Permanent magnets are used in a variety of media. This results in high requirements in terms of resistance and/or compatibility with drinking water and foodstuffs. Due to their partly limited corrosion resistance, magnetic materials require additional protection depending on the medium used. The solution here is to find the correct combination of magnetic material and adequate protection in the form of a coating or encapsulation.

**MAGNETS WITHOUT SPECIAL PROTECTION (RESISTANCE AND COMPATIBILITY)**

Sintered and plastic bonded hard ferrite magnets are highly resistant against humidity, solvents, bases, weak acids, salts and lubricants therefore these can in most cases be used without any special protection. Sintered hard ferrite magnets are approved for use with drinking water and foodstuffs.

Rare earth magnets (NdFeB and SmCo) that have no additional protection offer limited media resistance.

**REQUIREMENTS:**
- Drinking water test certificate
- Resistance against the medium
- Magnetic material suitable for the application
- Temperature / pressure according to operating conditions

**SOLUTIONS:**
- Tightly overmoulded
- Magnets without protection (Matrix material polyphenylene sulphide)
- Encapsulated

**QUALITY ASSURANCE:**
- Tightness
- Temperature
- Climate
- Salt spray fog
- Condensation water
- Autoklave etc.

Depending on the required magnetic material and the requirements of the medium, magnets can either be used without any special protection or need to be tightly overmoulded or encapsulated in metal.

**APPLICATIONS**

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<th>Medium</th>
<th>Sector</th>
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**Problem Solving Capability**

We commit our expertise and our experience to your development process.

**Because our areas of expertise are interlinked ...**

**Processing Competence**

Based on ultra-modern standards, we combine knowledge, technology and craftsmanship to create an efficient process and ultimate quality.

... ideas transform into a success story for you.

The requirements expected of permanent magnets and magnet assemblies are becoming ever more individual and, at the same time, ever more complex. We therefore take pleasure in casting light on the entire value-added chain: We are there beside you as a dependable partner, all the way from shared product development to on-schedule delivery. With our unique linked chain of areas of expertise, we can act as a specialist and as an all-rounder, depending on what is required, as a one-stop shop for high-quality processes. Together, we can transform a good idea into a genuine competitive advantage. After all, for you, the perfect amalgam of experience, expertise and technical implementation means, above all, one thing – efficiency. This creates results that firmly embed success in your products.

**Implementation Expertise**

With our name, we guarantee you a bespoke, innovative result – turning a product into a competitive advantage.

**MS-Schramberg – The Power of the Whole**

As a medium-sized company, MS-Schramberg has been synonymous with problem-solving expertise and quality for 50 years. The company is one of Europe’s leading manufacturers of permanent magnets and assemblies. On an area of approx. 33,000 square meters in three plants in Schramberg, Germany, more than 550 employees are developing and producing more than 5,000 customer-specific articles, used successfully worldwide by companies from a wide range of sectors.

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