TECHNOLOGIEZENTRUM

THE ART OF PERFECTION

SERVICE OVERVIEW

REICHLE TECHNOLOGY CENTRE

Individual consulting

We offer consulting across all services and topics for all your applications and tasks; our project managers, executives or our design and development centre will be happy to assist you at any time.

Regional and international

In order to realise the highest possible quality and short processing times, we have all necessary service areas in our company. For you, this means only one responsible partner and no additional coordination efforts.

Everything from one source

Get our quality "made in Germany" in the Stuttgart area, on site throughout Europe (welding | grain repair | gloss level adjustment) or worldwide via our global network (laser texturing | gloss level adjustment).

Technology and expertise

With over 40 years of experience, state-of-the-art machinery and specially trained staff, we set new standards every day: even when the tasks are complex.



SERVICE OVERVIEW



Lasertexturing (instead of conventional etching)

Advanced Design and R+D Centre Lighting development

High gloss polishing
Grinding
Contour restoration

Grain repair
Structure blasting
Gloss level adjustment
Tool optimisation

Laser/CNC engraving

Milling

Signs

Etching foils

Laser welding
TIG-welding

Repair of cast parts by means of laser welding

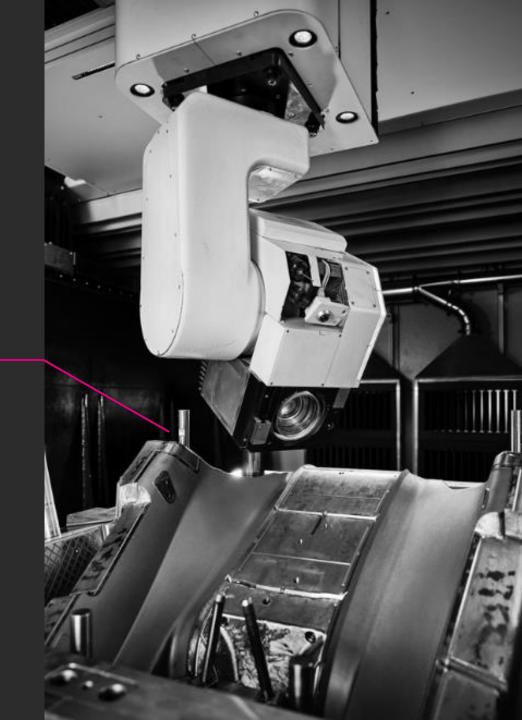
Stay tuned ...

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LASERTEXTURING

(INSTEAD OF CONVENTIONAL ETCHING)

FULLY DIGITAL, SUSTAINABLE, REPRODUCIBLE WORLDWIDE





- Eroded structures and fine structures

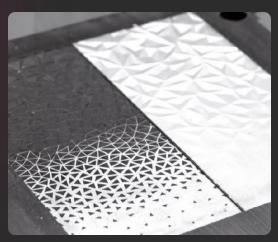
 Absolute reproducibility of structures in accordance with the applicable standards in your component no matter if originally etched, eroded or blasted we use highly efficient laser technology.
- Leather and textile grains

 Detailed graining thanks to state-of-the-art laser technology also in the look of leather-like materials, Alcantara or felts.
- Geometric 3D textures

 Carbon textures, detailed free designs up to facets, polygons and geometrically complex structures limitless design freedom.
- Fade-Outs and morphing
 Extraordinary designs with fading or merging texture depths from 100 0 %.











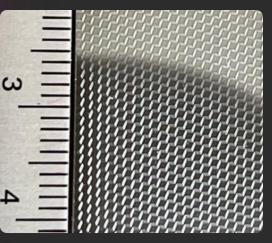
- Matt gloss levels in all plastics
 We offer matt gloss levels in all plastics such as ABS, PC, ABS-PC, PMMA,
 ASA and many more.
- Functional structures

 Anti-glare, anti-reflection, anti-slip, slip optimisation and much more we develop a specific texture for your application to reduce costs.
- Femto-Laser applications

 High-precision processing in the nanometre range, especially for engravings or geometries. If necessary, without flank angles for light extraction optics, direct laser processing of plastic prototypes with defined structures/optics, holograms, colour effects, and much more use the world's most precise laser technology for your progress.



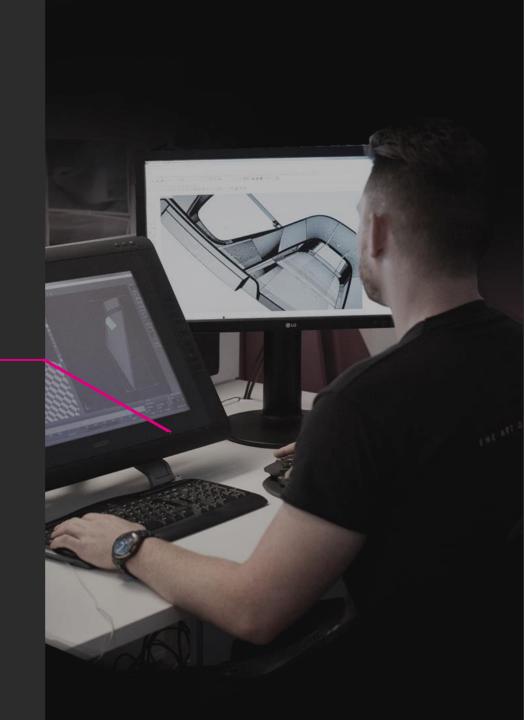






ADVANCED DESIGN AND R+D CENTRE

CONSULTING AND APPLICATION-RELATED DEVELOPMENT OF INDIVIDUAL SURFACE AND LIGHTING CONCEPTS



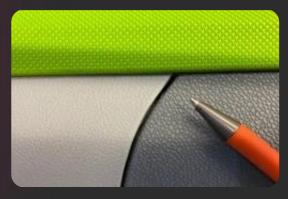


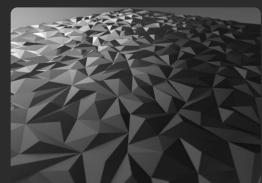
- Design development and consulting
 We develop inspiring surface concepts for your component or for an
 entire product family.
- Workshops around the topics of quality optimisation, cost reduction measures, surface design and much more.
- Texture development and reproduction
 Recreation of existing grain patterns or development of entirely new textures or texture families for your tool.
- Prototyping

 Creation of prototype components that are refined using our special foil process and thus come very close to an injection-moulded sample.











Mapping

A detailed mapping process enables natural structural distortion on convex and concave freeform surfaces for maximum aesthetics – even across components.

- High-end visualisation

 Creation of high-resolution 3D renderings in almost photorealistic quality for simplified coordination.
- Process support
 Support in series and approval processes from defect analyses to optimisation measures and independent expert opinions on component quality.









LIGHTING DEVELOPMENT

CONSULTING AND APPLICATION-RELATED DEVELOPMENT OF INDIVIDUAL LIGHTING CONCEPTS FOR INTERIORS AND EXTERIORS





Lighting development

Light simulation, development, industrialization, realization and consulting. Through special laser technology we achieve new standards in precision, efficiency, homogeneity and design.

Lighting applications

Lasertexturing of complete coupling-out and coupling-in optics, diffusers, design structures or light traps in front and rear lights or light guides.

Ambient Lighting 2.0

Together with our partners, we create partial transillumination in the Shy-Tech sector and open up unimagined design and customization possibilities for our customers.

Light guides

Using state-of-the-art laser technology, we realize cost-efficient decoupling and diffusion structures in contour light guide molds, texture light guide molds for waterfall lighting, and implement surface light guides with minimal radii and optical sizes.



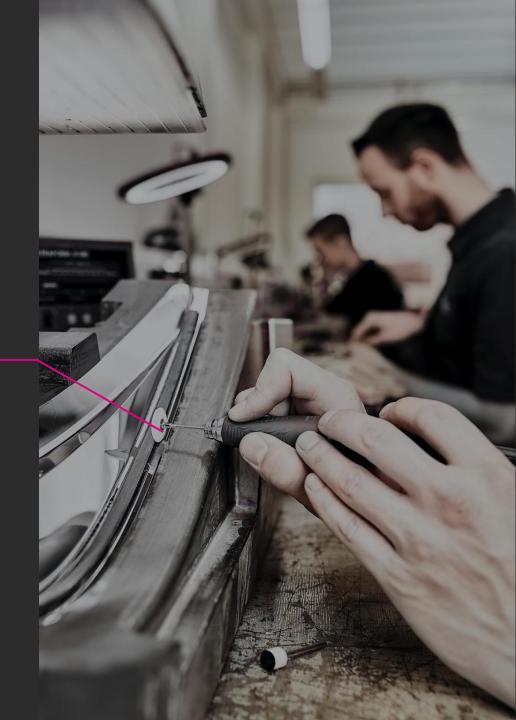






HIGH GLOSS POLISHING GRINDING CONTOUR RESTORATION

ALL QUALITY LEVELS, STATE-OF-THE-ART MEASURING SYSTEMS, POLISHING TO DIMENSION





High gloss polishing

Polishing of injection moulds, individual/series parts and prototypes from all industries and applications to brilliant high gloss; on request also to high-precision dimensions.

- Grain preparation

 Levelling of milling offsets or unevenness in preparation of the necessary graining process.
- Contour restoration

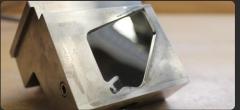
 Mechanical or manual restoration of contours true to drawing by precise Röders milling machines or our specially trained surface technicians.











GRAIN REPAIR STRUCTURE BLASTING GLOSS LEVEL ADJUSTMENT TOOL OPTIMISATION

ALL GRAININGS, EUROPE-WIDE ON-SITE, EXPRESS SERVICE





Grain repair

Mechanical and manual grain repair of all types and manufacturers in order to reduce your production downtimes to a minimum. Naturally, we carry out any necessary laser welding ourselves.

- Gloss level adjustment

 Adjustment of any gloss level using specific blasting materials or the state-of-the-art laser technology.
- Structure blasting
 We use special blasting processes to cost-effectively introduce fine structures into your mould.
- Tool optimisation
 Repair or optimisation of your injection mould in almost any matter.
 Complete overhauls, optimisation and spotting of mould and slide separations in the A-view area (with/without graining or high gloss polish) and much more.









LASER/CNC ENGRAVING MILLING SIGNS ETCHING FOILS

FOUR DECADES OF EXPERIENCE COMBINE TRADITION AND INNOVATION





Laser/CNC engraving

Production of high-precision and reproducible engravings through the use of 19 laser machines and 6 CNC engraving machines.

Milling

Milling of geometries for modifications or repairs after the welding process.

Signs

Production of CNC engraved, laser engraved, 4-colour printed or anodised signs in all quantities and sizes.

Etching foils

With our specially produced etching foils, you can apply date grids, functional inscriptions or material markings to the B-side of your tool yourself - delivery takes place within 24 hours.

Custom-made products

Prototypes, small series, complete components or groups of components, such as buttons, decorative parts, lettering, emblems, and much more.



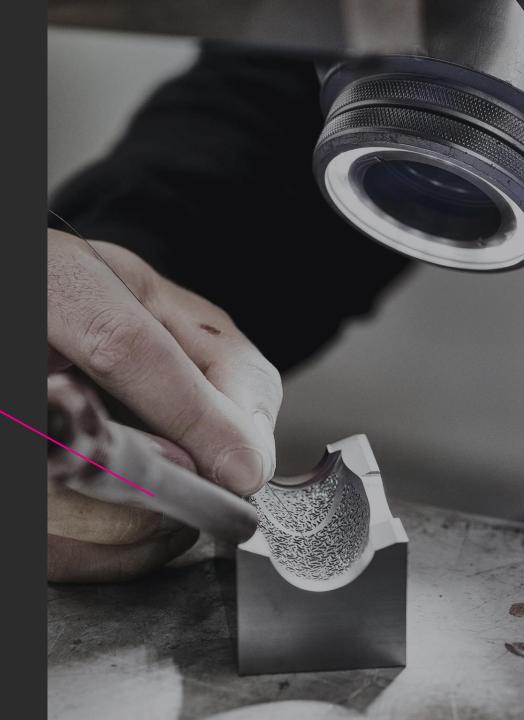






LASER WELDING ⁷ TIG-WELDING

OVER 20 WELDING SYSTEMS, EXPRESS SERVICE, EUROPE-WIDE





- Laser welding
 - Build-up welding in the repair and modification area for almost all materials and components through the use of special wires and a precise laser beam even in high-gloss or grain areas.
- TIG-welding
 Our welding process for large areas and high volume for efficient and fast processing times.



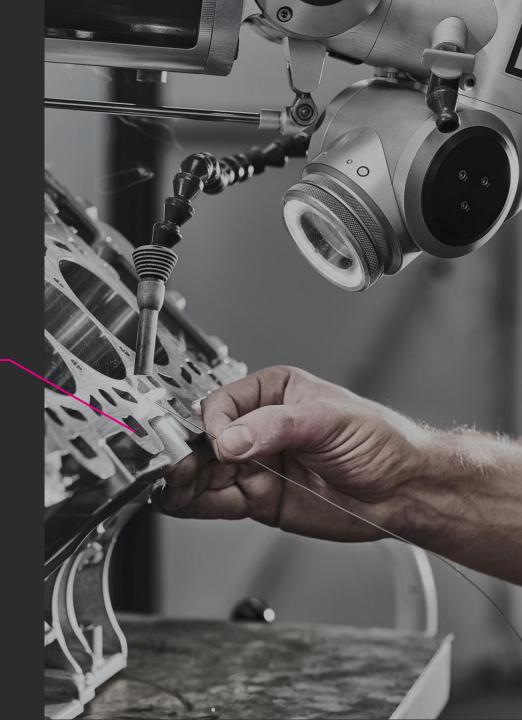






REPAIR OF CAST PARTS BY MEANS OF LASER WELDING

MORE THAN 300.000 CAST PARTS EVERY YEAR, SUSTAINABLE, COST-EFFECTIVE





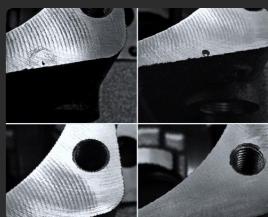
Repair of cast parts

Repair of finished cast parts of all alloys by means of a special laser welding process – you get back ready-to-install good parts within all dimensional tolerances and can thus reduce your scrap costs by up to 95 %.











THE ART OF PERFECTION

www.reichle.de