Pressing application – Sample application

Project
Pressing cartridges into a valve housing

Requirements
- Precise guidance during pressing
- High positioning accuracy
- Flexible manufacturing

Solution

1. **Press-fitting**
The cartridge seals are pressed into the valve housing via an electric linear drive with a guided horizontal movement.

2. **Feeding**
The seal is fed via a pneumatic handling solution, consisting of a linear axis, a rotary unit, a flat cylinder and a gripper.

3. **Controller**
It is all controlled via the valve terminal MPA with a CPX connection.

Highlights
- Precise movements
- High forces up to 3 kN
- All components from a single source
- Easy selection and configuration of the drive packages (electromechanical components, motor and motor controller) with the PositioningDrives software
- On request: ready-to-install systems – fully assembled and tested
Pressing application – Sample application

Feeding:
1. Linear axis DGC-32-390
2. Flat cylinder DZF-12
3. Rotary unit DRRD (downstream of DZF)
4. Gripper HGPT-25

Press fitting:
5. Linear axis EGC-185-200
6. Servo motor EMMS-AS 140

Controller:
7. Controller CPX-CEC
8. Motor controller CMMP-AS
### Linear axes
**EGC / EGC-HD**
- Toothed belt or spindle axis
- Size: 50 ... 220
- Stroke lengths: 50 ... 8500 mm
- Force: 50 ... 2500 N
- Optionally with a guide or as a heavy-duty version (EGC-HD) with two guide rails
- Maximum load capacity and rigidity
- Shortest cycle times due to maximum dynamic response
- Modular product with flexible options

### Servo motor
**EMMS-AS**
- Size: 40, 55, 70, 100, 140, 190
- Eight output classes from 100 to 2,000 W
- Torque: 1 ... 120 Nm
- Voltage: 360 ... 565 V DC
- Nominal current: 0.6 ... 14.4 A
- 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

### Motor controller
**CMMx-AS**
- Servo motor controller CMMP-AS: Ideal for dynamic movements and electronic control of cam discs
- Servo motor controller CMMS-AS: Strengths include standard applications and positioning tasks with I/O and fieldbus connection
- Servo motor double controller CMMD-AS: operates two servo motors independently of one another
- The safety function STO is integrated as standard: emergency stop requirements with a safe stop SS1 up to category 3

### Controller
**CPX-CEC**
- Control platform to IP65
- On-site installation
- Integrated in a valve terminal
- For easy control of valve terminal configurations with MPA or VTSA

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