



**Intralogistics  
Automation**



**EXTOR Tire Palletizer**

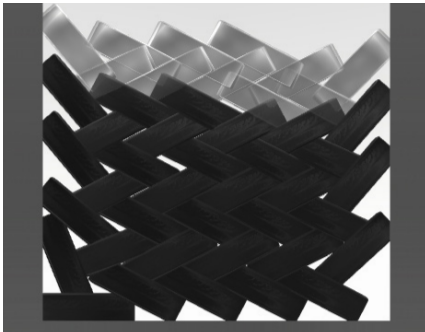
# EXTOR Tire Palletizer

## The idea

The Tire Palletizer system is developed to stack tires economically in standard tire racks.

The tire types and quantity are manually or via a warehouse management system entered in the Tire Palletizer software. This software generates automatically the best packing pattern and determinates the number of racks.

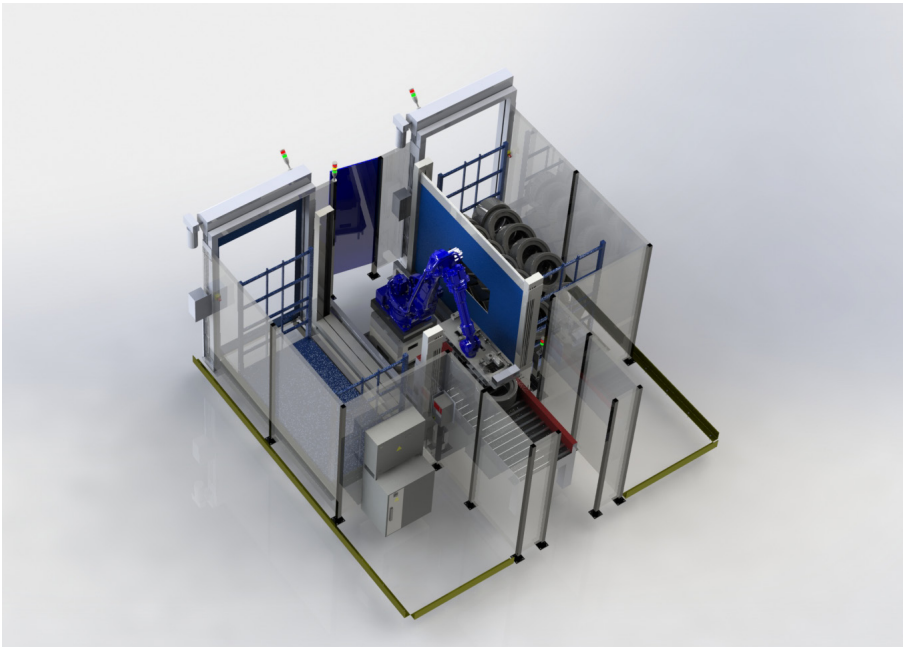
The tires are transferred to the tire organizer by an external conveyor system. The 6-axis robot picks up the goods with the tire gripper and stacks the tires in the rack. Once the rack is fully loaded, the tire palletizer automatically begins to load the next rack in the second rack area. The rack area with the loaded rack is secured from the robot and the extraction gate is opened for removal. As soon as the staff has exchanged the racks, the empty rack is released for loading by closing the gate area.



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## The system

- ▶ 2 safe gate areas to avoid downtime when changing racks.
- ▶ Fulfills all requirements of the DIN EN ISO 10218-1:2012-01 Robots and robotic devices-Safety requirements for industrial robots-Part 1: Robots
- ▶ 4 high-speed gates and fences from Brühl safety.
- ▶ Maintenance access to system
- ▶ Individualization possible in regards to rack input/output and tire input
- ▶ Security concept checked by



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## The 6-Axis robot with controller

- ▶ A 6-axis YASKAWA MH180/120 robot is installed in the system and controlled by a YCR 1000 controller.
- ▶ 0,2 mm repeatability that always ensures the quality of the packing pattern.
- ▶ 3,1 m horizontal reach.
- ▶ Up to 265 °/s angular velocity.
- ▶ Up to 800 tires/hour.



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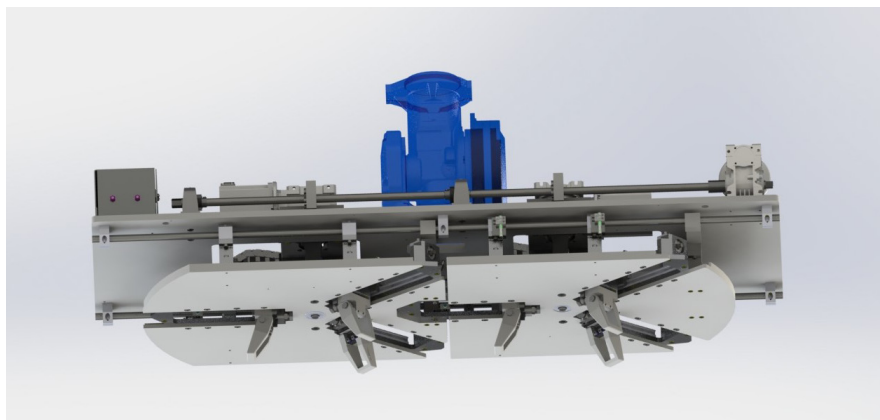
## The tire gripper

- ▶ Double gripper with 3 telescopic arms that pick 2 tires simultaneously.
- ▶ Compact design to place the tires at an angle into the rack
- ▶ No tire deformation or damage

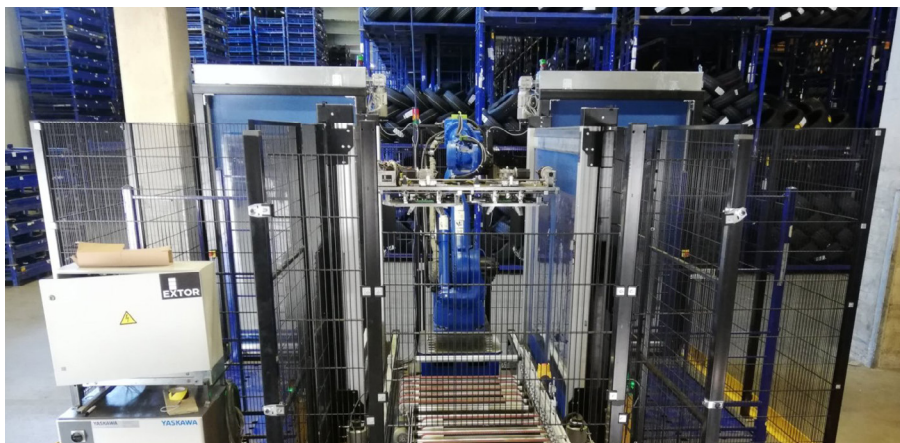
Suitable for tires with the following specifications:

- ▶ Outside diameter 500 to 700 mm (= 20 to 27 inch)
- ▶ Inside diameter 330 to 559 mm (= 13 to 22 inch)
- ▶ Tire width 140-325 mm
- ▶ Tire height (flank) 20-175 mm
- ▶ Up to 40 kg load

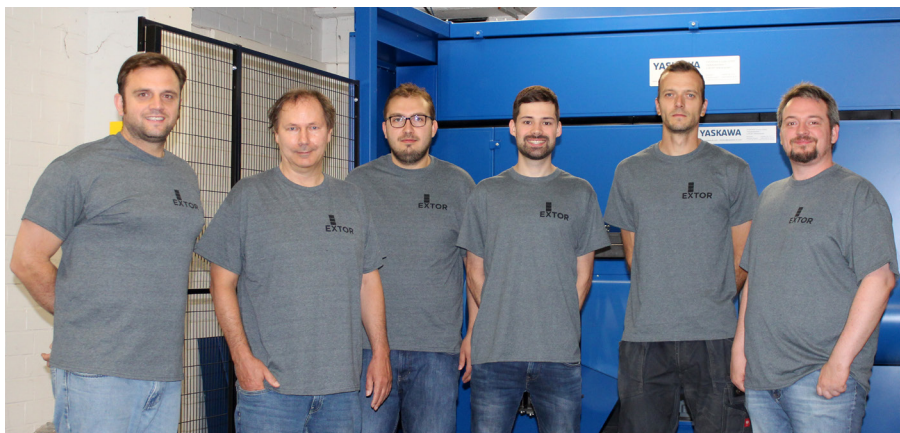
Other sizes possible on request







**Make an appointment with us  
for your individually planned  
Tire Palletizer System.**



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