

LATCHES | HINGES | GASKETS

**WORLD MARKET LEADER SINCE 2018** 





## **QUALITY** FROM THE WORLD MARKET LEADER





In-house production rate



Own production at 11 international locations



In-house mould making



Own technology center



Identical production possibilities at different locations



Accredited test laboratory



36,000 customers worldwide



Represented in 60 countries worldwide



More than 50 years of production experience



20 million € insurance per product



2,100 employees worldwide



30,000 catalogue and special products



## **INGENIOUS** LOCKING TECHNOLOGY

The EMKA GROUP is the world market leader for locks, latches, hinges and gaskets used in switch and control cabinets. For more than 50 years, the company has been active across all sectors in the fields of industry (switch and control cabinets, HVACR systems, mechanical engineering) and transport (railway and commercial vehicles, caravans, etc.) with conventional and electronic locking solutions.

The total product range comprises 30,000 articles, which are developed, manufactured, finished and assembled at eleven production sites in Germany, France, England, Spain, Bosnia, Serbia, China, Indonesia and India. In one of the two plants in Bosnia, the company produces up to 900 moulds per year for injection moulding and die casting - both for internal use and for external customers.

With 2,100 employees EMKA serves over 36,000 customers in 60 countries. In 2023, the company achieved turnover of over 350 million euros.

EMKA: Ingenious Locking Technology.







**View EMKA website** 

**View EMKA corporate video** 

### **MOULD + SERIES**

## PRODUCTION TO CUSTOMER ORDER

EMKA is one of the three largest mould makers in Europe.

One reason for this is that all of EMKA's 30,000 catalogue and special products are tool-related. In its own production sites, EMKA produces these products from the materials polyamide, zinc, steel, stainless steel and aluminum. EMKA customers can take advantage of this manufacturing excellence that has been developed over decades. With the business model "Mould + Series", EMKA offers a unique service package:

Based on the customer's drawing, the mould is designed. The production of the initial sample with this mould takes place directly at EMKA on site on factory-owned machines from series production. In this way, the mould making and initial sample production stages are directly coupled with each other. Time and quality losses due to transport and coordination loops are eliminated. After tool and initial sample approval, the customer receives the complete test documentation as well as all relevant production parameters. If the customer does not want to manufacture his product himself, but wants to outsource it, EMKA can also take over the series production - if necessary with assembly work and worldwide logistics.

"Mould + Series" is mould making and initial sample production from a single source - with optional series production. In short: Production with a system.







## MODULAR PRODUCT PROGRAM

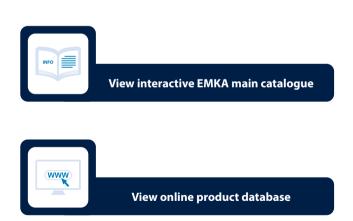




## **EVERYTHING AT A GLANCE**

You will find a large selection of EMKA products in the **interactive EMKA main catalogue** as well as in the **online product database**.

There you also have the possibility to download CAD data in the international exchange formats STEP and IGES as well as detailed product data sheets.





## **PRODUCTION** AT A GLANCE

MOULD MAKING





PLASTIC INJECTION MOULDING





ZINC DIE CASTING







**ALUMINIUM DIE CASTING** 



PROFILE EXTRUSION













## **PRODUCTION WORLDWIDE**

























Company headquarters Velbert, Germany



Goražde (Plant 1), Bosnia-Herzegovina

- Company headquarters
- Production site
- Subsidiary
- O Agency



## **MOULD** MAKING

#### Facts

Production in Bosnia-Herzegovina

Certified acc. to ISO 14001:2015, ISO 45001:2018, IATF 16949:2016 and ISO/IEC 27001:2013

150 employees, thereof:

- 46 engineers
- 15 constructors
- 14 developers

55,000 m<sup>2</sup> area under roof

95 high-quality machines in mould making

Production of up to 900 moulds per year

#### Development and engineering

3D-CAD

CAE

Filling simulations for various materials

Stress-strain analysis by means of finite element method

#### Service

Moulds for plastic injection moulding, zinc and aluminium die-casting

Multi-component moulds (2K)

Moulds for IML foils

Moulds for insert injection moulding

Punch deburring

Pre-series moulds for all materials

Family tools for small quantities

Guaranteed service life

Precision casting tools







## **MACHINERY IN MOULD MAKING**

#### Equipment in mould making

34 machining centres, several with 5 axles

7 lathes

5 surface grinding machines

22 die-sinking EDM machines

7 wire EDM machines

8 HSC machines for the production of graphite electrodes

12 standing drill presses

#### Manufacturers













## **PLASTIC INJECTION MOULDING**

Production in Germany, Bosnia and Herzegovina, India and Indonesia

All production sites are certified according to ISO 9001:2015

69 machines, thereof 4 2K machines

Manufacturer: Arburg

Clamping forces: 20 - 500 t

Max. tool clamping area: 1,100 x 600 mm

Parts weights: 3 - 3,000 g

#### Granular types:

Thermoplastic / PA 6 / PA 6 VO / PA 6 GF transparent, rubbery to high strength and chrome platable, others on request

Closed material circuit, automated material preparation as well as material feeding and parts removal





## **ZINC** DIE CASTING

Production in Germany, Bosnia and Herzegovina, France, India and Indonesia

All production sites are certified according to ISO 9001:2015

42 machines

Machine manufacturer: Frech

Clamping forces: 20 - 315 t

Max. tool clamping area: 900 x 550 mm

Parts weights: 3 - 3,000 g

#### Zinc alloys:

- 7410 acc. to DIN1743
- Z430 acc. to DIN1743
- · more on request

3 automated special machines for the thread production





## **ALUMINIUM** DIE CASTING, FORGING AND FRICTION WELDING

Facts

Production in Germany

Certified according to ISO 9001:2015 and ISO 50001:2011

80 employees

5,000 m<sup>2</sup> area under roof

3 Melting furnaces (2 tilting furnaces and 1 shaft furnace)

Fully automatic robot removal with deburring press

Own water treatment

#### Aluminium die casting

9 machines for aluminium die casting

Clamping forces: 220 - 1,250 t

Manufacturers: Frech, Bühler, Italpresse

11 machining centres

Max. tool clamping area: 1,500 x 1,500 mm

Part weight: 50 - 12,500 g

#### Aluminium forging

1 machine for aluminium forging

Pressing force: 800 t

Manufacturer: Weingarten

Part weight: up to 4,000 g

Forging alloys: AlMgSi0.5 / AlMgSi1 others on request

#### Aluminum friction welding

Manufacturer: KUKA

Diameter: up to Ø 90 mm

Welding force: up to 20 t

Total length of the parts: up to 1,600 mm

#### Suitable for:

- Aluminium
- Copper
- Steel / various alloys



## **STEEL** AND STAINLESS STEEL PRECISION CASTING



Production in Serbia

Certified acc. to ISO 9001:2015

192 employees

10.479 m<sup>2</sup> area under roof

4,000,000 parts per year

400 t of material per year

Certified acc. to ISO 9001:2015

Part weight: 5 g - 10 kg

Component lengths: up to 250 mm

Steel and stainless steel in various qualities and alloys

Heat treatment of steel:

- Hardening / Case hardening
- Tempering

Tolerances according to VDG P690 D2

Surface quality up to N8 (Rz =  $16 - 25 \mu m$ ) possible without reworking





## **PROFILE EXTRUSION**

Production in Spain and England

Both production sites are certified to ISO 9001:2015, the plant in Spain is also certified to ISO 14001:2015 and IATF 16949:2016

7 lines for EPDM

2 lines for PVC

1 line for TPE

5 injection moulding machines (50 - 100 t) for the production of corners

Manufacturers: Gerlach, Itaigum

Materials:

- EPDM
- NBR
- PVC
- TPE

Sealing profiles with and without metal reinforcement, as mono and bi profiles

Production of rings and frames, as well as ready-made lengths

Profiles with bonded coatings, flock and adhesive tapes







## **PUNCHING**, BENDING AND METAL WORKING



Production in Germany, Bosnia and Herzegovina and France

All production sites are certified according to ISO 9001:2015

46 machines

Manufacturers: Edelhoff, Kaiser, Leinhaas, Exner, Burger, Walter, Ruhrmann Pressing force: 80 - 250 t

Material thicknesses: 1 - 5 mm

#### Materials:

- Steel
- · Stainless Steel
- Aluminium
- Brass











## **CUTTING**

Production in Germany, Bosnia-Herzegovina and China

All production sites are certified according to ISO 9001:2015

3 rotary indexing tables

4 cam-controlled single-spindles / automatic lathes

13 CNC single-spindle automatic lathes

Manufacturer: Pfiffner, Index, Traub, Ergomat

Series production: 100 - 100,000 pieces

Turning part diameter: Ø 2 - Ø 65 mm

Turning part length: 5 - 300 mm from the bar

#### Materials:

- Plastic
- Zinc
- Aluminium
- Steel
- Stainless Steel
- · Non-ferrous metals

4 axis machining

Driven tools

Polygon turning

Simultaneous machining with up to 16 tools

Dimensional accuracy up to H7 (0.02 mm)

without rework

Slugless cutting









## **POST-PROCESSING / CNC**

Production in Germany, Bosnia and Herzegovina, France and China

All production sites are certified according to ISO 9001:2015

34 CNC machining centres, 3 - 4 axes

23 lathes

9 grinding machines

14 drilling machines

8 threading machines

6 belt grinders

4 milling machines

2 lathes

Series production: 5 - 10,000 pieces

#### Materials:

- Steel
- Stainless Steel
- · Non-ferrous metals
- Aluminium
- Zinc
- Plastic





### **ACCREDITED**

## EMKA TEST LABORATORY



#### This confirms:

The EMKA test laboratory fulfills not only the requirements of the quality management system but also all technical prerequisites. It also has the high level of technical competence to perform independent tests in accordance with the current standard.

Due to the affiliation of the DAkkS to the International Laboratory Accreditation Cooperation (ILAC), the accreditation is also internationally recognized.

#### Testing options

3D printer for plastic Corrosion test

Climate and humidity test

Tensile-compressive strength test

IP protection class test Torque measurement

Endurance and lifetime test Hardness test

IK test Spectral analysis

Vibration test system







## **SALES** WORLDWIDE









































# A STRONG PARTNER BY YOUR SIDE

#### EMKA Beschlagteile GmbH & Co. KG

Langenberger Str. 32 42551 Velbert Germany

+49 2051 273 0

info@emka.com

www.emka.com

Follow us on LinkedIn!

