

DIE TEMPERATURE CONTROLLERS

DYNAMIC CONTROL DRIVEN BY THERMOGRAPHY

Partnership with:

INPROTEC IRT
The Thermal Infrared Solution





DYNAMIC CONTROL

Driven by thermography



The benefits

✓ Continuous and systematic monitoring of the die cast process to increase productivity of the HPDC cell up to a 20% by avoiding deviations in the process.

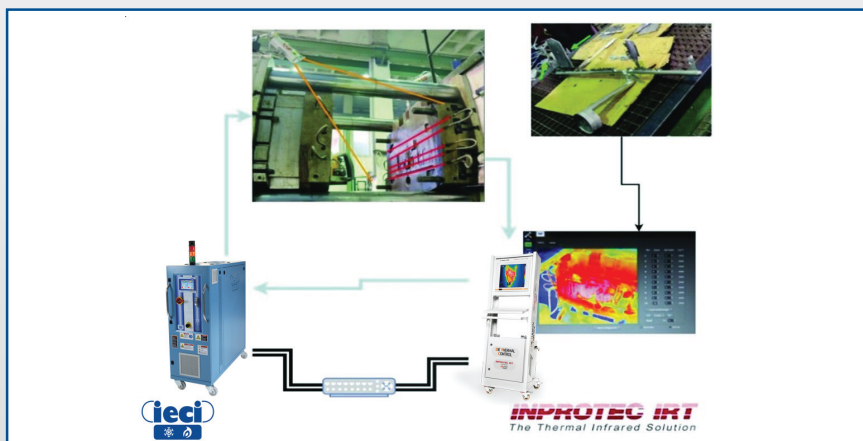
✓ Thermal stability of the process thanks to a self balancing approach, able to distinguish between a long term and short-term tempering units.

✓ Longer die life: around 30% increase in life by reducing thermal shocks, through optimized internal and external cooling.

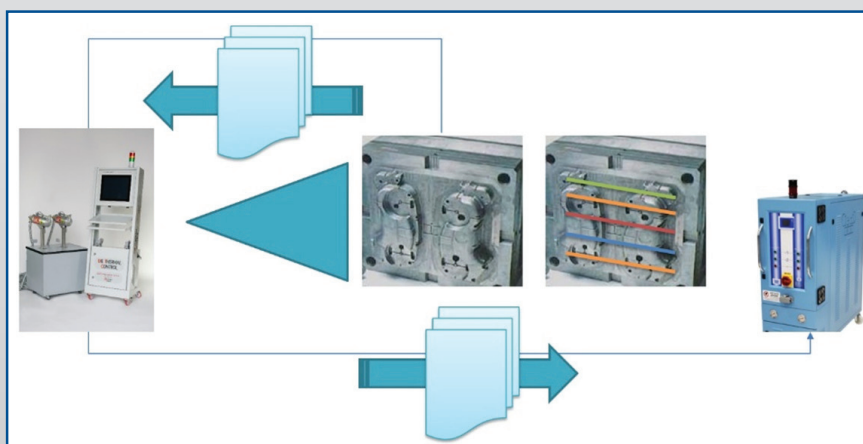
✓ Improved quality with reduced casting defects through optimized lubrication and heating or cooling of the die with consequent reduction of scrap rate after machining up to 25%.

✓ Scrap reduction in HPDC processes above all for structural castings from current 25% to 5% which mean less re-melting rate, overuse of energy and high competitiveness on the structural market.

✓ Significant scrap reduction. In a field with continually growing die and material changes, improved quality and reduced start-up scrap results in lower energy use for remelt and higher productivity for more competitiveness in the demanding structural casting market.



The need



The approach

