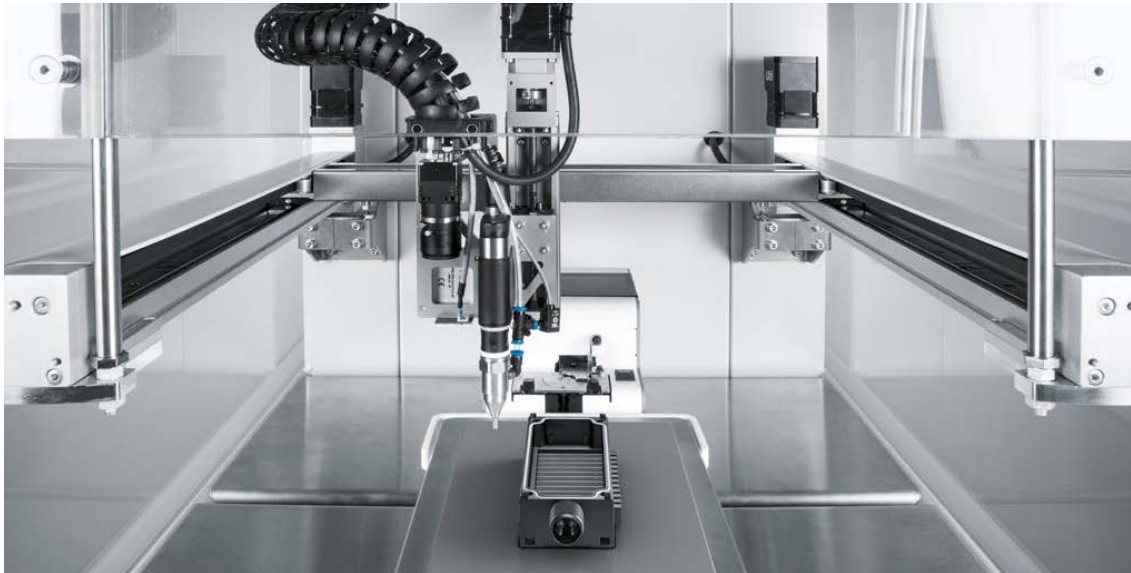


Handling solution for moving and positioning a dispensing head

FESTO



Highlights

- Complete system kit comprising kinematics, controller and software
- Precise path travel thanks to interpolating controller
- No programming skills required
 - Graphic user interface (sequencer) for simple and reliable generation of program sequences in CODESYS
 - Festo Handling Motion Lib with predefined function elements
- High efficiency with maximum time and cost savings: many predefined interfaces to a higher order control system

Customer

bdtronic GmbH, a company located in Weikersheim (Germany), is one of the world's leading suppliers of dispensing systems, including complete systems for automating the assembly and production of electronic components.

Requirements

- Compact, flexible and low-cost solution
- Precision and process reliability
- Interpolated control for precise application of very fine adhesive lines and the application of flexible contours

Solution

- Compact handling systems YXMx as kits
- Kit containing optimally harmonised standard components:
 - Control CECC-X with Soft-Motion
 - Compact planar surface gantry EXCM-30, with a high payload of up to 3 kg in a very compact space
 - Control software based on CODESYS for programming the system without in-depth programming skills

Project

Handling solution for moving and positioning the dispensing head in a micro-dispensing system.

Handling solution for moving and positioning a dispensing head

Micro dispenser mini-dis by bdtronic

FESTO



Precise path travel
thanks to interpolation



Handling solution for moving and positioning a dispensing head

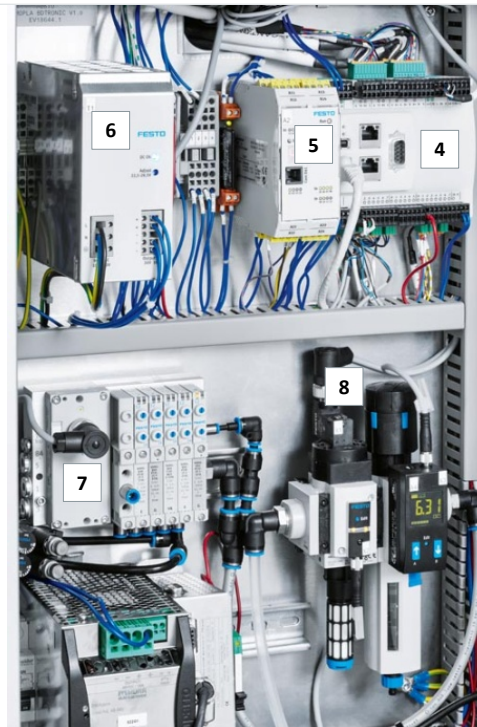
Micro dispenser mini-dis by bdtronic

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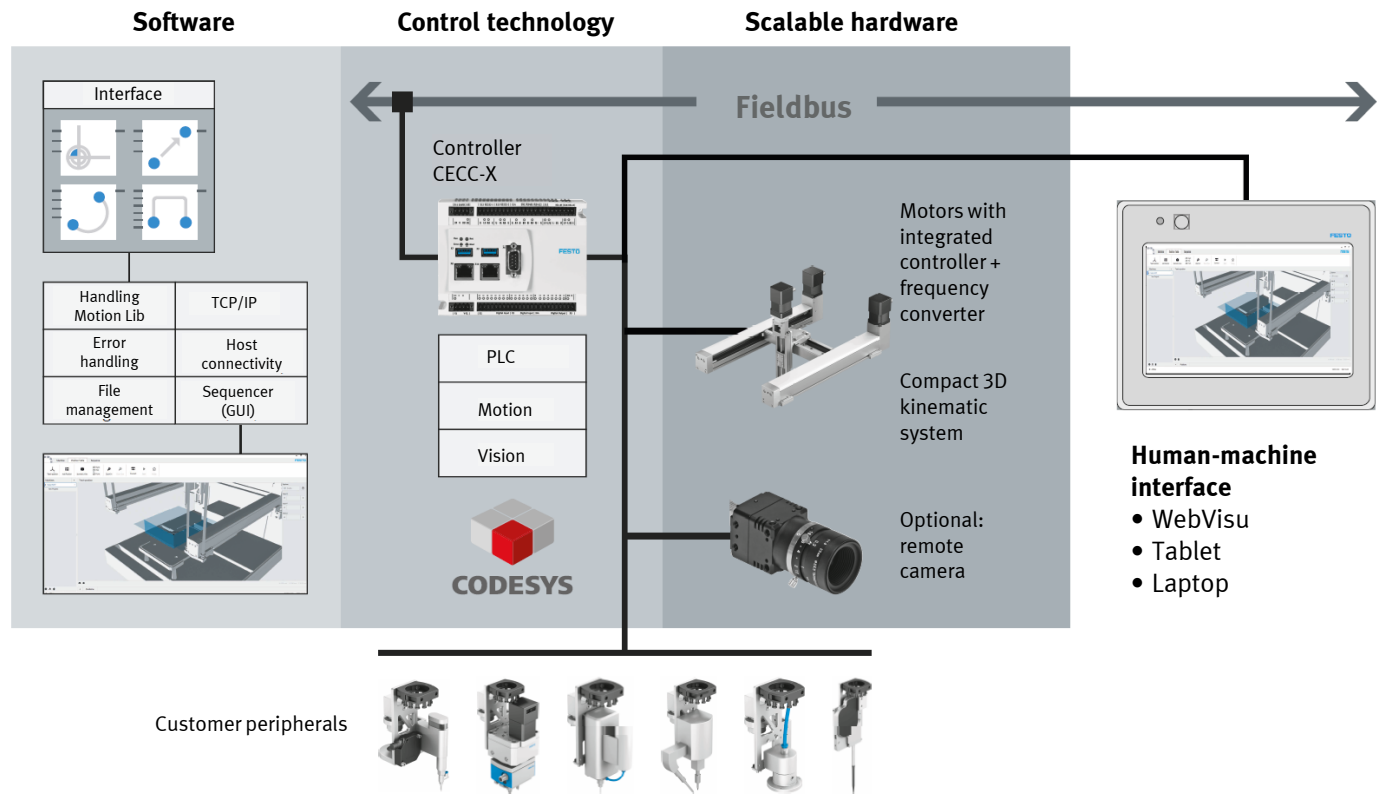
Festo solution:

- 1 X, Y-axis: planar surface gantry EXCM 30
- 2 Z-axis: electric slide EGSK 20-125
- 3 ISO cylinder DSBC
- 4 Controller CECC-X
- 5 Safety system CMGA
- 6 Power supply unit CMGA
- 7 Valve terminal VTUG
- 8 Service unit combination MS4



Handling solution for moving and positioning a dispensing head

System structure



- Human-machine interface**
- WebVisu
 - Tablet
 - Laptop

Handling solution for moving and positioning a dispensing head

Solution components in detail

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Controller CECC-X

- Large number of functions in a very compact space
- High performance (dual-core processor)
- Interface variety
- Programming based on CODESYS V3
- Future-safe for Industry 4.0 thanks to OPC UA interface



Compact planar surface gantry EXCM-30

- Stroke length X-axis: 100 ... 700 mm
- Stroke length, Y-axis: 110, 160, 210, 260, 360
- Rated load for maximum dynamic response: 3 kg
- Maximum acceleration: 10 m/s²
- Maximum speed: 0.5 m/s
- Stepper motors with integrated controller and frequency converter



Electric slides EGSK

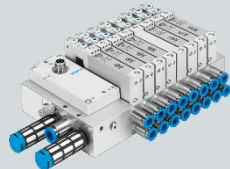
- Size: 15, 20, 26, 33, 46
- Stroke length: 25 ... 840 mm
- Force: 19 ... 392 N
- Recirculating ball bearing guide and ball screw
- Spindle axes with maximum precision, compactness and rigidity

Other Festo products suitable for bdtronic GmbH



Valve and valve terminal series VG

- Small, compact, with high flow rate
- From individual valves right up to fieldbus-compatible valve terminals
- Ideal for all price-sensitive applications



MS series service units

- High flow rates
- Energy efficient
- Individual configuration
- Integrated sensors



Safety system CMGA

- Configurable and/or programmable
- Reliably monitors command input devices, safety sensors, safety switches, encoders and measuring systems



Power supply unit CACN

- Clamping 100 ... 240 V AC
400 ... 500 V AC
- Output voltage 24/48 V DC
- Output current 5A, 10A, 20A