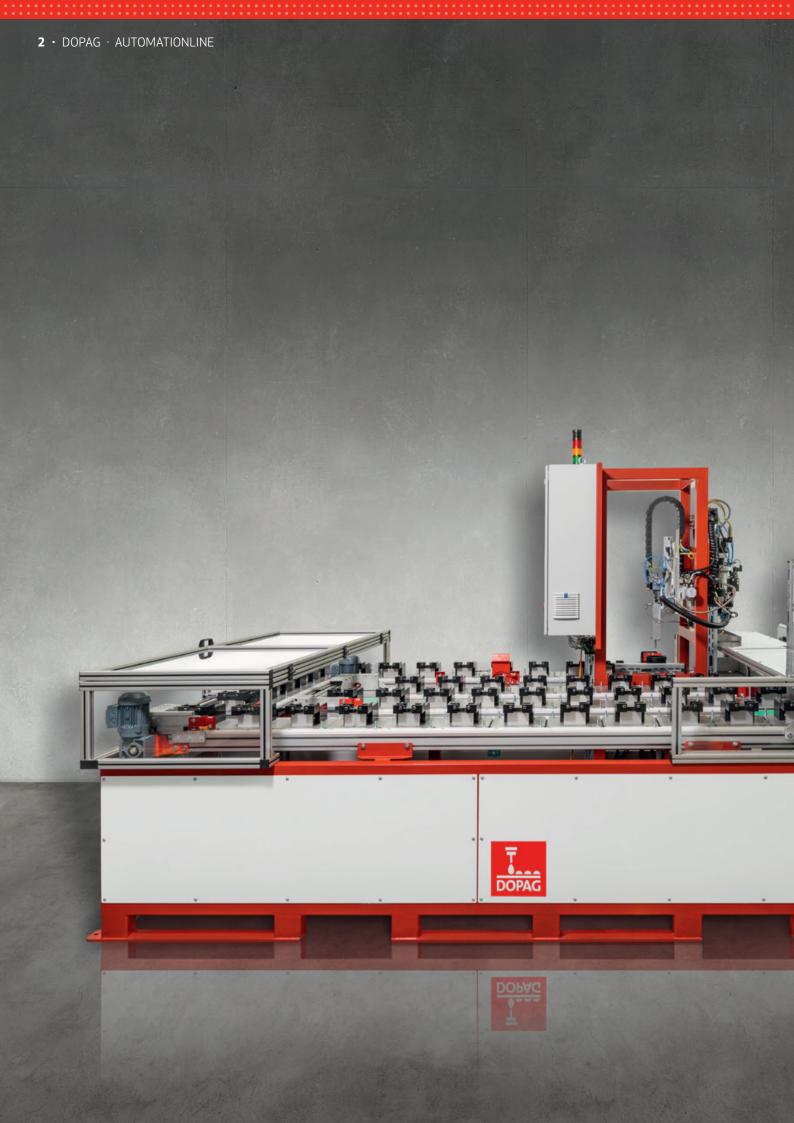


**METER** · **MIX** · **DISPENSE** 

# automationLine

SOLUTIONS FOR AUTOMATED
METERING AND MIXING TECHNOLOGY







# We understand the challenge

Excellent performance in your manufacturing processes

Our automated solutions let you integrate mixing and metering applications including all required aftertreatment in an efficient manufacturing process. DOPAG's portfolio includes both stand-alone solutions and line integration-capable production cells. They include not only the conveying and handling technology required for the application, such as coordinate systems or robots, but also proven dispensing systems from the proven DOPAG range. On top of this, there are peripheral components, such as conveyors, workpiece conditioning, plasma pre-treatment or nozzle position controls and scrapers.

### Your advantages

- One-stop solution: one contact person from the planning through the construction right up to serial production
- Reproducible bonding processes
- Remote maintenance
- Professional consulting due to decades of experience in metering and mixing technology
- Dedicated technical center for customer training and testing
- Global distribution and service in more than 35 countries

#### 4 · DOPAG · AUTOMATIONLINE



# Standard production cells

DOPAG offers a manufacturing cell in three different sizes for automated metering and mixing. Thanks to the modular design the cell can be individually tailored to a variety of applications.

- Modular design, customisation
- Single workpiece carrier pick-up, manually or pneumatically operated
- Double (tandem) workpiece carrier pick-up, manually or pneumatically operated
- Pneumatically operated safety doors
- Access protection through light curtains, scanners, safety steps.
- Barcode reader for individual, automatic selection of the processing program
- Connections for extraction systems
- and much more.

	Cell type 1	Cell type 2	Cell type 3
Size (W x D x H), mm	1200x1200x2400	1600 x1500 x 2400	1800 x 1700 x 2400
Load carrier dimensions (W x D), mm	800 x 500	1000×700	1200 x 900
Robot type	FANUC LR Mate 200iD	FANUC LR Mate 200iD/7L	FANUC M10iD/12
Control panel	Self-explanatory user guidance for setting up and controlling the machine		
	10.1" handheld controller box, 18" control panel as an option		



## Line integration-capable production cells

DOPAG offers a complete inline solution for fully automated implementation of several work steps in sequence. For example, the plasma pre-treatment and adhesive bonding

and sealing steps, as well as the joining processes, can be performed in three interconnected cells.

#### 1. Pre-treatment

• Cleaning, brushing, priming, plasma, gas flame, Pyrosil (based on plasma or gas flame), Corona

#### 2. Metering process

- Application for single- and multiple-component adhesives and sealants and potting compounds
- Various robot and coordinate systems, as well as application types (round and triangle beads, spraying, thin layer)
- Precise adhesive application through a reproducible positioning of the applications needle

#### 3. Joining technology

- Manual, semi-automatic or fully automatic systems depending on the degree of automation
- Joining of components and logging
- Application of adhesive pads or hotmelts, to keep the components handling capable until the adhesive cures
- Integration of joining technologies: Hot embossing, clinching, driving
- Part feeding by transfer systems, rotary indexing tables or sorting pots
- Preparation of workpieces in workpiece carriers
- Describing and documenting the processing state of the workpieces in the carrier

#### 4. After the metering process

- Curing systems: Infrared, ultraviolet (UV), medium frequency technology, continuous furnaces, buffer sections
- Quality assurance: Volumetric measuring systems, verification of material application (position and quality),
   component quality assurance and measuring
- Process data archiving, process visualization: Data carriers (USB, flashcard), network, SCADA systems

# No compromises

# Custom equipment

Highly specialised processes cannot always be covered by existing production concepts. Often, individual solutions are required. We are your competent, qualified contact for building custom equipment. DOPAG develops customer solutions that are tailored precisely to the application. The planning, design

and commissioning of the automated metering and mixing system takes place in close collaboration with the customer. After all, a system tailored precisely to customer requirements ensures trouble-free production and contributes towards business success.



### Proven and reliable

# High-precision equipment for the metering and mixing process

## vectodis / vectomix

With vectodis and vectomix, DOPAG has developed two product lines for processing low- to high-viscosity and even abrasive materials. Vectodis and vectomix are used wherever the media need to be metered in a highly dynamic and precise manner. Both systems are equipped with piston metering technology.

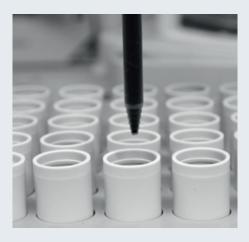
### eldomix

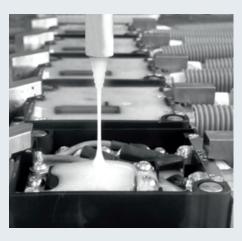
The eldomix is a compact, gear metering system. It is used to process low- to medium-viscosity multi-component media on the basis of, e.g., epoxide, polyurethane or silicone at mixing ratios from 100:100 to 100:5. Special configurations for processing highly viscous media are also possible.















DOPAG es el socio fiable y competente para todo lo relacionado con la tecnología de dosificación y mezclado. Los equipos y componentes de DOPAG se utilizan en numerosas industrias para procesar y aplicar polímeros multicomponente o medios de 1 solo componente, como adhesivos, grasas y aceites. Los elevados niveles de calidad de los productos DOPAG garantizan la máxima precisión y la repetibilidad de los resultados, incluso en procesos altamente automatizados.

DOPAG forma parte del grupo empresarial HILGER & KERN GROUP, un proveedor de confianza y socio para el desarrollo y servicio de empresas industriales pertenecientes a distintos segmentos del mercado desde hace más de 90 años. El grupo empresarial cuenta con unos 350 empleados y está presente mediante sucursales y distribuidores en más de 40 países.

# Ventas y servicio en todo el mundo



Encuentre aquí su contacto local de DOPAG: www.dopag.es/contacto/www.dopag.mx/contacto/

