



**BROAGER  
TRUCK SERVICE**

Kontakt os for et godt tilbud på  
telefon 30 74 12 02 

## 7-Series Forklifts

Electric 1.5 to 2.0 ton capacity  
3-wheel and 4-wheel



*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

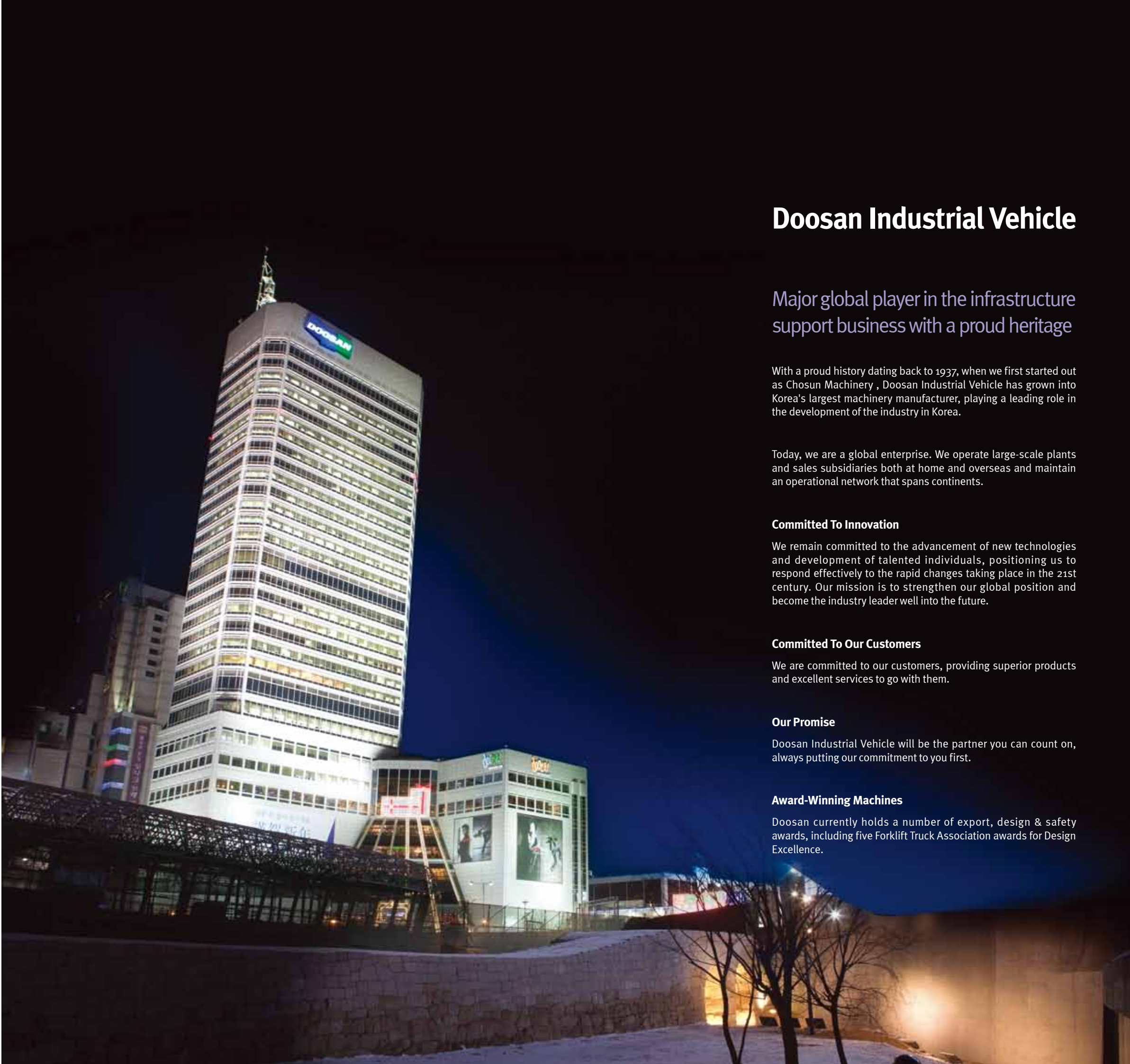
Doosan has recorded the longest business history since its inauguration in 1896, but has grown at its most rapid pace for the past 10 years.

### 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.



# 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 first started out 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. We operate large-scale plants and sales subsidiaries both at home and overseas and maintain an operational network that spans continents.

### Committed To Innovation

We remain committed to the advancement of new technologies and 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 will be 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.



## Leading the way. World class new 7-Series electric trucks from Doosan.

The new 7-Series 3- and 4-wheel electric counter-balance forklift trucks, continue to follow the core Doosan tradition of delivering simple, powerful performance, whilst most of all, delivering maximum 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 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 maximize uptime, whilst minimizing operational costs.





Powerful & Reliable Technology

Using the latest technology in AC control systems of Curtis, the controller provides an unbeatable combination of power, performance and functionality. Infinitely adjustable, optimized controllability and exceptional reliability makes the new Doosan 7-Series, the operator's first choice. The AC drive and hydraulic motors deliver power smoothly and seamlessly whilst offering the lowest possible energy consumption. Durable heat-resisting cables ensure stable operation, even in heavy operation conditions.

Industry Leading Performance

Doosan's 7-Series delivers high performance in driving, lifting & lowering functions and offers the highest levels of efficiency and productivity. Whenever the operator leaves the seat, the truck's electro-magnetic parking brake is automatically applied with an unlimited ramp-hold function, ensuring there is no danger of the machine rolling away, especially if left unattended on a ramp or slope. Performance settings enable operators to optimize the machine's performance for specific applications. The TL-version has a larger battery compartment, enhancing the autonomy. Doosan's Oil-Cooled Disk Brakes (ODB), standard on all 7-Series electric forklifts, are virtually maintenance-free. The enclosed brake system eliminates outside contamination significantly, extending brake life up to 5 times longer compared to conventional shoe brakes.

Maximized Productivity  
in Warehouse Applications

Warehouse managers are looking for maxium storage efficiency. The 3-wheel model's steer axle turns to a perfect 90° angle thus minimizing the area needed to turn the machine in the tightest of spaces. The 4-wheel models have a brand new steer axle, which has been carefully designed to minimize the turning radius and can now achieve a superb 86° steer angle. In addition, the newly designed rounded shape of the counter-weight enables the truck to move comfortably in and out of narrow spaces, reducing damage costs. Thanks to the battery side-lift-in/lift-out system (SLIO), the time needed for a battery change is reduced to the very minimum, maximizing the uptime of your truck.

Outdoor Operations

The Doosan 7-Series electric forklifts are rated waterproof and safe for outdoor use. The new sealed controllers are rated to IP65 and the motors are rated to IP43 enclosed type, with all related wiring & connectors being silicon sealed. This means they are fully protected from “Dust, Debris and Liquid”, and are suitable for outdoor applications.



7-Series Electric Forklifts  
1.5 to 2.0 Ton Series



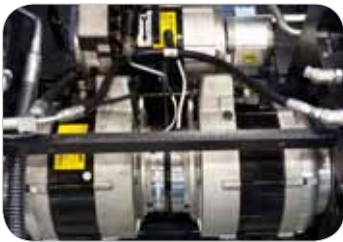
Reliable, Stable Operation  
IP65 Rated Curtis Controller



Optimized Steering Angle  
BT (3-wheel truck): 90°  
BX (4-wheel truck): 86°



Rounded Design Counterweight



Simple, Powerful IP43 Rated  
Enclosed Type Drive & Pump  
Motor





### 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. The steering column and full suspension comfort seat, armrest and optional headrest are all fully adjustable to accommodate every operator's individual preferences. The display and all control functions are ideally situated for maximum comfort. In addition, operators can control the truck's performance settings during operation, simply by navigating the instrument panel.



### Easy to Control

The effortless new Doosan finger-tip control system or mechanical hydraulic levers enables the most effective operation. The specially designed Convenience Box uses combinations of new and old favorites giving great added value, such as a large cup holder, USB port & 12V cigar jack and clip board holder. These features ensure optimal operator comfort.

**Hydraulic Levers :** Simple, reliable and familiar. The direction switch is located on the hydraulic lever, meaning a quick change of forward to backward is no problem and completely safe as there is no need to take your hands off the steering wheel or hydraulic levers.

**New Finger-tip Controls :** Optimal ergonomics gives optimal performance. The fast and accurate fingertip system makes operating the new Doosan 7-Series effortless and more efficient than ever before.

The ergonomic small steering wheel (ø 280 mm) with knob enhances operating comfort and productivity and increases the available legroom in the operator compartment.



### Ease of Access Ensures Maximum Comfort

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

- Large entry step plate with an anti-slip pattern ensures sure footing even for large safety boots
- Easy grip handle makes mounting and dismounting the machine easier
- Large uncluttered floor plate with no trip hazards gives optimal comfort and more leg room
- Angled floor plate reduces strain on ankles and large pedals ensure maximum safety and ease of operation





## Maximum Safety & Visibility in Operation

Like all Doosan equipment, Doosan 7-Series Electric Trucks are specially designed to guarantee Safety & Visibility.

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 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 Handle with Horn make reversing more comfortable and safe. The easy grip handle gives a comfortable place to locate your hand, instead of around the overhead guard, which could lead to damaged fingers or hands. The integrated horn button means that operators do not need to release the handle 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.



### 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 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 last longer than traditional sealed beams or halogen lights.



### Emergency stop switch

Integrated in the fingertip, 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.





## 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

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 array, 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 safely 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 2degrees
- Auto Tilt Leveling  
Returns the mast to the vertical position easily by using a tilt angle sensor.



## Optimal Serviceability

The controller & motor 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 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.



### 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.



### 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.



### Easy to access Controller Room

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



### 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.



### 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.







**B18T-7 Series**  
B15/18/20T-7, B18/20TL-7  
48V, 3-Wheel Truck



**B18X-7 Series**  
B16/18/20X-7  
48V, 4-Wheel truck

Major Specification		B15T-7	B18T-7	B18TL	B20T-7	B20TL-7	B16X-7	B18X-7	B20X-7
Classification		3 Wheel Electric					4 Wheel Electric		
Capacity	kg	1500	1750	1750	2000	2000	1600	1800	2000
Load Center	mm	500							
Wheel Base	mm	1323	1423	1554	1446	1554	1495	1495	1495
Turning Radius	mm	1515	1615	1756	1648	1756	1886	1886	1886
Load Moment Center	mm	376	376	376	381	381	376	376	381
Travel speed	km/h	17/17	17/17	17/17	17/17	17/17	17/17	17/17	17/17
Lift speed	m/s	0.4/0.6	0.4/0.6	0.4/0.6	0.4/0.6	0.4/0.6	0.4/0.6	0.4/0.6	0.4/0.6
Lowering speed	m/s	0.5/0.45	0.5/0.45	0.5/0.45	0.5/0.45	0.5/0.45	0.5/0.45	0.5/0.45	0.5/0.45
Max. Gradeability (at 1.6km/h, Loaded)	%	26	25	25	24	24	26	25	24
Max. Drawbar Pull (Loaded)	Kgf	1300	1300	1300	1300	1300	1300	1300	1300
Right Angle Stacking Aisle Width; 1000 x 1200	mm	3216	3316	3457	3354	3462	3446	3466	3471
Right Angle Stacking Aisle Width; 800 x 1200	mm	3341	3441	3582	3479	3587	3665	3665	3670
Steering Angle	deg.	90	90	90	90	90	86	86	86

Standard Features and Optional Extras

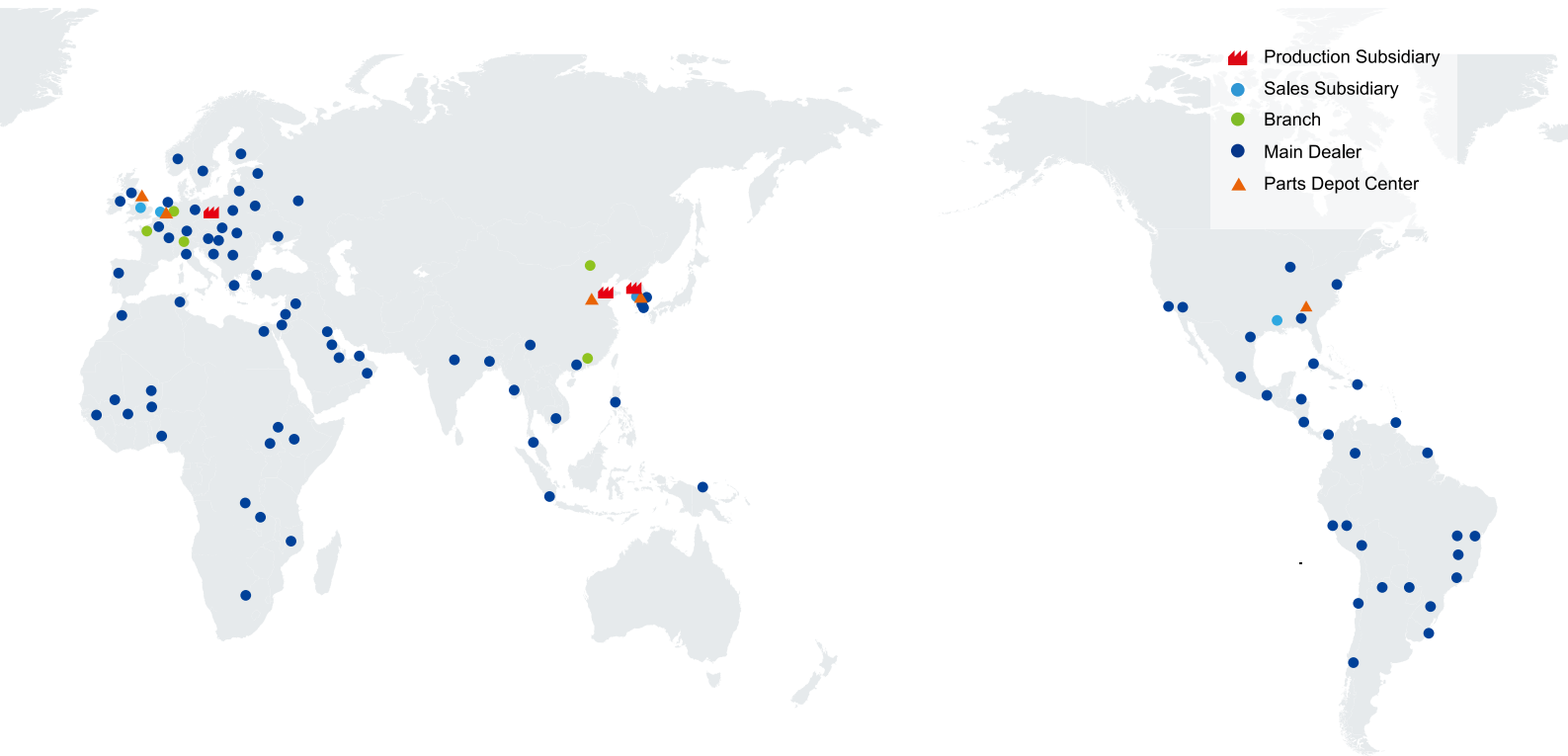
7-Series Electric Forklifts

1.5 to 2.0 Ton Series

SAFETY & STABILITY	STANDARD	OPTION
Guardian Stability System (GSS)	0	
- OSS (Operator Sensing System)	0	
- Neutral Position for start	0	
- Unlimited Ramp Hold	0	
- Low Battery Warning Alarm	0	
- Brake Oil & Seat Belt Indicator	0	
- (ISO 3691) Mast Lowering Inter-Lock & Tilt Lock	0	
Emergency Stop Switch		0
Rear Grab Bar with Horn Switch		0
Auto Tilt Leveling		0
Additional options for the Guardian Stability System (GSS)		0
- 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		
PRODUCTIVITY	STANDARD	OPTION
Full AC System Chassis	0	
Rounded Design Counterweight	0	
IP65 Rated Curtis Controller	0	
IP43 Rated PAL Enclosed Type Motors	0	
86° (BX)/ 90° (BT) Steering Angle	0	
Electro-Magnetic Automatic Parking Brake (EPB)	0	
Hydraulic Cushioned Valve in Secondary Cylinder (FFL & FFT)	0	
Accessory for DIN Type Battery Installation		0
Battery Lift In and 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.





AUTHORIZED DEALER

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