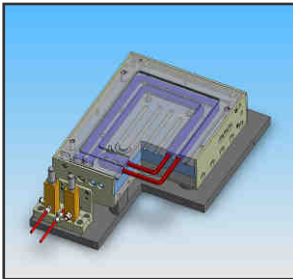


ROCTOOL LAUNCHES THE 3ITECH® RANGE INTEGRATED INTERNAL INDUCTION TECHNOLOGIES

3ITECH®, THE NEW TECHNOLOGY OF HEATING BY INDUCTION PATENTED BY ROCTOOL

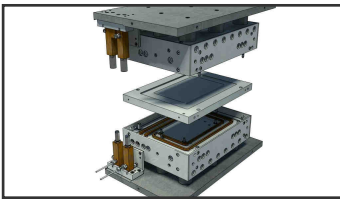


3D Image of a mold equipped with the 3iTech® technology.

When transparent, it is easy to see the integration of the inductors inside the mold.

The 3iTech® Technology is a process where the mold is heated by electromagnetic induction. **The inductors are integrated inside the mold at manufacturing time in order to match the shape of the part.** Placed several millimetres from the surface of the mold, the inductors therefore heat a reduced area of the tool by conduction. **According to Alexandre Guichard, RocTool's CEO, « the composite industry has been waiting for this innovation for 20 years ».** It is a type of « *super cartridge heater* »: **using very low energy consumption, it allows heating the mold from 60°C to 200°C in a few seconds.** As the heating is concentrated close to the mold surface, the cooling (via traditional water channels) is equally very fast, which is a real challenge today! « *In plastic injection, to be able to heat a mold at a temperature very close to the material injected revolutionises the flow and rheology* » continues Alexandre Guichard. « **The market needs solutions: making it possible to heat the mold during the injection phase means we can produce parts without welding lines, so no paint is needed, with an improved glossy appearance and reduced thickness** ».

CAGE SYSTEM® AND 3ITECH®: COMPLEMENTARY APPLICATIONS



3iTech® technology was presented at the IMTU 3 held on the 27th October 2009. As the inductors are placed inside the mold and not visible, this makes it quite the opposite to that of the Cage System®.

RocTool can now offer their clients a portfolio of technologies dedicated to heating by induction. « **As the Cage System® and 3iTech® target different markets we now offer a more overall choice.** This choice is made depending on the materials used and the chosen applications. Regardless of what is required, **our portfolio of technologies opens the door to all parts that can be manufactured by induction** » indicates Alexandre Guichard.

The **Cage System®** can produce parts at **very high temperatures** (up to 400°C). With **3iTech®**, the advantage for plastic injection, is that it can be heated at the same time as the injection phase, which improves the flow and reduces the pressure. For composites, the traditional obstacles for molding carbon fibre are removed, as there is no longer electrical current circulation at the mold surface: **an average production size for composite parts with a carbon fibre base, using heating cycles of ten to twelve seconds, will become a determining factor in the Aerospace, Automotive and Sports & Leisure industries.** Regarding plastic injection, 3iTech® targets the parts

general appearance. These can be multimedia parts (PDA, laptop covers, TV screens, Internet boxes) and for the automobile industry would be decorative interior parts and panels for the car's exterior.

TRIAL PLATFORMS IN FRANCE AND GERMANY

« *We filed the 3iTech® patent in June 2005. Today, we gathered more than 200 international clients or potential clients to present our innovation* » declares Alexandre Guichard, at our 3rd IMTU organised by RocTool. « *Our objective is to facilitate the access for our clients to experience our technologies and to show them the endless possibilities via the live demonstrations and through the testimonies from companies who we already work with* ». On the 27th October, **PMC, Dedienne and KIMW, presented their views about the Cage System® and 3iTech® in particularly within the electronic and aerospace sectors.** RocTool also offers to clients (new or existing) the opportunity to test these technologies by means of demonstrations at their trial platforms, at either, Pôle Européen de Plasturgie (PEP) in France and at Kunststoff Institut Lüdenscheld in Germany.

In 2010, RocTool will organise three more IMTU (Innovative Molding Technologies Update) conferences and demonstrations showcasing their technologies, these will be held in Japan, USA and Germany.

Demonstration photos and videos are available from Apocope

More about RocTool

Since its creation in 2000, RocTool develops innovative processes for rapid material molding. Winner on two occasions of the JEC Composites Awards, the company has sold a dozen patented licenses of its induction heating technology, the **Cage System®**, predominantly for Composite applications of medium to large series. RocTool was introduced onto the Stock Market at the beginning of 2008, on "Nyse Euronext Marché Libre" in Paris. RocTool's headquarters and R&D centre are situated at Savoie Technolac in Le Bourget du Lac (France) and two sales offices, one in Atlanta (USA) and the other in Tokyo (JAPAN).

Contact presse

APOCOPE Marie-Laure LALERE – Audrey LAUTARD

T : +33 1 45 78 87 37 / F : +33 1 40 59 85 46 / Email : presse@agenceapocope.com