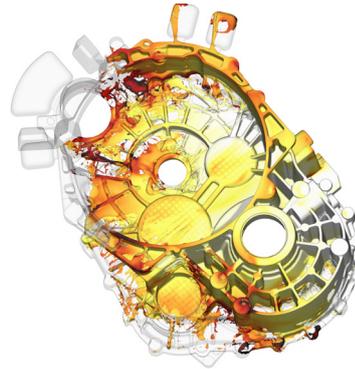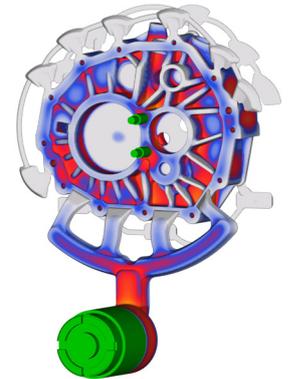# FLOW-3D® CAST

HIGH PRESSURE DIE CASTING

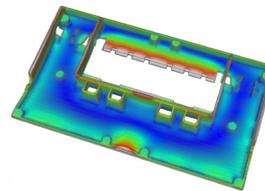The Next Generation of Casting Simulation Software

GENERAL FEATURES

- The most accurate filling simulation tool based on the **TruVOF** and FAVOR™ algorithm
- Advanced solidification model
- Intuitive model setup
- Automatic grid generation
- Event-based simulation control
- Moving geometries (ladles and plungers)
- Stress analysis with distortion
- Physical models, including turbulence, PQ² analysis, spray cooling, thixotropic viscosity, and surface tension
- Comprehensive defect prediction
- Output of important process variable (velocity, temperature,pressure)
- Additional outputs (flow path, contact times, gas pressure, local filling velocity/time/temperature)
- Extensive analysis tools (probes, sampling volumes
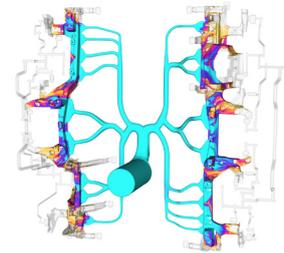- Advanced particle model
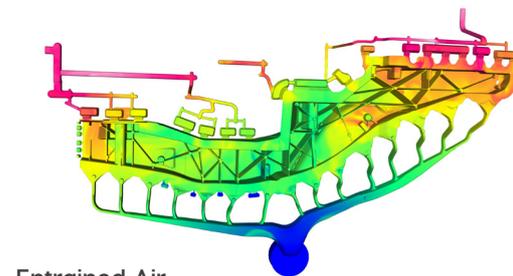- Floating license

Temperature

Solid Fraction

Thermal Stresses

Oxides

ADVANCED DEFECT PREDICTION

- Oxide formation and transportation
- Entrained air, void particles
- Liquid regions, cold runs
- Shrink holes, porosities
- Hot spots
- Distortion, hot cracks
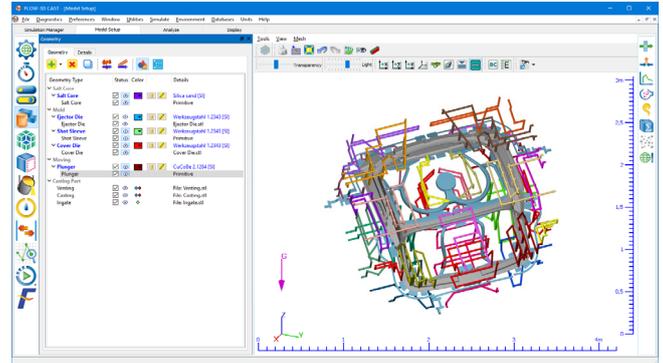- Cavitation

Entrained Air

FLOW-3D® CAST

HIGH PRESSURE DIE CASTING

The Next Generation of Casting Simulation Software

USER INTERFACE

- Process-oriented workspace
- Comprehensive databases for metals, solids, and HPDC machines
- Interactive object creation
- Project management
- Queueing system
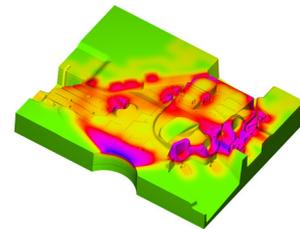- Configurable simulation monitor

FLOW-3D POST

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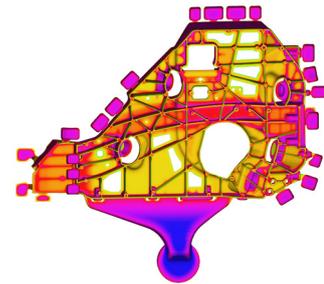- Customizable analysis tools
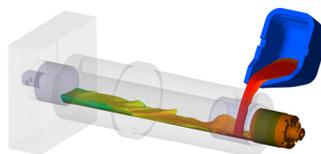- Key frame animations

Liquid region

Porosities

Mold Temperature

Solidification

Moving Ladle and Piston

GLOBAL DISTRIBUTION NETWORK

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