K Show 2016: RocTool presents 3 innovative molding demonstrations for plastics and composites

RocTool, heat and cool technology specialists for plastic and composites, present their new HD Plastics™ approach along with their latest technologies at the K show 2016.

Demonstrations will be on the following stands: ROCTOOL Hall 15 / C41, KRAUSSMAFFEI Hall 15 / B27 / C24 / C27 / D24 and FLEX Hall 8B / C79

HD Plastics™: A new level of quality, available for all designers

Thanks to the new HD Plastics™ approach, RocTool enables designers and part manufacturers to produce exceptional part quality, increased performance without secondary operations such as painting or decorative films. On their stand (Hall 15 C41), RocTool will showcase a live demonstration on a KraussMaffei CX 160-750 with a double cavity tool machined in collaboration with GF Machining Solutions. Laser texturing solutions allow end product value effects—with incomparable quality and high-definition surfaces due to texturing at a sub-micron scale.

“With HD Plastics™, our main focus is to evaluate different resin families and to maximize RocTool technology to achieve quality parts that allow designers to expand their choices. The surface quality, colour and removal of visual defects are always our priority.

At this year's K Show, we propose 3 molding demonstrations, plus we have several applications in production today on display and also various highly innovative products in development, "says Mathieu Boulanger, RocTool CEO."

In amongst the new parts on display, RocTool, in collaboration with ABC Group (Toronto, Canada) and Proper Tooling (Warren, Michigan), will show some exterior car grills “mold in color” with multiple textures and colors.
100% Recycled Plastic Housing

KraussMaffei made the RocTool choice for their demonstration to achieve High Definition in terms of quality and fast cycle time.

"Being able to get the best quality with 100% recycled materials is a great challenge and also a choice to turn to the most planet friendly solutions" Jochen Mitzler, Head of Strategic Product Management at KraussMaffei.

In partnership with Reichele and KraussMaffei, RocTool presents a complex case, with a decorative texture on the mold. The demonstration will also focus on eliminating weld lines, sink marks reduction, quick cycle time and a full replication of tool surface. Note that the RocTool system will be installed on a 2000 kN KraussMaffei press equipped with the APC function. APC automatically analyses the viscosity of the actual shot melt and adjusts the packing pressure profiles to avoid reject parts. With this new function combined with RocTool process, it is now possible to mold fully recycled ABS parts without any defects.

This demonstration can be found at the KraussMaffei stand hall 15, booth B27 / C24 / C27 / D24.

A new RocTool process will be presented at the K Show. IDH: "Induction Dual Heating", a combination of Plastic and Composite materials with the new innovative RocTool heating configuration.

In partnership with Flex and Arburg, RocTool will present for the first time its process IDH ("Induction Dual Heating"), a new technology that combines the forming of a composite sheet and injection over-molding of thermoplastic in the same process. RocTool will present the process for a “hybrid” 14 inch computer A cover that is 1.0 mm thick, bringing the benefits of composite (high modulus, lightweight ...) and those of plastic (cosmetic integration functions integrations ...) in one and the same product while eliminating secondary operations. All of this in a 1 minute cycle time per part and in the same machine!

"What differentiates Induction Dual Heating from other technologies, is predominantly our ability to transfer a cold composite insert, whether woven or nonwoven, therefore erasing any known deficiencies in current processes as problematic transfer and handling of a heated insert, the cooling of the insert during the transfer or the precise positioning of the "softened" insert" said Dr. Feigenblum, RocTool CTO.

IDH technology provides an in-situ pre-heating of the composite insert in the tool, by combining a heated mold by induction without any temperature limitation compared to other heating systems, and the preheating of the insert by radiation with a single power source. By definition, IDH is able to control the heating of the two elements intelligently, adapting the heating time and the power injected automatically.

The complete installation of unparalleled complicity, also meets the requirements of the electronics industry. It can be discovered at Flex’s stand Hall 8B / C79.

Live RocTool Demonstrations will be held at the K show 2016 from 19th until the 26th October 2016

Stand RocTool: Hall 15, C41
Stand KraussMaffei: Hall 15, B27 / C24 / C27 / D24
Stand Flex: Hall 8B, C79

About RocTool: Created in 2000, RocTool is a Technology & Manufacturing solutions provider offering Engineering services and systems. RocTool induction process is fully adapted for plastic injection and composite processing, including multiple configurations to fit with tier manufacturers requirements. RocTool’s Research and Development team is adapting the technologies to more materials including metal. As a Heat and Cool technology leader, RocTool now offers High Definition Plastics™ capabilities to plastic molders and Light Induction Tooling™ to composite part suppliers. The processes developed by RocTool are used in production by major brands in innovative industries such as automotive, aerospace, consumer products & electronics. They hold many advantages including reduced cycle times, surface quality, light-weighting and performance, therefore resulting in an overall cost reduction of the produced parts for manufacturers. RocTool is listed on Alternext. Its headquarters and R&D center is situated at Le Bourget du Lac (France). RocTool also has offices and platforms in North America, Japan, Taiwan and Germany.