# **COMPLETE OFFER**

TO ADOPT THE TECHNOLOGY



## **INITIAL FEEDBACK**

- Material review (database or trials)
- Power requirement estimation
- Preliminary budget envelope



#### **FEASIBILITY STUDY**

- Review of client objectives
- Heat & Cool integration layout
- Cycle time definition



#### **ENGINEERING SIMULATION**

- Flow analysis
- Thermal analysis
- CAD (Computer-Aided Design) and BOM (Bill of Materials)



# **SYSTEMS**

- Roctool hardware integration
- Interface with injection molding machine (IMM)
- Heat & Cool equipment



## **PROCESS INSTALLATION**

- Installation of tooling hardware in the mold
- Process start-up and optimization

# INDUCTION

HEAT & COOL SYSTEMS





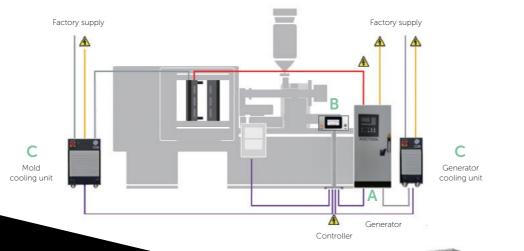
Optimized footprint





**POWERFUL** Best output in the industry





#### **GENERATOR**

Induction heating systems provide power to the mold Ranging from 25 kW to 300 kW Available as single or dual outputs





## **CONTROLLER**

Interface between press and generator Enables precise process monitoring

# **PERFORMANCE COOLING UNITS**

Designed for molds and Roctool equipment



#### INDUSTRIES















# WORLDWIDE

A global footprint with local expertise: Offices. Tech centers. Global agent network.





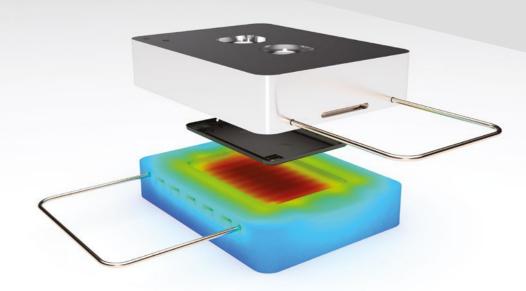
CONTACT

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www.roctool.com

# **ROCTOOL TECHNOLOGY**

LEADING HEAT & COOL TECHNOLOGY FOR INJECTION AND COMPRESSION MOLDING



# FAST \ CLEAN \ EFFICIENT \

Roctool's rapid induction heating delivers ultra-fast cycle times with perfect surface quality, no paint or secondary operations needed. Enables lightweight designs and is compatible with advanced engineering resins for high-temperature applications.



# 3

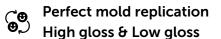
# TECHNOLOGY ADVANTAGES

## **APPLICATION**

No weld lines

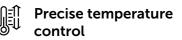


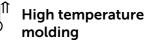
Thin wall & lightweight



# **N** PROCESS

Low energy consumption





Shorter cycle time
Fast heating & cooling

# ECO-MOLDING™

Founded on three interconnected pillars that work together to deliver high-quality molded parts with a reduced environmental impact, enhancing both performance and sustainability.

# High Surface Replication Heat & Cool Technology Enables perfect surface quality Reduces energy consumption and cycle time Reduces CO<sub>2</sub> emissions & waste Eco-Materials Enables use of recycled &

Enables greener product design

# COMPRESSION MOLDING

Advanced compression molding for high performance composites

# **3iTech® - Integrated Internal Induction Technology**

- Heat & Cool network integrated in the mold
- High temperature

# **R-IDS<sup>™</sup> - Induction Dynamic Saver**

- Heated platens
- Heat & Cool inside the platens
- Compatible molding inserts: steel, aluminium, nickel alloy

# LIT<sup>™</sup> - Light Induction Tooling

- OOA: Out of Autoclave process
- Thin shell mold
- Optional silicone membrane

# PLASTIC INJECTION

Enlarge your processing window when using Roctool Technology

# **3iTech® - Integrated Internal Induction Technology**

- Heat & Cool network integrated in the mold
- High temperature
- Compatible with all steels

# **USR™ - Ultra Surface Replication**

- High replication rate directly from mold to part surface
- Replication levels reach uncharted territories, such as micrometer and nanometer scales

# **HD Plastics<sup>™</sup> - High Definition Plastics**

- Improving process conditions & surface quality
- Extensive material database

# **Premium Surface Finish**

Glossy, textured, or matt directly from the mold

## Fast & Efficient

Fast and precise heat & cool management

# Thin & Complex Parts

Improved flow length for lightweight design

# **Material Versatility**

Commodity, Engineering, and High-Performance Polymers, including PCR grades



roctool.com