

STAR-CD and es-ice V4.14 Released

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CD-adapco is pleased to announce the release of STAR-CD and es-ice V4.14, the latest version of its comprehensive toolkit for engine simulation. As well as introducing new physics models, we have invested significantly in enhancing and tuning the existing capabilities to increase their flexibility, speed, accuracy and robustness.

New features and enhancements offered with this release include;

Mesh replacement and solution mapping for moving mesh ICE applications: Users are now able to strategically deploy a number of different meshes throughout the engine cycle, allowing the introduction of the most appropriate topologies as and when they are needed. For example, special areas of refinement can be introduced during the injection phase in order to correctly resolve the development of the spray. Additional cells can also be introduced near TDC.

Improved mesh quality: Ongoing improvements to trimming, smoothing and prism layer technology lead to better quality meshes and increased solver robustness.

Optional remedial treatment: The solver now has the ability to detect numerical problems caused by poor cell quality, severe changes in flow conditions or both, and to take remedial action to improve solution stability.

Automatic 2D template generation: Reduces the amount of time, skill and experience required to generate meshes for a wide range of engine configurations.

Automatic generation of a true 4-valve model from a 2/4-valve model: Permits changes to valve timing and geometry.

New ICE oriented post processing: Allows the calculation of data for full-cycle or part-cycle including Net Indicated Work/Cycle, Net Indicated Power/Cylinder and Net Indicated Mean Effective Pressure

New and improved physics:

Improvement and extension of the soot libraries

Wiebe functions for simple heat release.

Further validation of the ELSA atomization model.

Further validation and extension of ECFM-3Z and CLEH combustion models

Further validation and extension of the TIF combustion

Further consolidated and validation of Level Set combustion model

Try STAR-CD and es-ice today.

To download STAR-CD and es-ice V4.14 please visit our User Services Site (support.cd-adapco.com/), or contact your local support office (www.cd-adapco.com/about/global_locations.html). We also strongly recommend you to take the time to read the Release Notes that are provided with the installation package. The Release Notes will provide you with an exhaustive overview of the new features and improvements as well as all of the enhancement requests that have been implemented in this release.

About CD-adapco

CD-adapco is the world's largest independent CFD focused CAE provider. Our core products are the technology-leading

simulation packages, STAR-CCM+ and STAR-CD. The scope of our activities, however, extends well beyond CFD software development to encompass a wide range of CAE engineering services in fluid dynamics, heat transfer and structural engineering. Our ongoing mission is to "inspire innovation and reduce costs through the application of engineering simulation software and services."

A privately owned company, CD-adapco has maintained 16% organic year-on-year growth over the last 5 years. CD-adapco employs over 400 talented individuals, working at 21 different offices across the globe.

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