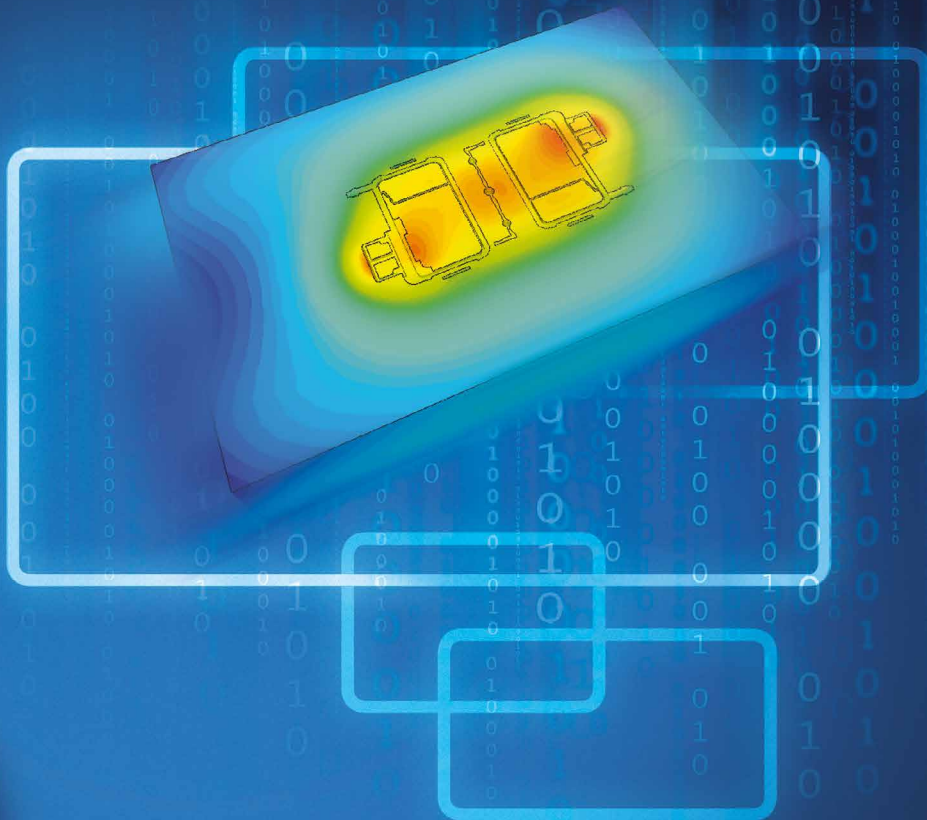# CADMOULD®

3D-F SIMULATION

3D T-BOX

ADD-ON-SOFTWARE FOR 3D THERMAL ANALYSIS OF A MOULD SKETCH AT THE START OF MOULD DEVELOPMENT

THE EXPERT SOFTWARE TO MINIMISE CYCLE TIME

CADMOULD®-GARANTIE
Patentierte Präzision

✓ EXAKTE ERGEBNISSE
✓ AUTOMATISCHE VERNETZUNG
✓ SCHNELLE BERECHNUNG

CADMOULD® 3D T-BOX

3D-F SIMULATION

■ ADD-ON-SOFTWARE FOR THE 3D THERMAL ANALYSIS OF A MOULD SKETCH AT THE START OF MOULD DEVELOPMENT

THE EXPERT SOFTWARE TO MINIMISE CYCLE TIME

3D T-Box is an add-on software for Fill, Warp Expert and Cool of the Cadmould® 3D-F expert product line. It combines the advantages of the flexible heating/cooling channel design of Cadmould® 3D-F Cool with a complete 3D simulation of all heat transfer processes within the injection mould. 3D-T Box automatically generates a mold sketch and thus can be need already at the start of mold development.

THE 3D T-BOX BENEFITS

■ Reduction of cycle time

■ 3D thermal simulation without mould design

■ Combination of a flexible heating/cooling channel design and a complete 3D simulation in a mould sketch

■ Easy identification of thermal weaknesses and optimisation of the heating/cooling system

■ Precise forecast of required start-up times in Production
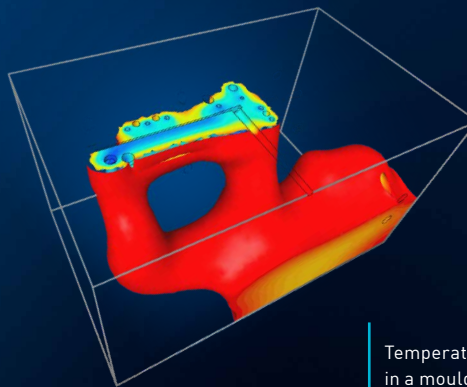
THE 3D T-BOX PERFORMANCE FEATURES

■ Automatically generates a mould sketch from heating/cooling system, part and runner system

■ Simulates the distribution of temperature and heat flow in the mould sketch in detail

■ Simulates conventional, conformal and impulse cooling systems, heating elements, and inductive heating

■ Calculates the flow in the heating/cooling channels (temperature increase of coolant, pressure loss, checking the turbulence etc.)

■ Simulates with a multi-cycle simulation transient up to a thermally stable state

■ Simulates the influence of hot runners on mould and part

■ Simulates the heat exchange between mould and machine, as well as with the ambience

■ Displays results as animation, in 3D cuts and as iso-surfaces

THE 3D T-BOX ADVANTAGES IN THE WORK PROCESS

■ Automatic generation of a mould sketch from heating/cooling system, part and runner system

■ Easy import and export of geometry data due to integrated CAD kernel: STL and IGES (further formats available as an option)

■ Take-over of heating/cooling channel geometries designed with Cadmould® 3D-F Cool

■ Extensive, integrated and expandable data base for mould steels and cooling agents

■ Automatic report generator: HTML, MS Word®, MS PowerPoint®

Temperature distribution in a mould displayed as iso-surfaces

AREAS OF APPLICATION:

■ 3D thermal mould design

■ Optimisation of the thermal mould behaviour

TYPE OF PRODUCT:

■ Add-on software of the Cadmould® 3D-F expert product line suitable for Windows® operating systems

■ Can be used with Cadmould® 3D-F Fill, Warp Expert and Cool