Picking & placing bulk goods: the parts arrive at random on a conveyor. The vision system detects the position and communicates it to the handling system’s controller. The parts are then gripped, taken from the belt and fed to the next process step in the correct orientation.

**Project**

- Flexible manufacturing of various component parts on a manufacturing line
- Simple, compact and efficient system
- High speed and precise positioning
- Less effort and cost for development, commissioning and operation

**Requirements**

- No external PLC required: the vision system for position sensing and quality inspection controls the handling system
- Complete solution: electric axes, servo motors, motor controllers and camera with integrated CODESYS PLC
- Very high speed when moving and extremely accurate positioning in the end position
- On request: ready-to-install systems – fully assembled and tested

**Solution**

1. **Handling system:**
   - Planar surface gantry EXCH
   - Servo motors EMMS-AS
   - Motor controllers CMMP-AS
   - Electric slide EGSL

2. **Vision:**
   - Compact vision system SBOC-Q

3. **Controller:**
   - Robotics controller CMXR-C2
Pick & place application – Sample application:
Products and solutions

- Maximum performance in a compact space
- Precision, load capacity and dynamic response for strokes of up to 300 mm
- Particularly ideal in vertical applications such as press-fitting or joining
- Ideal for dynamic movements and electronic control of cam discs
- The safety function STO is integrated as standard
- Compliance with the latest CE and EN standards without additional measures

Planar surface gantry EXCH
- Low vibration: reduced requirements for the frame
- Can be expanded with a Z-axis or rotary-linear module for 3D applications
- Ready-to-install complete system: fully assembled and wired
- Optional controller package CMCA (in a control cabinet or on a mounting plate)

Servo motors EMMS-AS
- Eight output classes from 100 to 2,000 W
- Always fits thanks to universally compatible interfaces
- Digital absolute displacement encoder for single-turn or multi-turn
- Maintenance-free operation thanks to life-time bearing lubrication
- High protection class IP65

Electric slide EGSL
- Maximum performance in a compact space
- Precision, load capacity and dynamic response for strokes of up to 300 mm
- Particularly ideal in vertical applications such as press-fitting or joining

Motor controllers CMMP-AS
- Ideal for dynamic movements and electronic control of cam discs
- The safety function STO is integrated as standard
- Compliance with the latest CE and EN standards without additional measures