



H+B Homberg + Brusius e.K. (bei Idar-Oberstein)
Auf der Lay 31, D-55743 Kirschweiler, Tel. +49 6781 35036
mail@homberg-und-brusius.de

SAFETY INSTRUCTIONS FOR MAGNETIC SYSTEMS

Drilling Jig

The information described below must be made accessible to all employees and persons who move or process magnetic materials and products in any form.

- **Always respect the high attractive forces of the magnets.** Magnets can attract each other even over larger distances. Therefore, there is a risk of injury when handling larger magnets and magnetic systems. [1, 2, 3]
- **Sintered magnets are hard and brittle.** When colliding, the magnets shatter into many sharp-edged pieces. Therefore, always wear safety goggles and work gloves, and take other appropriate protective measures. [1, 2]
- **Strong magnetic fields can disrupt or influence sensitive electronic and mechanical devices** (measuring instruments, computers, magnetic data carriers, etc.). This also applies to pacemakers; in extreme cases, highly sensitive devices can be destroyed. Ensure you maintain a sufficient safety distance from such equipment. [1]
- **Do not process magnets in explosive environments.** When sintered magnets attract and strike each other, sparks can be generated. [1]
- **For Rare Earth magnetic materials, ensure during any subsequent machining** that grinding dust and chips are self-igniting and can burn at extremely high temperatures. Machining must therefore only be performed wet. Never machine dry!
- **Avoid prolonged exposure of permanent magnets to radioactive radiation.** Otherwise, they will lose their magnetization. [1]
- **Observe the maximum permissible temperature for the respective material.** Magnetic properties fundamentally change with increasing or decreasing temperatures.
- **Rare Earth magnets must be stored in a dry environment** to prevent oxidation during long-term storage.
- **For air freight shipments,** we refer to the IATA Dangerous Goods Regulations Packing Instruction No. 953.
- **To date, no adverse effects are known** to be caused by touching magnetic materials. Furthermore, no adverse effects of magnetic fields on the human body are known. On the contrary, many people are convinced that magnetic fields have healing effects. It is to be assumed, however, that persons who react allergically to contact with ceramic or metallic materials will exhibit the same reaction when in physical contact with magnetic materials