

7-Series Forklifts

Electric 2.2 to 3.5 ton capacity



Lifting Your Dreams

About Doosan

Values that drive our future growth

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

Doosan has always put 'People' first for the past 100 years, based on our management philosophies. 'Business is not meant to make profits, but to help people grow.' (Late Too Pyung Park, First Chairman), and continues to spur corporate development with global competitiveness originated from human resources.

Doosan the oldest, but fastest growing company

Doosan has recorded the longest business history since its inauguration in 1896, but has grown at its most rapid pace for the past 10 years.

Doosan-the global Infrastructure Support Business (ISB) company

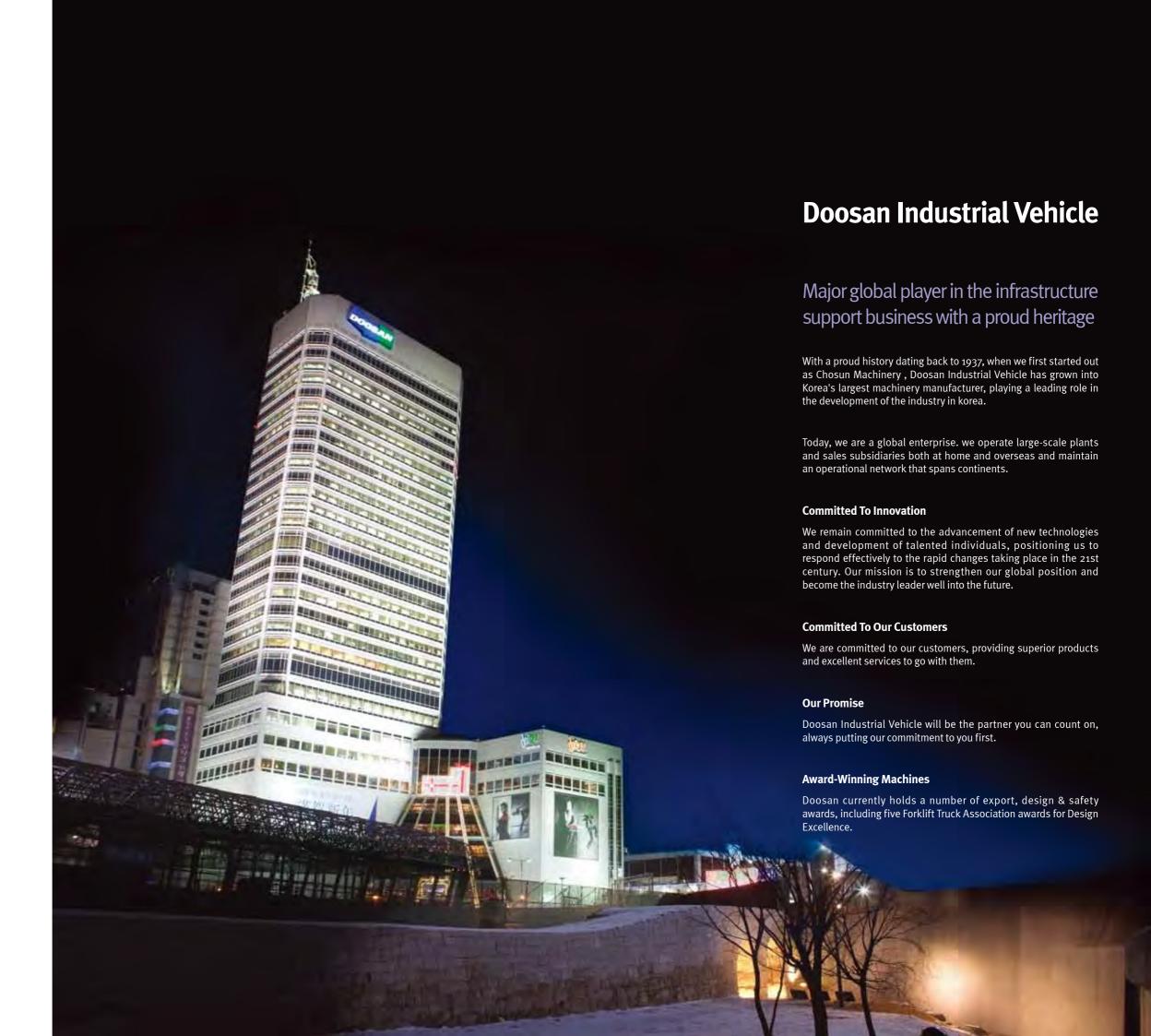
Doosan has created in excess of 90% of its sales within the ISB sector through vigorous reorganization of its business portfolio since 1998.

In the past, 70% of our business was concentrated on consumer goods, but we have successfully transformed our business DNA to the infrastructure support business that constructs and reinforces social infrastructure.

Doosan, surging as a global company

Doosan has become the global ISB leader based on its world class products and services.

In addition, as a true global company, Doosan's overseas employees encompass 50% of its human resources, and overseas sales take more than over 60% of the total sales.



Leading the way: world class new Doosan 7-Series electric forklifts

The 7-Series 4-wheel electric counterbalanced forklift trucks, continue to follow the core Doosan tradition of delivering simple, powerful performance, whilst most of all, delivering the best possible value for our customers.

The ergonomically designed operator compartment keeps the operator in complete control at all times, improving productivity and reducing stress and fatigue. The new operator compartment offers optimal visibility and the latest design in ergonomic hydraulic controls. Thanks to an improved durable design and an additional stability system, Doosan's new 7-Series electric trucks exceeds 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 match perfectly every customer's individual requirement, providing maximum control and accuracy for every function.

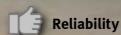
Doosan's highly efficient worldwide service network helps you to maximize uptime, whilst minimizing operational costs.



GSS

Productivity

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



- Waterproof and dustproof.
- Perfectly suited for outdoor use: new sealed Curtis 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.

2.2 to 3.5 Ton Series

OUTSTANDING PRODUCTIVITY

INDUSTRY LEADING PERFORMANCE

Using the latest technology in AC systems of Curtis, the Doosan's 7-Series delivers high performance in driving, lifting & lowering functions and offers the highest levels 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 optimize the machine's performance for their specific application. The rounded counterweight and the optimized 93° steering angle ensures optimal productivity, even in narrow aisle.

SUPERIOR RELIABILITY

POWERFUL & 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 when 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 & connectors have been silicon sealed. This means that they are fully protected against dust, debris and liquid, and are perfectly suitable for outdoor operations.



2.2 to 3.5 Ton Series

SUPERB ERGONOMICS

ERGONOMIC INTERIOR DESIGN

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



Convenience box

Specially designed Convenience Box offers a combination of new and old favorites. It gives great added value, such as 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 operators individual preferences.

EASE OF ACCESS ENSURES MAXIMUM COMFORT

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



Large entry step plate

With safety boots, it is easy to mount the forklift, thanks to the large entry plate 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.



Fingertip (optional

EASY TO OPERATE

Optimal ergonomics give perfect performance. Fast, precise and infinitely adjustable, the new fingertip system makes operating effortless and most efficient.



Hydraulic levers

The direction switch is integrated in 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) with knob enhances operating comfort and increases the available legroom in the operator compartment.



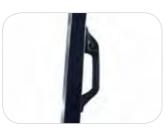
MAXIMUM VISIBILITY AND SAFETY IN OPERATION

Like all Doosan equipment, Doosan 7-Series Electric Trucks are specially designed to guarantee



Safety & Visibility.

High-visibility design
The mast and overhead guard
are developed with optimal
forward and upward visibility
for the operator in mind.



Rear Grab Bar with Horn Enhances safety, comfort and convenience when traveling in reverse.



Large Panoramic Mirror
Provides the operator a clear
view of the rear working area,
improving 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 last longer than traditional sealed beams or halogen lights.



Emergency stop switch Integrated in the fingertip module, the emergency stop switch is very easy to reach, to respond immediately to emergency situations.



Electromagnetic automatic parking brake

The electromagnetic parking brake replaces the traditional mechanical system, maximizing the level of reliability and thus optimizing safety.



Integrated horn in fingertip

For optimal safety, it is crucial to respond without even the slightest delay. Therefore, the horn is integrated in the fingertip module, enabling the operator to alert other people immediately, even without lifting his hand.



Orange seat belt

The highly visible Orange Seat Belt makes it easy to check whether operators have fastened their seat belt. The optional interlock system disables all truck operations, unless the seat belt has been fastened correctly.



Various safety options
Other options like strobe
lights, rear flood lamps and
backup alarms are available to
take safety to the very highest

levels.

Visibility issues play an important role in forklift truck-related accidents and often reduces the productivity of the operation. The precise designed overhead guard profile with angled roof bars provides a clear view upwards whilst ensuring ultimate strength for safety. At the same time, the neatly arranged hydraulic hoses and chains provide a clear forward visibility. The Rear View or Panoramic mirrors offer additional safety

The Rear View or Panoramic mirrors offer additional safety to avoid accidents and unnecessary damage to the truck, products or racking.

The LED or halogen working lamps and combination lamps optimize the operator's visibility, to avoid accidents or damage. The fact that the truck is better visible for others, contributes to a safer working environment.

The Electro-Magnetic Auto Parking Brake ensures maximum reliability, especially when the operator leaves the truck while positioned on a slope.

The Fork Lift Truck Association award-winning Doosan Rear Grab Bar with Horn makes reversing more comfortable and safer. The easy grip bar gives a comfortable place to locate your hand, instead of around the overheard guard, which could lead to injured fingers or hand. The integrated horn button means that operators do not need to release the bar to push the horn on the steering wheel, but instead, they can continue looking in the direction they are travelling and press the horn without having to turn around. The operator can mount and dismount the truck safely thanks to its large anti-slip step plate.

In emergency situations the operator can anticipate and react very fast, even without lifting his hand of the fingertip, he can press the emergency stop switch or push the integrated horn to alert others.



Guardian Stability System

EXCELLENT STABILITY

The Guardian Stability System (GSS) will dynamically protect 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

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



Low Battery Alarm

If the battery is discharged too far, the operator will face a sudden truck stop.

To prevent this from happening, this function will alert the operator when the battery capacity is low. Lifting speed will be reduced, to save battery.

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 natural lowering and tilting. It safeguards the work 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 travel speed will slow down to a predefined travel speed setting, without impacting the 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 the truck on, the start-up of the truck 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 level in the brake oil reservoir is lower than minimum level, the low brake oil level indicator in the instrumental panel will flash to instruct the operator to add brake oil.

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 to warn the operator.

Optional Features

- Decrease of 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 are designed with the focus on the "easy to service" concept.

Worldwide service network

Doosan provides highquality 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.



PP® A B V

LCD display

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

Toolless removable side panel

The side panel can be removed without the need for any tool, not even a screwdriver. In this way, the operator or service technician saves valuable time. Thanks to the wide open hood angle, components are easily accessible to service.



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

The parts warehouse, located in Belgium, supplies high quality Doosan parts to our European Dealer Network. Therefore, we can guarantee an optimal service for your trucks.





Diagnostics tool

Thanks to the kvaser connector, the performance settings can quickly and easily be finetuned. The EasyViewer software has been developed by Curtis, exclusively for Doosan for maximum control over your truck settings.





Main Specifications		B22X-7	B25X-7	B25XL-7	B30X-7	B35X-7
Capacity	kg	2200	2500	2500	3000	3500
Load Center	mm	500				
Wheel Base	mm	1589	1589	1734	1734	1750
Turning Radius	mm	1950	1950	2095	2095	2155
Load Moment Center	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 Width; 1000 x 1200 crossways	mm	3620	3620	3766	3772	3832
Right Angle Stacking Aisle Width; 800 x 1200 lengthways	mm	3799	3799	3944	3950	4010
Steering Angle	deg.	93	93	93	93	93

7-Series Electric Forklifts

	s Electric Forklifts	
Standard Features and Optional Extras	2.2 to 3.5 Ton Series	
SAFETY & STABILITY	STANDARD	OPTION
Guardian Stability System (GSS) - OSS (Operator Sensing System) - Neutral Position for start	O 0 0	
- Unlimited Ramp Hold - Low Battery Warning Alarm	0	
- Brake Oil & Seat Belt Indicator - (ISO 3691) Mast Lowering Inter-Lock & Tilt Lock	0 0	
Emergency Stop Switch		0
Rear Grab Bar with Horn Switch		0
Auto Tilt Leveling		0
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 whem Mast Raised Above Primary Stage with Mast Tilted more than 2 Degrees		0
PRODUCTIVITY	STANDARD	OPTION
Full AC System Chassis	0	
Rounded Design Counterweight	0	
IP65 Rated Curtis Controller	0	
IP ₄₃ Rated PAL Enclosed Type Motors	0	
93° Steering Angle	0	
Electro-Magnetic Automatic Parking Brake (EPB)	0	
Hydraulic Cushioned Valve in Secondary Cylinder (FFL & FFT)	0	
Lateral Battery Lift-in/out System		0
Cooling Options : Fans & Fin Type Controller		0
Application Packages : Cold & Freezer, Beverage, Fishery		0
OPERATOR COMFORT (ERGONOMICS)	STANDARD	OPTION
Entry Grip Entry Bar & Large Entry Step with Anti-Slip Pattern	0	
Large & Angled Floor Plate (Leg Room) with Rubber Cushion	0	
Rounded Design Battery Hood Cover	0	
Easy to Read Instrument Panel	0	
Adjustable Tilt Steering Column & Easy Grip (Φ280 Size) Steering Wheel	0	
Hydraulic Control Lever with Direction Switch	0	
Large Cup Holder, USB Port & 12V Electric Jack, Clip Board	0	
New Finger-Tip Control		0
Steering Wheel with Knob		0
Premium Seats: Grammer MSG65 Series		0
Panoramic Mirror		0
LED Lights		0
Special Height Overhead Guards		0
Mono Pedals		0
Modular Cabins		0
DURABILITY & SERVICEABILITY	STANDARD	OPTION
Robust Frame Structure & Strong Structure Overhead Guard	0	
Easy to Access Controller & Motors Room	0	
Wide Open Battery Hood Cover	0	
Tool-Less Side Cover with Air Ventilation	0	
Oil-Cooled Disc Brakes (ODB)	0	
Durable Heat-Resisting (38"SQ) Cables	0	
Easy Diagnostic & Fine-Tune	0	

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







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AUTHORIZED	DEALER

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