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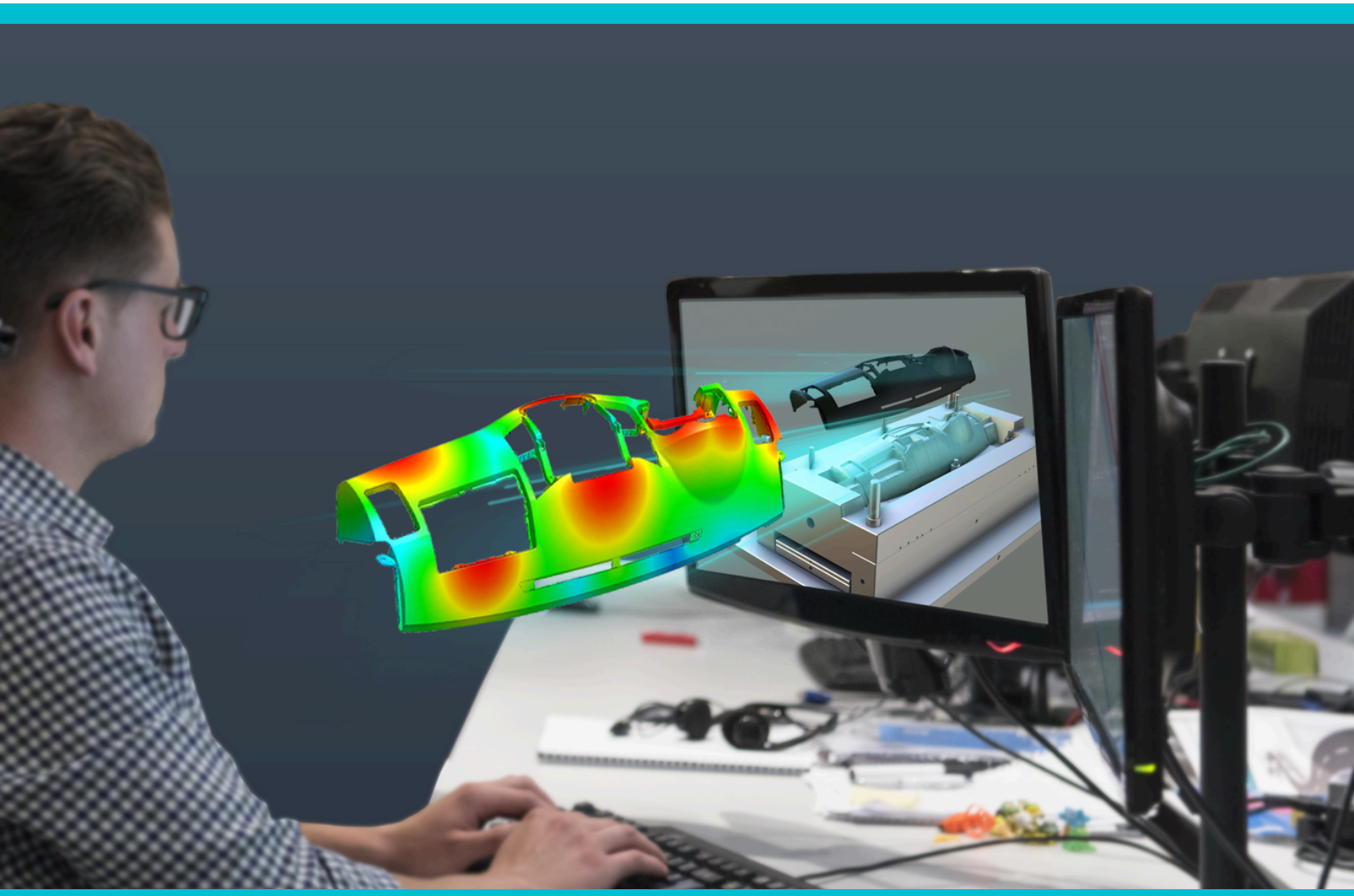

Moldex3D services from Distrupol

Moldex3D is the world leading CAE product for the plastic injection moulding industry, with best-in-class analysis technology. Distrupol specialists are highly experienced in leveraging the power of Moldex3D technology to carry out in-depth simulations of the widest range of injection moulding processes and to optimise product designs and manufacturability.

Why choose Distrupol and Moldex3D?

- To shorten cycle time and time-to-market
- To reduce number of mould trials and manufacturing costs
- To increase revenue and ROI
- To minimise product defects and extend mould life

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To discuss your individual requirements and obtain a quote, please contact your local Distrupol representative

Moldex3D
MOLDING INNOVATION

How can Moldex3D help you?

During part design

Moldex3D enhances part design by optimising gating, injection parameters, and weld line positioning for better aesthetics and mechanics. It detects defects like sink marks, air traps, and excessive shear rates early, allowing for timely corrections.

The software also aids in geometrical modifications, thickness optimisation, and deformation prediction, enabling precise CAD adjustments. This proactive approach streamlines development, reduces costly trial-and-error iterations once tooling has been cut, and improves overall part quality.

During mould design

By conducting simulations that also include the mould cooling channels, it ensures that the design is fully integrated and results are more closely aligned to real-world performance. In addition, cooling simulation plays a crucial role in identifying hot spots within the mould, allowing for the proposal of modified or targeted solutions to achieve uniform cooling.

This comprehensive approach helps to minimise defects, improve cycle times, and ensure the highest quality in the final product.

During production

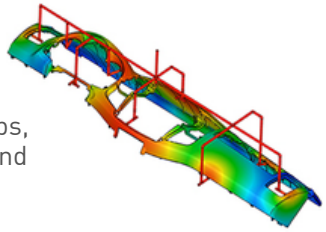
Plastic injection simulation enhances production by providing valuable insights into machine settings and real-world performance. Forensic simulations help to build know-how by correlating simulation results with actual outcomes, allowing for process optimisations that can lead to reductions in cycle time and/or improved quality of parts.

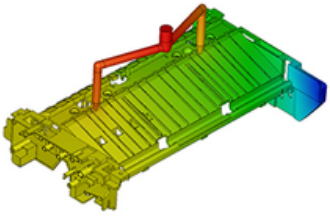
Additionally, pathline analysis shows plastic flow trajectories, detecting pressure, orientation, and stress lines.

The 4 pillars of Moldex3D

Flow

- Predict melt front and flow patterns
- Optimise gate locations and designs
- Diagnose short shots, air traps, weld lines, flow imbalance, and more
- Simulate multi-component interaction



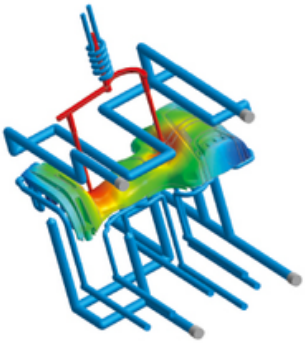


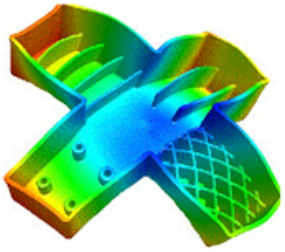
Pack

- Evaluate gate-freeze time
- Avoid sink mark or flash
- Optimise packing profile

Cool

- Improve cooling efficiency and reduce cooling cycle
- Predict hot spots
- Support multiple cooling / heating system, conformal cooling and CFD





Warp

- Foresee final part shape
- Identify warpage causes
- Support residual stress, anisotropic, in-mould constraint effect analysis