

# FLOW-3D<sup>®</sup>

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# CAST

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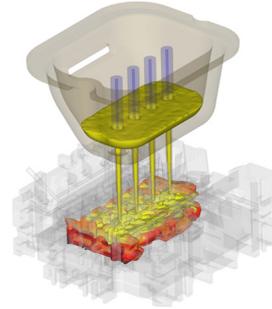
## GRAVITY DIE CASTING

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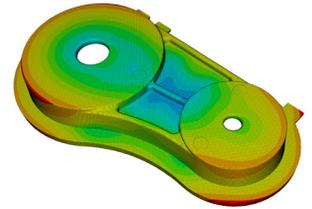
The Next Generation of Casting Simulation Software

### GENERAL FEATURES

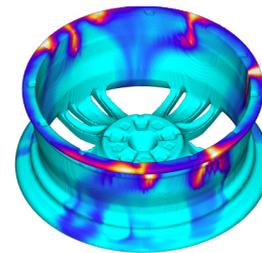
- The most accurate filling simulation tool, based on the **TruVOF** and FAVOR™ algorithms
- Advanced solidification model
- Intuitive model setup
- Automatic grid generation
- Event based simulation control
- Moving geometries (ladle, stopper)
- Stress analysis with distortion
- Physical models including turbulence and surface tension
- Comprehensive defect prediction
- Output of important process variables (velocity, temperature, pressure)
- Additional outputs (flow path and distance, contact times)
- Extensive analysis tools (probes, sampling volumes, tracers)
- Advanced particle model
- Complete simulation suite
- Floating license



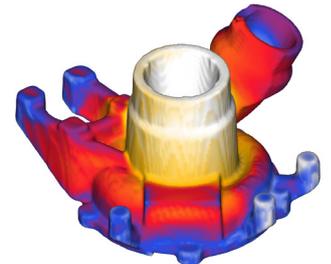
Temperature



Thermal Stresses



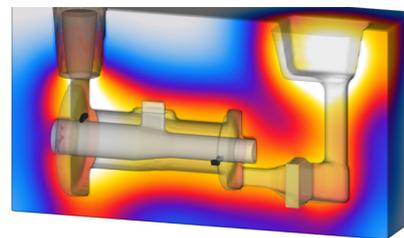
Oxides



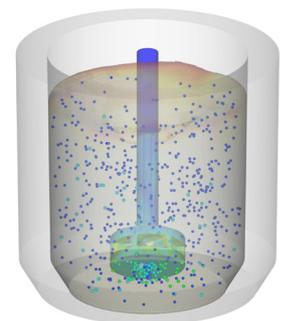
Solid Fraction

### ADVANCED DEFECT PREDICTION

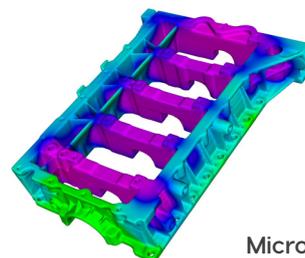
- Oxide formation and transportation
- Entrained air, void particles
- Liquid regions, hot spots
- Cold run, unfilled cavities
- Shrink holes, porosities
- Distortion, hot cracks



Mold Temperature



Melt Processing



Microstructure

