KUNSTSTOFF INSTITUT LÜDENSCHEID

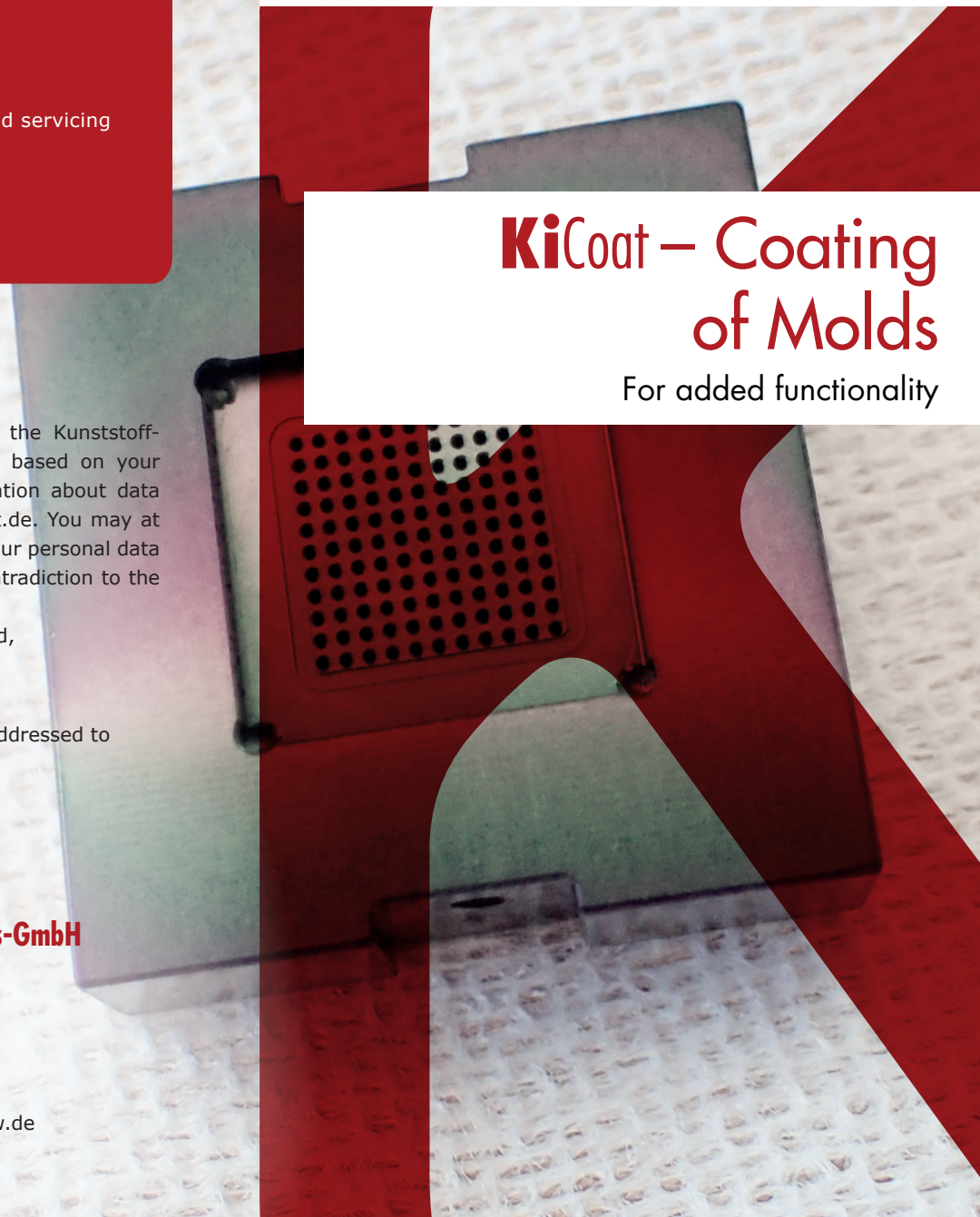
GEMEINNÜTZIGE KIMW FORSCHUNGS-GMBH

Your advantages

- Higher mold availability
- Reduction of cycle time
- Reliable demoldability
- Less effort for maintenance and servicing
- Reduced mold wear
- Sustainability
- Lower unit costs

KiCoat – Coating of Molds

For added functionality



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For added functionality

The challenges facing an injection mold are complex and divers. The properties of the surface can be positively influenced due to a functional coating. The used tool steel, the plastic material to be processed and the necessary requirements for the final component have decisive influence on the selection of a functional coating system. The development of functional coatings and its partial deposition on molds and tools is one of our core competencies.

The advantages of KiCoat:

Protection against corrosion

Some material combinations (tool steel/plastic material) make the tool highly vulnerable to corrosion damage, which can be reduced or even prevented by a specific coating.

Reduced adhesion and sticking tendency

A coating ensures a clean mold surface as well as a safe and fast demolding of the plastic part.

High surface hardness

Coatings improve the resistance and wear protection of surfaces. Less lubricants are required, and the availability of the mold is increased.

Improved surface properties

The flow behavior of the melt during the injection process is supported by coatings applied in a targeted manner.

Your direct line for questions.

We support you

- in the development of new coatings, especially for the optimization of the manufacturing process of specific plastic parts
- in the analysis of your current mold project with recommendations and selection of a suitable coating process
- for the calculation of the economic efficiency of your tool under consideration of a functional coating
- in the sampling of parts
- in the application of tool coatings

Quality in layers: Our range of services for your tool

Thermal barrier coatings

- ZrO_2-coatings – partially with different dopings
- SiO_2-coatings

Tribological coatings

- Tungsten sulfide coatings

Coatings for an improved demolding

- Oxide ceramic coatings such as zirconium oxide, aluminum oxide, chromium oxide, silicon oxide as well as combinations

Coatings for reduction of deposits

- Oxide ceramic coatings
- Multilayer ZrO_2 coatings for POM processing

Anti-corrosion coatings

- Nickel coatings
- SiO_2 coatings

Wear protection coatings

- Hard coatings: Tungsten carbide, chromium carbide

Metallic thin coatings

- Elemental nickel and copper coatings
- Development of heat conductor coatings