MESHING AND ACCURACY IN CFD

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ABSTRACT – Geometry preparation and meshing are the starting points and basis for each CFD simulation. Perhaps more than in any other CAE discipline, the quality of results in CFD depends on the usage of adequate meshes.
The present paper deals with questions regarding all kinds of quality criteria, like cell quality, mesh resolution, and the validity of meshes for a given application or combination of numerical models. Further more it gives an overview on the existing modeling approaches and illustrates the dependency of results for academical and industrial problems, solved with CFD methods.