

# ABAQUS/CFD 6.14 DATA SHEET

## ANALYSIS TYPES

- Incompressible fluid dynamics
- Transient and Steady State solutions
- Fluid and/or Solid heat transfer
- Buoyancy driven natural convection
- Laminar and turbulent flows

## ANALYSIS AND MODELING TECHNIQUES

- Algebraic multi-grid (AMG) pre-conditioned Krylov solvers
- Parallel processing
- Restart
- Arbitrary Eulerian-Lagrangian method

## TURBULENCE MODELS

- Realizable K-epsilon
- Spalart-Allmaras
- SST k-omega
- RNG k-epsilon
- Hybrid wall functions

## MATERIAL DEFINITIONS

- Newtonian and Non-Newtonian viscosity
- Porous Media
- Specific heat
- Conductivity
- Density

## ELEMENT LIBRARY

- 3-D hex
- 3-D pyramid
- 3-D tet
- 3-D triangular prism

## PRESCRIBED CONDITIONS

- Inlet/outlet conditions
- User-defined conditions
- Pressure-volume conditions
- Wall conditions
- Infiltration
- Moving boundary

## INTERACTIONS

- Fluid-structure interaction co-simulation
- Conjugate heat transfer interaction co-simulation

## INPUT

- Set concept
- Parts and assemblies
- Keyword input file

## OUTPUT

- Interactive graphical postprocessing
- Platform-neutral output database
- Diagnostic messages

## SUPPORTED PLATFORMS

- Windows/x86-32
- Windows/x86-64
- Linux/x86-64

## DOCUMENTATION

- Analysis User's Manual
- Example Problems Manual

## PRODUCT SUPPORT

- Maintenance and support
- Quality Monitoring Service
- Installation
- Training and User's Meetings

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