



Lairt

— dal 1957 —

Mold & Plastic Solutions

Annarita De Meo, PhD
Polymer Processing Engineer

Together to mold the future



People

80 employees
more than 100 customers
more than 50 strategic suppliers
International technological and
scientific partners



Automotive



01

Applications

Appliances



02

Applications

Healthcare



03

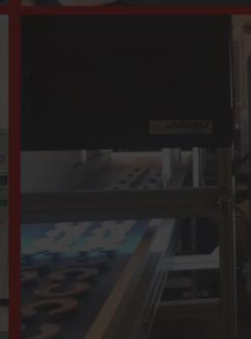
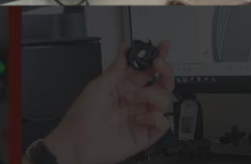
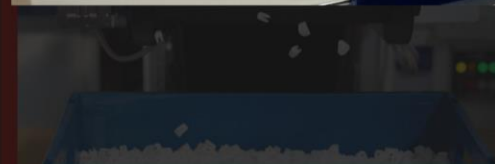
Applications

Molding
& more

Passion

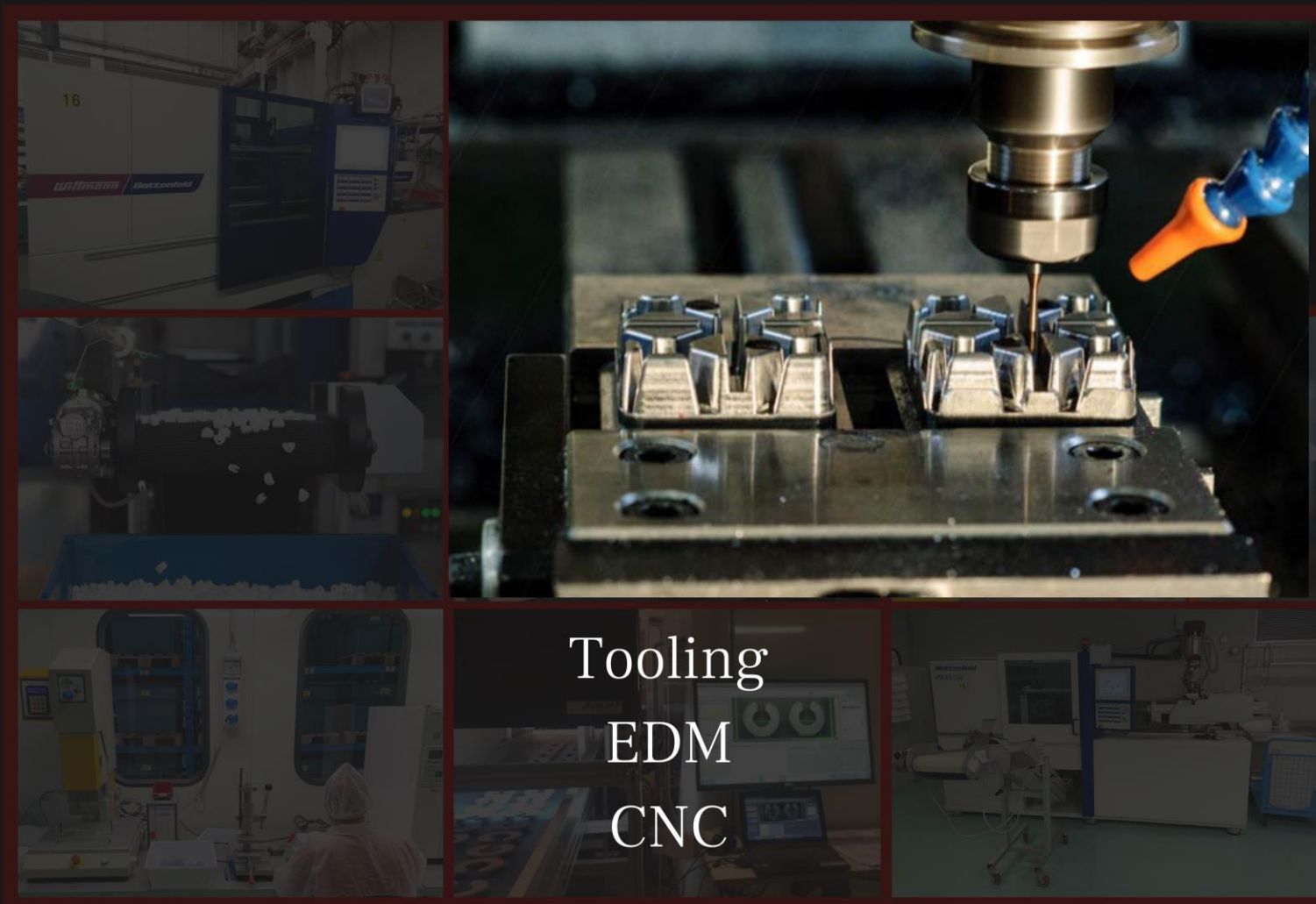


32 Injection Molding
Machines 35-680 tonn
in standard and clean
room



Molding
& more

Passion

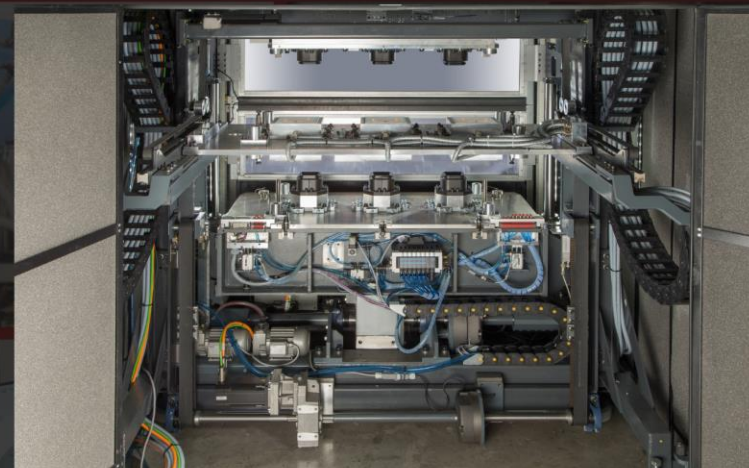


Tooling
EDM
CNC

Molding
& more

Welding machines:
infrared
vibration
ultrasonic

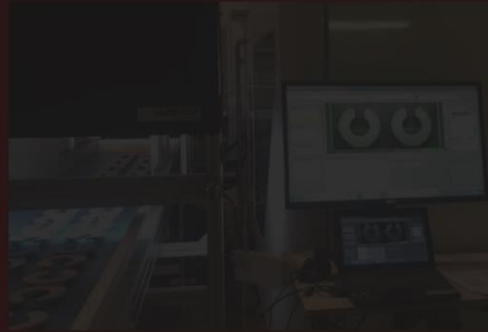
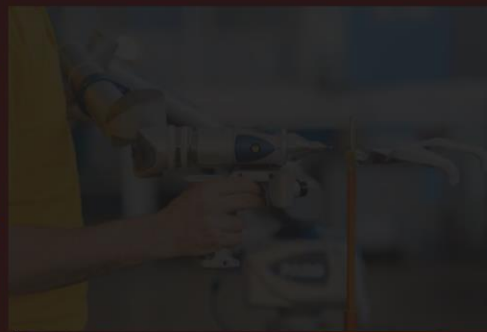
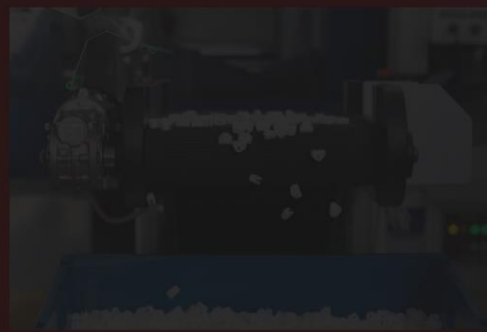
Passion



Molding
& more

Quality & Testing

Passion



Molding
& more

Passion

Engineering & Co-design

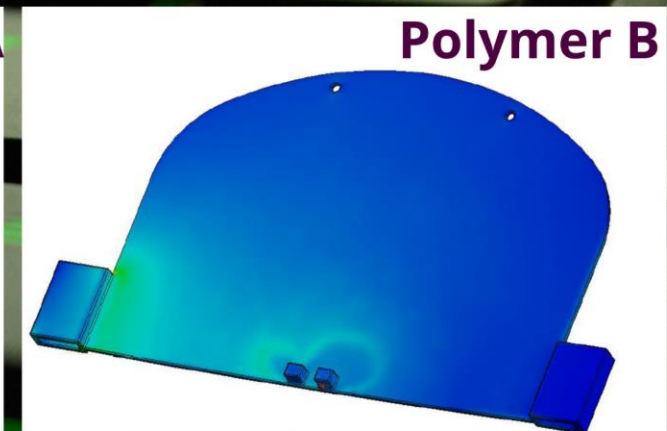
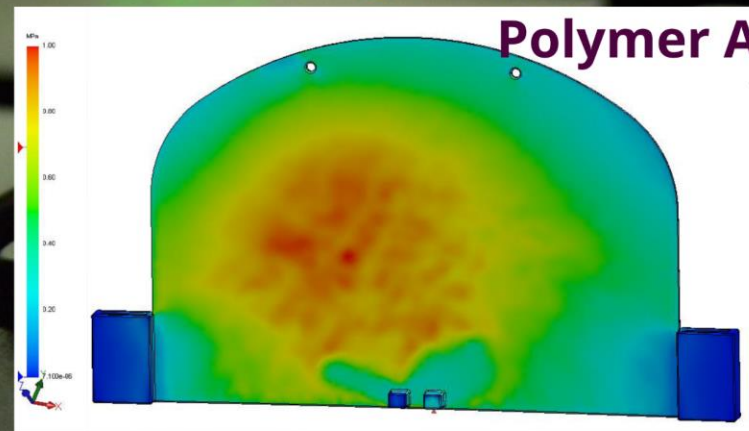


**Molding
& more**



**Engineering &
Co-design**

Injection Molding Simulation



The original version of the product is a customer property.
Here displayed is a representative geometry used for the study.

R&D

Innovation

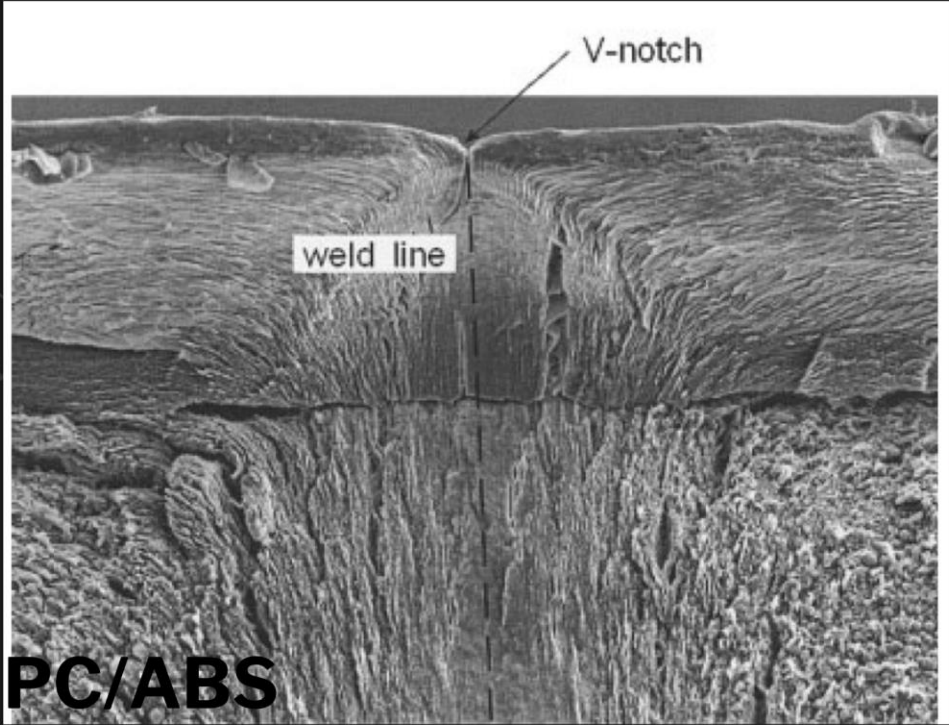
Behind the surface



R&D

Innovation

Behind the surface



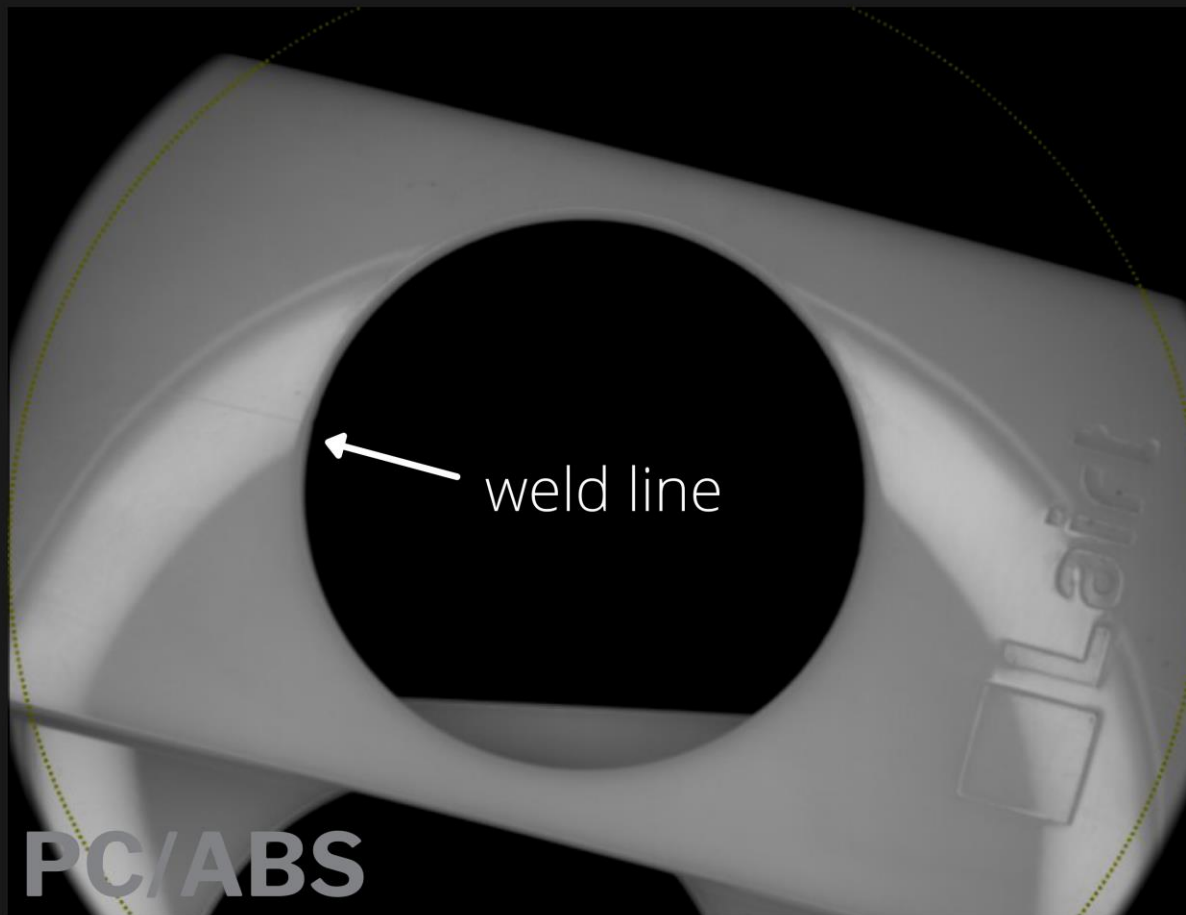
Literature

DOI 10.1002/app.21218

R&D

Innovation

Behind the surface



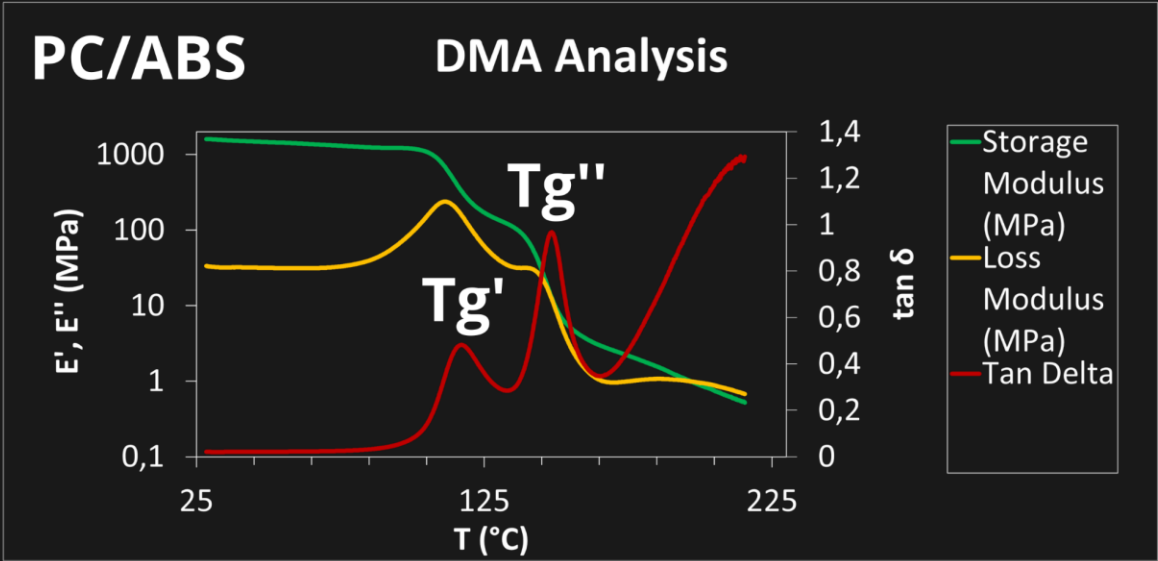
R&D

Innovation

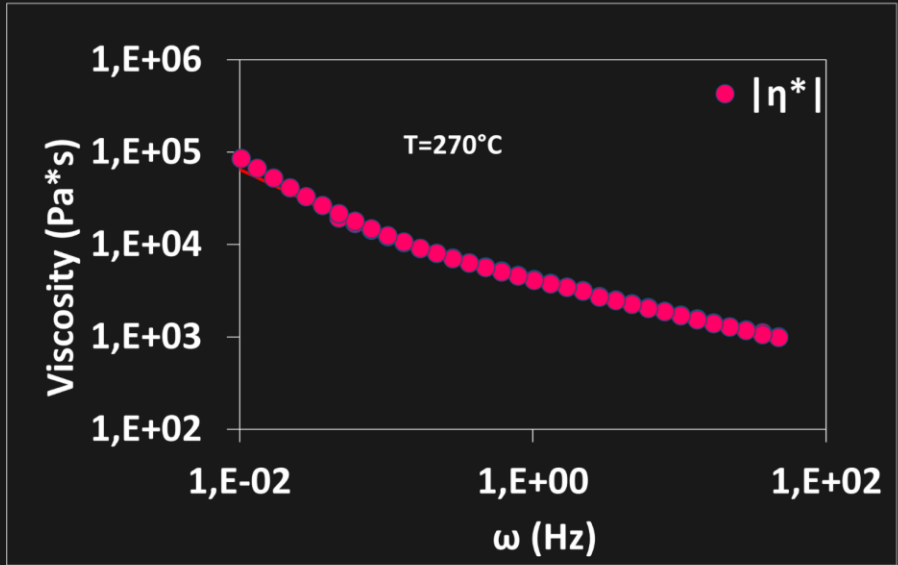
Behind the surface

PC/ABS

DMA Analysis



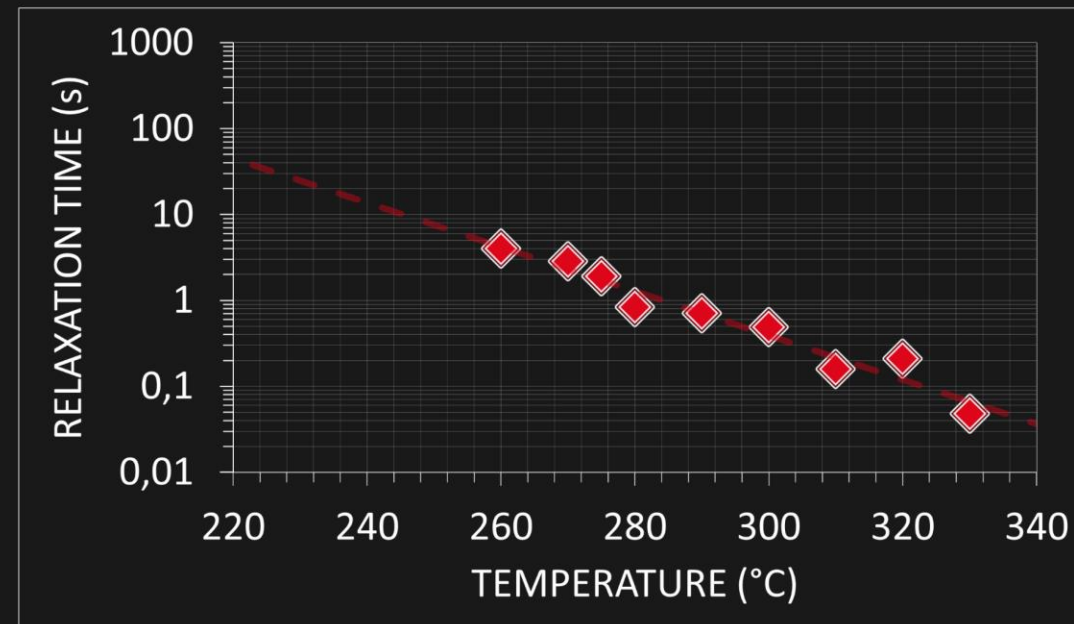
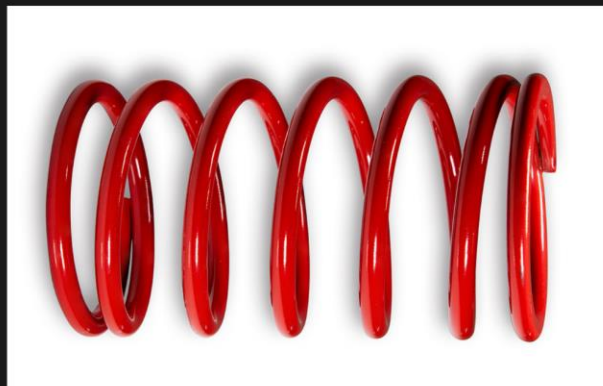
Rheological measurements



R&D

Innovation

Behind the surface



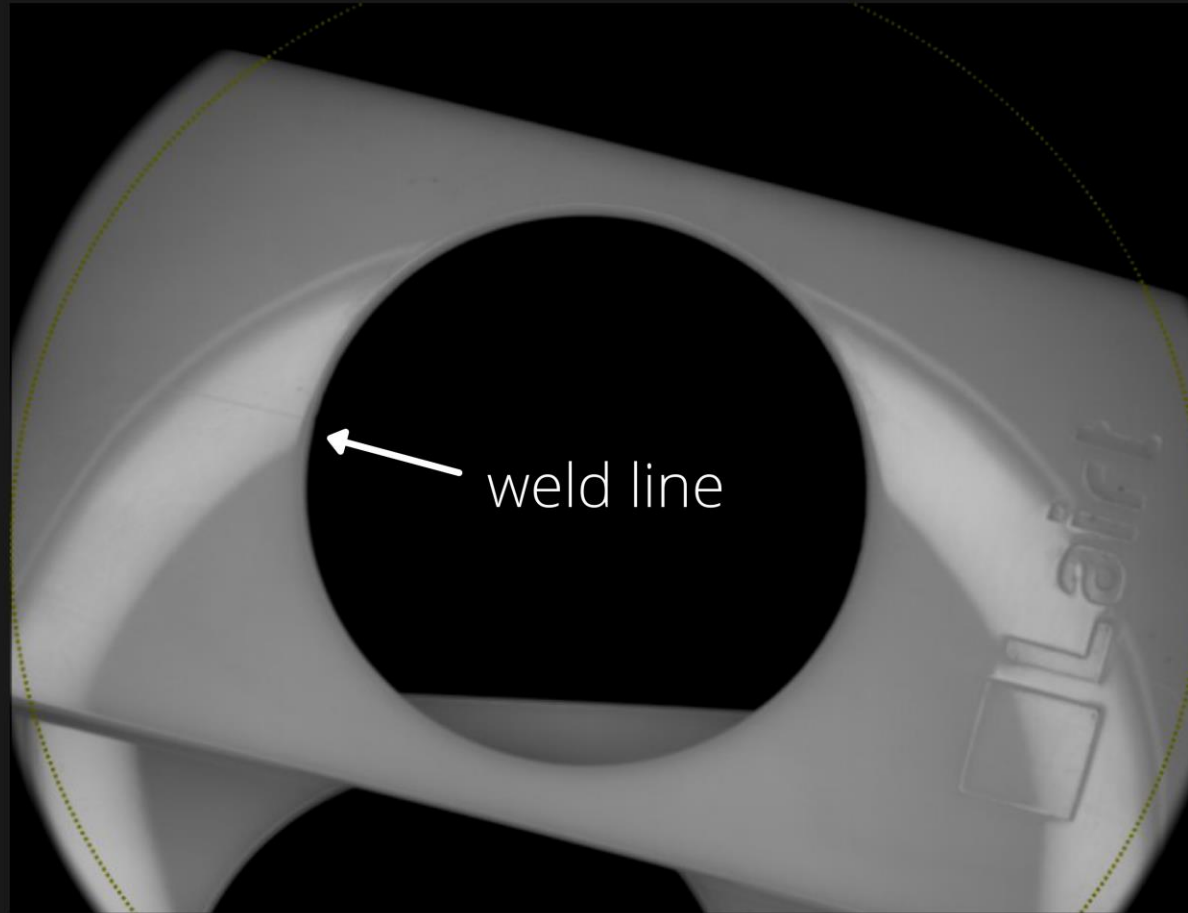
R&D

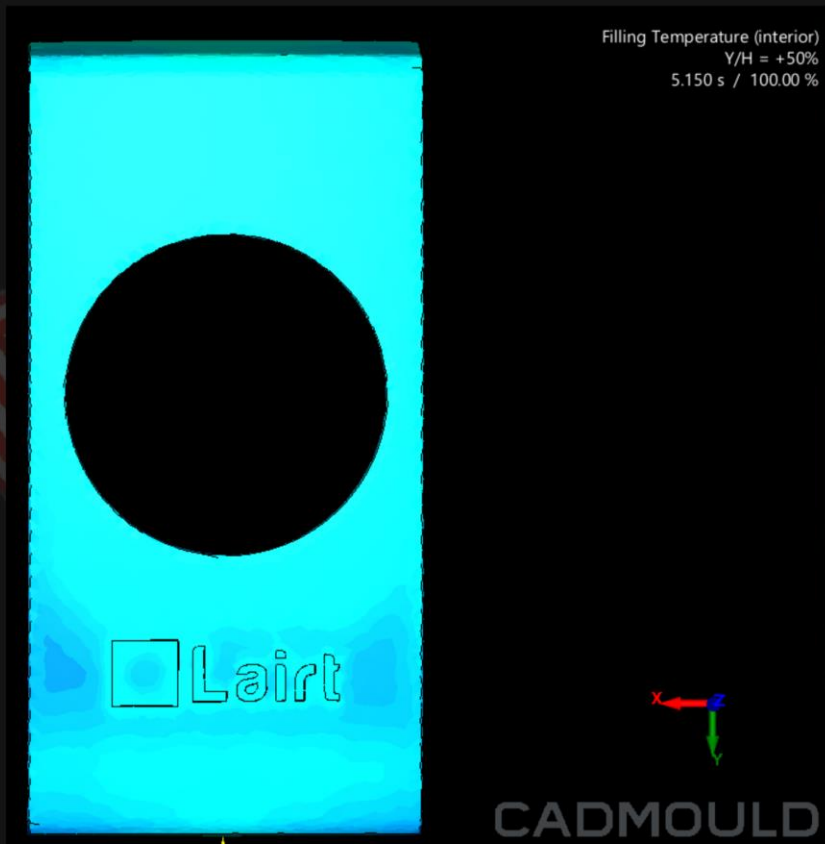
Innovation

Behind the surface

- Variotherm

- LocalTemp

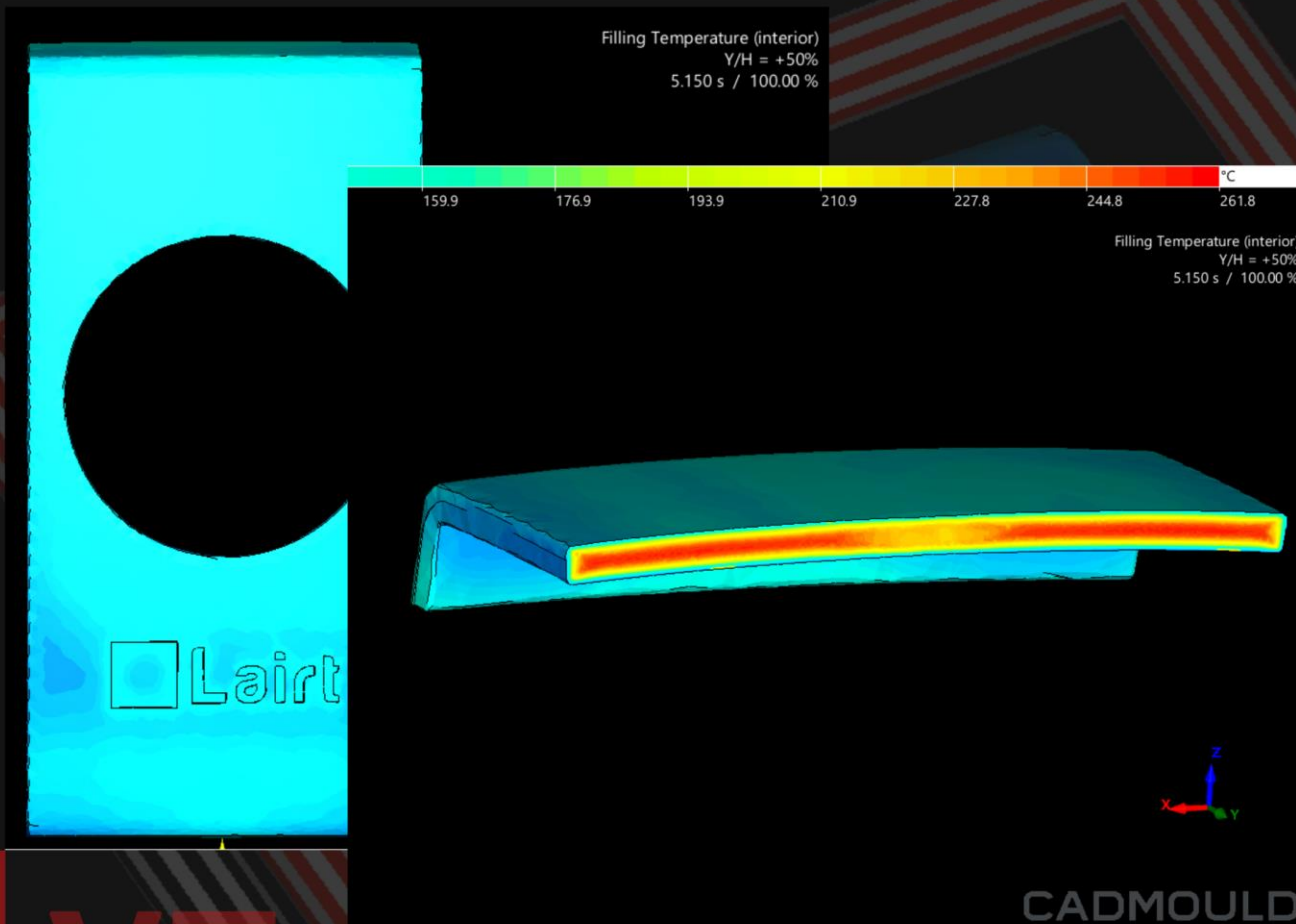




Conformal
cooling

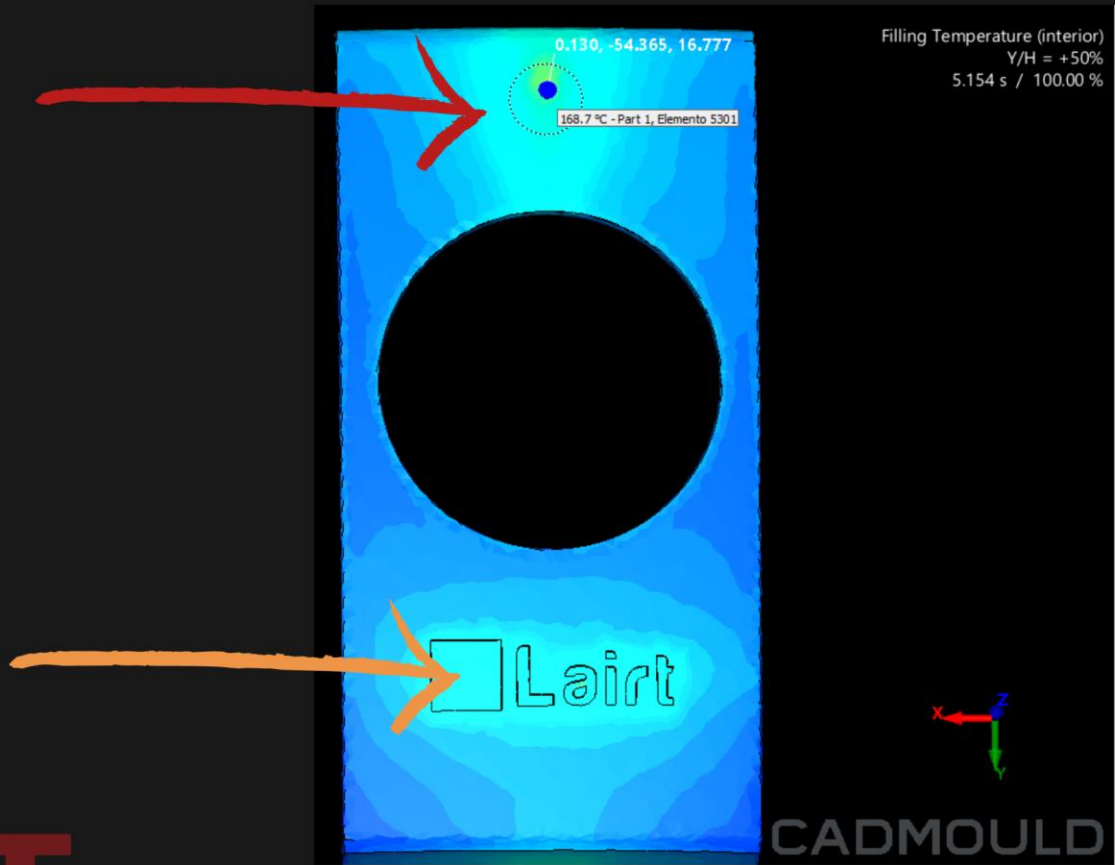
Looking for
the best
performance

VT
Variotherm study



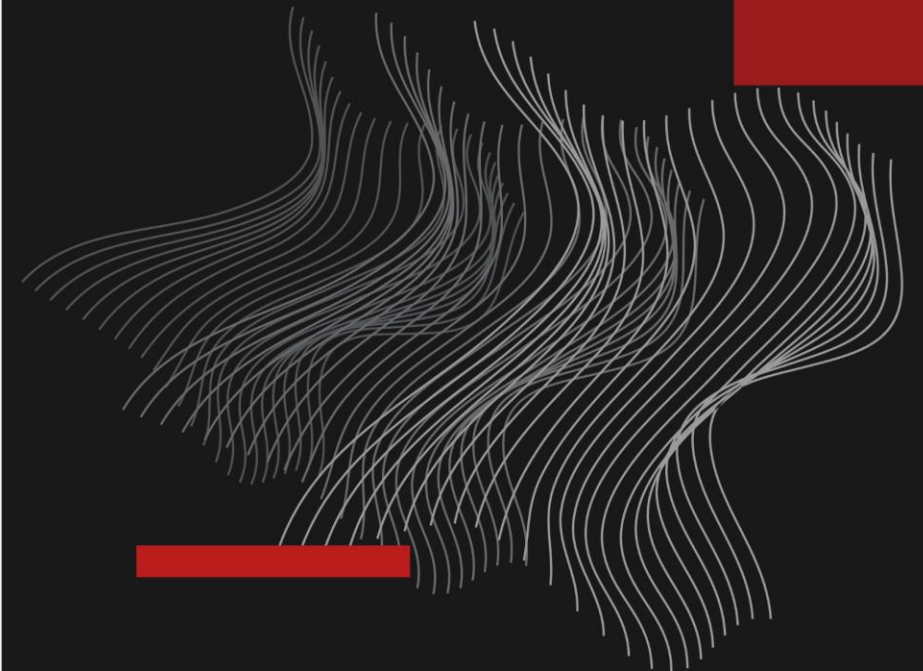
VT
Variotherm study

Looking for
the best
performance

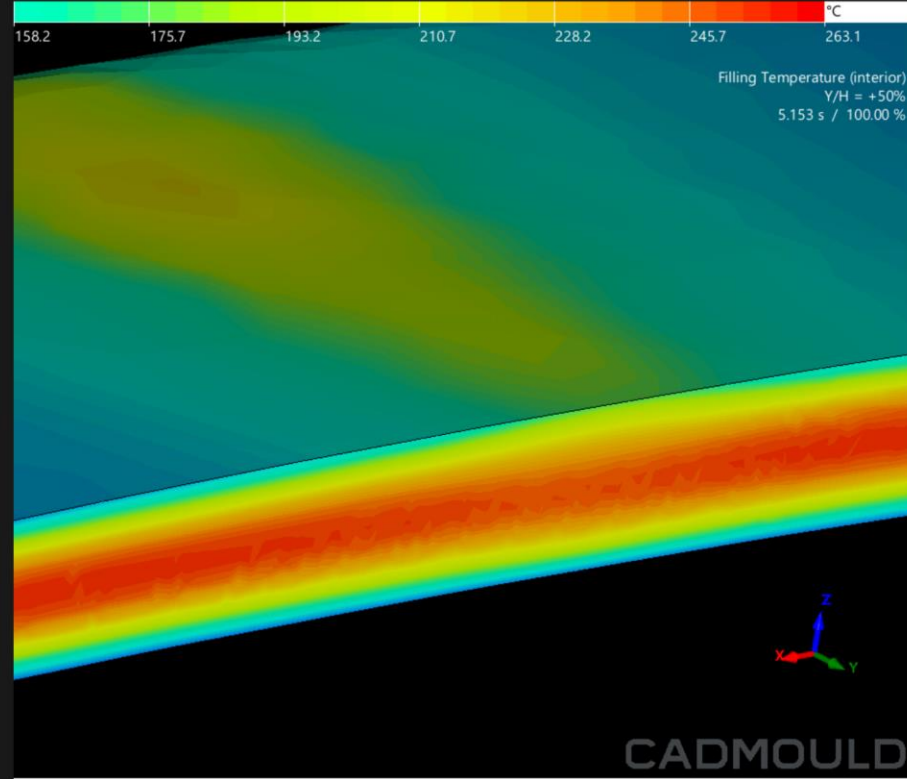
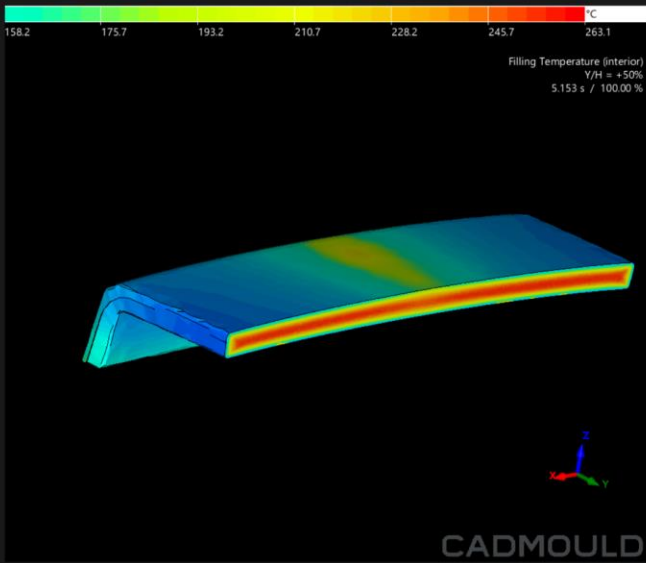


LT

LocalTemp

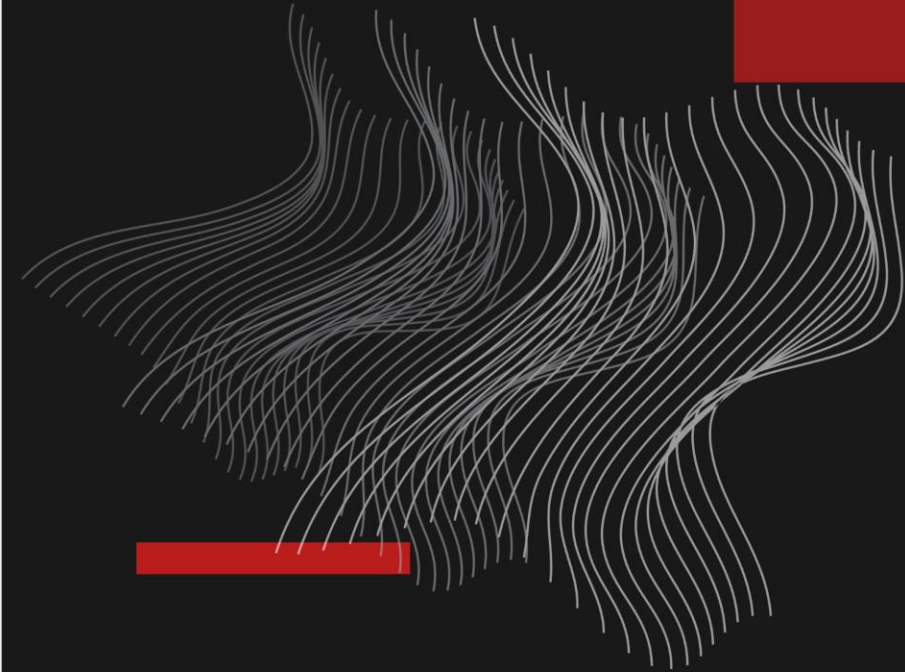


Looking for the best performance



LT

LocalTemp

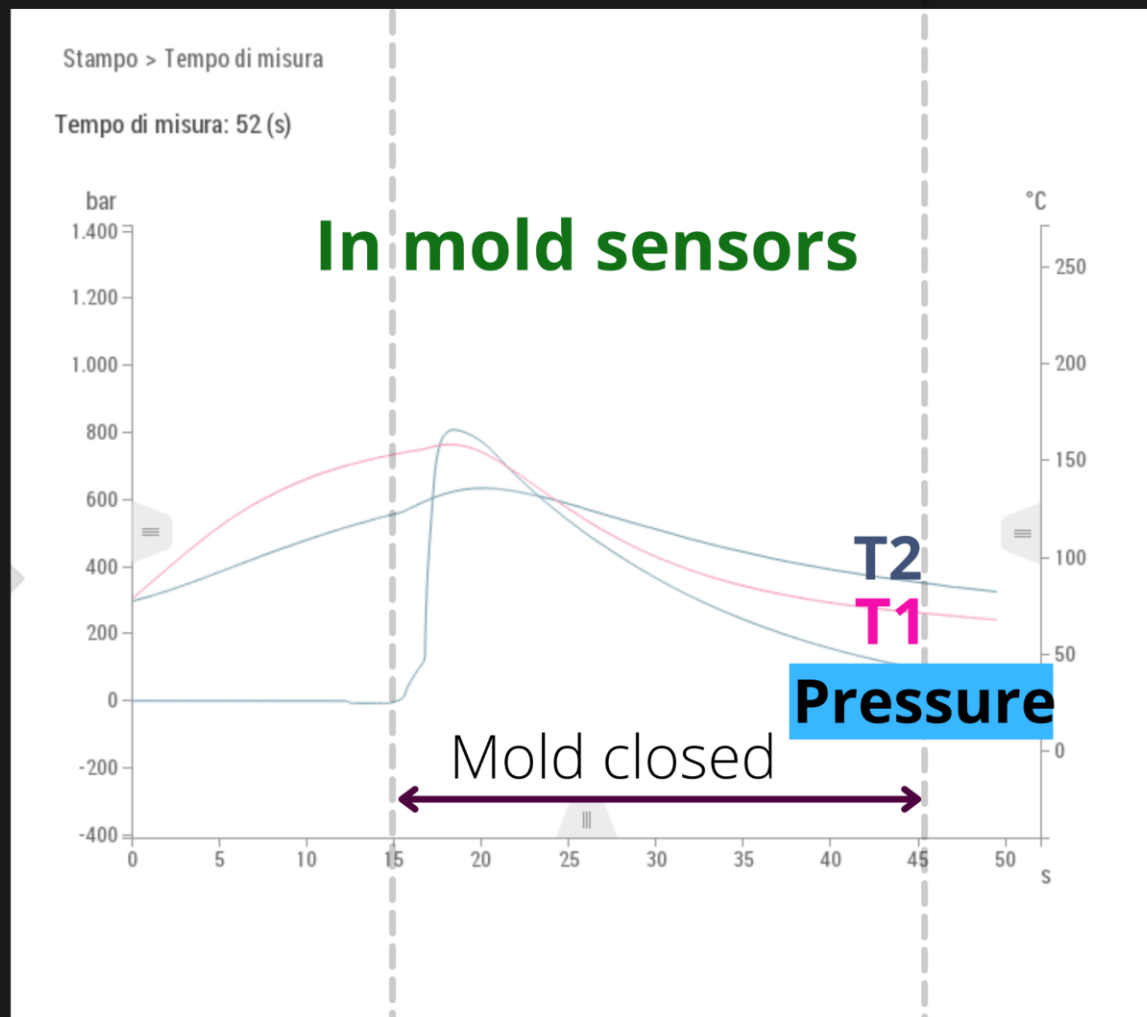
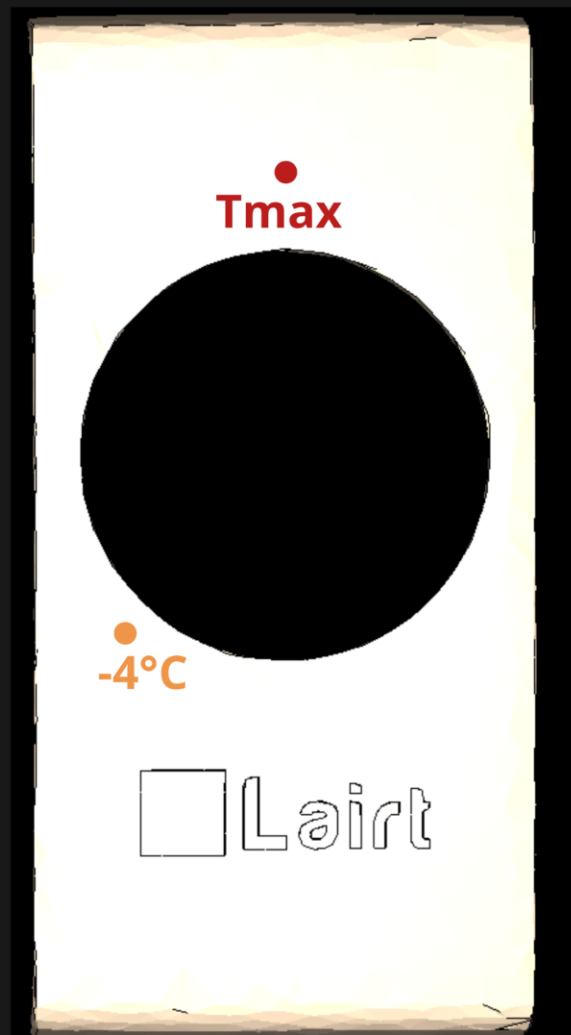


Looking for the best performance

Test

T read by probe on the surface of the cavity when the maximum temperature is reached by the system

VT
Variotherm

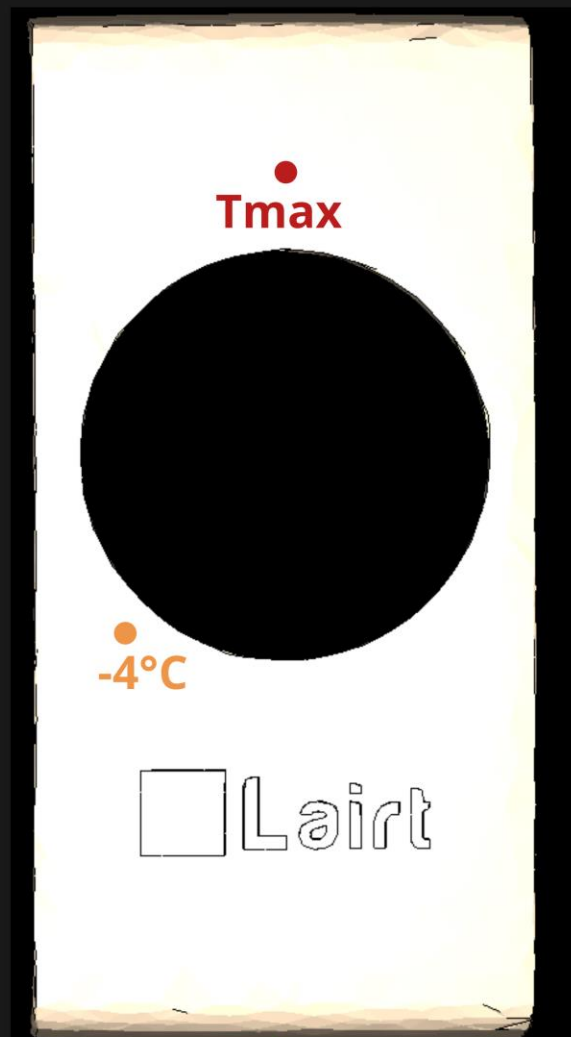


Test

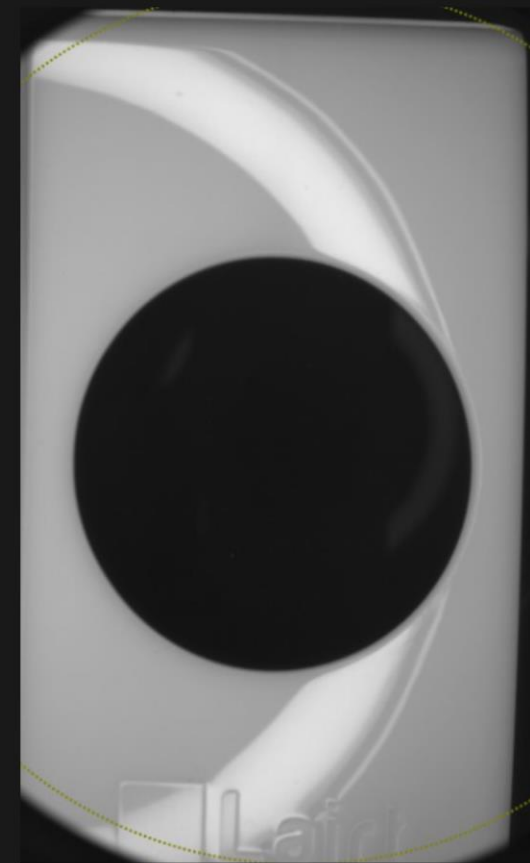
T read by probe on the surface of the cavity when the maximum temperature is reached by the system

VT

Variotherm



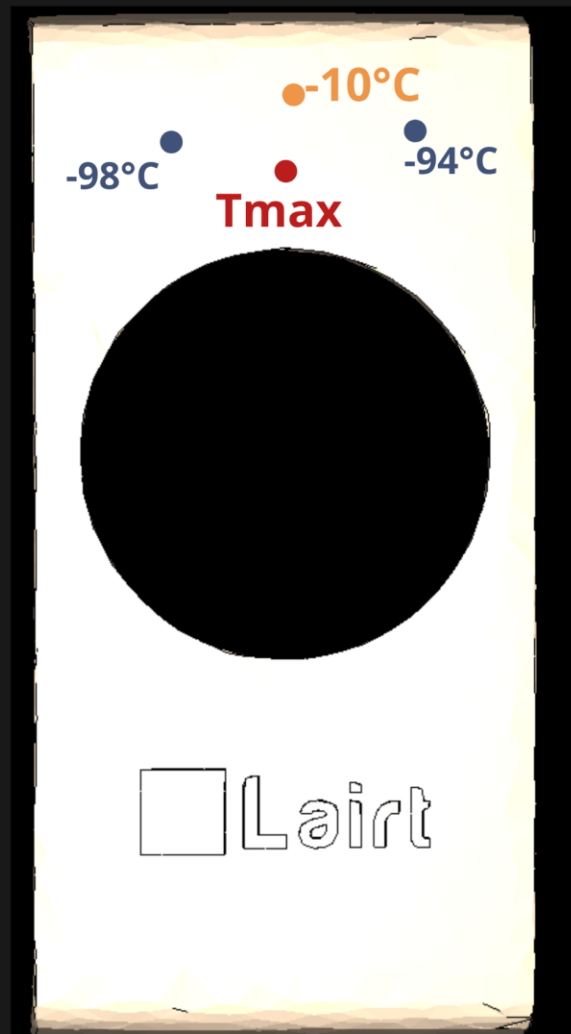
No weld line



Test

T read by probe on the surface of the cavity when the maximum temperature is reached by the system

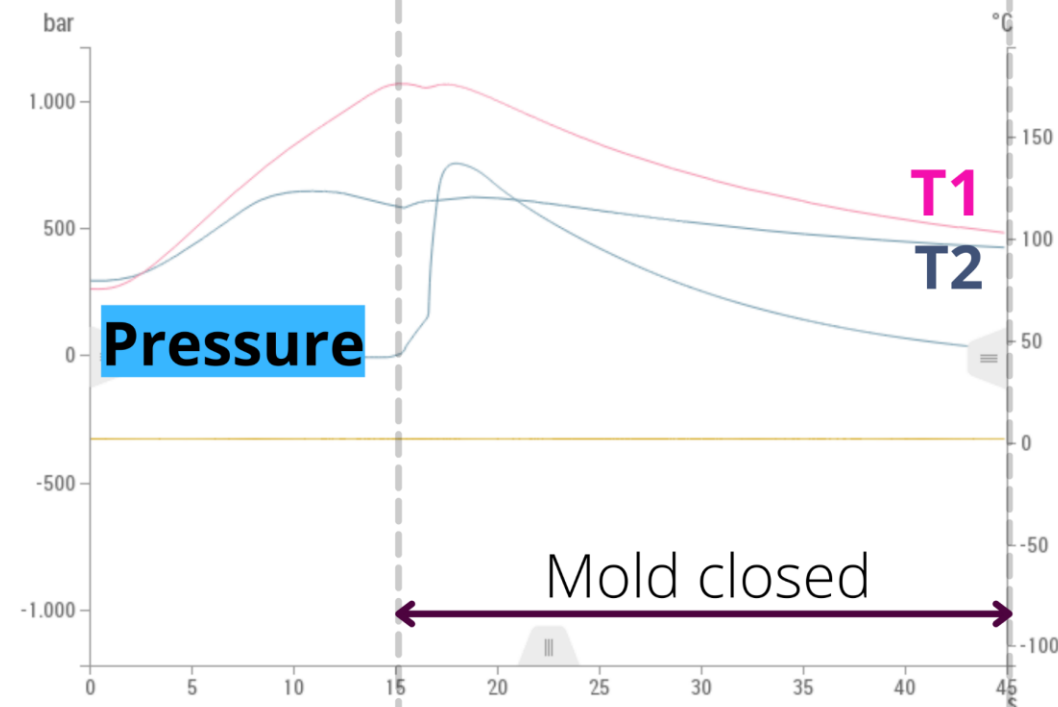
LT



Stampo > Tempo di misura

Tempo di misura: 45 (s)

In mold sensors

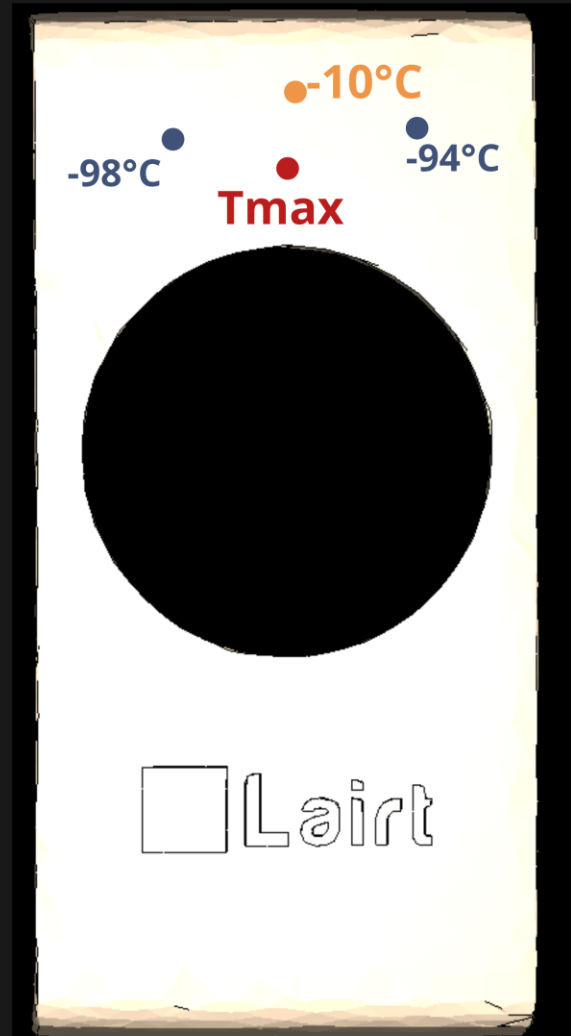


Test

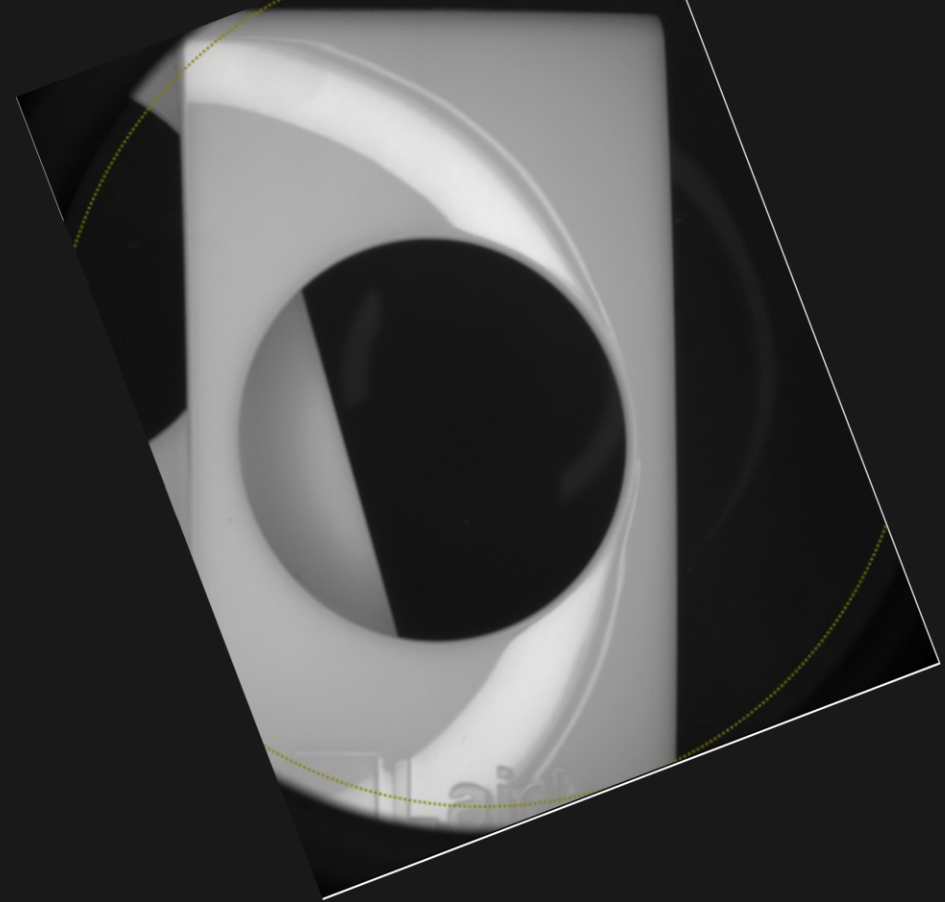
T read by probe on the surface of the cavity when the maximum temperature is reached by the system

LT

LocalTemp



No weld line



Innovation

Behind the surface



VT and LT worked

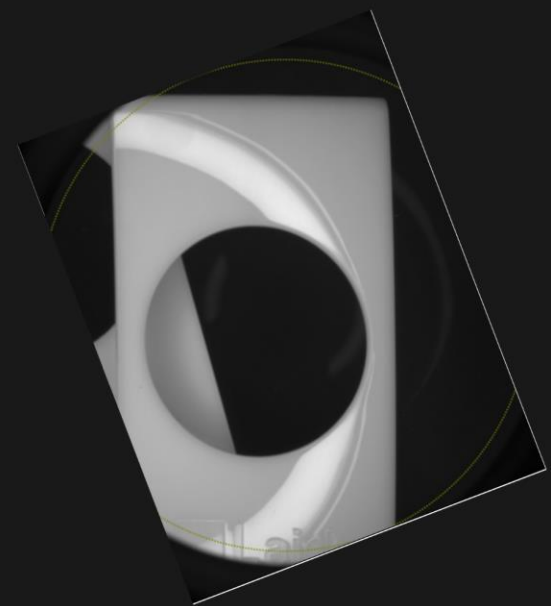
Standard



VT
Variotherm



LT
LocalTemp



Innovation

Behind the surface



VT and LT worked



We can control the process

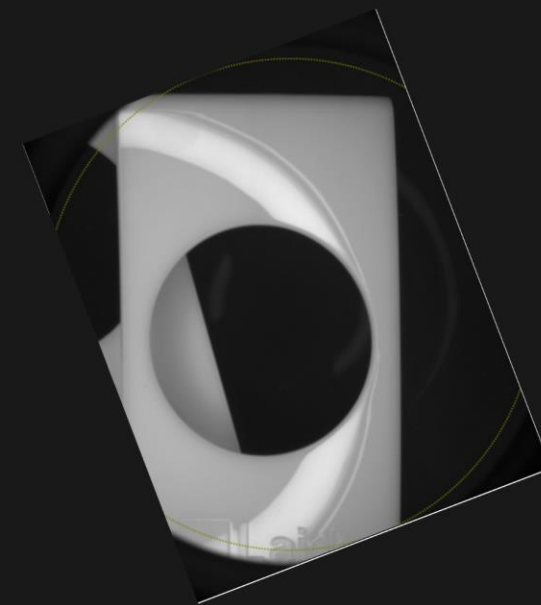
Standard



VT
Variotherm



LT
LocalTemp



Innovation

Behind the surface



VT and LT worked



We can control the process



We can control the quality of the products

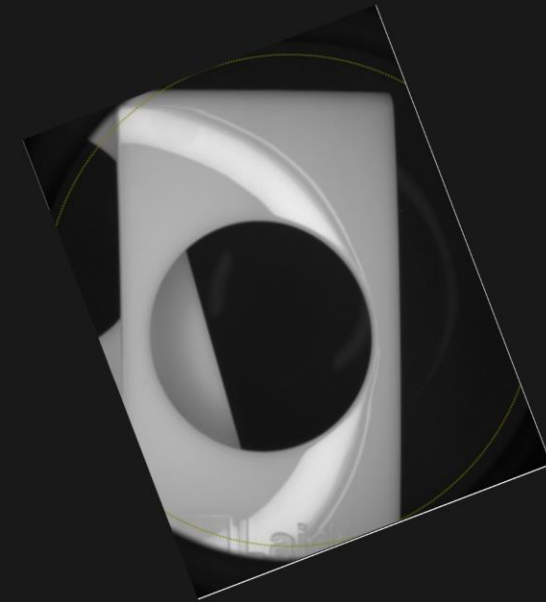
Standard



VT
Variotherm



LT
LocalTemp



Innovation

Behind the surface



VT and LT worked



We can control the process



We can control the quality of the products

- **Improved Quality**
- **Less Waste**
- **Cost Reduction**

AI



Predictive model

Scheduler
Forecasting
Warehouse

4.0



Thanks!



plast



**Smart
PLASTICS**

8th edition

10/11
NOV
2021

MUSEO
ALFA
ROMEO
ARESE

PLAST:DESIGN
COMPONENTI E PRODOTTI DI MATERIE PLASTICHE - PLASTIC PRODUCTS AND COMPONENTS



Lairt

— dal 1957 —

Mold & Plastic Solutions

Annarita De Meo, PhD
Polymer Processing Engineer
annarita.demeo@lairt.com

www.lairt.com

via Torretta 10/12
Calderara di Reno (BO)

stand n°11