Our New Factory in Wismar

specialized for

E-Mobility Applications

New: Anisotropic Injection into Rotor Stacks

New: Anisotropic Compound up to **1000mT**

New: Rotor Assembly with Sintered Magnets

New: Prototype Injection Tooling (**low investment costs**)

In January 2017 Veekim moved their offices and new production area to Wismar.

In February 2017 we started the production of plastic bonded magnets and plastic composite parts for series production with half- and full automatic technologies.

In March 2017 we opened our new magnetic test center in Wismar.

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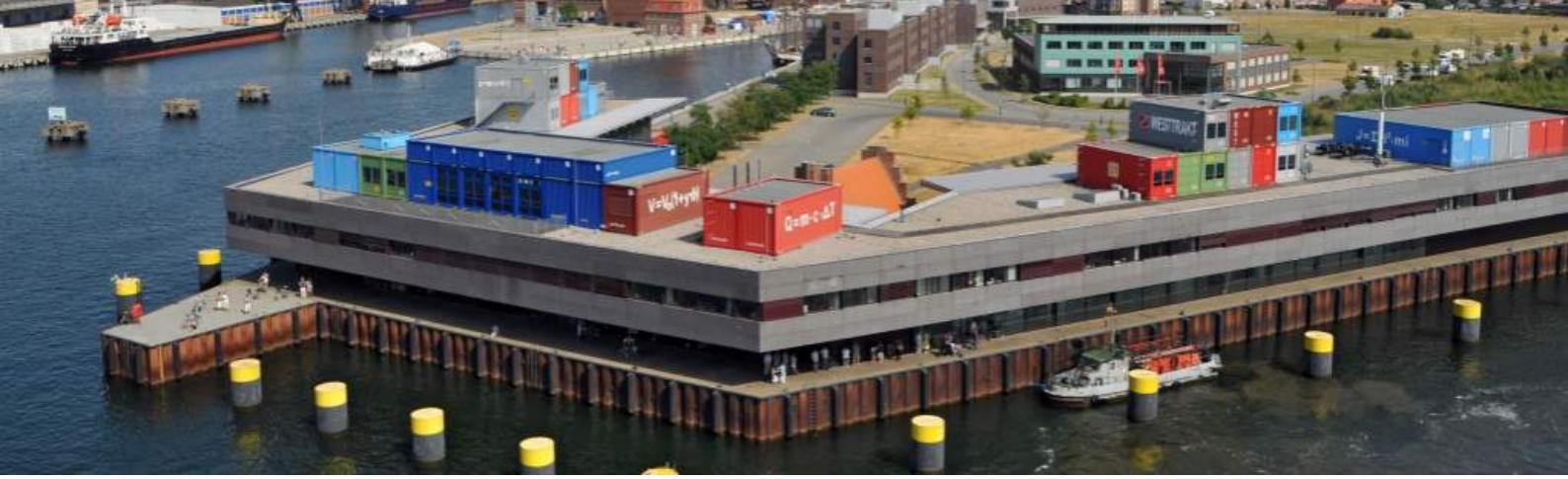
Veekim



Anisotropic Compound

Innovation 2017

Since 2016 we are supported by the german ministry of economy for the development and technology of anisotropic magnetic compound.

Bundesministerium für Wirtschaft und Energie

ZIM Zentrales Innovationsprogramm Mittelstand

This technology refers to the pure compound but also on the injection technology and mould construction.

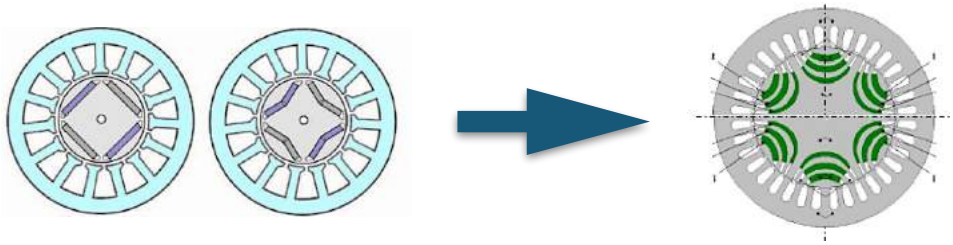
So far we can reach a remanence (Br) value of up to **1000mT**.

(A table of this magnetic compound and values can be send to you on demand)

With such a high Br value our plastic bonded magnets become a **substantial alternative to sintered magnets**.

The small difference of remanence can be equalized by the various possibilities of **free geometries and other advantages of our compound.**

Example:



Advantages:

- Low-cost manufacturing process for mass production
- One Step Injection and Magnetization at the same time
- less brittle and break-proof
- better corrosion stability
- less electrical conductivity

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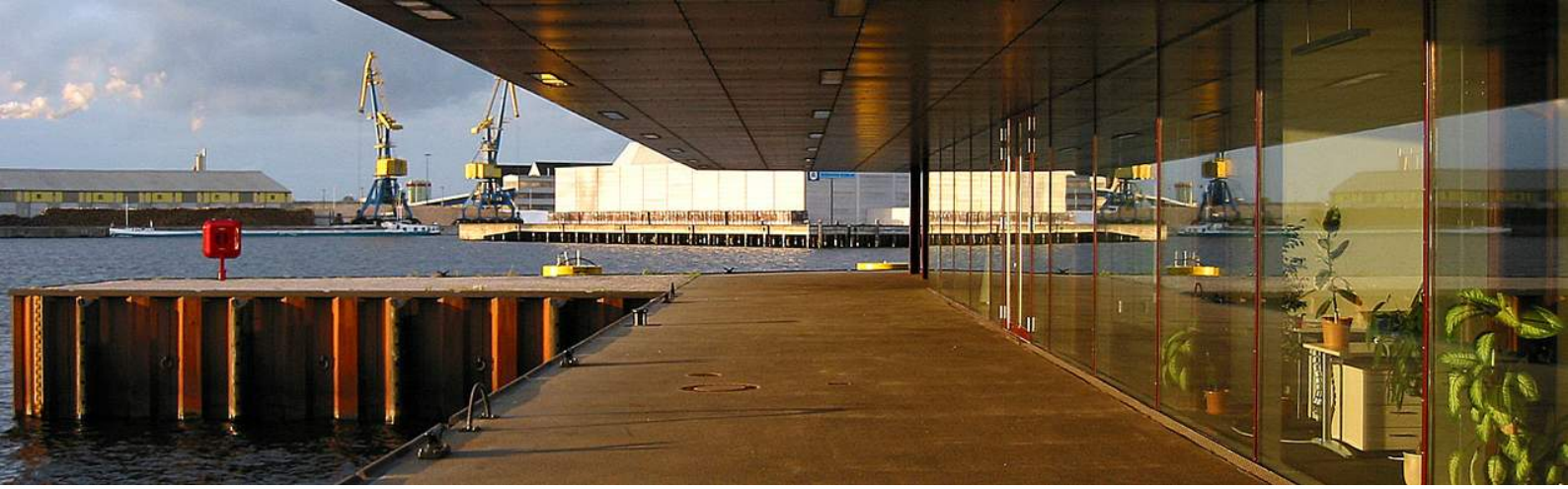
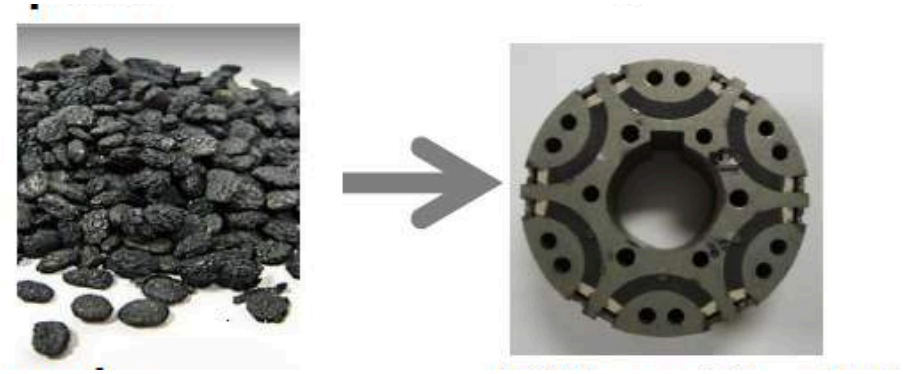


Injection of Rotor Stacks

In addition to our new magnetic anisotropic compound Veekim developed the technology of injection rotors for series production.

Therefore our engineers offer you support for the designing of new rotors with simulation softwares to achieve the optimize geometries for your application.



Advantages:

- Because of the injection material **no further glue process is needed** to fix the magnets
- Our anisotropic compound and the variability of geometry enable the replacement of sintered magnets
- Our compound is **free of Dysprosium and Terbium**
- High electric resistance enables **high energy efficiency by avoiding eddy currents** comparing to sintered magnets
- Small mechanical tolerances can be achieved without further treatments
- Veekim cooperates with two factories in China and East Europe for electrical steel parts which allows us to offer the complete rotor to you

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PM Rotors with sintered Magnets

Besides the Injection Rotors Veekim also produces Rotor Stacks (also including Stator Stacks) with sintered Permanent Magnets

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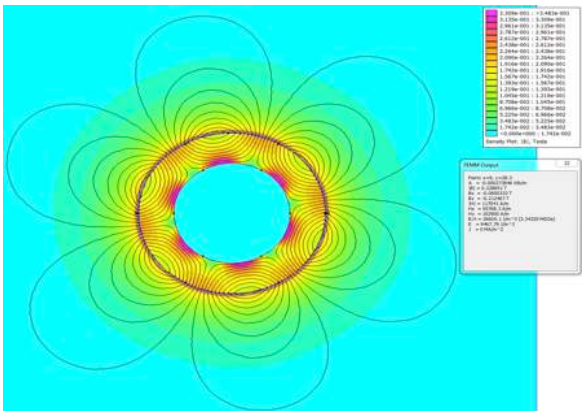
Sensor & Rotor Magnets for Automotive Applications

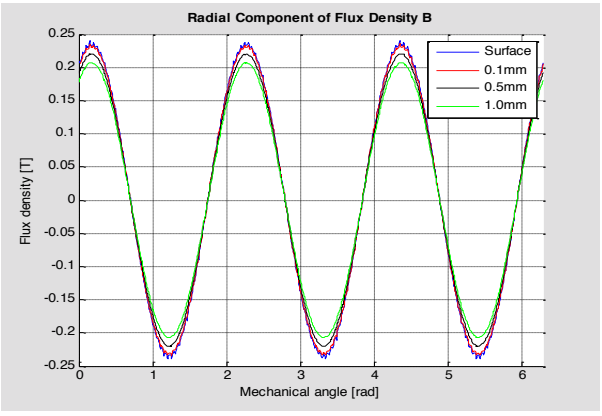
Our plastic bonded magnets are also often used in sensor and rotor applications like Hall Sensors, Reed Switches, Torque Sensors, Seat Adjustment Motor, Window Motor, Pump Impeller Wheels, Fan Motors and many more.

Also these magnets can be produced with our new anisotropic compound !!!

Advantages:

- Low flux deviations between the poles, homogenous curve lines
- **Angle error smaller 2°** possible
- Measurement of of flux, magnetic moment and angle error in our **3D Helmholtz Coil**
- **Magnetic Field Scanner** available to measure multipole ring or disc magnets
- Micro magnets with smallest mechanical tolerances **(+/- 0.005mm)**
- Production of **Sensor & Rotor Assemblies** (incl. Gears, Shafts, with plastic covered magnets,....)
- Automatic production lines for high quantities
- Calculation and Simulation of Magnetic Fields for Sensor Applications
- Several special Magnetization Options like **Halbach Magnetization**





Example:
Sensor Ring with Halbach Magnetization

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