

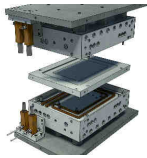
## AEROSPACE: ROCTOOL PRESENTS 3iTECH®, A SOLUTION THAT RESPONDS TO THE PART MANUFACTURERS RESTRAINTS

### 3iTech® RAISES THE BARRIERS FOR CARBON FIBRE MOULDING

The 3iTech® technology is a process of heating the mould by electromagnetic induction. « *The basic principle of 3iTech®, is that the inductors are integrated inside the mold at manufacturing time in order to match the shape of the part.* » explains Alexandre Guichard, RocTool's CEO

*The induction is generated from inside the mould and no electrical current circulates on the surface, this allows the conductive molding of materials such as carbon fibre.*

*This technology allows a homogenous heating at the tool surface, all whilst improving the heating time and energy needed». 3iTech® completes the RocTool range who already have Cage System® for plastic injection.*



**3iTech®, is a 3D network of « super heating cartridges»** which are placed differently depending on the process required (RTM, thermo compression, plastic injection, vacuum formed and hollow part production), the temperatures to achieve (differs depending on the material to be used), heating time, holding time and the shape and complexity of the part to be produced.

**To be able to heat a mould up to 400°C in several minutes or to 120°C in several seconds,** makes the mass production of carbon composite parts in a cycle time which has never previously been reached. Further to that by removing the constraints of inertia state, RocTool managed to **create “smarter” heating tools**, to separate the heating of a fixed part to a moving one, or to locally heat the tool to a chosen temperature level.....

### MORE FLEXIBILITY FOR AEROSPACE EQUIPMENT SUPPLIERS

3iTech® meets the market trend orientated to « Out of Autoclave ».

« *In Aerospace, the technology is particularly suited to structural parts, clips, seat components, hollow parts or port holes. We currently carry out PPS or Peek parts, heated close to 400°C with a complete cycle time of less than 5 minutes. For thermoset composites we can also considerably reduce the cycle times and increase the heating due to the rising of temperatures. The cool part is removed.* » explains Alexandre Guichard. The number of composite part references is very important in the Aerospace industry. It is not uncommon for equipment suppliers to have several thousand references, and as many moulds as necessary in the production phase and that the productivity is limited due to the tool heating time. Alexandre Guichard added « *Normally, the cycle time can vary from 30mins to several hours. With 3iTech®, the mould is hot for only one minute after being placed on the press! Therefore this reduces cycle time and hence the cost of production dramatically* ».

**RocTool invites you to their stand M26 at JEC COMPOSITES SHOW 2010  
13-14-15 April 2010 at Paris Porte de Versailles**

**An area is dedicated to Aerospace, displaying  
« hollow » and high temperature moulded parts**

**For more information: [www.roctool.com](http://www.roctool.com)**

#### **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 twenty patented licenses of its induction heating technology, the **Cage System®**, predominantly for Composite applications of medium to large series. The **Cage System®** began production in 2009 in Plastic Injection. **3iTech®** was launched in October 2009, destined to the transformation of composites and carbon fibre. **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 three sales offices, one in Atlanta (USA) one in Tokyo (JAPAN) and the other in Taiwan. RocTool also has a technical centre in India, trials and demonstration platforms in France, Germany, Japan and USA.*

#### 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](mailto:presse@agenceapocope.com)