

THE SUM OF ALL PARTS

WE'RE ENTERING A NEW AGE OF CHANGING MANUFACTURING PROCESSES. THIS INVOLVES A WHOLE NEW APPROACH TO DECORATING PLASTIC PARTS. WHAT WOULD MODERN CAR INTERIORS LOOK LIKE WITHOUT THESE PARTS? UNIMAGINABLE. THAT'S WHY WE KEEP LOOKING AHEAD AT HOW OUR EFFECT PIGMENTS CAN ENHANCE THE MOST INNOVATIVE OF APPLICATIONS.

Producers of plastic parts often work together with producers of paints and coatings in the hunt for innovation. That's why we belong to an interdisciplinary association of product manufacturers that investigates new ways of using sophisticated coatings containing effect pigments. A perfect example of this approach to cooperation was presented at the K Trade Fair in Dusseldorf, the world's specialist trade fair for plastics and rubber. Working together, we developed a revolutionary new process, a symbiosis of coating and plastic molding.

In 2009, three companies got together to develop a more efficient and environmentally friendly process for coating plastic parts. As part of this initiative, machine manufacturer KraussMaffei set to work developing an entirely new process for coating these parts directly inside the manufacturing tool – and the ColorForm (or reaction injection molding, RIM) process was born. The coating process required some tweaks and add-on developments, and paint specialist Panadur was happy to deliver these. In 2010 and



2013, the first prototypes were put on display. Back then, the process still had some limitations but these were quickly overcome. It's now possible to produce coated parts with the full spectrum of available colors and effects – without limitation. So it was time to present a new sample part at the K Trade Fair: a decorative trim for a car door interior.

Of course we worked shoulder to shoulder with KraussMaffei and Panadur to see this innovative process come to fruition. We always work with companies along the complete supply chain to provide our know-how for using innovative effect pigments. In this case, it was our effect pigments that performed the best. They're the perfect added ingredient for giving surfaces extraordinary appeal – innovation at its finest.

This new injection coating process for plastic parts allows for the detailed reproduction of microstructures and textures. It also allows for the use of all color tones and effects. Even effect colors are possible. So with this new process, manufacturers enjoy:

- Perfectly even or structured surfaces
- Solvent-free formulas and application
- Application without release agents
- Multicolored effects to enhance structures through angle-dependent color changes
- Conformity with REACH, GADSL, and HCS 2012

