

## **EP ORDER PICKING SOLUTIONS**

The optimal choice when it comes to order picking up to 6.5meter

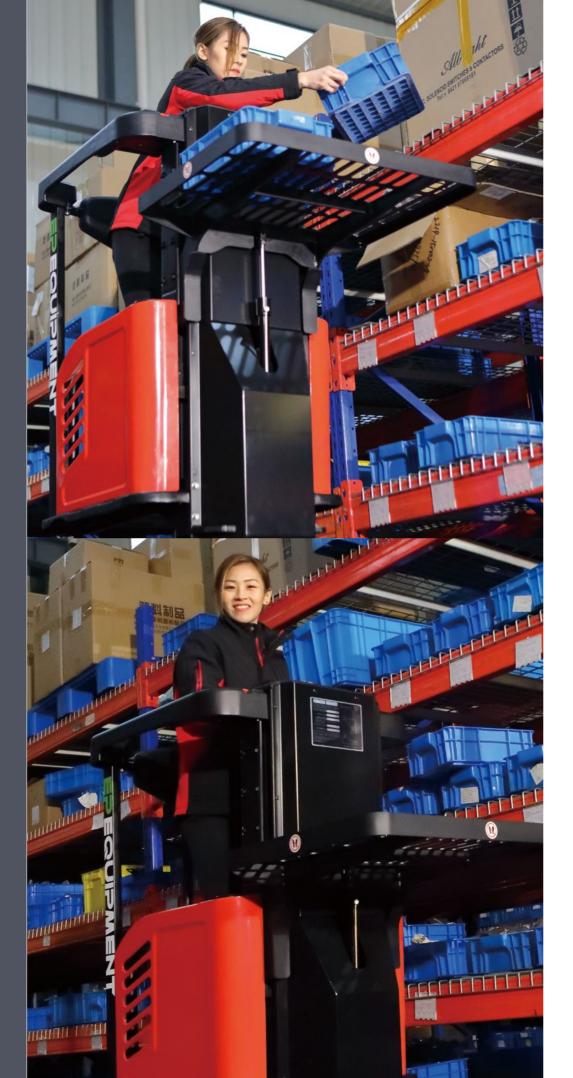


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# EP Order picking Solutions JX Series

With an ever growing industry in the E-Commerce sector as well as the needs for order picking solutions in retail, DIY markets and production, EP has developed a series of order picking solutions, tailored around the needs of the modern order picking warehouse.



#### ■ Retail, DIY, maintenance and inventory work

In retail stores, cash&carry as well as DIY markets, shelves need to be replenished regularly to ensure the best shopping experience for the customer. In the past this job was done with either ladders, a dangerous and ineffective solution, or with reach trucks with goods on pallets and blocked aisles. Similar truck requirements are seen for maintenance & inventory work, where a man-up truck with small turning cycle and simple handling is needed. EP developed the JX0 entry level order picker to match these requirements. Find out more on page 3-6.

#### ■ Order picking and E-Commerce

In the past most order picking jobs where carried out on ground level to increase the productivity, while stock was replenished to the bottom layer with reach & fork trucks. In recent years, driven by the E-Commerce industries picks per order get smaller and the need to collect different products from different levels has increased. To maximise flexibility for the driver and increase productivity, EP has developed the JX1, a professional order picker with a 20% higher pickrate per hour and a picking height of up to 6.5m. Find out more on page 3-6.



JX0

Entry level order picker / work assist vehicle

- Low/Medium volume order picking and retail environment
- Max. Platform height: 2.99m Picking height 4.50m
- Truck size: 1365x1440x750mm, turning radius (1260), suitable for narrow spaces
- Light and flexible
- AGM Battery (maintenance free), Li-Ion as option

#### The professional order picker

- High volume order picking in a warehouse environment
- Max Platform height: 4.80m Picking height 6.3m
- Truck Size 1590x1500x800, turning radius (1385), suitable for narrow aisles in the warehouse
- Strong and steady
- AGM Battery (maintenance free), Large Lead-Acid battery as option. Simple Battery exchange



#### your flexible and stable work assist vehicle

The JX0 meets the need of retail, occasional order picking, inventory as well as maintenance work with a lifting height of 2.99m and a picking height of over 4.5m



#### S IMPLE OPERATION

The JX0 comes with great ergonomics. The usability in narrow aisles and for rookie users is simple due to the steering wheel which always shows the driver the exact driving direction and reduces the risk of damage in the warehouse.

The truck is equipped with a large tray that can be lifted and lowered electrically. This option is standard at the EP machine show tray



The JX0 is equipped with all state of the art safety features like:

Automatic gate lock when lifted Foot Switch for safe usage Tilting sensor



#### S TABLE MAST DESIGN

Our work assist vehicle has not only been tested under European and US safety regulations, it also comes with a much more stable mast design to ensure stability and safety at large heights.

#### RIVING PERFORMANCE

Due to the three-point drive system the truck can be operated especially precise. Compared to truck with four-point drive system it allows a smaller turning radius and more predictable and precise navigation through the warehouse or shop.

#### Technical specifications

Truck		JX0
Stand height, elevated	mm	3000
rated capacity on front platform	kg	90
rated capacity on behind platform	kg	110
rated capacity on standing platform	kg	136
Service weight (include battery)	kg	800
Height, mast lowered	mm	1365
Overall length	mm	1440
Overall width	mm	750
Ground clearance, center of wheelbase	mm	35
Travel speed, laden/ unladen	km/h	6/6.5
Battery voltage/nominal capacity K5	V/Ah	24/120

#### JX1

#### the ultimate picking machine

The JX1 is a worldwide unique order picker. Small, flexible but yet powerfull it can lift up to 4880mm and increase productivity by 20%.



#### RGONOMICALLY OPTIMIZED

The JX1 was designed around the driver and gives great ergonomics. Compared to entry level work assist vehicles, the JX1 offers more space on the platform helping the driver stand more comfortable and increase productivity due to easier handling of

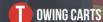


The JX1 has entry bars on both left and right side of the truck to ensure maximum flexibility and increased productivity.



#### ARGE TRAY

The large picking tray with a size of 800\*520mm offers great space for goods and tools. It can also be electrically lifted and lowered to ensure an ergonomic height at all times.



To ensure maximum flexibility in the picking process, a clutch can be equipped to the JX1 allowing it to pull carts of up to 1to. Perfect for picking several orders at once or restocking shelves.

#### Technical specifications

Truck		JX1(3200)	JX1(3600)	JX1(4100)	JX1(4880)
Stand height, elevated	mm	3200	3600	4100	4880
rated capacity on front platform	kg	227	227	Δ227	Δ227
rated capacity on behind platform	kg	137	137	137	137
rated capacity on standing platform	kg	136	136	136	136
Service weight (include battery)	kg	1160	1230	1340	1530
Height, mast lowered	mm	1590	1670	2120	2120
Overall length	mm	1500	1500	1500	1610
Overall width	mm	800	800	800	860
Ground clearance, center of wheelbase	mm	50	50	50	50
drive speed, laden/unladen	km/h	5.5	5.5	5.5	5.5
Battery voltage/nominal capacity K5	V/Ah	24V/224AH	24V/224AH	24V/224AH	24V/280AH



Whether it concerns batch picking or single order picking, smart picking of small items is a daily issue for many companies. Certainly, when it comes to the fast-growing e-commerce sector and when there is an increase in the range of articles and the 'depletion' of the available number of pick locations. The solution generally lies in picking at the second storage level and higher. It is exactly for this application that EP Equipment developed the JX1, a compact, palletless and manoeuvrable man-up truck. Thanks to the platform lift up to 4.880 mm, the truck offers a picking-/working height of up to 6,500 mm. So also replacing that lamp or other work at height are no longer a problem.

# LOGISTICSINSIDE TEST REPORT JX 1 ORDER PICKER

f you want to pick small items at various levels or have to carry out work at height, you can of course start with a movable ladder. However, it can be considerably more convenient, safer and more economical, shown by EP Equipment with the JX1. In our test, the smart truck not only proves to be right on this, it also sets a benchmark when it comes to speed, stability and ease of use.

#### S OLID CONSTRUCTION

The EP JX1 describes itself as a medium level order picker with a load capacity of 500 kg. The operator can place the load on the platform (525 x 785 mm) formed by a sturdy mesh grid that is mounted directly in front of the cab. At the rear of the truck we also find a second platform that you can fold if you do not need it. Thanks to the optionally available trailer coupling it is also possible to connect one or more wagons of a 'tow train'.

With the Crown Wave 60 we already tested a similar vehicle before, but the JX1 is not completely comparable. This Chinese truck is more an intermediate between the work assist vehicle and an industrial order picker. The truck is more than twice as heavy and contains more iron in its chassis- and mast construction. Based on these facts, we expect the EP JX1 to have a higher energy consumption and perhaps also be less agile and productive. We are very curious about the measurement results.

#### **ASY USE**

Via the folding safety gate you can easily step on the platform. The step height is 265 mm on the pleasantly low side. The plateau measures 770 x 410 mm and is spacious enough to move well. The deadman switch is sunk into the floor, but it forces you to stand in a certain way. This facility from our perspective might be integrated in the entire floor unit for more freedom of choice in the position of the right foot.

Another point for improvement is the space that the folding gate offers. Not all parts of the fence move all the way up so that the entry / exit opening is not completely free and there is a chance that you will bump into it. EP Equipment promises improvement. The JX1 can only be operated with closed safety gates to which the consoles of steering and the mast control are attached. The steering and driving with the truck is as easy as can be. With the left hand you steer and with the right hand you control the driving speed by a tilt switch. This right console is also equipped with three push buttons for lifting, lowering and horn.

#### MOOTH AND MANAGEABLE

The small display reads the amount of battery discharge and also shows steering wheel position, running hours, speed and driving programs. The dashboard is equipped with a handy paper compartment. The backrest on the truck is of the 'one size fits all' type and is not adjustable. The lack of this adjustment option does not bother us.

On our test course we collect 8 small items at different heights. Where possible, we drive diagonally to the locations to be as efficient as possible. The JX1 gets this job done with remarkable ease. The truck runs smoothly and manageable. He thereby safely reduces the driving speed at increased heights. Compared to the Crown the JX1 from EP Equipment has a striking stability that you experience as a driver. The mast runs smoothly in and out, but the lifting speed is less then that of the previously tested American counter part. When you descend, an acoustic signal sounds and both red signal lights flash.

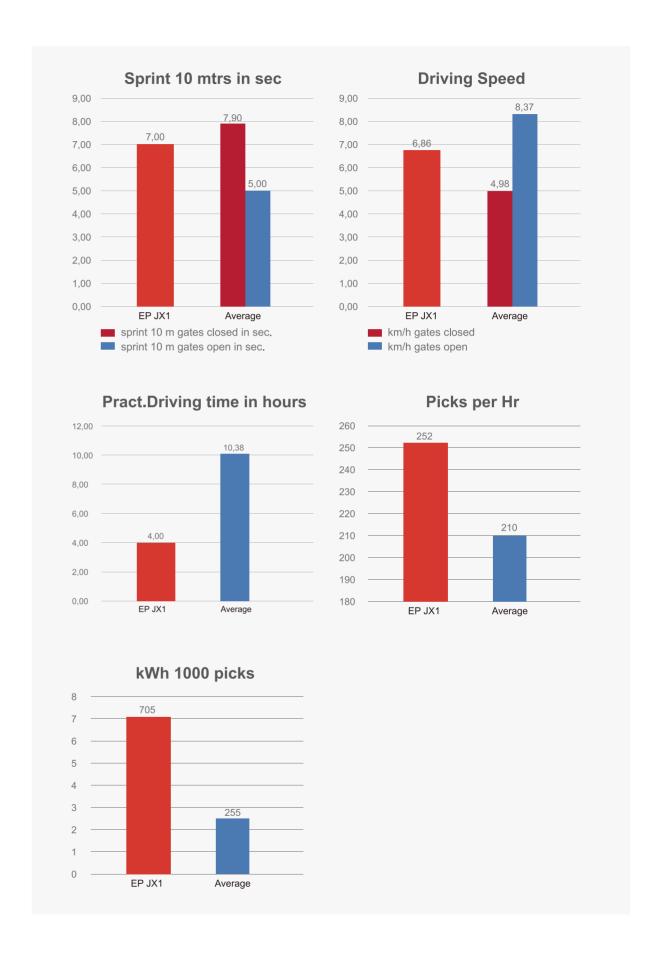
#### PERFORMANCE AND ENERGY CONSUMPTION

During the test, it appears that the JX1 is easy to operate and the truck drives very predictably, so that we get through the narrow passage quickly. In combination with the good diagonal speed, we score almost 20% more picks with the EP JX1 than with the Crown WAV.

The other side of the coin is the substantial (175%) higher energy consumption of the much heavier JX1. With the 4 maintenance-free gel batteries of the JX1, we achieve a practical deployment time of 4 hours while the Crown can be used for 10 hours. If a longer period of use is required, the JX1 can be equipped with a conventional lead-acid battery with 50% more capacity on board. The truck has a roller bed for quickly changing the battery container. On our test truck the on board battery charger is equipped, integrated in the battery container.

#### **H** ONCLUSION

The robust character, the stability and simple operation are certainly the strengths of the JX1 from EP Equipment. The concept can be seen as an intermediate truck for occasional work on heights and the industrial order picker. The truck is convenient, simple and effective. It allows a smooth way of single-item order picking up to heights of 6,500 mm. In this way it is easy to set up pick locations at multiple levels. The JX1 is also a handy helper for all kinds of jobs at height. The energy consumption is on the high side, although the possibility of a 50% larger battery capacity or a spare battery package offers extra capacity. The folding door may open slightly wider. For the rest, this warehouse truck reads like an open book.





# JX2 SERIES

Medium order picker equipped with forks

- Suitable for lifting goods with pallets
- Total lifting capacity up to one ton (JX2-4)
- The sensitive control system gives you a smooth and accurate working feeling.
- The full steel covered truck body ensures a safe and stable truck to work with and a high durability

### ifference structure



#### JX2-1

fork lift with work platform, also free lift

Truck		JX2-1
Stand height, elevated	mm	1220
rated capacity	kg	700
Service weight (include battery)	kg	1620
Height, mast lowered	mm	1560
Overall length	mm	2520
Overall width	mm	800
Ground clearance, center of wheelbase	mm	50
Travel speed, laden/ unladen	km/h	8
Battery voltage/nominal capacity K5	V/Ah	360



#### JX2-3

fork movement same with JX2-1, with overhead guard

		J2-3 (3200)	J2-3 (3600)
Stand height, elevated	mm	2620	3020
rated capacity	kg	700	700
Service weight (include battery)	kg	1620	1650
Height, mast lowered	mm	2200	2330
Overall length	mm	2750	2750
Overall width	mm	800	800
Ground clearance, center of wheelbase	mm	50	50
Travel speed, laden/ unladen	km/h	8	8
Battery voltage/nominal capacity K5	V/Ah	360	360



JX2-4

fork lift with work platform, no free lift, no front guard

		JX2-4 (126in)	JX2-4 (144in)	JX2-4 (162in)
Stand height, elevated	mm	3365	3765	4265
ated capacity	kg	1000	1000	1000(500)
Service weight (include battery)	kg	1900	1965	2050
leight, mast lowered	mm	2270	2360	2610
Overall length	mm	2750	2750	2750
Overall width	mm	860	860	860
Ground clearance, center of wheelbase	mm	50	50	50
ravel speed, laden/ unladen	km/h	8	8	8
Battery voltage/nominal capacity K5	V/Ah	360	360	360

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