### THE AUTOMATION SOLUTION

# 11 MIKRON





## **MIKRON**

FOUNDED IN 1908, MIKRON IS YOUR PARTNER FOR SCALABLE AND CUSTOMIZED ASSEMBLY SYSTEMS – FROM THE FIRST IDEA TO THE HIGHEST PERFORMANCE SOLUTIONS.

WE DESIGN AND CREATE EFFECTIVE AUTOMATION SOLUTIONS FOR THE PRODUCTS YOU WANT TO ASSEMBLE.

# YOUR SATISFACTION IS OUR GOAL

Mikron works in partnership with its customers to design the most effective automation solution for each project. To create tailor-made solutions for the product you want to assemble, we listen... and combine your experience with our own.

#### **UNIQUE EXPERIENCE ACROSS MULTIPLE SECTORS**



**Pharma / Medical** from insulin pens to asthma inhalers



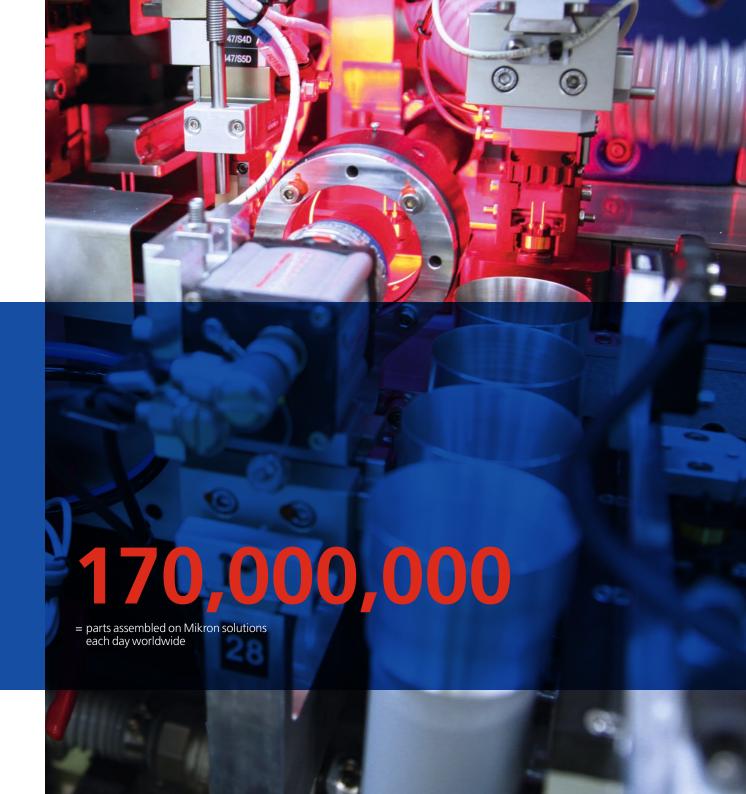
**Automotive** from gas generators for airbags to fuel injectors

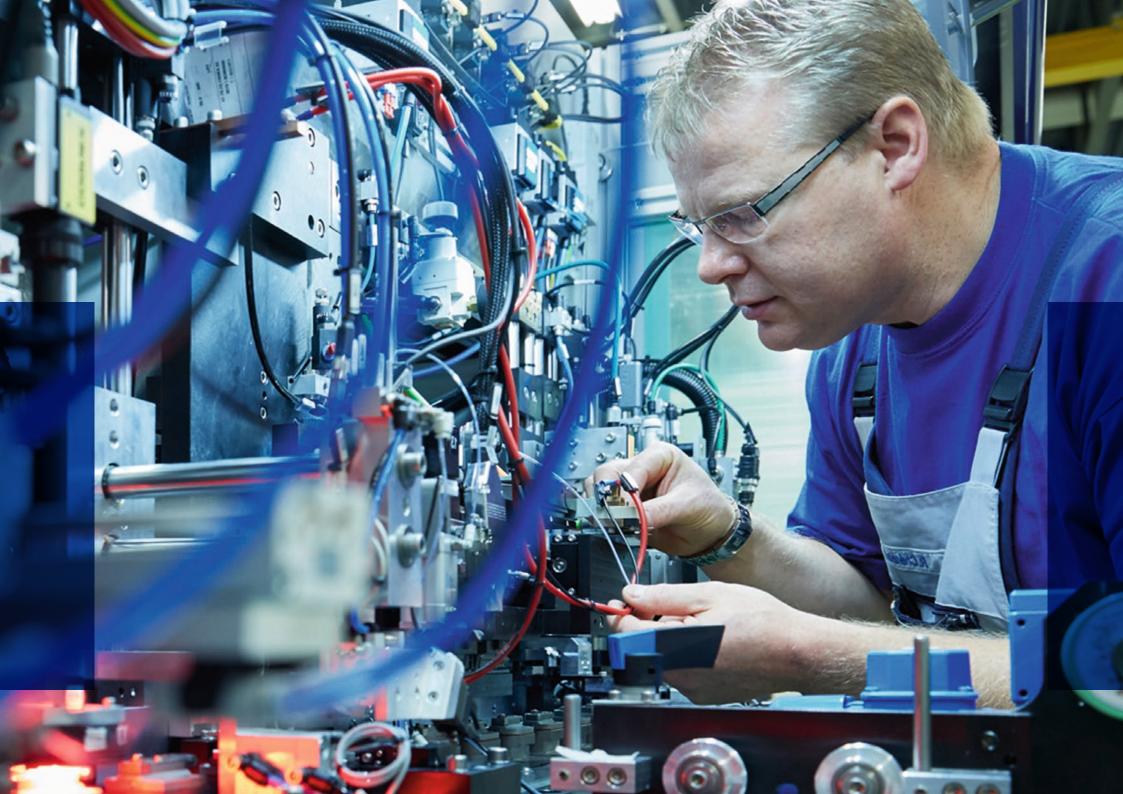


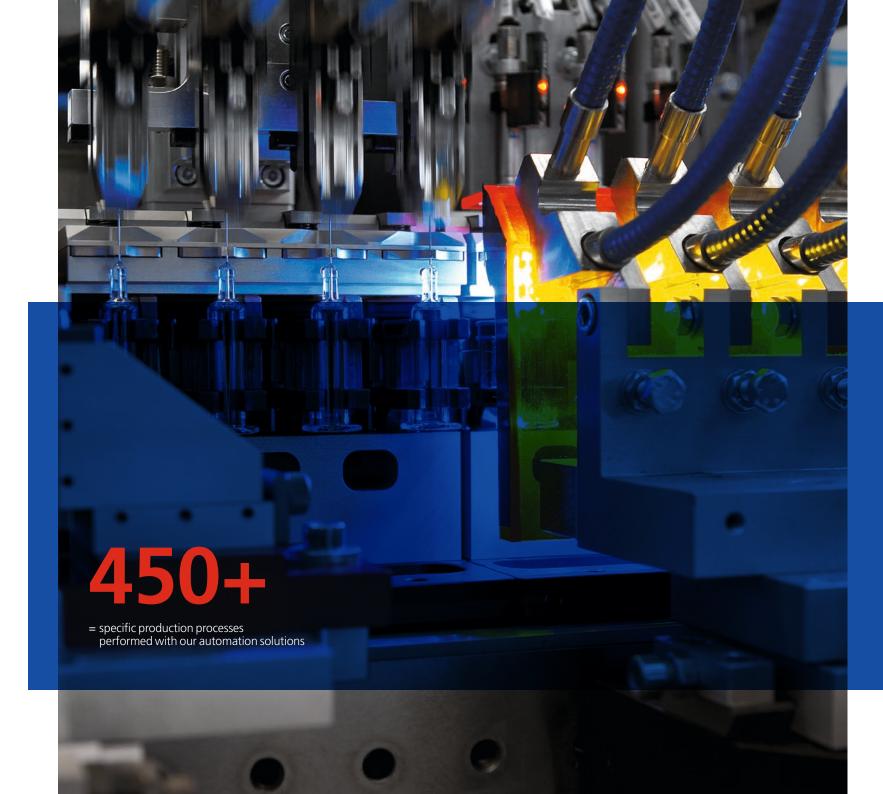
**Electrical / Industrial** from circuit breakers to quick connectors



**Consumer goods** from cosmetic pumps to ski bindings







## SOLUTIONS DESIGNED FOR YOU

To date, close to 4000 Mikron assembly solutions have been successfully installed across the world and are running around the clock.

Mikron-designed automation solutions are developed specifically for you. Their modularity, precision and process flexibility help you to realise your project quickly and efficiently. A flexible solution, that can change to suit your production needs within an ever changing market place.

#### **OUR EXPERTISE – WORKING FOR YOU**

#### Mikron's strengths

- Highly modular, standardised platforms which provide a solid, tried and tested foundation.
- More than 40 years of experience in integrating complex production processes.
- Optimised project management which, combined with our other benefits, ensures the quickest turnaround time.
- With 5 design and manufacturing centers around the world,
   Mikron expertise and support is where you need it.

#### PROVEN PRODUCTION AND TEST PROCESSES

#### Feeding

Bowl Centrifugal feeding Flexible feeding Tray handling Escapement

#### Handling

Glass handling Needle handling and inserting Tube handling

#### **Testing and Controlling**

Functionality tests
Flow and leak tests
Multiple torque tests
Needle tip, angle, length vision check
Occlusion check
Pull check
Quality tests
Vision tests
X-ray checks

#### **Dosing and Curing**

Gluing Greasing Liquid dosing Powder dosing UV curing Thermal curing

#### Welding

Laser welding Ultrasonic welding Resistance welding

#### **Marking and Printing**

Hot-Foil marking Inkjet printing Labelling Laser marking Pad printing

#### Data management

Data capture Line management Statistics Traceability

#### Forming and Stamping

Clinching Forming Riveting Hard and soft material stamping

#### Other specific processes

Coil winding Magnetization Photovoltaic related processes

## **EVERY DAY 170,000,000 COMPONENTS ARE...**



### ... ASSEMBLED ON MIKRON SOLUTIONS







1	2		3	4	5	
6	7	8	9	10		11
12		13	14	10		15
		16		17	18	19

20	21		22		
23	24	25			
	26	25			
27	28	29	30		

















#### Pharma/Medical

- **3.** Stopcock
- **6.** Glass syringe
- **12.** Inhaler for asthma
- 13. Auto-injector
- **15.** Plastic syringe
- **17.** Closer for ISO vials
- **20.** Shielded winged IV needle (Butterfly needle)
- **24.** Diagnostic kit
- **25.** Pen injector
- **26.** Dose counter for inhaler
- 28. Lancet

#### Automotive

- 2. Airbag gas generator
- 4. Rocker
- **9.** Seat belt buckle
- **10.** Gasoline injector
- 16. DC motor
- **23.** Ignitor for airbag gas generator
- **27.** Synchronizing ring for gearbox

#### Electrical / Electronic

- **1.** Electrical switch
- **14.** Loudspeaker for mobile phone
- **19.** Connector block
- **21.** Electrical socket
- **29.** Circuit breaker

#### Consumer goods

- 5. Cosmetic dispenser
- **7.** One-way pressure-relief valve
- **11.** Carburetor for outdoor power equipment gas engines
- **18.** Quick pneumatic fitting
- **30.** Fluid Tap

#### Industrial / Building

- **8.** Gas valve for cooking plate
- 22. Sprinkler

# PARTS AND PARTNERSHIP

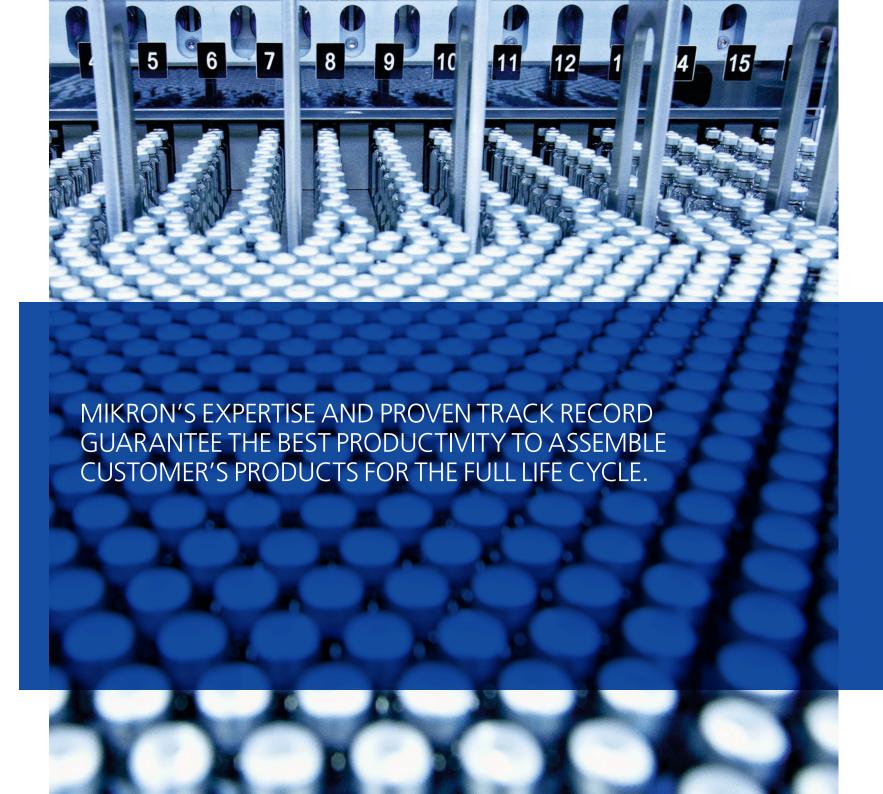
After installation, our customized training and production assistance introduces your people to the feel and function of the new system, increasing productivity by reducing the learning curve.

Our support continues with remote maintenance tools, a service hotline, and the expertise of our technicians – who arrive at your site to personally provide support throughout the entire service life of your assembly solution.

#### **CONTINUOUS IMPROVEMENT**

Need to make changes to your parts? Thanks to the flexibility of Mikron solutions, and the experience of our engineers, your line can be improved and adapted throughout its service life.





### THESE CUSTOMERS TRUST MIKRON

Renowned companies around the world place their trust in Mikron – for precision, performance and success.









ZF TRW

ABB AEG Aerogen Ltd Aptar Group Ark-Les B. Braun Medical Bausch&Lomb Biocartis Biocon Bespak

Boehringer Ingelheim Boston Scientific **Briggs & Stratton** Chiesi Farmaceutici Cilag J&J Continental

Dayco Eli Lilly and Company Flex Gan & Lee

Gerresheimer Gira GlaxoSmithKline Guala Closure Hager Electro Jabil Johnson Electric Legrand Metal Work Schlaeger Kunststofftechnik

Novelex Novo Nordisk Nypro Molex Owen Mumford Pfizer **Philips** Phillips-Medisize Renault

Nemera

Rockwell Automation Sabaf Sanmina Sanofi Schneider Electric Schott Siemens Silgen Dispensing systems Sonceboz

Robert Bosch

Sun Pharma Teva Pharmaceuticals Industries Trodat Tyco Fire Products UCB Unilever West Pharmaceutical Worldwide Dispenser Ypsomed

### FOR YOUR AUTOMATION SOLUTIONS CHOOSE MIKRON

