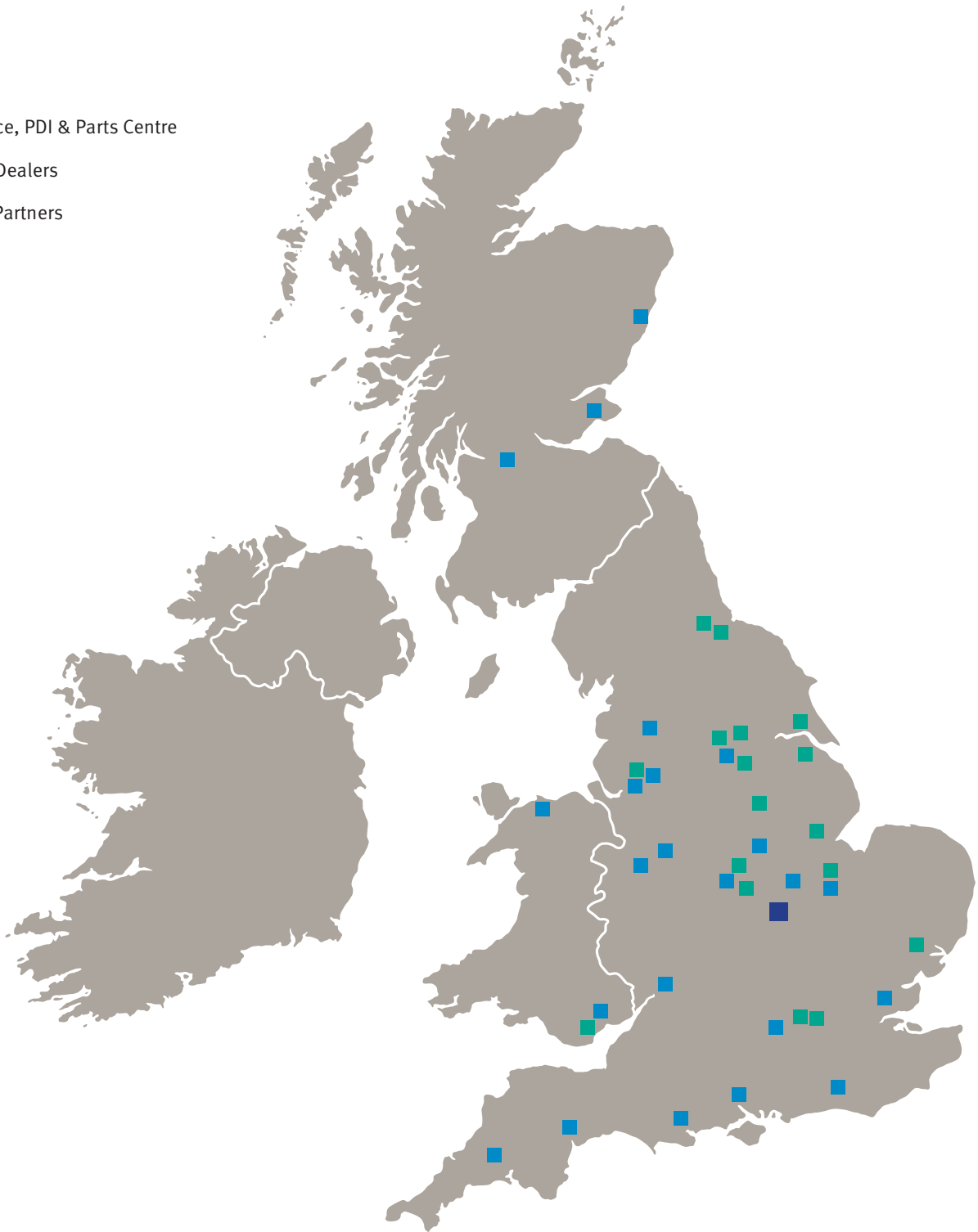


- Head Office, PDI & Parts Centre
- Regional Dealers
- National Partners



**Doosan Industrial Vehicle UK Ltd**  
 12 Kilvey Road  
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 NN4 7BQ  
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DIVUK\_D160\_May\_2015

AUTHORISED DEALER



[www.doosanforklifts.co.uk](http://www.doosanforklifts.co.uk)

## 7 Series Forklifts

Diesel 10.0 to 16.0 tonne capacity

Euro Stage IV



*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.

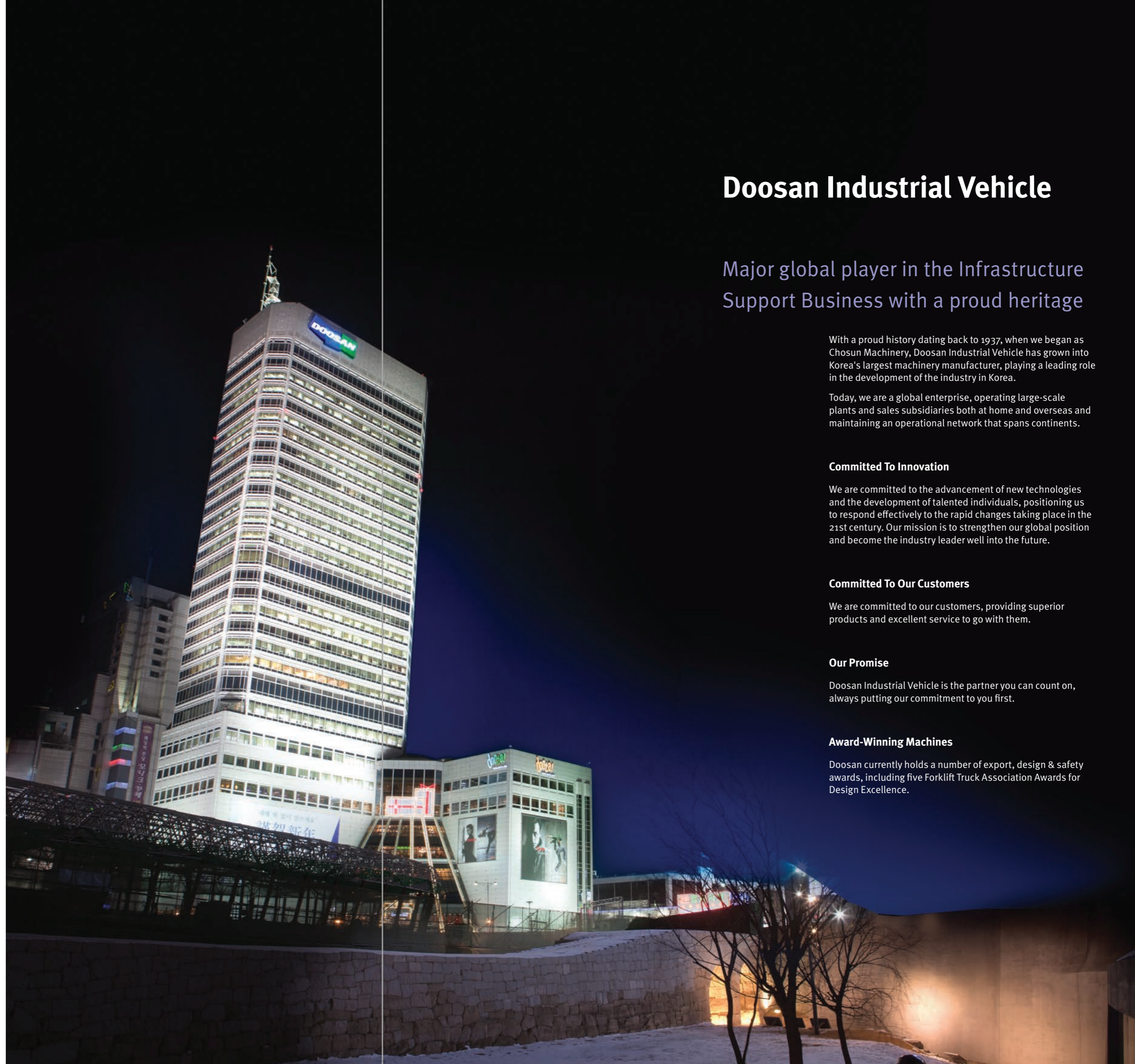
#### **Doosan’s global Infrastructure Support Business (ISB)**

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 Machines**

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

## 7 Series Highlights

- Meets and exceeds all Euro Stage IV emission regulations through Diesel Oxidation Catalyst (DOC) and Selective Catalytic Reduction (SCR).
- Superb performance and high power output from the new generation of Doosan's own diesel engines.
- Strong, rigid chassis frame, together with 'more metal than plastic' design, ensures Doosan's 7 Series is the best choice for all applications.
- New Zeus Cabin provides wide front view and excellent operator comfort.
- Reduced maintenance: extended SCR cleaning intervals mean increased uptime and reduced servicing costs.
- Like all Doosan products the 7 Series includes rugged reliability as standard.



### Proven and reliable Doosan DLo6P engines

Powerful Doosan engines provide high-end torque at low RPM with reduced fuel consumption. They conform to all Euro Stage IV regulations, without employing a Diesel Particulate Filter (DPF).

### Improved productivity

Enhanced by excellent synchronisation between drive train and hydraulic system, Doosan's new-generation engines deliver much higher drawbar pull and gradeability than previous models.

### Proven load-sensing hydraulic system

All Doosan 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.

### 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

Doosan's powerful DLo6P electronic-controlled engine, combined with an already proven transmission, delivers excellent fuel efficiency.

The unique and innovative Ultra-low Particulate Matter Combustion system, using Diesel Oxidation Catalyst (DOC) and Selective Catalyst Reduction (SCR), ensures compliance with all current emissions regulations.

No Diesel Particulate Filter equals maximum up-time, no DPF regeneration, no cleaning or changing and, therefore, no additional maintenance costs. An extended SCR cleaning interval provides increased uptime and also helps reduce servicing costs.

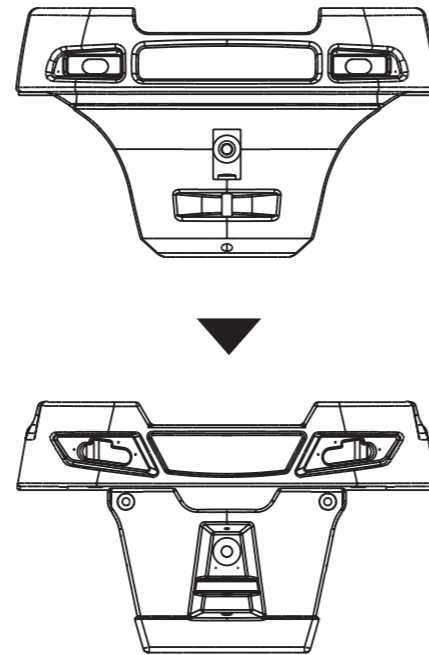
Doosan guarantees the highest quality of both engines and components as they are developed and built in house. We guarantee the best supply of spare parts at the most competitive prices.

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, thus extending the life-time of the drive train.

### 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.



### Hydraulic, motor-driven, remote-type cooling fan

A large capacity cooling fan, driven by a remote hydraulic motor, effectively manages operating temperatures to minimise engine wear and maximise engine efficiency. Fan speed changes according to acceleration for maximum cooling capacity and minimum energy loss.



### 7 Series Forklifts

10.0 to 16.0 tonne capacity



### Instrument panel

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.



### Rugged front-end design

Rugged front-end design and heavy duty build quality ensure these trucks are tough enough for any application.

- J-Hook mounting: Stronger, and makes it easier to remove mast for servicing.
- Six roller carriage: Superior strength and durability for wider and longer loads
- Nested rails: Reduced width providing better visibility, silent staging, and greater strength



### Excellent service access

The Electronic Tilting Cabin with safety-bar locking system provides maximum safety with the easiest access for in-depth maintenance, while the wide-opening hoods give excellent access for routine maintenance checks and oil level top-ups.

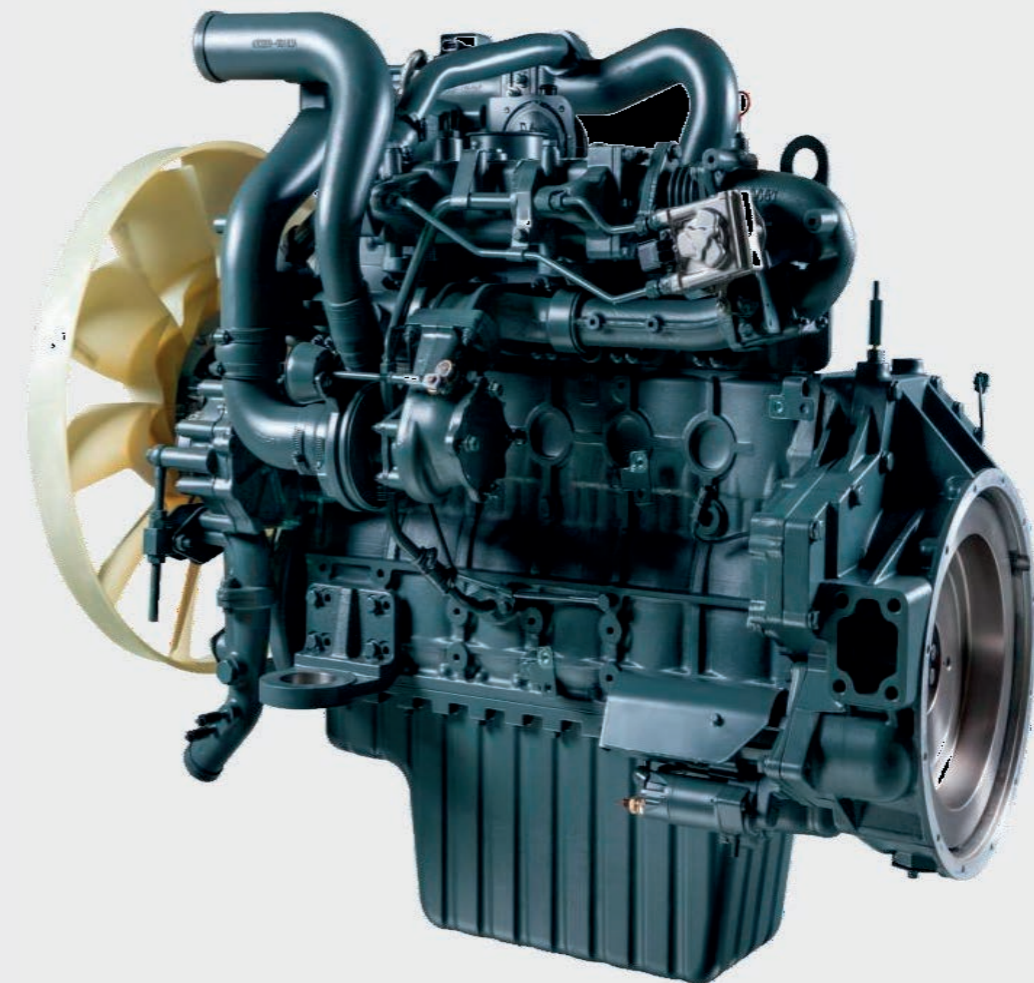


### New air cleaner

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

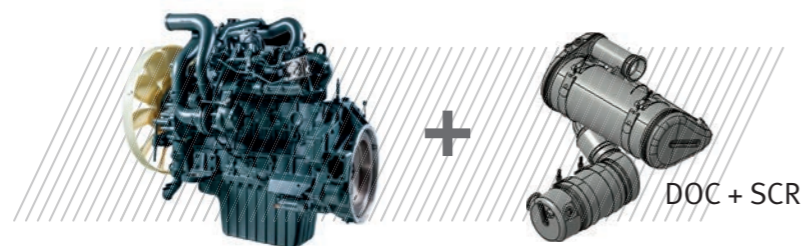
Powerful and delivering excellent fuel efficiency, Doosan's DLo6P electronic-controlled engine, combined with already proven ZF 3-speed automatic transmission and oil-cooled disc brakes (ODB), provides excellent levels of productivity, durability and value for money.



### After Treatment System

- Excellent performance, low fuel consumption and full compliance with Euro Stage IV emission regulations.
- Exhaust emissions reduced to lowest-ever levels through combination of highly-efficient Exhaust Gas Reduction (EGR) system, Diesel Oxidation Catalyst (DOC) and Selective Catalyst Reduction (SCR).
- SCR 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

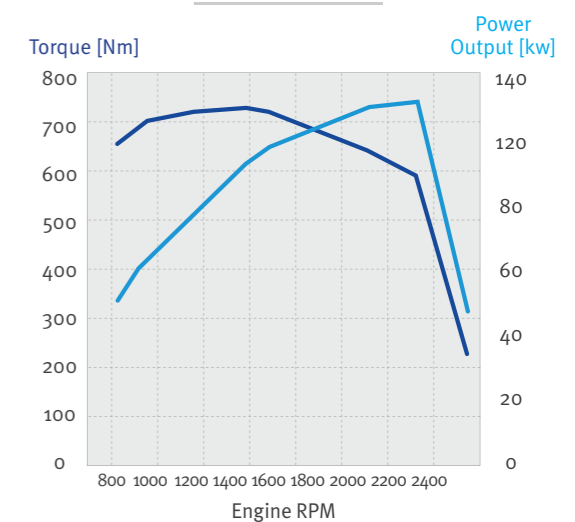
The new Doosan DLo6P 5.9 litre diesel engine provides excellent performance. The powerful Doosan engine provides high torque at low rpm or at low engine speed, reduces fuel consumption, and meets Euro Stage IV requirements.

- DLo6P Stage IV electronic controlled engine
- 6 cylinders, 4 cycles, 5,890 cc
- High torque at low rpm: 725.7 Nm @ 1,400rpm



Category	Unit	Doosan
Model	-	D160S-7
Engine	-	DLo6P
Rated output	PS (kW) / rpm	175 (128.7) / 2,100
Max. torque	Nm / rpm	725.7 / 1,400
Displacement	cc	5,890

### PERFORMANCE



# Doosan engine innovation delivers clean, compliant and cost-effective performance

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 the 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

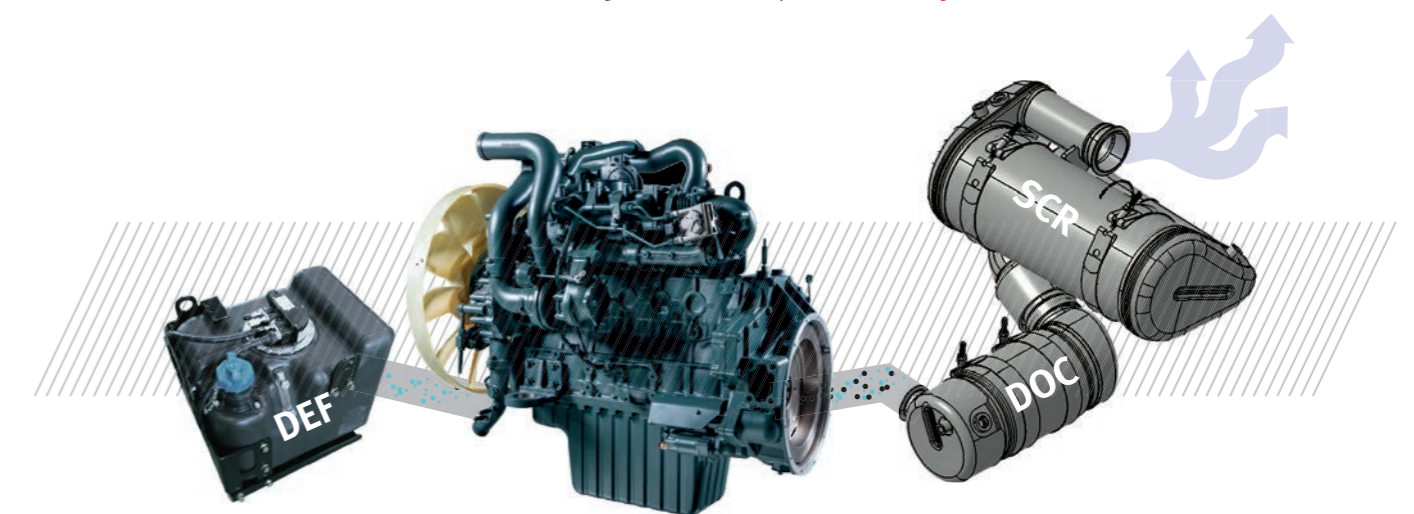
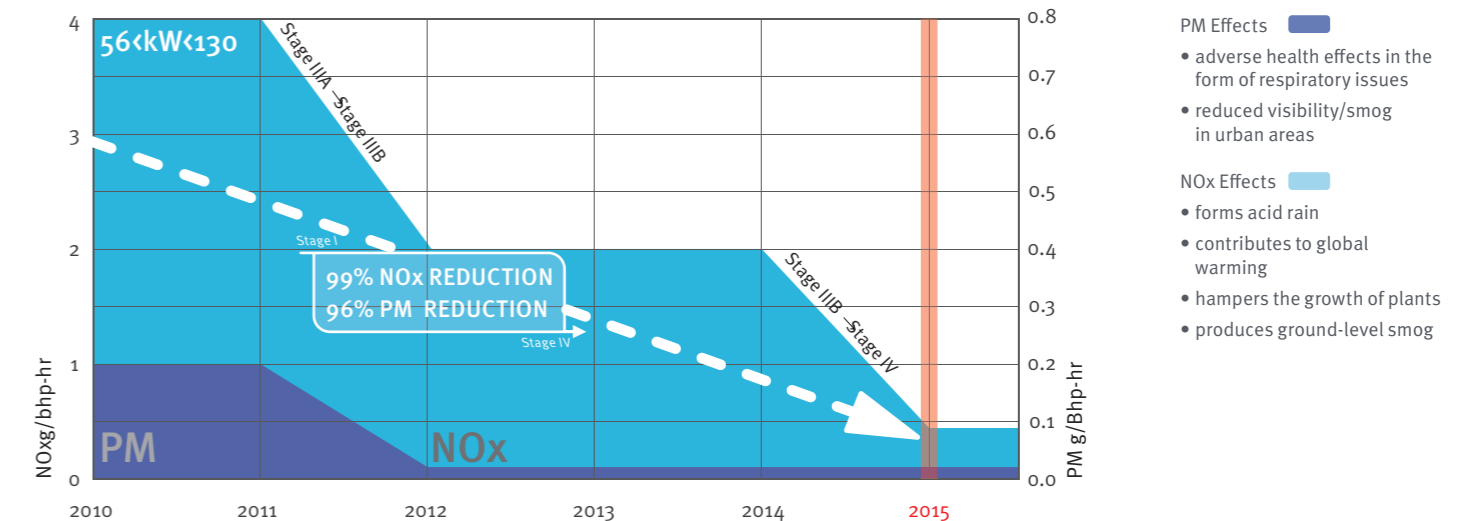
Euro Stage IV emissions standards come into effect from 2015 onwards for all engines over 56kW. To meet the new regulations, PM and NOx should be reduced by 90% compared to the EU Stage III A regulations.

## Doosan's green technology meets Euro Stage IV emissions regulations

- Ultra Low PM Combustion (ULPC): reduces particulate matter (PM)
- Diesel Oxidation Catalyst (DOC): oxidises HC, CO, SOF and converts NO into NO<sub>2</sub>
- Selective Catalyst Reduction (SCR): reduces NOx
- Diesel Exhaust Fluid (DEF): reduces ammonia

## 7 Series Forklifts

10.0 to 16.0 tonne capacity



## New Zeus cabin: superior comfort and productivity

The new Zeus cabin, with ergonomic design features, provides greater operator comfort, which in turn supports improved productivity. Doosan guarantees the highest quality of its cabins and components.



### 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.
- Low noise level and low vibration level.
- Generous adjustments help all operators achieve the most comfortable driving position.

### Wide visibility

- Centre seat for best visibility
- Excellent all round vision



### 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 keeps paperwork and supplies organised and handy



### Other features

- Heaters and windscreen demisters
- Heated leather seat
- Air conditioning
- Panoramic mirror
- CD stereo
- Rear view camera
- LED lights
- Air compressor
- Integral side-shifter
- Integral fork positioner
- Excellent forward and back tilt



## 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.



## Standard features and option availability

Safety	Option	Option
Direction Lever Function	<input type="radio"/>	
Operation Sensing System	<input type="radio"/>	
Anti Cinching Type Orange Seat Belt	<input type="radio"/>	
Autoshift Controller	<input type="radio"/>	
Emergency Switch	<input type="radio"/>	
Panoramic Rear View Mirror	<input type="radio"/>	
Combination Lamps	<input type="radio"/>	
Back-up buzzer	<input type="radio"/>	
Weight Scale	<input type="radio"/>	
Siren and Microphone		<input type="radio"/>
Rear View Camera		<input type="radio"/>
Rear View Camera (with Tyre Steer Angle)		<input type="radio"/>
Strobe Light (Amber)	<input type="radio"/>	
Speed Limiter		<input type="radio"/>
Productivity	Standard	Option
Electric Controlled TCI (Turbo Charged Intercooler) Doosan Engines	<input type="radio"/>	
Pedal Location (Accelerator, Brake and Inching)	<input type="radio"/>	
All-in-one Electronic Brake and Inching Pedal	<input type="radio"/>	
Rear Grab Handle with Horn	<input type="radio"/>	
Additional 2 Front Lights on Mast		<input type="radio"/>
Additional 1 Rear Light on Counterweight		<input type="radio"/>
Engine Block Heater		<input type="radio"/>
Comfort	Standard	Option
Telescopic Steering Column	<input type="radio"/>	
Integrated Instrument Panel		<input type="radio"/>
Heated Suspension Seat	<input type="radio"/>	
Steering Knob	<input type="radio"/>	
Easy to Service		<input type="radio"/>
- Integrated Electric Components (Relays and Fuses)		<input type="radio"/>
- Automatic Tilttable OPC		<input type="radio"/>
- Wide Hood Open Range		<input type="radio"/>
Full Cabin (Zeus)	<input type="radio"/>	
- Wide Front and Rear View	<input type="radio"/>	
- Low Noise & Low Vibration Level	<input type="radio"/>	
- Automatic Tilttable	<input type="radio"/>	
- Front, Rear & Top Wiper	<input type="radio"/>	
- Heater	<input type="radio"/>	
- Air Conditioner		<input type="radio"/>
- CD & MP3 Player	<input type="radio"/>	
- Sun Visor	<input type="radio"/>	
Air Compressor		<input type="radio"/>
Durability	Standard	Option
Use Waterproof Connectors	<input type="radio"/>	
Dual Element Air Cleaner	<input type="radio"/>	
Pre-Cleaner	<input type="radio"/>	
Rigid Driveaxle (with ODB)	<input type="radio"/>	
Full Autoshift Transmission	<input type="radio"/>	
Environment	Standard	Option
Emission Regulation (Euro Stage IV)	<input type="radio"/>	
ISO 9001 / ISO 14001	<input type="radio"/>	
Homologation	Standard	Option
UL		<input type="radio"/>
CE		<input type="radio"/>

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