IMD VARIOFORM®

One-stop process solution for the decoration of 3D-shaped plastic components
Do you want to offer your customers technically sophisticated plastic processing? Would you like more leeway in design with maximum efficiency? And at the same time, you value efficiency and sustainability? Then we have the ideal solution for you: IMD VARIOFORM®, our new process-efficient one-stop solution. It combines the best of the IMD (In-Mold Decoration) and insert molding decoration processes and is designed both for processing recycled materials and for using foam technology.

We supply all components and services for the smooth integration of IMD VARIOFORM® into your injection molding system. From tool and feed technology to matching decoration systems, KURZ provides you with everything from a single source.
3D geometries, 4 processes, 1 step

IMD VARIOFORM® enables you to quickly and cost-effectively manufacture sophisticated plastic parts with complex 3D geometries in a roll-to-roll process. This will let you benefit from significantly higher efficiency.

How does this work? Decoration, thermoforming, injection molding, and precise punching of the component takes place directly in the injection mold. IMD VARIOFORM® can be easily integrated into your existing injection molding system and can be supplemented with touch sensor integration via Functional In-Mold Labeling.
Designed for foam technology

In order to meet the increasing requirements for lightweight construction and resource-efficient component production, we have also designed IMD VARIOFORM® for material- and weight-saving foam technology. This enables you to produce significantly lighter plastic components with sophisticated, deeper 3D geometries, homogeneous surfaces, and unique designs—even from foamed recycled materials.

Your technological advantages:

- Weight reduction and thus CO₂ reduction for transport and end product
- Material savings
- Cost reduction
- Avoidance of sink marks in the injection molding process
- Possibility to use recycled materials
- Various surface designs including Shy Tech and backlighting effects are possible
Your design advantages with IMD VARIOFORM®:

- Creative design freedom with backlighting and Shy Tech designs
- Quick decor changeovers
- All-in-one process
- Cost efficiency through roll-to-roll process
- Developed for 3D geometries and space-saving, extraordinary component shapes

In addition to its process advantages, IMD VARIOFORM® also unleashes enormous creative potential in product design. This process offers the same freedom of design as the IMD process. This means that you can freely choose the injection molding material used, the shape, and the punching of plastic parts. The surface design can also be customized. The options range from continuous designs to backlit single-image designs. Thanks to IMD VARIOFORM®, designers and product developers can therefore rethink their approach as early as during the brainstorming stage, without reaching efficiency limits in production.

Winner of the Bavarian Innovation Award 2020: IMD VARIOFORM® with Functional IML
Technical details at a glance

Take a look into the future of plastic decoration with KURZ and discover your potential with IMD VARIOFORM®.

Your sustainability benefits with IMD VARIOFORM®:

- Recyclability of scrap and finished components
- Raw material and weight reduction through the use of foam technology
- Reduction of waste parts
- CO₂ reduction through high process efficiency

Develop your advantage long term

With IMD VARIOFORM®, you not only benefit in terms of efficiency when decorating sophisticated 3D plastic elements. IMD VARIOFORM® also demonstrates its strengths when it comes to sustainability. The process can be flexibly combined with lightweight construction and recycling technology. Physical or chemical foams help you save plastic material. Recycled materials can be processed and decorated in an aesthetically pleasing and sophisticated way, just like new materials. The lacquer package, which is applied as a decorative layer, has no negative effects on recyclability. These advantages offer enormous ecological potential for many industries.

Continuous design
For particularly fast, economical, and edge-precise decoration of pronounced 3D geometries, e.g., in the home appliance sector.

Sensor integration
Human machine interfaces in the automotive segment—for the economic realization of small series.
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