

Grid Generation Methods - 1999 - 9783540656869 - 363 pages - Springer Science & Business Media, 1999 - Vladimir D. Liseikin

The book which answers most of questions you have on CFD Computational Fluid Dynamics (Mcgraw-Hill Series in Mechanical Engineering) by John D. Anderson Jr. There are many others, but use it as best kick starter. For your basic knowledge of Grid generation, I think the best book is "Computational Fluid Dynamics, The basic with application" By John D. Anderson(Jr.) you can find the soft copy here (old version).. Computational Fluid Dynamics. There are many other books you can look for, I recommend to go through the book I mentioned above. Here is some other books you may find useful. Basic Structured Grid Generation: With an introduction to unstructured grid generation. Handbook of grid generation. <http://bookzz.org/dl/445268/55e012>. Grid generation codes represent an indispensable tool for solving field problems in nearly all areas of applied mathematics. The use of these grid codes significantly enhances the productivity and reliability of the numerical analysis of problems with complex geometry and complicated solutions. The science of grid generation is rather young and is still growing fast; new developments are continually occurring in the fields of grid methods, codes, and practical applications. The objective of this book is to give a clear, comprehensive, and easily learned description of all essential methods of grid generation technology for two major classes of grids: structured and unstructured. These classes rely on two somewhat opposite basic concepts. application for generating grids for immersed boundary methods. It also describes a stretching method adjusted to the numerical solution of singularly perturbed and examples of various aspects of grid generation and their applications. This book will introduce a reader to structured and unstructured grid methods, as well as automated technologies for the generation of adaptive grids for the numerical solution of applied problems with complicated domain segments and complicated solution structures.