IMD UNIFY for Automotive Designs

Special editions and design variety
Customization for the vehicles of tomorrow

Efficiency plays an extremely important role for forward-looking mobility designs. That’s why market leaders need a flexible and innovative partner right from the start. KURZ is at your side – with technologies, designs, and concepts for the future. You receive everything from a single source and will benefit from our expertise and that of our subsidiaries and partners.

Quantity 1 – with series production advantage

Customization is a mega trend in the automotive industry. KURZ has the economic answer: IMD UNIFY. With this process, automotive companies can also easily and directly realize customized surfaces for their customers. IMD UNIFY utilizes in-mold decoration plus a perfectly matched hybrid CMYK digital printing capability by KURZ subsidiary BAIER. This ensures an optimal interplay of decoration and customization via photorealistic digital printing.

Benefit: 100% efficiency!

Benefits of IMD UNIFY:

- IMD process conserves natural and material resources
- IMD UNIFY can also be used for 3D geometries
- Suitable for recycled materials
- Component including decoration is recyclable
- Rapid manufacturing: Series parts can become one-offs
- Suitable for 5G and radar applications
- Special requests and trends can be implemented quickly and efficiently
- No limits in terms of design: Shy Tech, backlighting, indium-based metallization, and much more is possible
- Supports intuitive operation through tactile designs and soft-touch surfaces
IMD UNIFY

The process

An automotive interior panel is produced in series using the cost-efficient IMD process and then customized using digital printing. Backlighting and touch functionality make it an intelligent interface for vehicle passengers.

Step 1:
In-Mold Decoration in series: Injection molding and decoration of the component. Sensors for touch control can optionally be integrated using the functional IML process.

KURZ Group competence:
BAIER GmbH + Co KG Maschinenfabrik
- Crisp and clean images in 600-dpi resolution
- Optional decoration of contour parts
- Unlimited variety of motifs
- Additional print head for white color to increase contrast of print color to substrate

Step 2:
Customization via digital printing. Brilliant colors, color gradients, and photorealistic designs are possible.

IMD UNIFY decoration with Shy Tech design
IMD UNIFY decoration with subsequent customization via digital printing
IMD UNIFY

Sustainable and efficient

Get crucial and sustainable benefits with this process! Thanks to in-mold electronics for possible touch operation, you save on buttons and switches, numerous transport journeys, and work steps. This significantly improves your CO₂ balance. IMD UNIFY is also suitable for recycled materials. The decoration does not impair the recyclability of the components.

Endless design freedom

There are no limits to design creativity: Any conceivable look as well as Shy Tech designs, touch operation, innovative light design, and even haptic effects are possible. IMD UNIFY enables the perfect symbiosis of series advantage and individualization via problem-free digital overprinting.

KURZ IMD BIOFENSE® - no chance for bacteria

Interior surfaces are often touched and germs can accumulate. KURZ has demonstrably developed long-lasting and durable protection against this: KURZ IMD BIOFENSE®. IMD BIOFENSE® is transparent and can therefore be used with all decorations. The protective function has been confirmed by the independent Fraunhofer Institute according to ISO 22196. This finish can also be combined with IMD UNIFY.