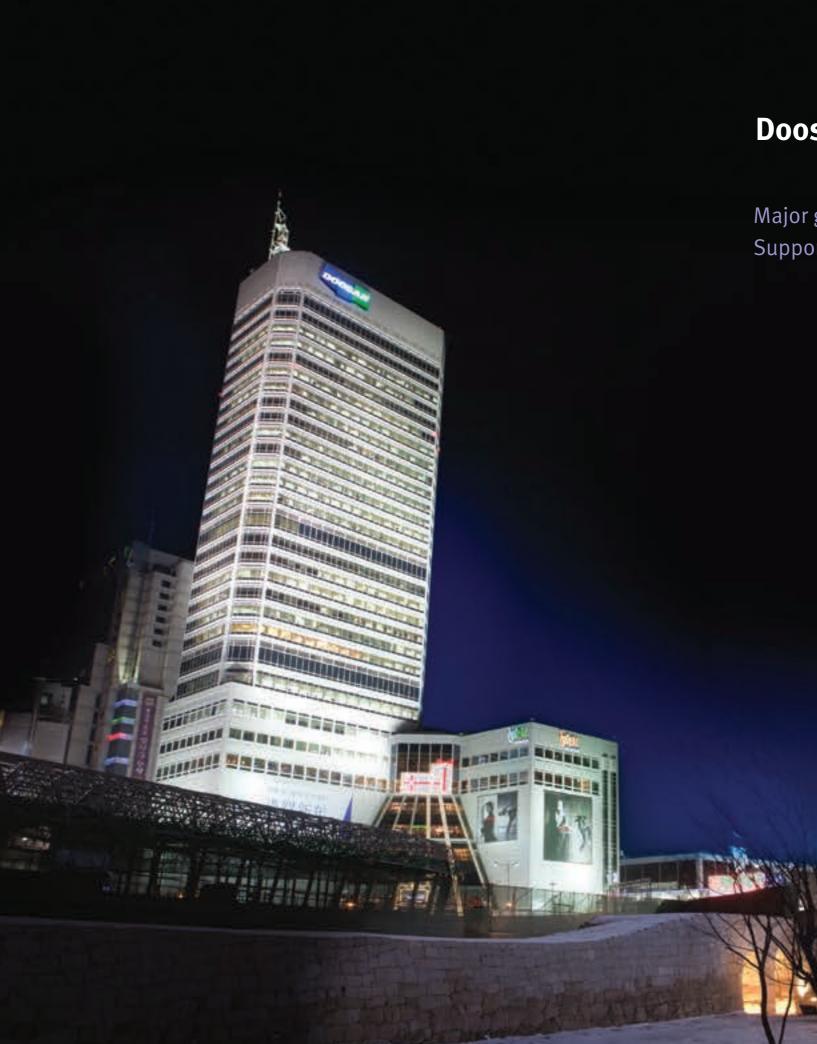
Doosan's global Infrastructure Support Business (ISB)

In the past 70% of our business was concentrated on consumer goods, but following reorganisation of our business portfolio in 1998 we have successfully transformed our business DNA to shift the primary focus of our business to infrastructure support.

This means that Doosan now creates more than 90% of its sales through its Infrastructure Support Business.

Doosan's growth as a global company

Doosan has become the global ISB leader based on its world-class products and services. It is a truly global company, with 50% of its employees based outside Korea, and overseas trade making up over 60% of its total sales.



Doosan Industrial Vehicle

Major global player in the Infrastructure Support Business with a proud heritage

With a proud history dating back to 1937, when we began as Chosun Machinery, Doosan Industrial Vehicle has grown into Korea's largest machinery manufacturer, playing a leading role in the development of the industry in Korea.

Today, we are a global enterprise, operating large-scale plants and sales subsidiaries both at home and overseas and maintaining an operational network that spans continents.

Committed to innovation

We are committed to the advancement of new technologies and the development of talented individuals, positioning us to respond effectively to the rapid changes taking place in the 21st century. Our mission is to strengthen our global position and become the industry leader well into the future.

Committed to our customers

We are committed to our customers, providing superior products and excellent service to go with them.

Our promise

Doosan Industrial Vehicle is the partner you can count on, always putting our commitment to you first.

Award-winning products

Doosan currently holds a number of export, design & safety awards, including five Forklift Truck Association Awards for Design Excellence.



7 Series highlights

- Doosan's innovative G2 diesel engines meet and exceed all Euro Stage IV emission regulations without the need for a Diesel Particulate Filter (DPF)
- No DPF means much lower cost of operation: better fuel economy, no need for regeneration every few hours, no cleaning or additional maintenance required
- Greatly improved fuel consumption compared with previous models and competitors
- Superb performance and high power output from Doosan's very latest in-house-developed diesel engine technology
- Increased uptime and reduced servicing costs thanks to extended service intervals and reduced maintenance requirements



The Doosan G2 engine: well proven and reliable

The powerful Doosan engine provides high-end torque at low engine rpm, and reduced fuel consumption. It also meets all Euro Stage IV regulations without the need for a Diesel Particulate Filter (DPF).

Doosan multi-engine performance mapping system

Doosan offers three engine maps: Standard, Eco and Drive. Eco mode limits engine performance but can reduce fuel consumption by approximately 5%. Drive mode increases maximum travel speed for higher productivity.

Proven load-sensing hydraulic system

All Doosan G2 models are equipped with a proven load-sensing hydraulic system which provides increased fuel efficiency and better overall performance.

Comfortable and convenient operator compartment

Designed to provide greater rigidity and comfort, the Zeus Cabin offers outstanding visibility, a clear dashboard and high quality interior, along with excellent heating and air conditioning.

Safety

The OSS (Operator Sensing System) makes a major contribution to safety. If the operator is not in the seat, the truck will not move, Lift and Lower functions are disabled and the Tilt function is locked. Additionally, a warning light illuminates if the seat belt isn't fastened, and an alarm will sound if the operator leaves the seat without applying the parking brake.

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6.0 to 9.0 tonne capacity



Meets emission regulations (Euro Stage IV) with SCR + DOC system

A significantly extended SCR cleaning interval (to 200 hours) means increased uptime and reduced servicing cost. Neither ash cleaning nor filter changing are required.



Greater durability and easier maintenance

Durability is assured with Doosan. We guarantee the highest quality of both engines and components as they are developed and built in house. Robust chassis design and heavy-duty build quality ensures Doosan's 7-series is tough enough for any application.

Three-speed fully automatic transmission in forward and reverse ensures the optimum gear is always selected, extending the life-time of the drive train. Combined with this proven transmission, Doosan's powerful D34 electronic-controlled engine delivers excellent fuel efficiency and is fully compliant with the latest Euro STAGE IV emissions regulations.

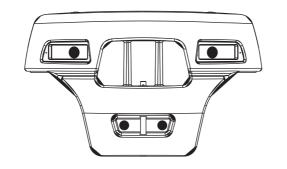
Doosan's unique, innovative Ultra-low Particulate Matter Combustion system helps reduce maintenance costs and maximise uptime:

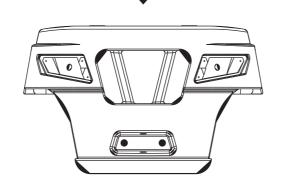
- no Diesel Particulate Filter so no DPF regeneration required
- no ash-cleaning or filter changing required
- extended 200-hour Selective Catalyst Reduction (SCR) cleaning interval

Finally, Doosan guarantees the best supply of spare parts at the most competitive prices

Counterweight

Increases radiator capacity by improving inside air flow. Reinforces the identity of Doosan's 7 Series IC truck using a dynamic concept design.







Oil-cooled disc brakes (ODB)

Oil cooled disc brakes are fitted as standard on all 7 Series trucks. This enclosed braking system eliminates outside contamination, significantly extending brake life and reducing maintenance costs.

The service interval on oil cooled disc brakes is five times longer than that of conventional shoe brakes, and they are virtually maintenance free.



Locking-type gas spring for hood

This improves the operator's safety and convenience.



Instrument panels

Engine coolant temperature, transmission oil temperature, speed meter, fuel level gauge and an hour meter keep the operator aware of the machine's operations. Engine oil pressure, alternator voltage, water separator gauge and pre-heater indicators illuminate to alert the operator to any problem.



Multi engine map

We provide three engine settings, Standard, Eco and Drive. Customers can choose their own setting to suit different applications. In Drive mode, maximum travel speed increases o.7mph.

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Easy to access

Wide hood opening range for enhanced access to the engine bay, and fuel filter ideally located for easier servicing.



New air cleaner

The increased capacity of the Dual Element Air Filters makes the new 7 Series more durable. The integrated Mass Air Flow (MAF) sensor provides precise monitoring and is easy to access.



High-powered, fuel-efficient performance

Powerful and delivering excellent fuel efficiency, Doosan's D34 electronic-controlled engine, combined with already proven transmission and oil-cooled disc brakes (ODB), provides excellent levels of productivity, durability and value for money.



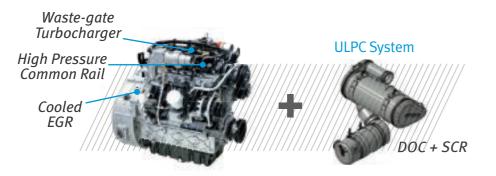




After Treatment System

- ULPC (Ultra Low PM Combustion) is Doosan's own system to optimise combustion characteristics. By enhancing piston bowl, injector and cylinder head swirl it uses as much air as possible to reduce particulate matter.
- SCR (Selective Catalytic Reduction) technology uses Diesel Exhaust Fluid (DEF) and a catalytic converter to significantly reduce NOx emissions.

Note: SCR cleaning process only required every 200 hours but is available at any time through manual switch operation.



Engine Performance

The new Doosan D34 3.4-litre diesel engine provides excellent performance, delivering high torque at low engine speed, reducing fuel consumption and meeting Euro Stage IV requirements

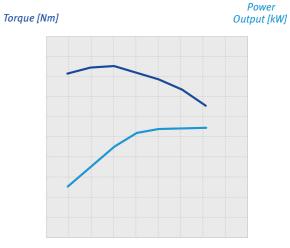
- D34 Stage IV electronic controlled engine
- 4 cylinders, 4 cycles, 3,409 cc
- High torque at low rpm: 375Nm @ 1,600 rpm

CC	3,4
Nm / rpm	375 /
kW / rpm	80.9 /
-	Doosan
-	6.0-9.0
Unit	Doo
	- - kW / rpm

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PERFORMANCE



Engine RPM

TIER4 STAGE4

005an 0.0 tonne n D34(G2) / 2,300 / 1,600 ,409

Driving down emissions, driving up productivity and cost effectiveness

Decreasing engine emissions is a vital objective for all vehicles, not only to comply with legislation but also to protect the environment for future generations.

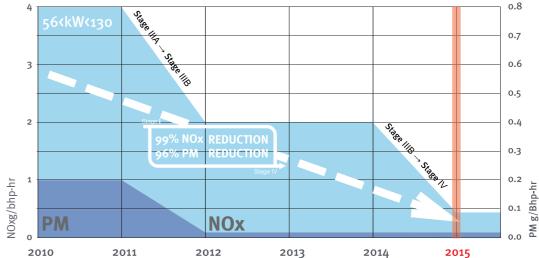
Doosan has met this challenge and set a new benchmark with its unique, highly-innovative Ultra Low Particulate-matter Combustion system (ULPC) using Selective Catalytic Reduction (SCR) and a Diesel Oxidation Catalyst (DOC) to dramatically decrease emissions and thereby comply with the latest regulations.

However, by avoiding a Diesel Particulate Filter (DPF) and providing a fully-extended SCR cleaning interval, Doosan's engines also achieve maximum up-time while minimising maintenance costs.

European emission standards

European emission standards define the acceptable limits for exhaust emissions of new vehicles sold in EU member states. The emission standards are defined in a series of European Union directives staging the progressive introduction of increasingly stringent standards, depending on engine power. Euro Stage IV refers to the European commission directive 98/69/EC (& 2002/80/EC) which requires the reduction of emissions, especially Particulate Matter (PM) and Nitrogen Oxides (NOx).





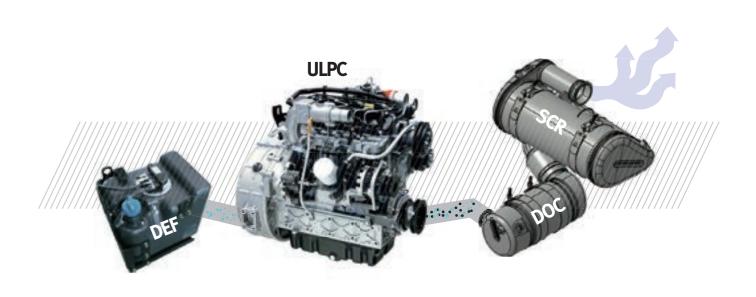
Diesel emission standards for non-road mobile machinery

Euro Stage IV emissions standards come into effect from 2015 onwards for all engines over 56kW. To meet the new regulations, PM and NOx should be reduced by 90% compared to the Euro Stage III A regulations.

Doosan's green technology meets Euro Stage IV emissions regulations

- Ultra Low PM Combustion (ULPC): reduces particulate matter (PM)
- Diesel Oxidation Catalysts (DOC): oxidises HC, CO, SOF and converts NO into NO2
- Selective Catalyst Reduction (SCR): reduces NOx
- Diesel Exhaust Fluid (DEF): reduces ammonia

Below 56kW : Combination of ULPC and DOC Above 56kW : Combination of ULPC, DOC, DEF and SCR



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PM Effects

- Adverse health effects in the form of respiratory issues
- Reduced visibility/smog in urban areas

NOx Effects

- Forms acid rain
- Contributes to global warming
- Hampers the growth of plants
- Produces ground-level smog

New Zeus Cabin: superior comfort and productivity

The new Zeus cabin, with ergonomic design features, provides superior



Ergonomic design

- All switches are located in the perfect position close at hand for the operator's convenience
- Extremely comfortable suspension seat with optional armrests
- Conveniently located hand brake



Spacious leg room and operator comfort

Neat and wide-open floorboard provides plenty of operator foot-room, making it easier to get in and out



Wide visibility

- Centre seat for best visibility
- Excellent all round vison



5" full colour LED display

DEF warning, DEF level gauge, DeSOx Request, DeSOx inhibit, Engine RPM and Engine Check indicators keep operators fully aware of truck's activity and maintenance status



Convenience package

- Deck-mounted control valve levers simplify hydraulic actuation • Convenience tray
- supplies organised and handy

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keeps paperwork and



Various options

- Heater
- Air Conditioner
- Panoramic Mirror
- CD or MP3 Player
- Rear View Camera
- Defrost Fan



Standard features and Option Availability

Proven Quality, Service and **A Reliable Partner**

You will receive the best after-sales service from your authorised local or national factory-trained dealer, backed by Doosan's own customer service centre.

And Doosan provides 100% parts inventory to ensure any downtime is minimised.

When you own a Doosan forklift, our high quality, responsive customer support team comes with it.

The Doosan network starts with your local dealer and ends with a national team of highly qualified and experienced personnel standing ready to support all your material handling needs.

	Safety	Standard	Option
	Direction Lever Function	0	
	Mast Lowering Interlock	\bigcirc	
_	Operation Sensing System	\bigcirc	
_	ELR Type Orange Seat Belt	\odot	
	Autoshift Controller	ullet	
	Combination Lamps (LED)		0
	Weight Scale		0
_	Tilt Anti-Surging		0
_	Emergency Switch	0	
_	Panoramic Rear View Mirror		0
	Rear View Camera		0
	Flashing Beacon	0	344
	Reverse Alarm	0	- Million - Mill
	Speed Limiter		0
	Productivity	Standard	Option
35	Electric Controlled TCI (Turbo Charged Intercooler) Doosan Engines		
	Pedal Location (Accelerator, Brake and Inching)		
	Inching Pedal		Harris and a second
	Rear Grab Bar (w/ Horn)		
	Heavy Duty Cooling	ALL ALL	
	Engine Block Heater	E MAR	
	Additional Thermostat for Transmission Oil		0
	Comfort	Standard	Option
	Adjustable Steering column		Sector States and
	Integrated Instrument Panel		1000
	Easy to Service		
	- Integrated Electric Components (Relays and Fuses)	KS DE L	
	- Tool-less Side Cover and Footplate		No.
	- Wide Hood Open Range		
	Full Zeus Cabin with Heater or Airconditioner		0
	Suspension Seat		
	Low Noise Level	0	The second value of the se
-	Adjustable Steering Column	0	
	Durability	Standard	Option
1	Electronic Control Units (ECU) Cover		
P	Waterproof connectors		
	Dual Element Air Cleaner		
	Rigid Driveaxle with Oil-Cooled Disc Brakes		
	Radiator Screen		
- 18	Pre-Cleaner		
	Environment	Standard	Option
	Environment Emission Regulation Euro Stage IV		
	Ultra Low PM combustion system (ULPC) with DOC & SCR		
	ISO 9001 / ISO 14001		
	3 Operating Modes: STD, ECO & Drive		Option
	Homologation	Standard	Option
_	UL CE		

* Other options are also available. Please ask your local Doosan representative for more details.