



Dispensing Robot DR-CNC

Highest flexibility – Dynamic sealing, casting, and bonding

The ideal solution for complex dispensing processes

The dispensing robot DR-CNC ensures an optimal interaction of dispensing process and motion sequences. The variable X-Y-Z strokes of the high-precision linear axes enable the three-dimensional dispensing of casting, sealing, and adhesive systems. State-of-the-art control technology and the modular control structure allow for simple and full integration into existing production systems.



Compact design

- Precise and highly dynamic RAMPF axis system with cantilever gear or portal gear



High flexibility

- Compatible with available RAMPF mixing and dispensing systems (dynamic and static)
- Flexible automation solutions – from manual to automatic part loading



Highly productive

- Increased productivity through optional dual mixing system
- High travel speed during dispensing
- Speed-dependent dispensing with FlexSpeed



Accurate metering

- Highly precise gear metering or piston dispensing pumps
- Short hoses between metering pumps and mixing head for highest accuracy
- Servo-driven gear pumps
- Mixing head for up to four components



Controls

- Controls from Beckhoff and Siemens
- Quick and flexible programming of different parts
- Integrated process monitoring
- Intuitive operation via RAMPF HMI



RAMPF – Dispensing & Digitalization

The new HMI

- Uniform user interface for dispensing process and control of CNC axes
- Full integration of automation and testing technology
- Hardware-independent solution with process-related icons and intuitive menu navigation (touch)
- Access to system via mobile devices
- Hardware from Beckhoff and Siemens
- Visualization of process-relevant parameters
- Concise graphic menu navigation
- Service-Support-Tool

FlexSpeed



Find out more at
youtube.com/rampf-group

- > Dispensing speeds go up – Lead times go down – Same high quality
- > Foaming with minimal corner radii
- > Bonding in record time
- > Saving time without compromising quality
- > For more information, please check out our FlexSpeed flyer or the following QR Code





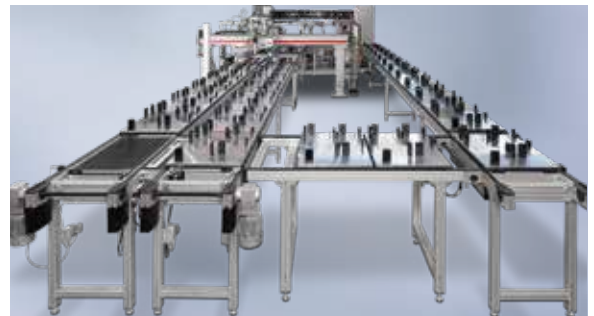
DR-CNC with table top

Dispensing Robot DR-CNC One base – many possibilities

Examples for integration options

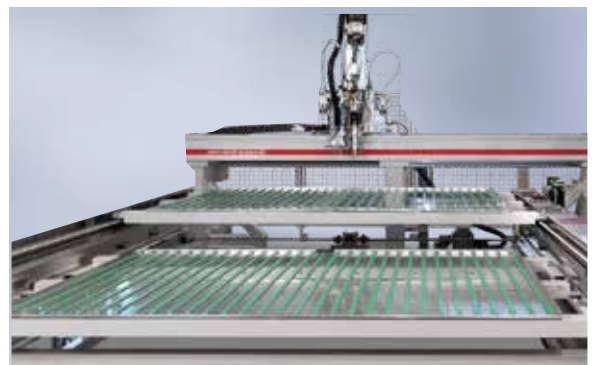
DR-CNC with conveyor system

- Highest flexibility
- For continuous production processes
- For integration of further processing steps



DR-CNC with over-under shuttle tables

- For large components
- Suitable for FlexSpeed



DR-CNC with side-by-side shuttle tables

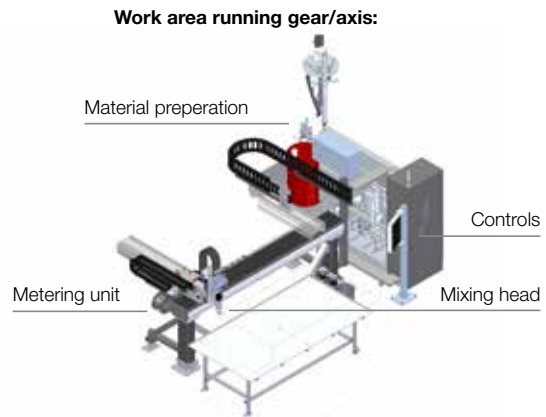
- For continuous production processes
- Linking of tables for large components



Dynamic sealing, casting, and bonding

Product details

The DR-CNC is the ideal solution for all complex applications. Variable X-Y-Z strokes enable the three-dimensional dispensing of sealing, casting, and adhesive systems. The DR-CNC is equipped with state-of-the-art control technology to combine the mixing and dispensing system with maintenance-free CNC linear axes. The result: optimal interplay of metering process and axis motion sequences. The modular control structure allows for simple and full integration into existing production systems.



X-stroke (mm)	1,500	2,000	2,500	3,000	4,000	5,000	7,500	10,000
Y-stroke (mm)	750	1,000	1,250	2,000	Further axis dimensions available in portal gear			
Z-stroke (mm)	300	500						

Further axis lengths on request

Technical data

Flow rate, mixing ratio, viscosity, etc. depending on installed mixing system

Maximum travel speed	X, Y, Z = 60 m min ⁻¹
Acceleration	10.0 m sec ⁻²
Repeatability	< 0.15 mm (ISO 9283)
Controls	Beckhoff and Siemens
Power supply	400 V / 16 – 32 A / 50 Hz (60 Hz)
Power consumption	5.5 – 25 kW (depending on project size)
Compressed air supply	> 5 bar at max. throughput 800 l min ⁻¹ , depending on application

Options (more upon request)

- High-pressure rinse recycling system or high-pressure water rinsing system
- Nucleation controller for air load controls of gasket materials
- Material recirculation system and temperature controller
- Automatic thin-film degassing for bubble-free casting
- Various types of automation equipment available (rotary index tables, shuttle tables, conveyor lines, customized automation)
- Individual operating and process data collection as well as visualization via RAMPF-HMI
- Interfaces to customer-specific MES
- Portal gear for bigger work areas
- Further material components can be integrated
- Mobile Touch Panel
- FlexSpeed: flexible adjustment of dispensing speed to suit the component shape for minimal processing times

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