dynamicLine
FOAMING, BONDING, SEALING, AUTOMATION
One-stop solution
From the dynamic mixing head to the automation and the material

DOPAG is the system provider for foaming, bonding, sealing, potting, and automating. The dynamicLine is based on the newly developed dynamic mixing head with its innovative valve technology. With this technology, DOPAG has raised the bar and set a new benchmark regarding ease of use, accuracy, and reliability for dynamic mixing.

The high-performance mixing head is based on 40 years of experience with two-component low pressure metering and impresses with its unique valve technology with booster. Functions such as the rinsing of the mixing system with water (alternatively cleaning agent), the controlled opening and closing of the mixing system, and the extremely precise metering performance set new standards on the market.

DOPAG provides you with comprehensive system solutions – worldwide:

- Optimal processing of sealing foams, adhesives and potting compounds
- Automated application of adhesives and sealants even with three dimensional components as well as grooves and molds
- Intelligent automation with highly modern control technology
- Process consulting and optimization
- Material consulting and selection, independent of supplier and type of material
- System provider for machine and material

Your technological advantages

- Highly dynamic mixing - even with extreme mixing ratios and high differences in viscosity
- Dynamic mixing technology for guaranteed reactivity when mixing low to high-viscosity PU and silicone substances for foaming, bonding, sealing and potting
- Extremely compact mixing head due to special valve design
- Low-maintenance system technology
- Global availability: web-based control technology for real-time maintenance and training

Your benefits

- Professional consulting due to decades of experience in metering and mixing technology
- Selection and delivery of suitable materials
- Dedicated technical center for customer training and testing
- One partner for an all-in-one system solution from the dynamic mixing head to the automation and the material
- Global distribution and service in more than 35 countries
A class of its own
The new dynamic mixing head

The dynamic mixing head with its new valve technology has been designed for mixing of low to high-viscosity polymeric reaction substances for foaming, bonding, sealing, and potting.

- Lightweight, small, and compact design
- Simple installation and removal of the mixing systems (mixer and mixing chamber)
- Simple cleaning and maintenance of the mixing head and mixing systems
- Low wear
- Recirculation of all components to the mixing system
- Metering accuracy with deviation +/- 1% (depending on material, discharge capacity and mixing ratio)
- No dripping of mixed components
- Perfect overlapping at start and end of beads, when using the right materials

<table>
<thead>
<tr>
<th>Metering performance</th>
<th>DOPAG DMH 1200 – dynamic mixing head</th>
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<tbody>
<tr>
<td>Specifications may vary depending on material, mixing ratio and viscosity</td>
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<tr>
<td>Discharge capacity from approx. 0.5 g/sec. to approx. 30 g/sec., increasable to 120 g/sec.</td>
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<tr>
<td>Metering accuracy +/- 1%</td>
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<td>Control unit B&amp;R, web-based control technology</td>
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<tr>
<td>Operating unit Self-explanatory operator guidance for setup and control of the machine 10.1&quot; Handheld operating box, optional 18&quot; operating panel</td>
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<td>Mixing ratio from 1:10 to 10:1 (depending on discharge capacity)</td>
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<td>Selectable mixer speed from 50 to 3,000 rpm</td>
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Automation in a new dimension

The new linear robot

- Highly dynamic AC servo and rack drive
- Torsionally stiff high-precision gearboxes and couplings
- Guide systems with maintenance-free, low-wear linear bearings
- Mechanical limit and reference switches
- Energy chain for guiding of pneumatic and electric lines

- Variant 1: Travelling speed:
  \( X = 36 \text{ m/min}; Y = 36 \text{ m/min}; Z = 24 \text{ m/min} \)
- Variant 2: Travelling speed:
  \( X = 60 \text{ m/min}; Y = 60 \text{ m/min}; Z = 24 \text{ m/min} \)
- Max. acceleration: Variant 1: 5 m/s\(^2\); variant 2: 12 m/s\(^2\)
- Repeatability: < 0.15 mm (ISO 9283)
- Effective load: 20 kg
The new system controller

- Comfortable and efficient operation
- Simple curve programming
- Software-supported 3D programming of components
- Programming via import of NC data (G code editor)
- Remote maintenance and training via modem, Ethernet or TeamViewer
Versatile and productive
Our dynamicLine is used in a wide range of applications and industries

Control cabinet technology
Foam sealings of control cabinets

Automotive industry
Foam sealings of filler caps

Filter industry
Bonding, sealing or foam gasketing

Packaging industry
Bonding and sealing

Automotive industry
Bonding, sealing or foam sealings of ventilation grilles

Renewable energies
Potting of solar cells
**Electromobility**  
Bonding, sealing and potting of connectors

**Automotive industry**  
Foam sealings and vibration protection of loudspeakers

**Electronics industry**  
Potting of sensors

**Engineering industry**  
Foam sealings of door locks

**Household appliance industry**  
Foam sealings, potting, bonding, sealing of ceramic glass cooktops, sinks, dishwasher or vacuum cleaner

**Lighting industry**  
Bonding, sealing and potting of LED light
40 years of industry experience
DOPAG metering and mixing technology
Absolute precision, reliability and repeatability – The technical demands on automated production processes are continuously rising. The digitalization of the worldwide key industries poses high challenges for the metering and mixing technology. We accompany and support this development with automation solutions in our core applications, for example bonding, sealing, potting and greasing. For many decades, the name DOPAG has stood for reliability and future-oriented metering technology. This determines the development of new metering systems through our daily progress.

Our innovative strength and the decades of cooperative partnership with our customers and project partners form the basis of our success. During the past ten years, DOPAG has realized a large number of projects in more than 70 countries. Market leaders from various key industries such as the automobile and aerospace industry as well as the wind energy sector may be found on DOPAG’s list of references.
DOPAG is one of the leading manufacturers of metering and mixing technology. In numerous industries, DOPAG systems and components are used for processing and application of multi-component polymers or 1-component media such as adhesives, greases and oils. The company employs more than 300 people and is represented in more than 30 countries by its subsidiaries and distributors.

DOPAG is a member of the HILGER & KERN GROUP that has been a reliable supplier and service partner for industrial enterprises across various market segments for more than 90 years.

Worldwide sales and service

Please find your local DOPAG contact here:
www.dopag.com/contacts