



Variation of Friction Drag in Wall-Bounded Flows

By Stephan W Klumpp

Shaker Verlag Aug 2010, 2010. Taschenbuch. Book Condition: Neu. 208x149x10 mm. Neuware - One of today's major issues in the development of new fluid application, e.g., airplanes, turbo engines, and high speed trains, is to achieve a high efficiency at a low consumption of energy by reducing the fluid dynamical drag. Besides other options, the reduction of wall-shear stress in wall bounded flows, which determines, e.g., about 50% of the total drag of the flow field around aircraft, is a promising approach to increase the overall efficiency. In the current study the application of a surface structure consisting of tiny grooves aligned in the main flow direction, so-called riblets, on technical components such as compressor blades is investigated. Although the basic drag reducing effect of riblets in turbulent flows is well-known the impact of riblets on the skin friction under realistic flow conditions is still unclear. Therefore large-eddy simulations (LES) of riblet covered surfaces in flow states as occurring on technical components, namely turbulent adverse-pressure gradient flow and transitional flow, are performed. Since the drag reducing effect of a certain riblet surface is limited to a narrow range of flow parameters in the second part of the current work an...

DOWNLOAD



READ ONLINE
[6.3 MB]

Reviews

Most of these publication is the perfect ebook accessible. It is amongst the most awesome publication i have got read through. You wont truly feel monotony at whenever you want of the time (that's what catalogs are for regarding in the event you request me).

-- Prof. Edgar Kshlerin

It is easy in study safer to comprehend. It can be writter in basic phrases and never confusing. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- Emmitt Harber

See Also



Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG, Eignungstest für das Medizinstudium, Adult Attachment Interview,...



Pete's Peculiar Pet Shop: The Very Smelly Dragon (Gold A)

Pearson Education Limited. Paperback. Book Condition: new. BRAND NEW, Pete's Peculiar Pet Shop: The Very Smelly Dragon (Gold A), Sheila May Bird, This title is part of Bug Club, the first whole-school reading programme that joins books with an online reading world...



Chaucer's Canterbury Tales

Walker. 1 Paperback(s), 2007. soft. Book Condition: New. Travel back to medieval England and join Geoffrey Chaucer's band of Canterbury pilgrims in this introduction to one of Britain's great literary treasuresone of Marcia Williams's puckish literary adaptations, illustrated with her abundantly detailed...



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers who are new to computer programming. Although...



What is in My Net? (Pink B) NF

Pearson Education Limited. Book Condition: New. This title is part of Pearson's Bug Club - the first whole-school reading programme that joins books and an online reading world to teach today's children to read. In this book, Zac and Daisy are fishing...



Sport is Fun (Red B) NF

Pearson Education Limited. Paperback. Book Condition: new. BRAND NEW, Sport is Fun (Red B) NF, Dianne Irving, This title is part of Pearson's Bug Club - the first whole-school reading programme that joins books and an online reading world to teach today's...