

SUCCESS STORY

PARAT CONVINCES INTERNATIONAL CONSTRUCTION MACHINERY MANUFACTURER HAMM ALL ALONG THE LINE

The whole is only as good as the sum of its individual components.

As a competent partner with a global footprint, PARAT Group has already impressed construction machinery manufacturers all over the world with many years of experience in plastics engineering and a wide range of technologies. We would like to present PARAT's know-how with the help of the following sample project. Including a combination of two reliable process techniques, the case study also showed up with advanced design options (e. g. complex geometric shapes) and gave free rein to creativity regarding multicolor and integration of functions as further key success factors.



NO COMPROMISE. WE CUSTOMIZE.

Tailor-made technology solutions lead to success!

The project started with a main focus on our customer's request for a process-safe technique. Along with meeting budget allowance, quality specifications and deadlines, the challenge was also to realize a special product design with complex geometric shapes and specific demands on multicolor (contrasting colors). With many years of experience in the construction machinery sector and a wide range of technologies, PARAT was well-positioned for this project.



technology/surface matrix	TF	RIM	LFI
bare plastic part		х	
film for exterior parts (PMMA)	х	х	W HAMM
film for interior parts (PVC)	х	х	х
IMC		™ HAMM	х
painted	х	х	х
IMP		х	

A comprehensive range of technologies and surfaces enables numerous design options which are perfectly tailored to our customers' needs.

CHALLENGE.

- · demanded technology: LFI
- improvement of surface quality
- UV, corrosion and scratch-resistant high-gloss surface finish
- ensured process reliability
- cost-effective tooling concept
- adherence to total budget
- multicolor
- complex geometric designs

SERVICE.

- complete development and manufacturing of engine hood
- a tooling concept that optimizes both product and process
- Design to Cost
- multicolor thanks to the combination of two technologies (LFI/RIM)
- procedure with glass-fiber reinforced plastic in spite of complex geometric shapes
- successful substitution of GRP by LFI technology

CUSTOMER BENEFIT.

- premium UV-proof, corrosion and scratch-resistant robust Class A surfaces
- reproducibility
- noise reduction thanks to "Low Vibration Effect" of plastic material

The specialist for premium plastic trim parts successfully combines technologies for maximum customer benefit

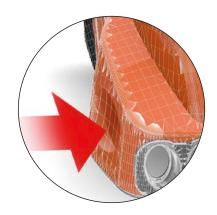
Our customer's explicit request for LFI technology has already predefined the appropriate process. The PARAT project team has - within the scope of product engineering - intensively dealt with solution approaches based on customer's specifications and unlocked the potential of individual technologies. Taking cost effectiveness and requirements into account, we were able to identify a combination of two technologies (LFI/RIM) and two surfaces (film/IMC) as ,best choice'. Following our development work in the spirit of partnership and always observing the total budget, we've finally worked out a tooling concept that optimizes both product and process.

A wide range of processes, one expert and the perfect technology solution!

The unique combination of LFI and RIM (IMC) creates a high impact resistant component with premium surface along with multicolored design options. Here, too, the benefits of process-safe PARAT technologies and, in particular, possible combinations thereof constitute a clear competitive advantage with constant cost structure. In addition, PARAT impressed with a high class UV, corrosion and scratch-resistant Class A surface within the framework of this project.

"Our long years of experience as an expert in fiber composites and our wide range of technology and surface solutions help achieve optimum results by the use of specific techniques in order to meet the toughest challenges one could face when dealing with complex components and the relating customers' requirements."





If you would like to learn more about our technologies or further case studies, please send an email to info-vertrieb@parat.eu

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