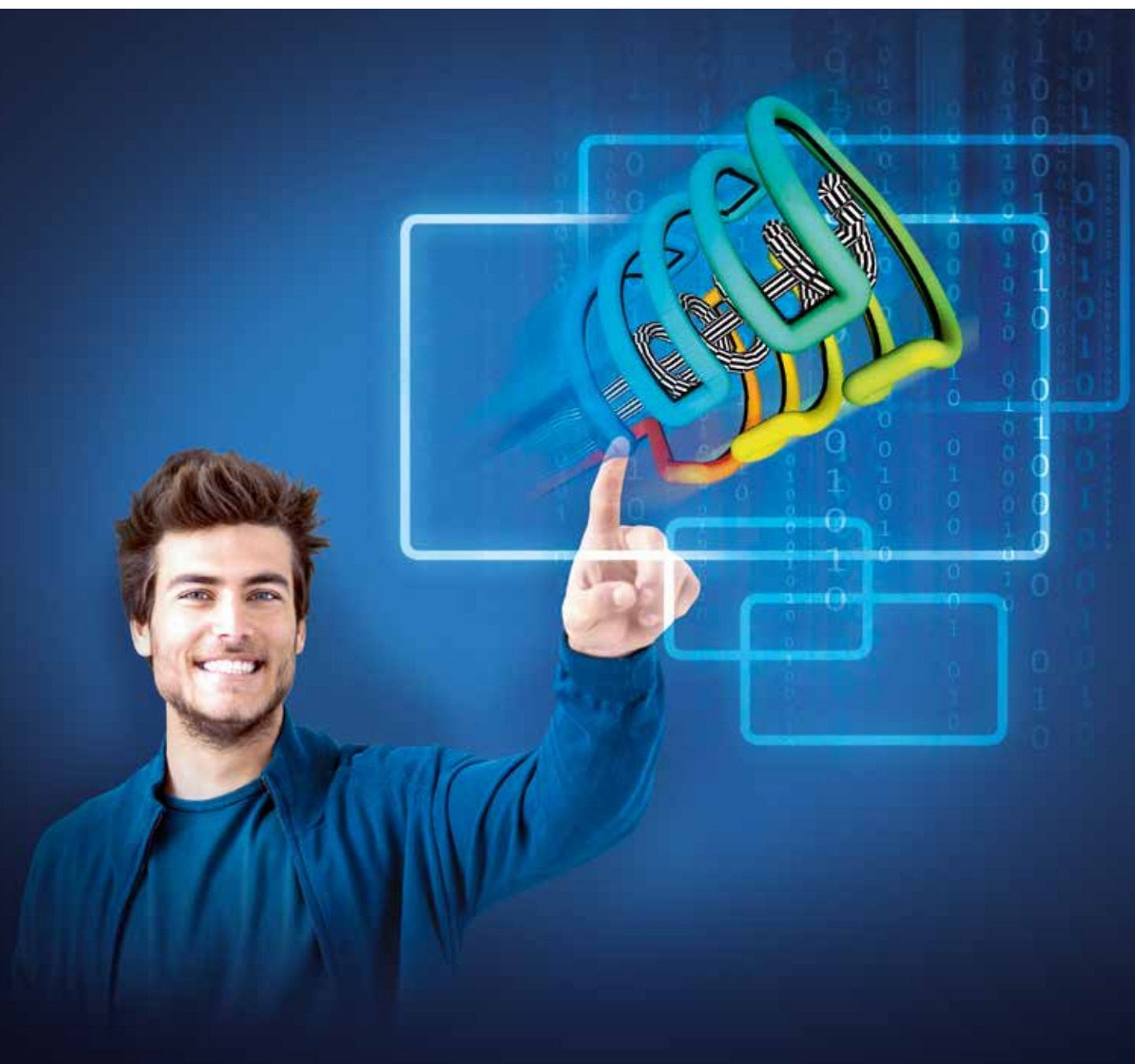


CADMOULD®

3D-F SIMULATION



COOL

ADD-ON SOFTWARE FOR THE THERMAL SIMULATION OF INJECTION MOULDS

THE EXPERT SOFTWARE FOR DIMENSIONING
AND OPTIMISING THE COOLING SYSTEM

CADMOULD® GUARANTEE

3D-F Precision

- ✓ EXACT RESULTS
- ✓ AUTOMATIC MESHING
- ✓ FAST CALCULATION

■ ADD-ON SOFTWARE FOR THE THERMAL SIMULATION OF INJECTION MOULDS

YOUR EXPERT SOFTWARE FOR DIMENSIONING AND OPTIMISING THE COOLING SYSTEM

Cool is a software add-on for Fill or Warp Expert of the Cadmould® 3D-F Expert product line. Cool is part of the Cadmould® 3D-F product family that has been successfully developed in Germany for more than 25 years. Cadmould® 3D-F uses the highly precise 3D-F method especially designed by Simcon for injection moulding simulation, making Cadmould® 3D-F the superior simulation solution.

THE COOL PERFORMANCE FEATURES

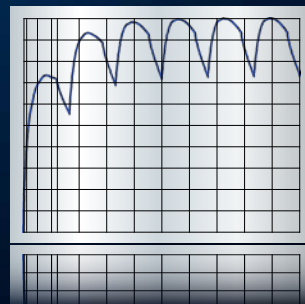
- Calculates the temperature distribution during the overall process (filling, packing and cooling phase as well as ancillary time)
- Calculates conventional, conformal and impulse cooling systems
- Calculates with a multi-cycle simulation transient up to a thermally stable state
- Analyses the efficiency of the cooling system
- Considers the different materials of mould inserts and mould steels
- Considers different cooling agents
- Calculates the flow process in the cooling channels (temperature increase of cooling agent, pressure loss, check for turbulent flow, etc.)
- Illustrates results by animation and 3D cuts

THE COOL BENEFITS

- Reduction of cycle times
- Recognition and elimination of hot-spots, before the tool is designed
- Easy and fast comparison of variants of different cooling systems
- Optimisation of the cooling system
- Reduction of part warpage
- Supply of reliable basic data for part and mould cost calculation

THE COOL ADVANTAGES IN THE WORK PROCESS

- Simple import of cooling channel geometries by integrated CAD kernel: STL and IGES (further formats are available as an option)
- Export of cooling channel geometries as IGES and STL (further formats available as an option)
- Integrated CAD-independent design of cooling channels
- Dimensioning of the cooling system before the mould is designed
- Integrated, extendable data base for mould materials and cooling agents
- Automatic generation of reports: HTML, MSWord®, MS PowerPoint®



Transient multi-cycle analysis up to a thermally stable state

AREAS OF APPLICATION:

- Thermal mould layout
- Process optimisation

TYPE OF PRODUCT:

- Add-on software of the Cadmould® 3D-F Expert product line, suitable for Windows® operating systems
- To be used with Cadmould® 3D-F Fill or Warp Expert