



[www.doosanlift.com](http://www.doosanlift.com)

## 7 Series Electric Forklifts 3,000lb to 4,000lb Capacity



Lifting Your Dreams

# Doosan

## A name to be proud of

### **The foundation on which Doosan has built its century of success is the trust in its people.**

Doosan's management philosophy has always been "people first".

"Business is not meant to make profits, but to help people grow."

*—Late Too Pyung Park, First Chairman*

We believe this value drives our future growth and it continues to spur corporate development with global competitiveness.

### **Doosan – the oldest, but the fastest growing company**

Doosan holds the record for having the longest business history in Korea since its inauguration in 1896. We are also the fastest growing company, with steady growth rates over the years and reaching our fastest pace in the past 10 years.

### **Doosan – the global Infrastructure Support Business (ISB)**

Doosan has achieved an excess of 90% of its sales within the ISB sector through vigorous reorganization of its business portfolio since 1998. Prior to the transformation in the late 90s, 70% of our business was concentrated on consumer goods, but we have successfully transformed our business DNA into an ISB, that constructs and reinforces social infrastructure.

### **Doosan – surging as a global company**

Doosan has become a global leader in the ISB by providing communities across five continents with the fundamental solutions, tools and structures they need to advance their societies.

With over 43,000 employees in 38 different countries, and 50% of its human resources being locally employed, Doosan is truly a global company.





# Doosan Industrial Vehicle

## Lifting Your Dreams

Since we first started out as Chosun Machinery in 1937, 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 in Korea and around the world, as well as maintain a massive operational network that spans over continents.

### **Committed To Innovation**

We remain committed to the advancement of new technologies and the development of talented individuals, which drives us to respond effectively to the rapid changes taking place in the 21st century. Our mission is to strengthen our position in the international market and become a global leader in the industry.

### **Our Promise**

Doosan Industrial Vehicle will be the partner you can count on, with our commitment to you a top priority.

### **Award-Winning Machines**

Doosan currently holds a number of awards in the categories of export, design & safety, including five Design Excellence awards from the Forklift Truck Association.

## Doosan's All-new 7 Series Electric Forklifts

Our 7 Series 3 wheel and 4 wheel electric counter balance forklift trucks continue the Doosan tradition of delivering simple, powerful performance, at the best possible value for our customers.

The operator compartment was designed specifically to keep the operator in control at all times, improving productivity while reducing stress and fatigue. The operator compartment offers improved visibility and ergonomic hydraulic controls.

Extended maintenance intervals and advanced technology componentry reduce the overall cost of maintenance. The latest AC control systems provide an unbeatable combination of power, performance and reliability. Each parameter is fully customizable to perfectly fit any individual's requirements, while providing maximum control and accuracy. The new and improved design of Doosan's 7 Series electric trucks exceeds customer demands for safety by offering excellent durability and stability.



7 SERIES ELECTRIC FORKLIFTS

3,000 lb to 4,000 lb Series



EPB  
ODB

DOOSAN

CSS  
Counter Stability System

DOOSAN

20

DOOSAN



## Powerful & Reliable Technology

Armed with the latest technology from Curtis Instruments, the new Doosan 7 series provide an unbeatable combination of power, performance and functionality. They are the operator's choice, being infinitely controllable and exceptionally reliable. The Curtis motor control system allows our trucks to be surprisingly versatile, maintaining high productivity in various work environments. The AC drive and hydraulic motors deliver smooth and seamless power with minimal energy consumption.

## Safety and Convenience

The Electro-magnetic Auto Parking Brakes provide the operator maximum safety and convenience. Whenever the operator leaves the seat, the truck's parking brake is automatically applied with an unlimited ramp-hold function, ensuring the safety of the workplace. There is no danger of the machine rolling away, even if it is left unattended on a ramp or a slope.

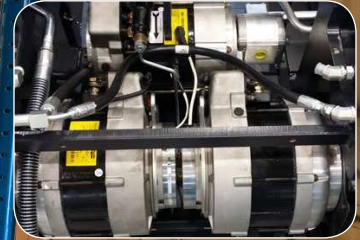
## 7 SERIES ELECTRIC FORKLIFTS

3,000 lb to 4,000 lb Series

**Curtis Controller**  
Reliable, Stable Operation  
IP65 Rated



**Enclosed Drive & Pump Motor**  
Simple, Powerful  
IP43 Rated



**Optimized Steer Angle**  
BT (3 Wheel Truck) : 90°  
BX (4 Wheel Truck) : 86°



**Rounded Counterweight Design**



**Easy and Instinctive  
Instrument Panel**



### Maximized Productivity in Warehouse Applications

Effective storage is the primary goal for many warehouse managers. Our 3 wheel models have steer axles that turn 90°, enabling the machines to maneuver with ease even in the tightest spaces. The 4 wheel models also have brand new steer axles, which have been carefully designed to minimize the turning radius and can now achieve an outstanding 86° steer angle. In addition, the new rounded design of the counter-weight enables the truck to move comfortably in and out of narrow spaces, reducing damage costs.

### Outdoor Operations

The Doosan 7 Series electric forklifts are waterproof and are safe for outdoor use. The sealed controllers are rated IP65 and the motors are rated IP43, with all related wiring & connectors being silicon-sealed. This means they are fully protected from dust, debris and liquid, which allows them to be used outdoors with no problems.

## Optimum Visibility & Safety

Visibility plays a vital role in forklift safety. The root cause of many forklift accidents can be traced back to visibility issues, and when they occur, the productivity of the workplace can take a significant hit.

Designed with precision, the overhead guard profile with angled roof bars provides a clear view upwards while ensuring ultimate strength for safety. An open rear view and an optional panoramic mirror offer additional safety to reduce accidents and unnecessary damage to trucks, products or racking.

Doosan's award-winning Rear Grab Handle makes reversing all the more comfortable and safe. The easy grip handle is positioned ergonomically for your hand to locate effortlessly, instead of around the overhead guard, which could lead to hand injuries. The integrated horn button allows the operators to keep one hand on the handle without having to reach for the steering wheel, so they can continue looking in the direction they are traveling.

The chains and the hydraulic hoses are neatly arranged so that they provide a clear, unobstructed front view through the mast. All auxiliary hoses used on attachments, such as the integrated side-shift, are aligned behind the mast chain and cylinders, which allow excellent front visibility.



### **Panoramic Mirror**

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



## 7 SERIES ELECTRIC FORKLIFTS

3,000 lb to 4,000 lb Series



### Rear Grab Handle

Adds to safety, comfort and convenience when traveling in reverse.



### Neatly arranged Hydraulic Hoses

Reduce clutter and provide better visibility.



### LED Lights

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



DOOSAN

MSU

DOOSAN

4A AUTOSIGNAL

4A WARNING

4A 4B 4C 4D



## Ergonomic Interior Design

Operators perform best when their working conditions are ideal, and the Doosan 7 Series has been designed to make this a reality. The steering column, full suspension comfort seat, armrest and even the optional headrest are all fully adjustable to accommodate any operators' individual preferences. All of the control functions and displays are ideally situated for maximum comfort. In addition, operators can control the truck's performance settings during operation, simply by navigating the instrument panel. The new Doosan finger-tip control system and the mechanical hydraulic levers enable the easiest operation imaginable.

In addition, specifically designed for operator comfort, the Convenience Box was conceived by adopting combinations of new and old favorites to give the best operator experience. Some of the features include: a large cup holder, a USB port, 12V power outlet, and a clipboard holder.



## Easy to Control

**Hydraulic Levers:** Simple, reliable and familiar. The direction switch is located on the hydraulic lift lever, enabling a quick change from forward to reverse motion safely. There is no need to take your hands off the steering wheel or the hydraulic levers.

**The all-new Finger-tip Controls:** Optimal ergonomics giving optimal performance. These fast, precise and instinctive controllers make operating the new Doosan 7 Series effortless and efficient.



## Ease of Access Ensures Maximum Safety

Operators have the need to get on and off the truck regularly for different reasons. With this in mind, a number of new features were added to make this process easier and safer than ever before.

- Large step plate with an anti-slip pattern ensures firm footing even for large safety boots
- Easy grip entry bar makes entering and exiting the machine safer
- Large uncluttered floor plate with no trip hazards provide improved comfort and more leg room
- Angled floor plate reduces strain on the ankles, and large pedals ensure maximum safety and ease of operation





**DOOSAN**

20 EPB  
00B

GSS  
G-Series Safety System

## Maximum Safety & Stability in Operation

All Doosan equipment are designed to promote a safe and stable operation. Adding the Guardian Stability System (GSS) will dynamically protect the operator and the load to reduce the risk of accidents. The 7 series meets all of the current, as well as the emerging demands for operator safety and machine stability in every application.

### Unlimited Ramp Hold

The Electro-magnetic Auto Parking Brake (EPB) prevents the forklift from rolling back if the truck is stopped on a slope. Operators can get off the truck easily without braking.

### Quiet & Smooth Operation

The modulating hydraulic cushioned valve is included in secondary cylinder of FF and FFT mast to prevent staging noise which will result in quiet operation and longer mast life.

### Seat Belt Indicator

When the key is switched on, a warning light in the instrumental panel will flash if the seat belt is not fastened.

### Automatic Speed Control

The angle sensor controls the travel speed in sharp turns. The truck automatically reduces the travel speed for safety when turning corners.

### Neutral Safety Switch

If the truck is in forward or reverse mode, the truck will have to be returned to neutral before operation.

### Brake Oil Level Indicator

The low brake oil level indicator in the instrumental panel will flash when the oil level in the brake oil reservoir is lower than minimum level.

### Battery Discharge Indicator

Lifting will be disabled when the battery is discharged to 20% during operation. This function is to protect the battery from damage and prevent sudden loss of power due to a dead battery.

### OSS (Operator Sensing System)

This OSS prevents the truck from traveling or lifting when the operator leaves the seat.

### Mast Lowering Inter-Lock (ISO3691)

If the operator keys off or gets off the seat, the hydraulic lift & tilt locking system will limit the motion of the truck.



### Turtle Mode

Pressing the Turtle Mode button will reduce travel speed to a previously set parameter without affecting the lift speed.

### Mast Tilt Lock (ISO3691)

Hydraulic locks prevent hydraulic drift when lowering and tilting.

### Guardian Stability System (Optional)

- Decreased Travel Speed (50%) when mast is raised above primary stage
- Forward tilt reduced 2 degrees when mast is raised above primary stage
- Alarm when mast is raised above primary stage with mast tilted more than 2 degrees

### Auto Tilt Leveling (Optional)

Returns the mast to vertical position easily by tilt angle sensing



### B18T-7 Series

B15/18/20T-7, B18/20TL-7  
36 or 48V 3 Wheel Truck



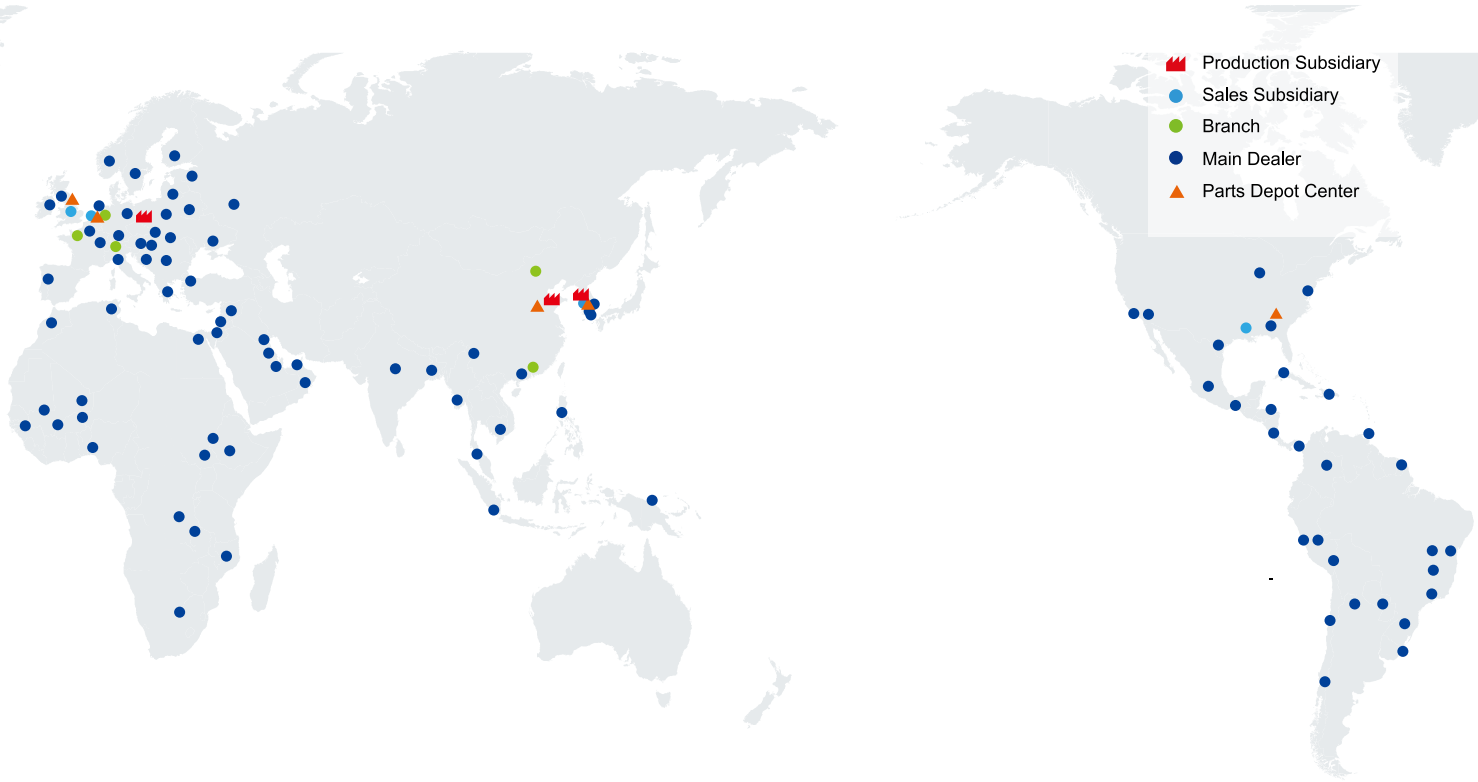
### B18X-7 Series

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

| Major Specification                              |        | B15T-7           | B18T-7 | B18TL-7 | B20T-7 | B20TL-7 | B16X-7           | B18X-7 | B20X-7 |
|--|--------|------------------|--------|---------|--------|---------|------------------|--------|--------|
| Classification                                   |        | 3 Wheel Electric |        |         |        |         | 4 Wheel Electric |        |        |
| Capacity   | lb     | 3,000            | 3,500  | 3,500   | 4,000  | 4,000   | 3,000            | 3,500  | 4,000  |
| Load Center                                      | in     | 20               |        |         |        |         |                  |        |        |
| Wheel Base                                       | in     | 52.1             | 56.0   | 61.2    | 56.9   | 61.2    | 58.9             | 58.9   | 58.9   |
| Turning Radius                                   | in     | 59.7             | 63.6   | 69.1    | 64.9   | 69.1    | 74.3             | 74.3   | 74.3   |
| Load Moment Center                               | in     | 14.8             | 14.8   | 14.8    | 15     | 15      | 14.8             | 14.8   | 15     |
| Travel speed                                     | mph    | 10.6             |        |         |        |         |                  |        |        |
| Lift speed (U/L)                                 | ft/s   | 1.3 / 2.0        |        |         |        |         |                  |        |        |
| Lowering speed (U/L)                             | ft/s   | 1.6 / 1.5        |        |         |        |         |                  |        |        |
| Max. Gradeability<br>(at 1.0 mph, Loaded)        | %      | 26               | 25     | 25      | 24     | 24      | 26               | 25     | 24     |
| Max. Drawbar Pull<br>(Loaded)                    | ft.lbf | 9402.9           |        |         |        |         |                  |        |        |
| Right Angle Stacking<br>Aisle Width; 39.4 x 47.2 | in     | 126.6            | 130.6  | 136.1   | 132.1  | 136.3   | 135.7            | 136.5  | 136.7  |
| Right Angle Stacking<br>Aisle Width; 31.5 x 47.2 | in     | 131.5            | 135.5  | 141.0   | 137.0  | 141.2   | 144.3            | 144.3  | 144.5  |
| Steer Angle                                      | deg.   | 90               | 90     | 90      | 90     | 90      | 86               | 86     | 86     |

## Standard &amp; Optional Features

|  | Standard                         | Option                           |
|--|----------------------------------|----------------------------------|
| <b>Safety &amp; Stability, Guardian Stability System (GSS)</b>                       |                                  |                                  |
| OSS (Operator Sensing System)  | <input checked="" type="radio"/> |                                  |
| Neutral Safety Switch  | <input checked="" type="radio"/> |                                  |
| Unlimited Ramp Hold  | <input checked="" type="radio"/> |                                  |
| Battery Discharge Indicator  | <input checked="" type="radio"/> |                                  |
| Brake Oil & Seat Belt Indicator  | <input checked="" type="radio"/> |                                  |
| (ISO 3691) Mast Lowering Inter-Lock & Tilt Lock                                      | <input checked="" type="radio"/> |                                  |
| Emergency Stop Switch  |                                  | <input checked="" type="radio"/> |
| Rear Grab Handle   |                                  | <input checked="" type="radio"/> |
| Auto Tilt Leveling   |                                  | <input checked="" type="radio"/> |
| Guardian Stability System  |                                  | <input checked="" type="radio"/> |
| - Decreased Travel Speed (Up to 50%) When Mast is Raised Above Primary Stage         |                                  |                                  |
| - Forward Tilt Reduced 2 Degrees when Mast is Raised Above Primary Stage             |                                  |                                  |
| - Alarm when Mast is Raised Above Primary Stage with Mast Tilted more than 2 Degrees |                                  |                                  |
| <b>Productivity</b>  |                                  |                                  |
| Full AC System Chassis   | <input checked="" type="radio"/> |                                  |
| Rounded Counterweight  | <input checked="" type="radio"/> |                                  |
| IP65 Rated Curtis Controller   | <input checked="" type="radio"/> |                                  |
| IP43 Rated PAL Enclosed Motors   | <input checked="" type="radio"/> |                                  |
| 86° (BX)/ 90° (BT) Steer Angle   | <input checked="" type="radio"/> |                                  |
| Electro-Magnetic Automatic Parking Brake (EPB)                                       | <input checked="" type="radio"/> |                                  |
| Hydraulic Cushioned Valve in Secondary Cylinder (FFL & FFT)                          | <input checked="" type="radio"/> |                                  |
| Accessory for DIN Type Battery Installation  |                                  | <input checked="" type="radio"/> |
| Battery Roller System  |                                  | <input checked="" type="radio"/> |
| Cooling Options : Fans & Fin Type Controller   |                                  | <input checked="" type="radio"/> |
| Application Packages : Cooler & Freezer, Beverage, Fishery                           |                                  | <input checked="" type="radio"/> |
| <b>Operator Comfort (Ergonomics)</b>   |                                  |                                  |
| Easy Grip Entry Bar & Large Step Plate with Anti-Slip Pattern                        | <input checked="" type="radio"/> |                                  |
| Large & Angled Floor Plate (Leg Room) with Rubber Cushion                            | <input checked="" type="radio"/> |                                  |
| Rounded Battery Cover  | <input checked="" type="radio"/> |                                  |
| Easy to Read Instrument Panel  | <input checked="" type="radio"/> |                                  |
| Adjustable Tilt Steering Column & Easy Grip (Size Φ280) Steering Wheel               | <input checked="" type="radio"/> |                                  |
| Hydraulic Control Lever with Direction Switch  | <input checked="" type="radio"/> |                                  |
| Large Cup Holder, USB Port & 12V Power Outlet, Clipboard Holder                      | <input checked="" type="radio"/> |                                  |
| Finger-Tip Control   |                                  | <input checked="" type="radio"/> |
| Power Grip Knob  |                                  | <input checked="" type="radio"/> |
| Premium Seat: Grammer MSG65 Series   |                                  | <input checked="" type="radio"/> |
| Panoramic Mirrior  |                                  | <input checked="" type="radio"/> |
| LED Lights   |                                  | <input checked="" type="radio"/> |
| Special Height Overhead Guards   |                                  | <input checked="" type="radio"/> |
| Mono Pedals  |                                  | <input checked="" type="radio"/> |
| Modular Cabin  |                                  | <input checked="" type="radio"/> |
| <b>Durability &amp; Serviceability</b>   |                                  |                                  |
| Robust Frame & Overhead Guard  | <input checked="" type="radio"/> |                                  |
| Easy to Access Controller & Motors Room  | <input checked="" type="radio"/> |                                  |
| Wide Open Battery Cover  | <input checked="" type="radio"/> |                                  |
| Tool-Less Side Cover with Air Ventilation  | <input checked="" type="radio"/> |                                  |
| Oil-Cooled Disc Brakes (ODB)   | <input checked="" type="radio"/> |                                  |
| Durable Heat-Resisting(38”SQ)Cables  | <input checked="" type="radio"/> |                                  |
| Easy Diagnostic & Fine-Tune  | <input checked="" type="radio"/> |                                  |



**Doosan Industrial Vehicle America Corp.**  
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