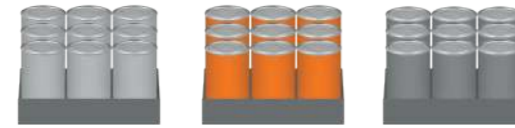


CASE STUDY:  
**AUTOMATED PICKER LINE FORMS MIXTRAYS**

**DEPALLETIZING**

Articulated arm robots depalletize single-variety trays and place trays including cans on the conveyor belt.



**MIXING**

Pickers grip the products one after the other and thus form tray combinations according to customer requirements.



**LOADING | PALLETIZING**

The gantry sucks up the created mixed-formation by means of a suction plate and loads the trays. This is followed by palletizing with jointed-arm robot.



**MULTI-USE TRAY**

Sustainable: empty trays are reused for the mixed tray combination.



**TRANSPORT | LOADING AND UNLOADING**

The finished pallets are transported by driverless transport systems, the TRAPO Transport Shuttle, to the TRAPO loading system, which autonomously loads trucks.

**ALWAYS PERFECT  
PICK AND PLACE SOLUTIONS**

**HIGH-PERFORMANCE PICKING AND CARTON FILLING WITH PARALLEL KINEMATICS**

With the HPPS series

- > Everything from one source: 1 system | 1 control
- > Extremely stable solution thanks to kinematic design
- > Three payloads available; others on request
- > Picking and box packing with one system
- > Modular design for picker line; can be expanded at any time
- > Model for care areas
- > Individual gripper technology: own gripper development and production

**PICK AND PLACE WITH DELTA OR JOINTED-ARM ROBOT**

- > Additional purchase of the robot - including manufacturer software
- > Modular design for picker line; can be expanded at any time
- > Model for care areas
- > Individual gripper technology



> We are also active in your industry and will find a pick and place solution for your products for forming mixtrays.

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**HIGH-PERFORMANCE PICKING  
WITH KINEMATICS  
PICKER, GRIPPER AND SOFTWARE  
FROM A SINGLE SOURCE**

**TRAPO | PICK AND PLACE SYSTEMS**

## HIGH-PERFORMANCE PICKER LINES IN PAYLOAD

**HPPS Series** >  
High-Speed Pick&Place System

Challenging pick and place solutions offer many industries, including the food industry, consistently high accuracy with short cycle times - and thus greater value-creation in sorting and packaging.

### 1 System | 1 Control

The high-performance picker with parallel kinematics covers all requirements.

**The big advantage:** TRAPO supplies hardware and software from a single source.

The flexible modular system allows individual customer requirements.

Accordingly, hardware and control technology are adapted, installed and maintained from a single source.

Three different sizes meet the complex requirements of different industries and products: with different strength and payloads; further sizes are available on request.



### PAYLOAD

#### 1kg payload

For small and very light products that can be picked up with a single suction cup

#### 3kg payload

For cylindrical bags or cans, which can be either suction-picked or gripped

#### 6kg payload

Allrounder: for products that are either suction-picked or gripped (All payloads refer to gripper plus product)



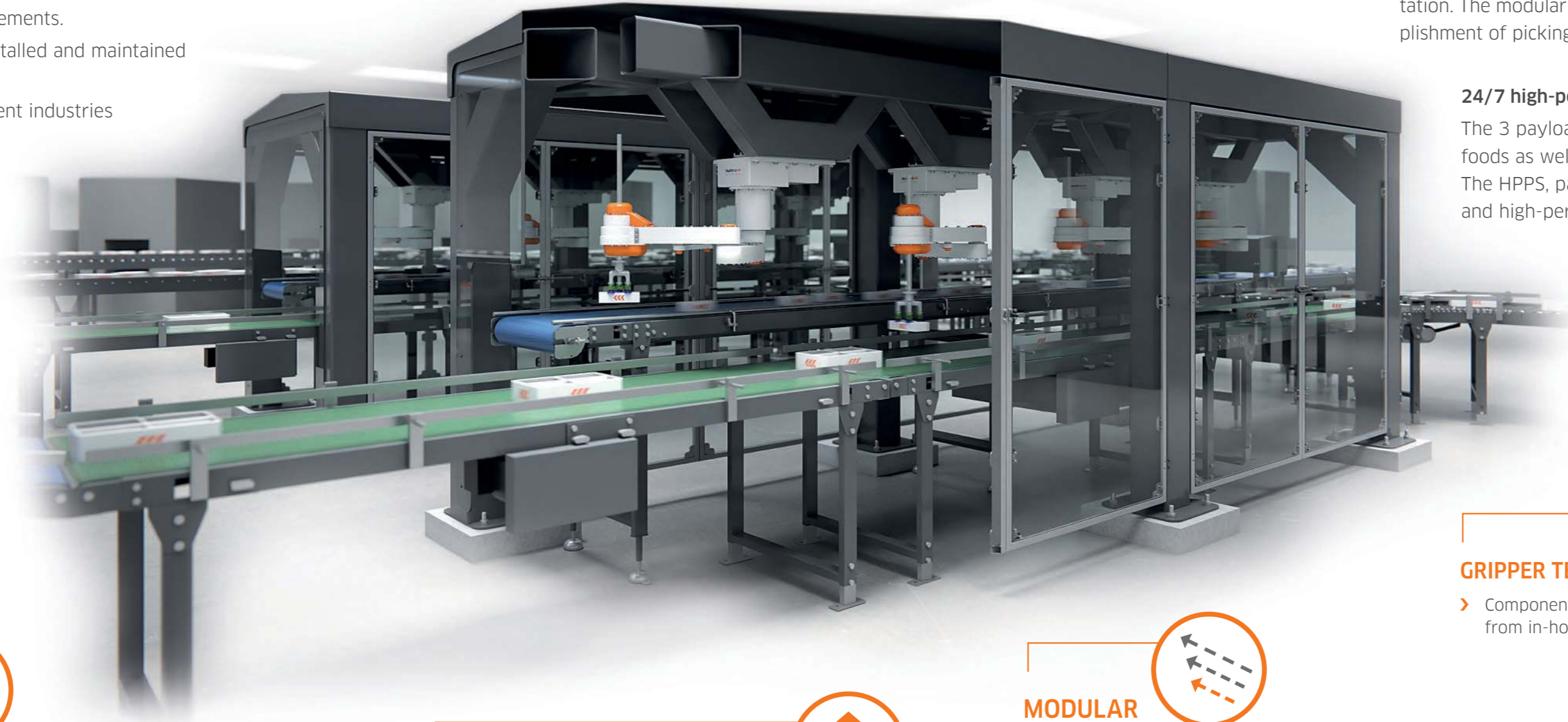
### PICKING PERFORMANCE

- > Up to 200 picks/minute with a theoretical standard movement of 300mm measuring range
- > The real picker performance depends on the application (product and measuring range)



### 1 SYSTEM | 1 CONTROL

- > Picking and carton packing with parallel kinematics
- > Hardware and software from a single source
- > 1 contact person / 1 machine lifelong



### LARGE STROKE THANKS TO Z-AXIS

- > Strokes up to 240mm (Standards 120mm / 150mm / 240mm)



### MODULAR

- > High-performance picker line, can be expanded at any time

## PICK ACCURATELY AND SAFELY AND PACK IN CARTON

**The kinematic solution of the HPPS series offers an innovation at a swift pace:**

With a large stroke and 360° angle of operation, the parallel kinematics ensure consistently high process quality and machine availability. The large stroke can even be increased by using a longer spindle.

The HPPS Series high-performance parallel kinematics use a Z-axis and rotary module for orientation. The modular system has an optional three or four degrees of freedom for smooth accomplishment of picking and packing tasks.

### 24/7 high-performance and absolute precision

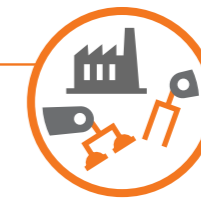
The 3 payloads of the HPPS Series handle wet, dry or irregularly shaped foods as well as primary and secondary packaging.

The HPPS, payload 6kg, also covers packing tasks with precision and high-performance.



### RANGE OF ACTION

- > 360°



### GRIPPER TECHNOLOGY

- > Components and gripper systems from in-house production