

INTERNAL GRIPPERS FOR TIRE STACKS

SERIES WTR2000

▶ PRODUCT ADVANTAGES



- ▶ Dynamic, strong, and robust ready-to-mount gripper on gantry or robot for tire stack handling
- ▶ Lightweight, modular industry-standard gripper provides flexibility and ease of use
- ▶ Sensor mounting to verify the presence of the tire and height of the stack
- ▶ Self-gripping by force retention through lead screw drive
- ▶ Can handle a wide range of tire diameters
- ▶ Useful for finished tire handling in the intermediate storage area
- ▶ Workpiece contact parts are made of stainless steel

▶ SERIES CHARACTERISTICS



Drive AC servo motor



Internal gripping



Gripper jaws are synchronized

▶ CHALLENGE AND SOLUTION

- ▶ Modular system for gantry and robots with easy-to-use, ready-to-mount solution
- ▶ High dynamics and speed with servo operated linkage mechanism to grip stack
- ▶ Wide range of diameters and weights with linkage mechanism to facilitate jaw opening
- ▶ Suitable for corrosive and humid environments with stainless steel components and coated parts
- ▶ Advanced safety with gripping force retention through lead screw
- ▶ Easy maintenance with easy-to-replace parts
- ▶ Light and readily available, an economical choice for system integrators
- ▶ Low TCO for end users with low cost, high availability and proven design

▶ VARIANTS

WTR2000-159916-A

Tire gripper for finished tires
Two wheeler



WTR2000-156384-A

Tire gripper for finished tires
PCR tires

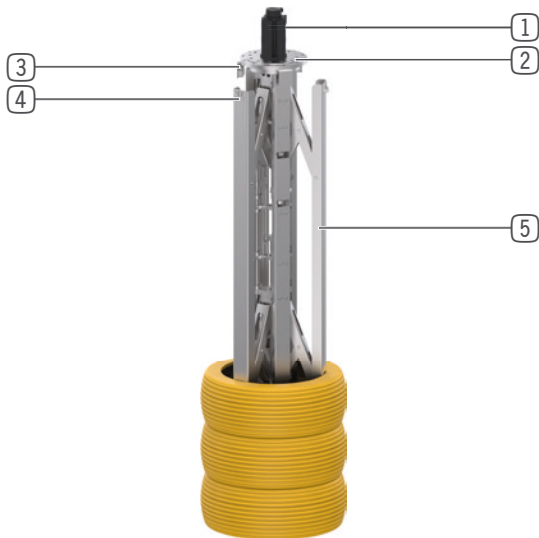


WTR2000-159917-A

Tire gripper for finished tires
TBR tires



► BENEFITS IN DETAIL



- ① **Automatic lubrication system**
- optional
- ② **Robot and gearbox mounting flange**
- customized
- ③ **Clearance laser sensor**
- customized
- ④ **Sensors to verify the presence of workpieces**
- customized
- ⑤ **Gripper jaw**
- hardened steel

► TECHNICAL DATA

Order no.	WTR2000-159916-A	WTR2000-156384-A	WTR2000-159917-A
Type of drive *	electrical	electrical	electrical
Included in delivery			Gearbox
Connection	Portal	Portal	Portal
Handling principle	Grasp	Grasp	Grasp
Movement type of the gripper	Palletizing mode	Palletizing mode	Palletizing mode
Gripper type	Form fit	Form fit	Form fit
Gripping concept	Internal gripping	Internal gripping	Internal gripping
Gripping points	Inner diameter	Inner diameter	Inner diameter
Gripper jaws are synchronized	Yes	Yes	Yes
Stroke per jaw [mm]	150	210	150
Nominal gripping force [N]		400.0	400.0
Workpiece	Two wheeler	PCR tires	TBR tires
Arrangement of the workpieces	Stack	Stack	Stack
Number of workpieces in the gripper	4	4	3
Interface to the workpiece	Steel jaw	Steel jaw	Steel jaw
Diameter inside min. ["]	9	12	18
Diameter inside max. ["]	19	27	28
Workpiece height [mm]	2000.0	2000.0	2000.0
Gathering workpieces	one direction	one direction	one direction
Workpiece weight max. [kg]	25	45	100
Certifications	LABS / REACH / RoHS	LABS / REACH / RoHS	LABS / REACH / RoHS
Weight [kg]	90	120	230

*Please note: motor, drive and sensors are not included in the scope of supply and can be ordered separately.
For different motors, please contact Zimmer Group sales team.