



Deutsche Magnetwerke GmbH

Warning about SmCo-Magnets!

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Magnetic materials made from the elements samarium (Sm) and cobalt (Co) are so-called high-energy magnetic materials, even small dimensions of which exhibit enormous pulling forces on each other as well as on ferromagnetic parts. There is a risk of injury due to pinching. We therefore expressly recommend separating the magnets only by sliding them apart laterally. SmCo magnets are available in two different basic compositions: SmCo₅ and Sm₂Co₁₇, with the 2-17 types exhibiting even better magnetic properties and to some extent being able to be utilized up to 350° C (1-5 types only up to 250° C). The magnets are corrosion-resistant and thus require no protective galvanic layer. They are hard and brittle and cannot be processed with conventional tools (turning, drilling, milling, sawing, etc.). The magnets must be treated carefully since banging them together can lead to chipping. When processing magnets which have been manufactured to fit each other, we recommend cementing using a two-component adhesive for metals or infusing them in synthetic resin (epoxides, etc.).