



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

## 7-Series Forklifts

Electric 2.2 to 3.5 tonne capacity



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 for the past 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 of Korea, and overseas trade making up over 60% of the 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 services 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.

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# LEADING THE WAY

## World class new 7 Series electric forklift trucks from Doosan

The new 7 Series four wheel electric counter-balance forklift trucks continue to follow the core Doosan tradition of delivering simple, powerful performance whilst delivering maximum value for our customers.



The ergonomically designed operator compartment keeps the operator in complete control at all times, improving productivity while reducing stress and fatigue. The new operator compartment provides optimal visibility and the latest approach in ergonomic hydraulic controls. Thanks to an improved durable design and an additional stability system, Doosan's new 7 Series electric trucks exceed the highest standards for safe operation.

Extended maintenance intervals and advanced technology components reduce the overall maintenance costs. The latest AC control system provides an unbeatable combination of power, performance and reliability. Each parameter is fully adjustable, to perfectly match every customer's individual requirement, providing maximum control and accuracy for every function.

Doosan's highly efficient worldwide service network helps you to maximise uptime, whilst minimising operational costs.



**Productivity**

- High levels of efficiency and productivity.
- Comfortable manoeuvring, even in narrow aisles, thanks to the optimised turning radius.



**Reliability**

- Waterproof and dustproof.
- Perfectly suited for outdoor use: new sealed IP65 rated controllers and enclosed motors.



**Ergonomics**

- Easy to control: fingertip system or levers with integrated F/R switch.
- Ergonomic interior design for optimal working conditions.



**Safety**

- Perfect 360° visibility.
- Quick access to safety features.
- Optimal safety to protect the operator, the load and nearby people.

# OUTSTANDING PRODUCTIVITY

## INDUSTRY LEADING PERFORMANCE

Using the latest technology in AC systems, the Doosan's 7 Series delivers high performance for driving, lifting & lowering functions, offering the highest level of efficiency and productivity. The IP43 rated enclosed motors avoids dust and debris from entering the motor, maximizing the machine's uptime.

Whenever the operator leaves the seat, the truck's electro-magnetic parking brake is automatically applied with an unlimited ramp-hold function. Performance settings on the LCD display enable operators to optimise the machine's performance for their specific application. The rounded counterweight and optimised 93° steering angle ensures optimal productivity, even in narrow aisles.



Stable, intelligent and easily serviceable controller



Simple, powerful enclosed drive & pump motor



Specially designed Electro-magnetic auto parking brake



Easy to read instrument panel, which enables diagnosis and adjusting performance settings.



Reduces damage, thanks to the rounded counterweight.



Optimised steering angle to minimize the turning radius



# SUPERIOR RELIABILITY

## POWERFUL AND RELIABLE

Virtually maintenance-free, oil-cooled disc brakes (ODB) are standard on all 7 Series forklifts. The enclosed brake system eliminates outside contamination, significantly extending the brake life by up to 5 times compared to conventional shoe brakes.

The Doosan 7 Series electric forklifts are rated waterproof and safe for outdoor use. The new sealed controllers are rated to IP65 and the enclosed motors are rated to IP43. All related wiring and connectors have been silicon sealed. This means that they are fully protected against dust, debris and liquid, making them perfectly suitable for outdoor operations.



Virtually maintenance-free  
Oil-Cooled Disc Brakes



**WATERPROOF**

Waterproof and safe for outdoor use



**DUSTPROOF**

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# SUPERB ERGONOMICS

## ERGONOMIC INTERIOR DESIGN

Operators perform best when working conditions are perfect and the Doosan 7 Series has been designed to make this a reality.



### Convenience box

The specially designed convenience box uses combinations of new and old favorites providing great added value, e.g. large cup holder, USB port, 12V cigar jack and clip board holder.



### Tiltable steering column

The steering column and full suspension comfort seat, armrest and optional headrest are all fully adjustable to accommodate every operator's individual preferences.

## EASE OF ACCESS ENSURES MAXIMUM COMFORT

Many operators need to get on and off the truck regularly, therefore we have designed a number of features to make this easier and safer than ever before.



### Large entry step plate

Large entry plates prevent any issues when mounting the forklift in safety boots. The anti-slip pattern ensures good shoe grip, even in snowy and rainy weather conditions.



### Easy grip handle

Mounting becomes easier and safer with the easy grip handle.



EASY TO OPERATE



**Fingertip controls**

Optimal ergonomics provides perfect performance. Fast, precise and infinitely adjustable fingertip controls makes operating effortless and most efficient.



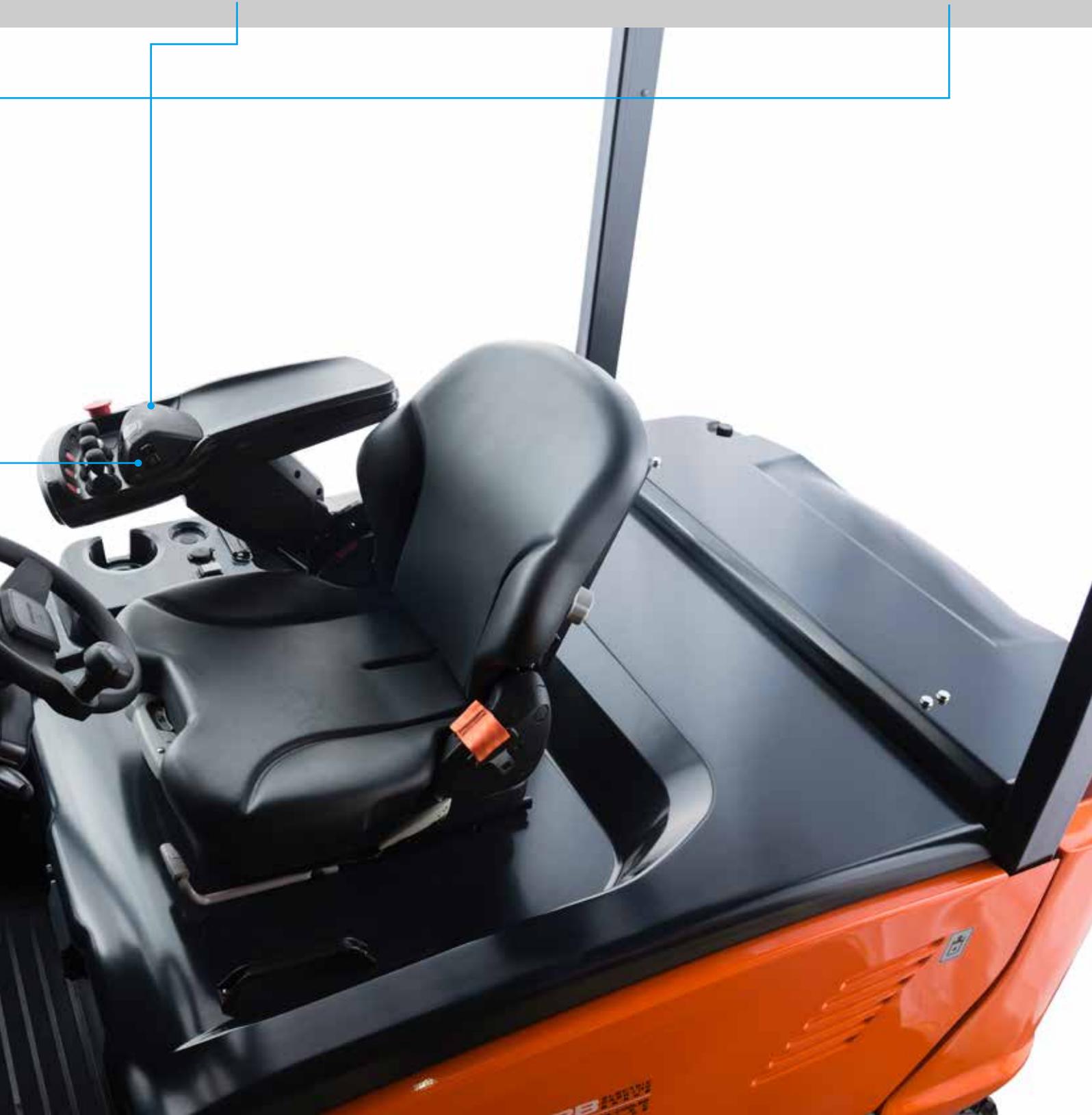
**Hydraulic levers (optional)**

The direction switch is integrated into the hydraulic lever, meaning quick directional changes, without the need to remove your hand from the levers.



**Small steering wheel**

The ergonomic small steering wheel (ø 280 mm) enhances operating comfort and productivity, whilst increases the available leg room in the operator compartment.



# MAXIMUM SAFETY AND VISIBILITY IN OPERATION

Like all Doosan equipment, Doosan 7 Series electric trucks are specially designed to guarantee safety & visibility.



#### High-visibility design

The mast and overhead guard have been developed to provide optimal forward and upward visibility for the operator.



#### Rear grab bar with horn

Enhances safety, comfort and convenience when reversing.



#### Large panoramic mirror

Provides the operator with a clear view of the rear working area, improving working safety & efficiency.



#### Anti-slip step plate

The anti-slip pattern step plate increases safety when mounting the truck during snowy or rainy weather conditions.



#### LED Lights

Brighter and longer-lasting than traditional sealed beams or halogen lights.



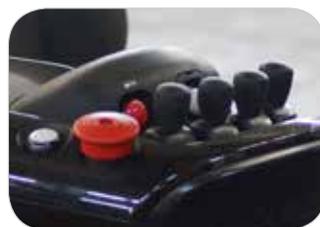
#### Emergency stop switch

An emergency stop switch sits right alongside the fingertip control, easy to reach for an immediate response.



#### Electromagnetic automatic parking brake

The electromagnetic parking brake replaces the traditional mechanical system, providing a much more reliable and therefore safer solution.



#### Integrated horn button in fingertip controls

Every second counts in averting a collision. With a horn button integral to the fingertip control module, operators can immediately alert others of their presence without even lifting their hands.



#### Orange seat belt

The highly visible orange seat belt makes it easy to check that the operators have fastened their seat belts.

The optional interlock system disables all truck operations unless the seat belt has been fastened correctly.



#### Other safety features

Flashing beacons and audible reverse alarms are also fitted as standard, with blue spot lights and white noise alarms available as options.

Lack of visibility is an important factor in forklift truck-related accidents and often reduces the productivity of operations.

Doosan's 7 Series trucks incorporate numerous design features that improve visibility for the operator. The precisely tailored overhead guard profile, with angled roof bars, provides a clear view upwards whilst ensuring ultimate strength for safety. At the same time, neatly arranged hydraulic hoses and chains provide clear forward visibility.

The rear view or panoramic mirrors offer additional safety to avoid accidents and unnecessary damage to the truck, products or racking.

LED or halogen working lamps and combination lamps optimize the operator's visibility, to avoid accidents or damage. Plus, by making the truck more visible to others, safety is further enhanced.

Finally, the electro-magnetic auto parking brake ensures maximum reliability, especially when the operator leaves the truck while positioned on a slope.

Doosan's Fork Lift Truck Association award-winning rear grab handle with horn makes reversing more comfortable and safe. The easy grip handle provides a comfortable hand rest, and one much safer than the overheard guard, around which fingers and hands can easily be injured. The integrated horn button means that operators do not need to reach around to push the horn on the steering wheel, but instead can continue looking in the direction of travel and press the horn without glancing away. The operator can mount and dismount from the truck safely thanks to its large anti-slip step plate.

Crucially, 7 Series trucks enable the fastest possible safety reactions in unexpected situations, thanks to an emergency stop switch or horn button fully integrated with the new fingertip control panel... operators can respond instantly without even lifting their hands.



# EXCELLENT STABILITY

The Guardian Stability System (GSS) dynamically protects the operator and the load to avoid accidents. It meets and exceeds all current and emerging regulations for operator safety & stability in every application.

## Unlimited ramp hold

Electro-magnetic Auto Parking Brake (EPB) prevents the forklift from rolling back at a stop on an upslope. The operator can dismount from the truck easily without any braking on slope.



## Low battery alarm

If the battery level is too low, the operator experience a sudden halt. To prevent this, the low battery alarm alerts the operator when the battery charge is almost expended, and lifting speed is reduced to conserve power.

## Automatic speed control

The angle sensing information controls the travel speed when turning sharply. It automatically reduces the travel speed to the optimal speed when cornering, reducing the risk for accidents or damage.

## Mast lowering inter-lock & tilt lock (ISO3691)

The hydraulic locking system prevents uncommanded lowering and tilting. It safeguards the work place area, the truck and the load even if the operator leaves the truck unattended.

## Turtle mode

By pushing the slow travel speed button when the truck operates in a warehouse, the truck will slow down to a predefined travel speed, without any changes to lifting speed. This mode ensures safe manoeuvring in delicate operating situations.

## Neutral position to start

If the direction switch is in forward or backward position when the operator turns on the truck, start-up will be interrupted automatically. After returning the direction switch to the neutral position, the truck will start. This feature prevents accidents when starting the truck without checking the direction switch first.

## Brake oil level indicator

When the brake oil level drops below the accepted minimum, oil level indicator in the instrumental panel will alert the operator to replenish the reservoir.

## OSS (Operator Sensing System)

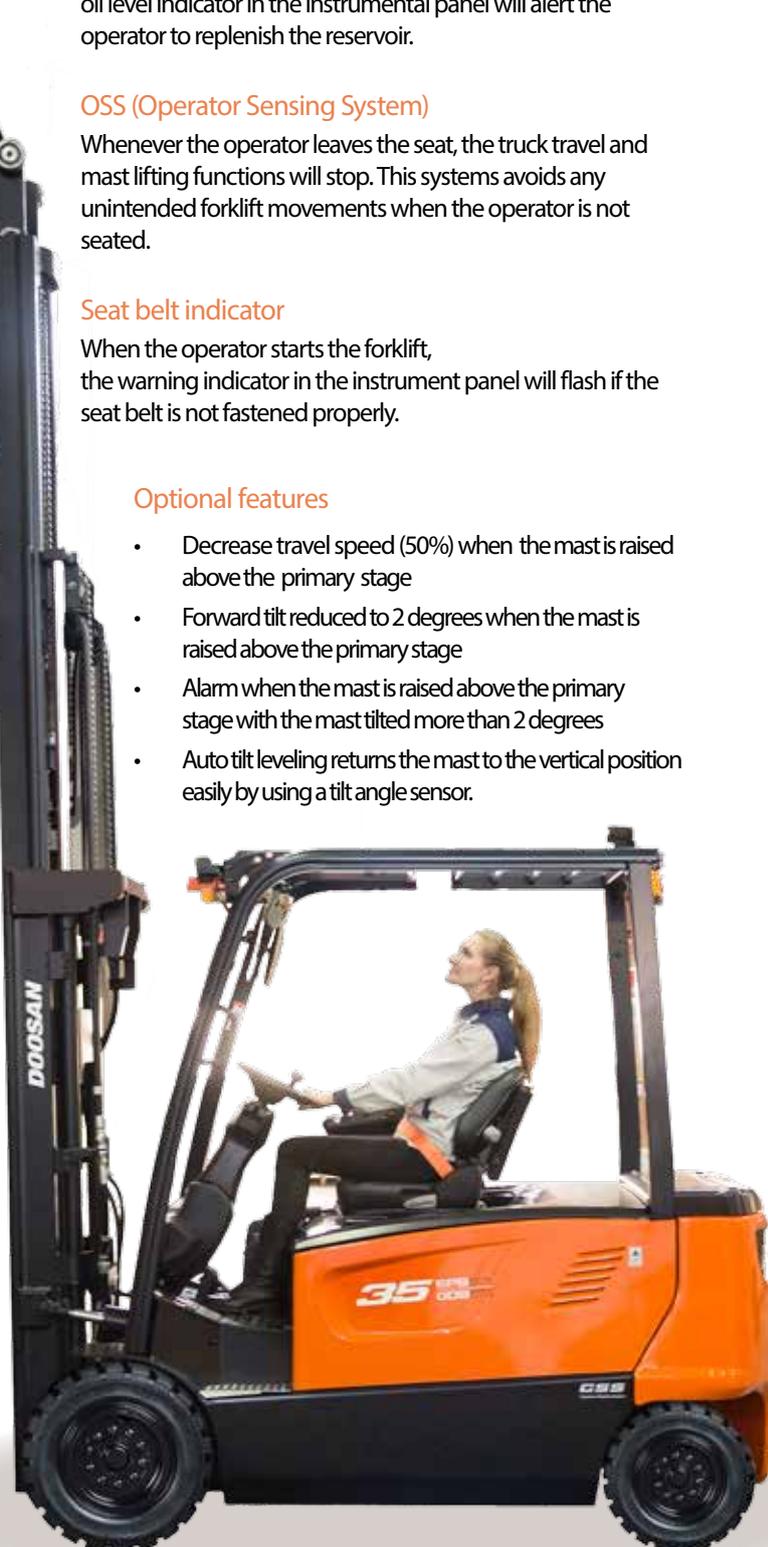
Whenever the operator leaves the seat, the truck travel and mast lifting functions will stop. This systems avoids any unintended forklift movements when the operator is not seated.

## Seat belt indicator

When the operator starts the forklift, the warning indicator in the instrument panel will flash if the seat belt is not fastened properly.

## Optional features

- Decrease travel speed (50%) when the mast is raised above the primary stage
- Forward tilt reduced to 2 degrees when the mast is raised above the primary stage
- Alarm when the mast is raised above the primary stage with the mast tilted more than 2 degrees
- Auto tilt leveling returns the mast to the vertical position easily by using a tilt angle sensor.



# OPTIMAL SERVICEABILITY

The controller, motors and other electric components are not only protected against dirt, dust and moisture, but are also positioned for easy servicing. All components have been designed to meet the goal of our "easy to service" concept.

## Worldwide service network

Doosan provides high-quality support, relying on its extensive dealer network. No matter where you are located, highly-skilled professionals are always ready to help you, guaranteeing maximum uptime.



## LCD display

The large colour LCD display keeps the operator informed about the condition of the truck. Upcoming service intervals will be indicated on the display.

## Tool-less removable side panel

The side panel can be removed without the need of any tool, (not even a screwdriver) saving valuable time for the operator or service technician. Thanks to the wide open hood angle, components are easily accessible for servicing.



## Easy to access Controller Room

No need to open the hood to access the controller to change settings or connecting the diagnostics tool.

## Doosan genuine parts

Our fully stocked Northampton based parts centre supplies high quality Doosan parts throughout the UK; backed by over 700 fully equipped and factory trained mobile engineers.



## Diagnostics tool

Thanks to the Kvaser CAN connector, the performance settings can be quickly and easily fine tuned. EasyViewer software, permits maximum control over truck settings.





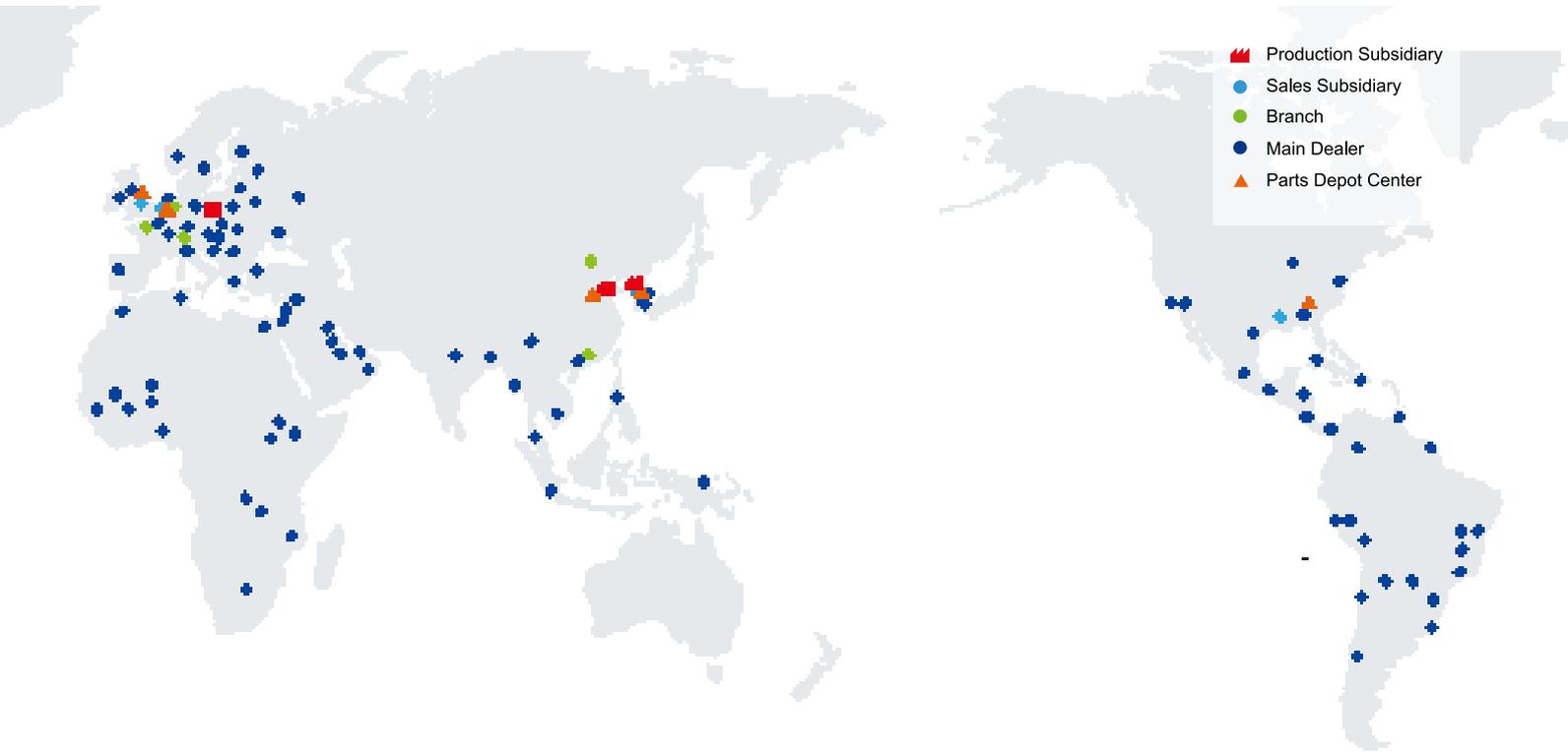
Major Specifications		B22X-7	B25X-7	B25XL-7	B30X-7	B35X-7
Capacity	kg	2200	2500	2500	3000	3500
Load Centre	mm	500				
Wheel Base	mm	1589	1589	1734	1734	1750
Turning Radius	mm	1950	1950	2095	2095	2155
Load Moment Centre	mm	448	448	448	454	454
Travel speed (loaded/unloaded)	km/h	16 / 18	16 / 18	16 / 18	16 / 18	16 / 18
Lift speed (loaded/unloaded)	mm/s	500 / 600	480 / 600	480 / 600	420 / 600	380 / 600
Lowering speed (loaded/unloaded)	mm/s	490 / 460	490 / 460	490 / 460	490 / 460	500 / 460
Max. Gradeability (at 1.6km/h, loaded)	%	27	25	25	22	20
Max. Drawbar Pull (loaded)	Kgf	1768	1768	1768	1768	1768
Right Angle Stacking Aisle; 1000 x 1200	mm	3620	3620	3766	3772	3832
Right Angle Stacking Aisle Width; 800 x 1200	mm	3799	3799	3944	3950	4010
Steering Angle	deg.	93	93	93	93	93

## Standard Features and Optional Extras

2.2 to 3.5 Ton Series

	STANDARD	OPTION
<b>SAFETY &amp; STABILITY</b>		
Guardian Stability System (GSS)	○	
- OSS (Operator Sensing System)	○	
- Neutral position for start	○	
- Unlimited ramp hold	○	
- Low battery warning alarm	○	
- Brake oil & seat belt indicator	○	
- (ISO 3691) Mast lowering inter-lock & tilt lock	○	
Emergency stop switch	○	
Rear grab handle with horn switch	○	
Auto tilt leveling		○
Additional options for the Guardian Stability System (GSS)		○
- Decrease of travel speed (Up to 50%) when mast raised above primary stage		
- Forward tilt reduced 2 degree when mast raised above primary stage		
- Alarm when mast raised above primary stage with mast tilted more than 2 degrees		
<b>PRODUCTIVITY</b>		
Full AC system chassis	○	
Rounded design counterweight	○	
IP65 rated Curtis controller	○	
IP43 rated PAL enclosed type motors	○	
93° Steering angle	○	
Electro-magnetic automatic parking brake (EPB)	○	
Hydraulic cushioned valve in secondary cylinder (FFL & FFT)	○	
Lateral Battery lift-in/out system		○
Cooling options : fans & fin type controller		○
Application packages : cold & freezer, beverage, fishery		○
<b>OPERATOR COMFORT (ERGONOMICS)</b>		
Entry grip entry bar & large entry step with anti-slip pattern	○	
Large & angled floor plate (leg room) with rubber cushion	○	
Rounded design battery hood cover	○	
Easy to read instrument panel	○	
Adjustable tilt steering column & easy grip (Φ280 size) steering wheel	○	
Hydraulic control lever with direction switch	○	
Large cup holder, USB port & 12V electric jack, clip board	○	
New fingertip control	○	
Steering wheel with knob	○	
Premium seats : grammer MSG65 series	○	
Rear view mirrors	○	
LED lights	○	
Special height overhead guards		○
Mono pedals		○
Modular cabins		○
<b>DURABILITY &amp; SERVICEABILITY</b>		
Robust frame structure & strong structure overhead guard	○	
Easy to access controller & motors room	○	
Wide open battery hood cover	○	
Tool-less side cover with air ventilation	○	
Oil-cooled disc brakes (ODB)	○	
Durable heat-resisting(38"SQ)cables	○	
Easy diagnostic & fine-tune	○	

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



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AUTHORISED DEALER