Smart. Surface. Design.

Inspiring perspectives for plastic
Exploiting your full potential

At the POS customers increasingly make their decisions based on exceptional appearance, customization and functionality. Their purchases fit their lifestyle, which poses ever tougher challenges for product design. You must think outside the box. You must think with all your senses! Exploit the full 360° potential of your products with LEONHARD KURZ.

Your sales success is our greatest incentive, so we research and develop in tune with the times. Being at the cutting edge and having an inimitable sense for trends make us trail-blazers in the field of surface finishing. In the quest to maximize customer convenience we rely on innovation and, as an industry-spanning solutions provider for finishings, the best technologies from various sectors. We stand by you throughout the entire production process and never lose sight of process security and efficiency. Discover entirely new facets of plastic design with LEONHARD KURZ. Surprise your customers with backlighting, touch sensors, and fascinating tactile and holographic effects.

Welcome to the inspiring world of exceptional surfaces.
At LEONHARD KURZ we are specialists in surface finishing and sensor technology. As a full-service operator for various industries we are your go-to choice for the aesthetic and functional design of your plastic surfaces. We offer you a unique variety of decoration solutions and application technologies, as well as top-notch Full Service with uniform quality standards worldwide.
Lighting accents convey mood and emotion

Light is one of the most important factors in emotional product design. As a sensory stimulus, it spurs the intuition of your customers, provides orientation and implies well-being. Give your creativity free rein with us. We will develop custom surfaces with the exact optical features you request, and will assist you in placing striking lighting accents with magical depth effects. For ambient and dead-front applications, for organic, three-dimensional shapes and flat part geometries. First-glance fascination becomes long-term enthusiasm for your brand.
“The desire for aesthetics and customization is changing products. Good design awakens emotions, supports intuitive operation, and makes essential contributions to living space. This makes brands tangible.”

Bernd Herrmann
Head of Design Management
LEONHARD KURZ
Design meets Function

Illumination is the key to intuitive, emotional design concepts which combine effects with functions. Room lighting, visualization of switch elements and day-night designs are only part of our wide variety of application types.

Our portfolio is particularly oriented to customers in the automotive, home appliance, furniture construction, and consumer electronics sectors.

The diversity of KURZ:

- Surface haptics
- 3D optics
- Custom combinations of design and function
- Partial or full-surface backlighting in any color
- Carbon, wood, metal and color designs
- Single and series production
- Activated by approach
- Highly sensitive sensor technology
- Touch function for organically shaped, highly curved surfaces

Lucid operation

Unlike conventionally decorated components, backlit modules deliver new options: visual highlights such as color change and bright-dark adjustment boost appeal.

Unlimited options:

- Day and night ambient lighting
- Dead-front effects
- Light intensity can be freely selected
- Color change can be integrated
- Intuitive control using touch or gesture

Intuitive operation of emotional design.
Click here for the animation:
With our Austrian subsidiary BURG DESIGN, we have expanded our design expertise in recent years. BURG's design experts are worldwide trail-blazers in silk-screen printing, and they support us in furnishing single or series products with a custom 3D look in the PMD process.

www.burg-design.com
“The user interfaces of electronic devices are in transition. The conventional electromechanical keys and simple displays are being replaced by capacitive keys and touchscreens. This trend to reduction applies to the automotive as well as to the consumer electronics and appliance sectors.”

Dr. Wolfgang Clemens
Head of Product Management
PolyIC
As an expert in sensor technology, PolyIC extends our functional know-how and strengthens us in the field of HMI. The highly efficient and transparent PolyTC® sensor labels of our subsidiary are very conductive, flexibly processed, and sturdy. They are ideally suited for use in touch-screen applications and for capacitive sensor keys, sliders and gesture-control modules.

www.polyic.de
Touch & Gesture

Single- and multi-touch surfaces are the new stars of HMI concepts for product designers and end customers. They keep things tidy where buttons and switches have gained the upper hand. The advantages are plain to see: freedom of design, intuitive operation, and ease of cleaning.

Would you like to design your products fit for the future with Touch and Gesture? Teamed up with PolyIC, we will supply you with sensor foils customized for your plastic parts. You furthermore benefit from our know-how in integrating sensors and decoration into parts.

An innovative component forms the basis for our Touch and Gesture applications: PolyTC®. The wafer-thin and transparent sensor foil fits any part. And to top it off, the framework of tiny metal-mesh structures makes the foil highly conductive, while at the same time extremely flexible and highly transparent. PolyTC® is suited to any device with touch or gesture control.

Multi-sensory product experiences

Technological maturity

Methods for integrating PolyTC®:
- IML (Inmold Labeling)
- FFB (Functional Foil Bonding)
- PSA Bonding (Pressure Sensitive Adhesive)
- OCA Bonding (Optical Clear Adhesive)
- All conventional methods
Areas of application:
- Automotive
- Consumer Electronics
- Home Appliances
- Home Automation
- Industry

Outstanding features:
- Excellent conductivity
- Flexible shape and thermally stable
- Transparent and color-fast
- For flat or domed surfaces – from 2D to 3D
- Customer-specific layouts
- Dead-front design option
- High freedom of design
A symbiosis of design and function

“The new infotainment world that has found its way into car interiors in the form of touch operation has sounded the death knell for switches. Anyone who wants to come out ahead in the future cannot look past innovative HMI surface concepts, which provide for exclusive design and intuitive operation.”

Rainer Süßmann
Head of Sales & Marketing
Management Automotive
LEONHARD KURZ

The future has already begun, and no one is more aware of it than you. Think ahead now to efficiently realize your innovative concepts for intelligent surfaces with us. Make the decision to gain more freedom in designing exclusive surfaces and context-sensitive sensor functions. Seamlessly and efficiently integrate functional elements into any decoration, as well as into your three-dimensional part geometries. Simply use existing equipment, expand it according to need, or let us develop the optimum production concept.

With our long-standing experience in decorating plastic surfaces and with a wide spectrum of new designs and impressive effects, as well as our know-how in the innovative PolyTC® sensor and integration technology, we provide you with HMI solutions that leave nothing to be desired.
KURZ HMI provides:

- Organically shaped parts
- Seamless dead-front surfaces
- Ambient lighting in decoration
- Day and night design
- Active touch control with capacitive sensor technology
- Homogeneously connected surfaces
- Design expertise
HEAVY DUTY COATS

The protective shield for your product

Each coating is unique
Top product performance, independent of outside influences – that is the goal of every supplier. With our specific foil compositions we aim to meet precisely this demand. Our Research and Development Department designs customer-specific coatings to enhance the appearance and resistance of your products.

Maximum stress
Whether intelligent operator interfaces (HMI), smart devices, furniture fittings or medical devices – such high-use products must satisfy many demands. To achieve this we develop the colors and coatings of our high performance varnishes at our own in-house laboratories. In close coordination with our customers we work out surface specifications and establish a focus test for each product: Abrasion resistance for everyday objects, long service life for design objects, and chemical resistance for hygiene products. In the automotive sector, the high requirements for resistance, gloss and reflective properties must also be considered. They must be precisely aligned with the intended use as well.
Wind and weather resistance
Your products meet their toughest opponent in the outdoors: temperature fluctuations, sun, rain, and ice are the natural enemies of all plastic parts. Furthermore, chemical influences such as exhaust gas quickly show as wear. Adding more cover foil is essential to protect against UV radiation, micro- and macro-cracks, and contact with insects and emulsions.

Tough and rugged
Indoors, your products are also exposed to everyday stresses and strains. Constant humidity in plumbing units, heat and lipids in living and eating areas, scratches, damage from bumps and impacts generally accelerate wear and tear on home appliances, consumer electronics, and interior objects. Reinforce your products with our custom-tailored KURZ protective foils.

If you have specific design requests with regard to gloss and reflective properties, including in the automotive sector, we offer three topcoat variants. KURZ BRIGHT VIEW enables especially high luminosity and contrasting colors. Touch functions are seamlessly integrated and the surface is easy to clean. KURZ COMFORT VIEW and its matte surface meet the demand for low glare and reflection, with impressively clear color contrast. KURZ EASY EYE is ideal as an anti-reflective on displays. The glare-free, nonsensitive surface provides for colors rich in contrast, and is pleasing to the eye.
Attractive hybrid

The starting shot for efficient lightweight component decoration

Composite Decoration is a process that KURZ has developed to combine Hybrid Molding with part decoration in a single work step. The thermoplastic deformed polymer composite is reinforced with a bond of woven carbon-fiber panels and then decorated with hot stamping foil. This automated process eliminates the need for subsequent varnishing and sanding. You save up to 60% in costs.

“With their vast process and foil know-how, our team of experts has mastered very difficult surfaces and technically demanding requirements. We have managed to take a quantum leap in the economical decoration of thin-walled parts.”

Nick Wagner
Head of Plastics Decoration Sales and Marketing
LEONHARD KURZ

Foil designs
✓ Matte
✓ Glossy
✓ Brushed metal
✓ Soft touch
To touch is to feel

A touch of nature
The tangible power of persuasion

Warm wood tones, cool marble, and smooth mother-of-pearl – natural motifs have always inspired designers. When these motifs are combined with surprising haptics, your product has arrived at the premium level of design. Whether tactile relief structures or hand-caressing Soft touch or Silky touch finishings, our special effects like tactile woodgrain, 3D look, and soft gloss capture the trend for haptic surfaces. The product experience is almost as perfect as nature itself.

Striking Soft touch effect
✓ Transparent and backlit
✓ Can be combined with patterns and designs
✓ NCVM (Non-Conductive Vacuum Metallization)
✓ Sound-dampening
✓ Different Soft touch effects: Satin Feel, Velvet Feel, Grip Feel
Creativity breaks rules and creates anew. Put this primeval concentrated energy to use. Look into our KURZ creative workshop and get inspired by edgy design ideas, exciting looks, novel effects, and fascinating styles.

A dramatic pleasure

Imaginative light play
Multifaceted decoration

Marvel at our breathtaking holographic foils, for instance, in which we have invested all of our creative competence. A multitude of metallic shades put on a brilliant light show, generating unique contrasts and an intriguing depth effect. The result is an emotional statement that makes your product a magnet for the senses.

Our holographic effects:
✓ Spectacular 2D and 3D effects
✓ Custom designs
✓ Endless pattern
✓ Brilliant gloss
An outdoor wonder
Chrome gloss

Conceived outside the box

A roaring engine and a finish buffed to a high shine. Real gearheads value perfection when it comes to their dream cars. High expectations which you, as a manufacturer or supplier, fulfill along the entire track with LEONHARD KURZ. We are specialized in sophisticated exterior designs. In cooperation with our subsidiary BAIER we provide cars and vehicles with a high-gloss and very weather-resistant grill.

Based on the classic hot stamping process, our thermally-treated special foil envelops even three-dimensional parts cleanly and flush. The advantages of heat treatment are immediately evident: extremely high gloss and pronounced 3D geometries for an impressive appearance.
Ready for rallycross!

To be prepared for even the toughest conditions of use, we rely on sustainable quality. For our high-class finishing we combine deep-draw hot stamping with corrosion-resistant real chrome foil for high durability in outdoor areas. Unlike electroplating, we do not employ any kind of health- or environmentally-hazardous
Creativity in precision
Whether using silicone or metal dies, our subsidiary h+m lends expressive depth to your custom design. High quality stamping solutions, including the filigree micro- and the even finer nano-embossing, provide almost unlimited design freedom for breathtakingly vivid image effects. In addition to dies, individual fixtures also belong to the scope of services of this tool manufacturer.

Hot Stamping Easy
For the decoration of parts we work hand in hand with BAIER GmbH & Co. KG. As a subsidiary of the KURZ Group, this mechanical engineering firm focuses on the manufacture of specialized machines for the plastics and graphics industries. With its know-how we manage the logical and technical dovetailing of hot stamping machines, foils, and tools.

chrome-VI-compounds. And when further compared to electro-plating, our cost-effective inline process also scores in ease of processing and in flexibly performing full-surface or partial decoration.
For unique holographic effects, OVD Kinegram is the technological competence centre of the KURZ Group. As an innovator in the field of optical high-security features for cards, ID documents and banknotes, this KURZ subsidiary possesses unique know-how. Building on this, we have succeeded in transferring amazing holographic 3D effects to plastic. In this way, we open up completely new creative scope for highly emotional optical designs.

www.kinegram.com
Would you like to put customers under a spell at the POS? The spectacular 3D effect of TRUSTSEAL 3D PLASTX will help you do just that. Remarkably real hologram motifs on flat or domed plastic surfaces create an extremely realistic and vivid depth effect. A visually seducing invitation to touch.

Magical depth effects

Check it out!
- Flexible implementation
- Free hologram design
- Unique 3D design
- For flat or domed surfaces
Inmold labeling is ideal for control panels, multi-touch sensors and capacitive operating elements in consumer electronics applications. Combined with IMD, transparent, conductive PolyTC® foils for touch sensors and decorative coatings can be applied to parts during the injection molding process.

If the parts require greater profiling and molding, Insert Molding provides an alternative to IMD decoration. The process combines hot stamping, vacuum forming, and injection. This allows greater deformation of the foil, and is advantageous when highly profiled and curved parts are required.

Depending on the part, the hot stamping method can be performed by stroke or roll-on stamping. It is a dry process that works with heat and pressure. This technique applies a full- or partial-surface finish boasting unicolor, brushed and metallic effects, exclusive chrome effects, or premium woodgrain designs, to intricate two-dimensional surfaces. Both first- and second-surface decoration is possible.

This patented decoration process takes classic hot stamping into the third dimension – even complicated 3D geometries can be finished with hot-stamped decoration like Chrome. The process is dry, solvent-free, and very efficient because it eliminates the need for an injection tool, an injection pass, and an assembly step, and allows for quick design change.

Exceptional finishes provide you with enormous potential. They draw the focus of target groups to your products. They awaken emotions and encourage interaction. For long-term success, efficient finishing of your components can be crucial to your competitive edge. As industry experts, we at LEONHARD KURZ place great value on a high degree of innovation and on a wide range of technologies, to flexibly adapt to your individual decoration requirements. Reap the benefits of our vast scope of technologies for finishing your components. We provide all finishing processes and their accompanying service and support from a single source.

Click here for an animation of our decoration process: www.plastic-decoration.com/en/processes
This flexible process works with light pressure and low temperature. This means that impressive haptic and visual effects can be applied to very different materials. Quick change of design provides for maximum freedom when working with special editions or limited runs, and is also suited to large parts.

IMD

This highly efficient process combines injection and hot stamping into a single work step. A modified hot stamping foil is fed into the mold and pressed into the cavity by the injection molding material. The temperature peels the decorative layer off the substrate and bonds it to the plastic part. There are no subsequent decoration, intermediate stock or further work steps.

IMD Varioform

IMD Varioform enables especially fast, economical, and edge-precise decoration of pronounced 3D geometries. This efficient one-step process solution provides a wide variety of designs for identical geometries and merges the best of two decoration processes. Decoration and thermoforming in the injection mold tool, as well as back-injection molding and punching of the part, take place in one step. The IMD Varioform foil can be processed like an IMD foil in a roll-to-roll process and without thermoforming equipment.

IPD Skin

Without rival on the market is the fast and cost-efficient inLINE Foiling® process. In a single work step, without pressure and heat, cylindrical glass and plastic parts, such as bottles and tubes, can be finished with metallic decoration, edge-defined and finished with high precision, while at the same time protected by UV varnishes.

PMD (Print Mold Design)

This design-oriented process creates top-notch single-image designs and 3D effects, beautifully accentuated by backlighting. Foils are printed, deformed, punched out, and back-injected with a specific silk-screen technique. Combined with PolyTC® sensors, control panels and displays with touch and gesture control can be implemented.

www.isimat.com
New surface trends?
Innovative integration of functions?
Efficient processing technologies?

Find more answers specifically for the plastics industry online by visiting us at:

www.plastic-decoration.com
KURZ is a major international supplier of thin layer technology with more than 5,000 employees, as well as 14 production facilities, 24 international branch offices and distributors located throughout Europe, North- and South America, Asia, Africa, and the Pacific region. This worldwide presence implements the requirements of every single customer to provide the ideal full-service solution.