

Composite mesh generator for CFD problems

Kalinin E., Mazo A., Isaev S.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Published under licence by IOP Publishing Ltd. In present paper a brief introduction of HybMesh grid generator which uses composite approach is given. The process of complicated area meshing using HybMesh generator consists of sequential building structured prototype grids in relatively simple geometry, mapping them to a non-regular domains and superposing to assemble resulting grid. Transitional areas between two superposed low level grids are filled with triangular cells. Currently only 2D algorithms of such approach are implemented; 3D grids can only be restored as a result of extrusion or revolution of 2D objects.

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