

evitron



[www.evitron.pl](http://www.evitron.pl)

PLASTIC  
BONDED  
MAGNETS

We strictly carry out the Quality Management System: ISO9001:2008 and ISO/TS16949:2009



evitron



## [ Company ]

EVITRON is renowned manufacturer of Plastic-Bonded Magnets (PBMs), magnetic sensor systems and mechatronic components. We have specialized in tools and overall processes involved in the manufacturing of magnets in injection molding.

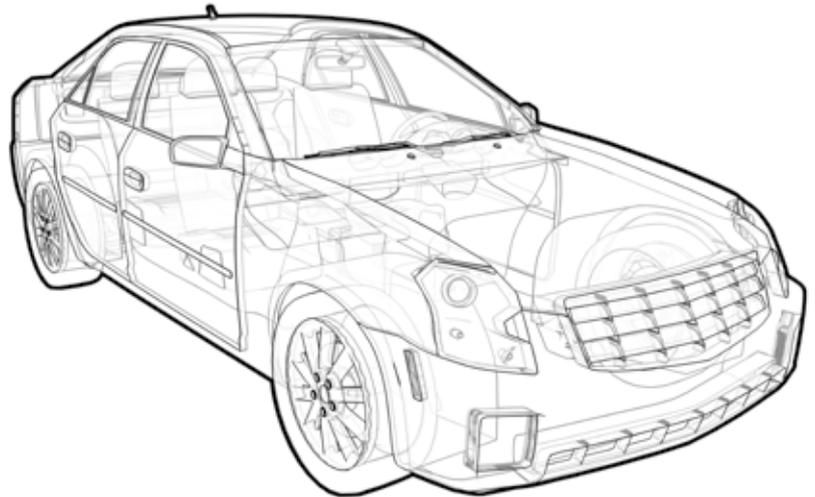


# Markets



## AUTOMOTIVE

Magnets supplied for this sector perform a long service life, highest precision and absolute reliable operation. Automotive magnets can be found e.g. in window lifters and numerous angle sensors.



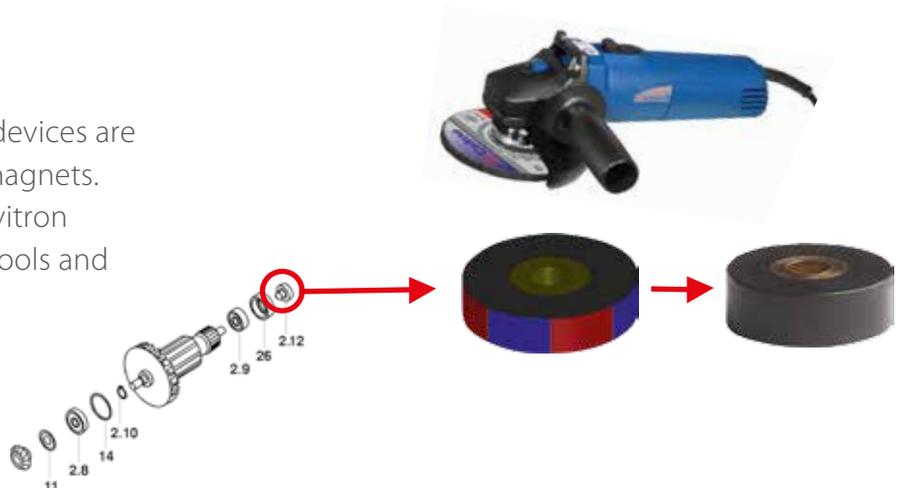
clean room

## MEDICAL

This sector requires highest material quality and high cleanness class. Within this area our magnets perform control and regulation tasks e.g. in drug delivery systems.

## GENERAL INDUSTRY

Nowadays many machines and devices are equipped with plastic bonded magnets. Magnetic ring and rotors from Evitron are applied especially in power tools and domestic electrical equipment.



# [ Toolmaking ]

Our services focus on application-related consultancy and the development and manufacture of high-quality products. Comprehensive know-how of shaping possibilities and the properties of the materials are combined in our facilities with the most modern process engineering.

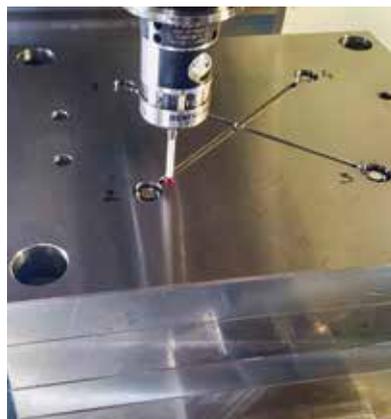
CNC milling center Haas VF2



Tool shop



Precise milling



Measuring machine

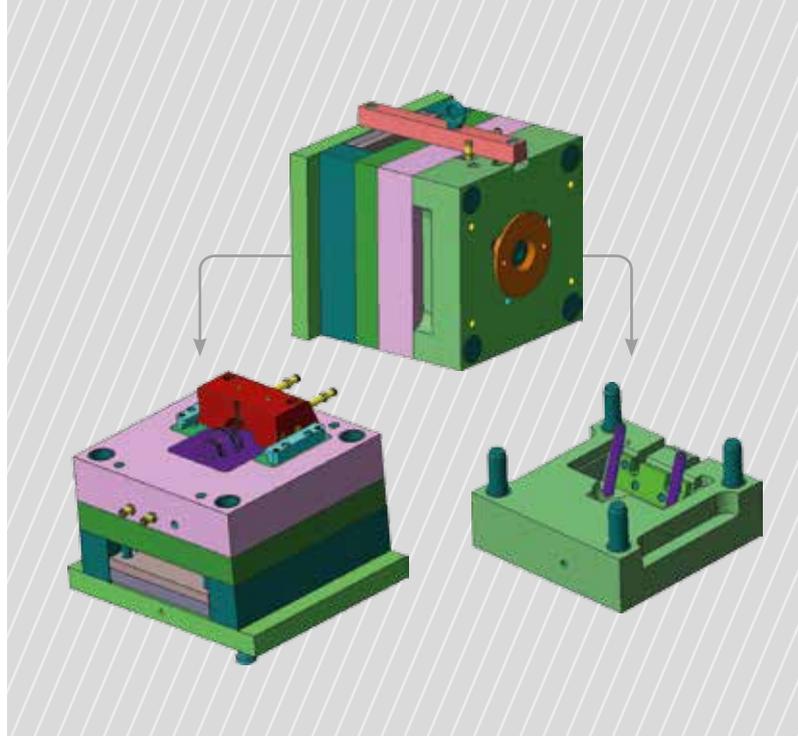


Measuring microscope



Electrical discharge machines

# MOLDS FOR MAGNETS WITH COMPLEX SHAPE

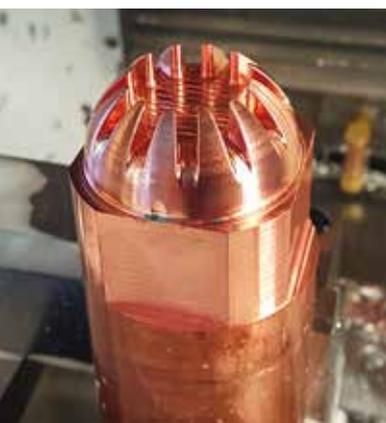
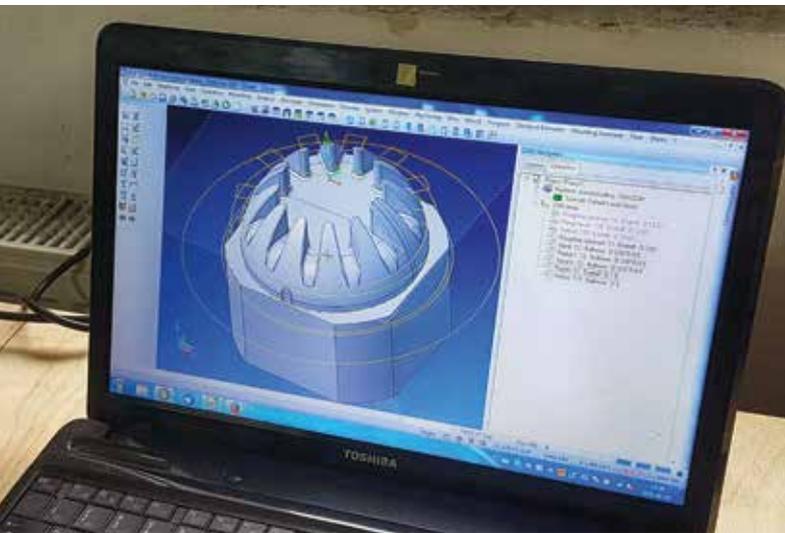


Mold design

Many different metalworking technologies, such as precision milling or electrical discharge machining (die sinking erosion or wire erosion), are used in the manufacture of magnets with complex shapes.



Magnet with complex shape



Electrode milling



High-hard milling



Die sinking erosion



Injection mold

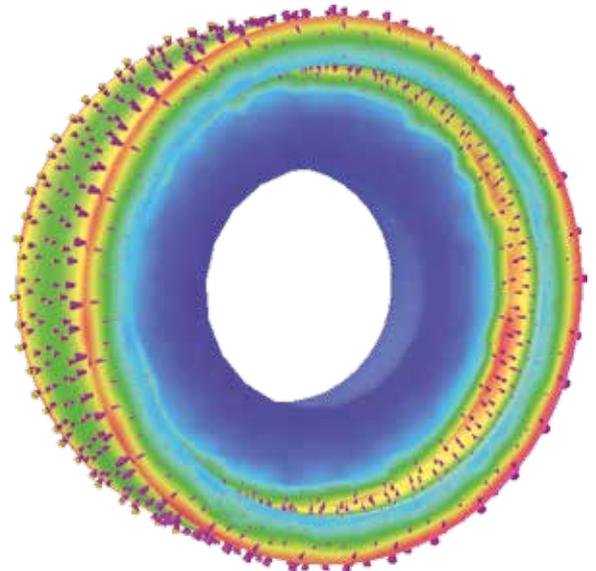
# MOLDS FOR MULTIPOLAR ANISOTROPIC MAGNETS



Multipolar anisotropic magnets are produced in molds with integrated multipolar or radial magnetic field for particle aligning during processing in injection molding.

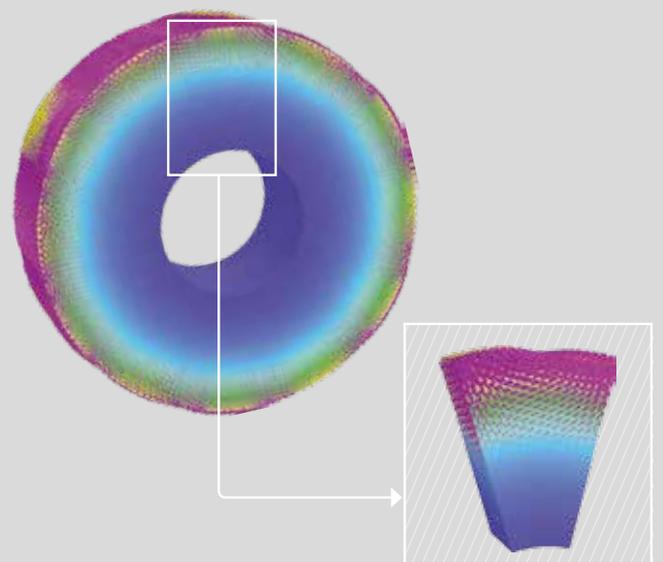
## MOLDS WITH INTEGRATED RADIAL MAGNETIC FIELD

Radial magnetic field in the molds is usually produced by magnetic coils. Magnets produced in this way are delivered usually in demagnetized state and are remagnetized multipolar by pulse capacitor discharge magnetizer.



## MOLDS WITH INTEGRATED MULTIPOLE MAGNETIC FIELD

Multipolar magnetic field in the molds is usually produced by integrated permanent magnets in the mold. These magnets are delivered in magnetized state and don't have to be magnetized additionally.

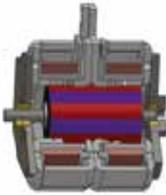
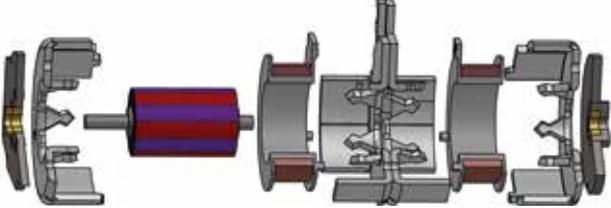
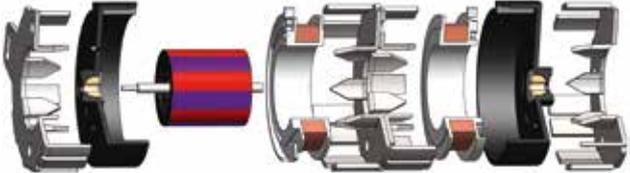
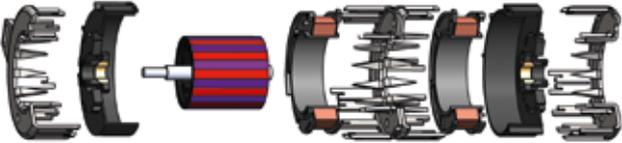


# MAGNETS FOR ELECTRIC DRIVES

## Outer diameter

Pole length

## Pole number

<p><b>9 mm</b> 2,4 mm <b>12</b></p>		
<p><b>15,5 mm</b> 4 mm <b>12</b></p>		
<p><b>18,5 mm</b> 4,8 mm <b>12</b></p>		
<p><b>31 mm</b> 4 mm <b>24</b></p>		

A claw-pole type stepping motor comprises: a rotor assembly shaped substantially cylindrical, and having a center shaft; and a stator assembly composed of two cup-shaped stator units which are coupled to each other coaxially so as to sandwich the rotor, and which each include a bobbin having a magnet wire wound therearound, and two pole tooth arrays magnetically connected to each other and shifted in phase from each other by an electrical angle of 180 degrees.

In the motor, each stator unit further includes a cover ring which protects the magnet wire wound around the bobbin against resin injected when the stator unit is resin-molded for an integrated solid structure. The motor structured as described above can be successfully resin-molded so as to enable elimination of a motor case, thus achieving downsizing for the dimension of the eliminated motor case while maintaining a sufficient mechanical strength.

**evitron**

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We strictly carry out  
the Quality Management System:  
ISO/TS16949:2009  
and ISO9001:2008



**PROGRAM  
REGIONALNY**  
NARODOWA STRATEGIA SPÓJNOŚCI



**Pomorze  
Zachodnie**

**UNIA EUROPEJSKA**  
EUROPEJSKI FUNDUSZ  
ROZWOJU REGIONALNEGO

