

# Custom-made Material Handling Equipment



### In a nutshell



PTB Special Products designs and produces custom-made material handling equipment for the transportation of heavy goods. These devices are delivered all over the world.



PTB Special Products ontwerpt en produceert al meer dan 40 jaar maatwerk transportmiddelen voor het verplaatsen van zware lasten. De rest van deze brochure is geschreven in het Engels.



PTB Special Products entwickelt und produziert seit mehr als 40 Jahren kundenspezifische Transportmittel für die Bewegung von schweren Lasten. Der Rest dieser Broschüre ist in englischer Sprache verfasst.



Depuis plus de 40 ans, PTB Special Products conçoit et fabrique des équipements de transport sur mesure pour la manutention de charges lourdes. Le reste de cette brochure est écrit en anglais.



PTB Special Products diseña y produce equipos de manejo de materiales a medida para el transporte de mercancías pesadas. Estos dispositivos se entregan en todo el mundo, por lo que lo hemos escrito en inglés.

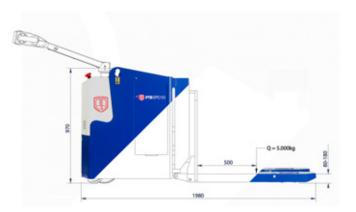


PTB特种设备公司为搬运重型货物 提供物流搬运设备设计和定制化生 产服务。产品销往全球各地,因此 手册其余部分内容采用英文描述。



### What we do

PTB Special Products designs and produces custom material handling equipment for the transportation of heavy goods. Pallet trucks, stackers, tow-tractors and completely new concepts, all 100% custom-made, with extreme lifting capacities. Measurements and functionalities are according to your requirements.





### Delivered to renowned companies

























### **About us**

#### Who we are

PTB Special Products is part of the PTB Group, based in Groningen, the Netherlands. The company was established in 1897 and is family-owned. The PTB has grown into a collection of companies with a variety of products delivered worldwide.

### Why we do it

A passion for logistics combined with the challenge of finding solutions for unconventional processes. The entire process of designing and producing equipment, for customers anywhere in the world. That is what drives us at PTB.

### What we do

PTB Special Products designs and produces material handling equipment for the transportation of heavy goods. All equipment is designed as well as produced in PTB facilities. Our equipment can handle cargo that weighs more than 50 tons.

### **Our history**

Established at the end of the 19th century, PTB started as a farriery in the city center of Groningen (NL) and grew rapidly. From the production of horseshoes to agricultural equipment, to high-tech material handling equipment.



# **Call** +31 (0)50 542 28 44



# **E-mail** info@ptbspecial.com



# **Website** ptbspecial.com



### How it's done

### Personal contact & experience

PTB Special Products designs custom equipment for the transportation of heavy goods. Through personal contact with our sales and engineering department, your requirements are carefully examined to offer you the best solution.



### All-in design & production

The process of tailor-made equipment starts at the PTB engineering department. Every device is designed, built, and tested by PTB engineers. A custom material handling solution, all at one place: PTB Special Products.





### Two cooperating facilities

The equipment made by PTB Special Products is designed and produced in its own factories in Groningen (NL). The production process is separated in two facilities, a machine works for parts and a plant for assembly and testing purposes.



### **Worldwide delivery**

PTB has delivered devices to companies all over the world. From tech giants like ASML and Philips, to the automotive and pharmaceutical industries. From Finland to Mexico, from Thailand to Germany, from Slovakia to Norway.

### Pallet trucks

Tailor-made pallet trucks are the perfect solution for handling heavy materials. These devices are designed and produced according to customer requirements and can handle materials from 1 to 50 tons. Equipment 100% customized for your material handling requirements. The pallet trucks can effortlessly move heavy materials such as pallets, coils, paper rolls, dies and machinery.



100% custom-made by PTB engineers



Fully electric, zero emission



Minimal maintenance required



Up to 50 tons lifting capacity











### **Stackers**

Electric stackers are the solution for the horizontal and vertical transportation of materials. Stackers are available in numerous varieties and for different purposes. PTB devices are characterized by the ability to handle large and heavy goods in special situations. Each device is designed based on the materials it has to handle.

### Why choose a custom-made stacker?

The electric stackers made by PTB are wholly customizable and therefor ideal for your company's requirements. Each device is designed based on your specific requirements, resulting in a machine that is the most efficient, most effective and safest solution for your company.











### **Tow-tractors**

The electric tow-tractors PTB designs are built for pulling heavy loads up to 80 tons. Applications range from picking orders to the transportation of industrial trailers and aircraft. The tow-tractors are equipped with powerful AC-motors, power-steering, electromagnetic brakes and can feature options such as air conditioned/heated cabs, Atex certification and camera systems.







Custom-made for optimal safety and efficiency





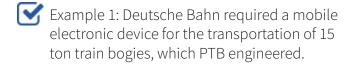






### Other products

You have something to move from A to B, we design a solution. Are the materials exceptionally difficult to handle, so that a tailor-made pallet truck, stacker or tow-tractor is not sufficient, then PTB engineers will develop a brand-new concept. The basis of such a concept is the materials that must be handled.



Example 2: The European Spallation Source based in Sweden required a device to very safely and accurately move and place tall klystrons.









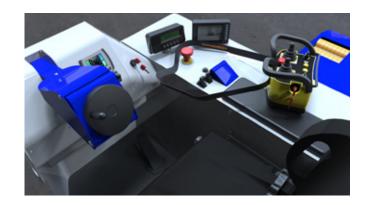


# Usage examples

























### **Operation methods**

Finding a method to move your goods safely and efficiently is the starting point of every project. The next step is to choose an operation method for the device. A variety of options is available, ranging from the traditional walk along operation by controlling the device by means of a tiller-handle, to a radio controller or an autonomous solution. The following list describes the various methods.



### Walk along operation

The operator handles the device by means of a tiller handle, while walking behind or adjacent to the machine.



### **Sit-on operation**

From a comfortable seat, the operator drives the device by using a steering wheel. The seat is positioned sideways.



### **Ride-on operation**

For short and medium distances, the standing platform in combination with a tiller-handle is the ideal mode of operation.



#### **Combination operation**

This method is a combination of a sit-on and stand-in chassis. The operator can choose to stand or sit while driving.



### **Stand-on operation**

With the stand-on mode, the operator stands within the chassis and operates the device from a sideways position.



#### **Other methods**

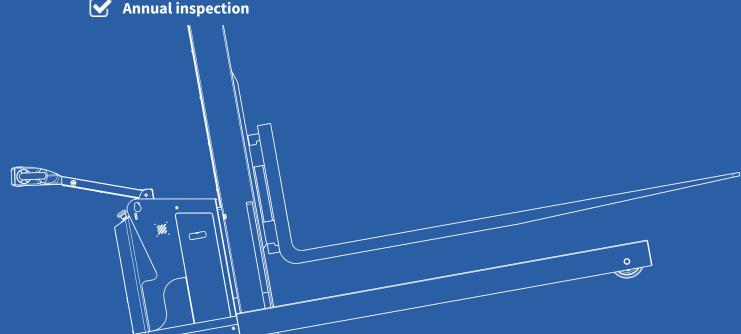
PTB offers various options for either controlling a device from a distance or autonomously.

# Lift off!

When the machine is ready to be used. It will help make your company's work environment safer, more intelligent and more efficient.

This does not mean goodbye. We will gladly assist you with:

- **✓** In-company training
- Recurring service & maintenance
- Incidental maintenance
- **Annual inspection**







### **PTB EPS105**

Two compact and powerful electric pallet trucks, with an innovative hydraulic leveling system and a lifting capacity of 10.500 kilograms. Due to an innovative hydraulic system that enables horizontal forks while driving on a slope, these pallet trucks can position goods in the back of a container and drive out of the container over an 11,5% slope.



Chonburi **Thailand** 

**Plan B Plus** 

### **Technical specifications**



### **Lifting capacity**

10.500 kg at 950 mm loadcenter



#### **Battery**

48V 625 Ah



- > Dual-drive AC motors
- > Capable of handling 11.5% slope
- > Standing platform
- > Innovative tilting system for horizontal forks on slopes





### PTB ESD30

This stacker is designed and produced for Wilvo in the Netherlands. The device is designed to lift and place special frames in autoclaves. This process takes place in a cleanroom, which is why the forks, straddle legs and chassis have been covered with stainless steel. The stacker can lift 3.000 kilograms at a load center distance of 1.800 millimeters.





### **Technical specifications**



### **Lifting capacity**

3.000 kg at 1.800 mm loadcenter



#### **Battery**

24V 315 Ah



- > 2.700 mm fork length
- > Tiller-handle operation
- > 9.000 kg mast
- > 1.200 mm lifting height
- > Cleanroom ready





### PTB EPZ150

A 100% tailor-made vehicle with a special platform that can tow train bogies from rails. A combination of electric and hydraulic systems ensures safe and efficient transportation of these heavy objects. Moving train bogies used to be quite labor intensive, because the bogies weigh up to 15 tons each. This has changed significantly since the arrival of the EPZ150.



Neumünster **Germany** 



### **Technical specifications**



Lifting capacity

15.000 kg



**Battery** 

48V 625 Ah



- > Chassis with seat
- > Camera system
- > Custom wheelset locking mechanism
- > Electric winch for loading





### **PTB DP130**

ASML is the world's most innovative manufacturer of lithography systems. The company uses multiple heavy-duty pallet trucks for moving its products, which often weigh over 10.000 kilograms. This particular device has been designed and produced by PTB for handling lithography systems in a cleanroom, with a capacity of 13.000 kilograms.



Eindhoven **Netherlands** 



### **Technical specifications**



**Lifting capacity** 

13.000 kg



- > Stainless steel covered forks
- > Low fork height
- > Tiller-handle operation
- > Powerful AC electric drive unit
- > Cleanroom ready





### PTB EPD45

PTB Special Products has delivered a custom-made platform truck to the ESS Research Center for the transportation of large klystrons used in the research of particle acceleration. Our engineers have developed a device that can lift the klystrons accurately, using a horizontal and hydraulically sliding platform.



Lund **Sweden** 



### **Technical specifications**



**Lifting capacity** 

4.500 kg



Battery

48V 320 Ah



- > Side-shifting platform
- > Hydraulic stabilizers
- > Tiller-handle operation
- > Mast for attaching load to the platform





### PTB EPD60

One of our customers from southern Europe has purchased three pallet trucks for three separate production facilities. Each pallet truck has a specific color, but all feature 3.500 mm forks, with a load center distance of 2.700 mm. The pallet trucks will be used for the transportation of long and heavy goods.

### **Technical specifications**



#### **Lifting capacity**

6.000 kg at 2.700 mm loadcenter



#### **Battery**

24V 315 Ah



- > 3.500 mm fork length
- > 90 mm initial fork height
- > 2 trucks with standing platforms
- > 4.180 mm turning radius
- > 2.700 mm loadcenter





## **PTB DP100**

Hitachi Construction Machinery from Amsterdam moves heavy parts of excavators throughout its assembly line with this custom-made PTB pallet truck. This powerful electric device features a high platform for the operator, built for optimal safety and visibility during the transportation of these 10 ton components.



Amsterdam



### **Technical specifications**



**Lifting capacity** 

10.000 kg



**Battery** 

48V 440 Ah



- > 2.400 mm fork length
- > Camera system
- > High operator platform
- > Powerful electric propulsion



### PTB EPS120



Loading containers with big coils used to be a very challenging endeavor. Aleris' metal coils were originally placed in containers by many people using multiple devices. With the EPS120, the coils are now loaded into containers quickly and safely, by just one person operating the EPS120. This method has led to a considerable shortening of the loading time.



Duffel **Belgium** 



### **Technical specifications**



**Lifting capacity** 

12.000 kg



Battery

48V 775 Ah



- > Two AC electric driving units
- > Capable of driving 10% slopes with full 12.000 kg load
- > Total length of just 3.475 mm
- > Standing platform for driver safety





# PTB DP100

Philips uses multiple custom-made pallet trucks for the transportation of its innovative products, specifically products like this 10 ton device, which can be seen on the picture. This particular DP100 features two forks, while other models have been equipped with a platform to carry heavy goods.



Best



### **Technical specifications**



**Lifting capacity** 

10.000 kg



**Battery** 

48V 300 Ah



- > 3.320 mm total length
- > Full electric propulsion
- > Tiller-handle operation

## More customer cases

























# Notes

| <br> |  |
|------|--|

