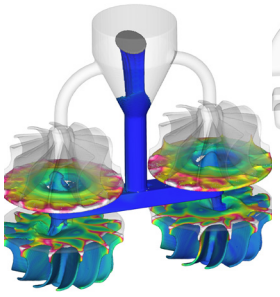
FLOW-3D® CAST

THE SIMULATION SOFTWARE FOR THE FOUNDRY INDUSTRY

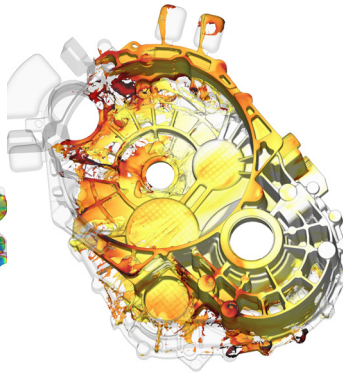
The Next Generation of Casting Simulation Software

GENERAL FEATURES

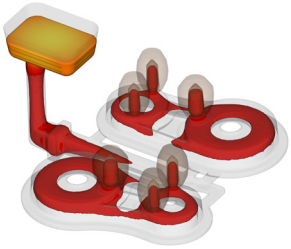
- The most accurate filling simulation tool, based on the **TruVOF** and FAVOR™ algorithms
- Advanced solidification model
- Intuitive model setup
- Automatic grid generation
- Event based simulation control
- Moving geometries (plunger, ladle, stopper)
- Stress analysis with distortion
- Physical models,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



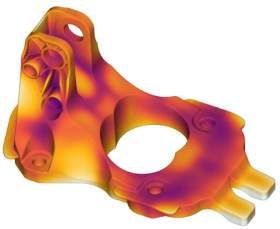
Filling Defects



Temperature



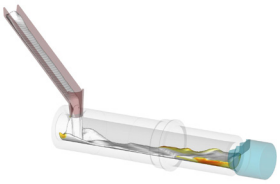
Liquid Region



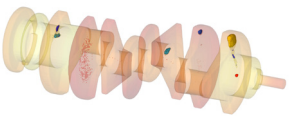
Solidification

ADVANCED DEFECT PREDICTION

- Surface defects, including oxides, slag, and residue
- Entrained air, void particles
- Liquid regions, cold runs
- Shrink holes, porosities
- Hot spots, hot cracks, distortion



Filling Chamber



Porosity

CASTING PROCESSES

- High pressure die casting
- Permanent mold casting
- Sand casting
- Lost foam casting
- Centrifugal casting
- Tilt casting
- Low pressure casting
- Squeeze casting
- Investment casting
- Continuous casting
- Sand core making

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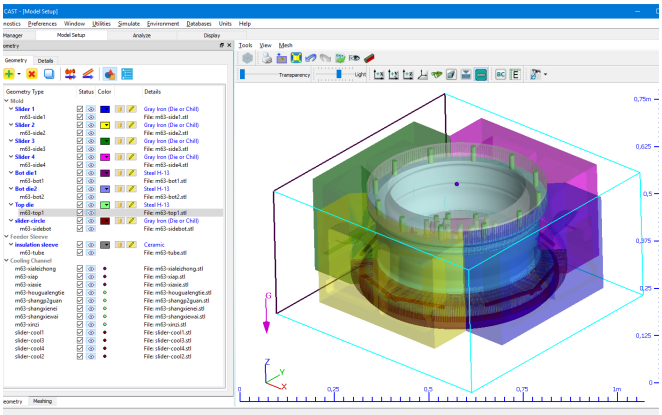
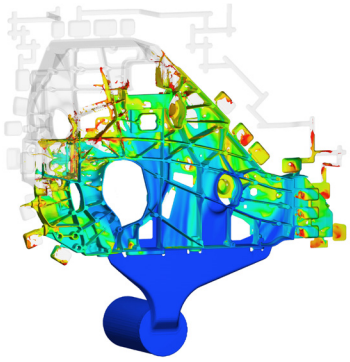
USER INTERFACE

- Process-oriented workspaces
- Comprehensive databases for metals, exothermic feeders, and filters
- Interactive object creation
- Project management
- Queueing system
- Configurable simulation monitor

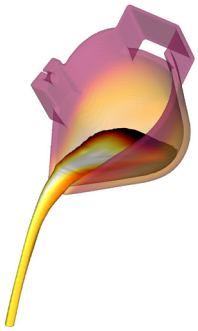


FLOW-3D POST

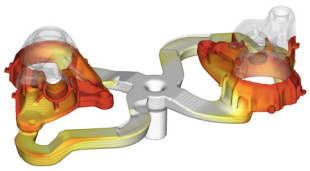
- Multi-case analysis
- Defect prediction tools
- Multiple objects and viewports
- Particles, vectors, and streamlines
- Volume rendering
- Customizable analysis tools
- Keyframe animations



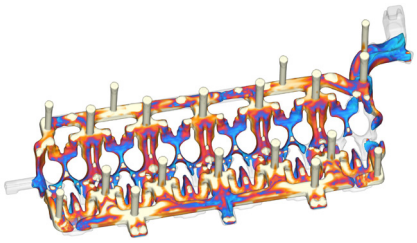
High Pressure Die Casting



Moving Ladle



Low Pressure Die Casting



Core Shooting

GLOBAL DISTRIBUTION NETWORK

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