

Sustainable advancements in component adjustment and sliding surface production

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It is widely known that working within the micrometer range is essential in the construction of machine tools. One of the most time-consuming processes in this field is the precise alignment of individual components. The DWH adjustment coating, an epoxy resin system, offers a highly effective solution to this challenge by significantly reducing the time and effort required for fine-tuning and alignment.

As an adjustment layer, DWH allows engineers to account for gaps between components during the design phase. These gaps can later be precisely adjusted using set screws, enabling quick and accurate alignment of parts. DWH is then applied to fill these gaps, ensuring a secure and durable connection. In addition to creating form- and force-locked bonds—proven through decades of industrial use—the epoxy resin system of DWH offers superior damping properties compared to traditional steel-to-steel connections. This not only enhances the stability of the assembly but also reduces vibrations, resulting in improved overall machine performance. Furthermore, DWH enables the exact replication of master forms, providing a highly accurate adjustment layer.

Another area where exact molding is crucial is the production of sliding surfaces. With the use of Moglice, also an epoxy resin system, sliding surfaces can be precisely manufactured through molding. Moglice extends this precision by offering self-lubricating sliding coatings. Like DWH, Moglice is applied via a molding process, ensuring exact surface replication for bearing surfaces and guideways, delivering optimal accuracy and smooth movement in machine tool assemblies.

Both materials, DWH and Moglice, contribute to sustainable manufacturing practices by increasing the lifespan of components, reducing material waste, and minimizing energy consumption through enhanced machine efficiency and reduced downtime.

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