Record Nr. UNINA9910795202003321 Autore Obidi T. Yomi <1955-> Titolo Theory and applications of aerodynamics for ground vehicles // by T. Yomi Obidi Warrendale, Pennsylvania (400 Commonwealth Dr., Warrendale PA USA) Pubbl/distr/stampa : , : Society of Automotive Engineers, , [2014] **ISBN** 9780768088250 0-7680-8105-X 0-7680-8825-9 Descrizione fisica 1 online resource (xix, 267 pages): illustrations, digital, PDF Collana Society of Automotive Engineers. Electronic publications Disciplina 629.231 Soggetti Automobiles - Aerodynamics Trucks - Aerodynamics SCIENCE / Mechanics / Aerodynamics TECHNOLOGY & ENGINEERING / Automotive Physics: Fluid mechanics Aerodynamics Automotive technology and trades Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Chapter 1 Drag -- Chapter 2 Noise and Vehicle Soiling -- Chapter 3 Experimental Aerodynamics for Ground Vehicles -- Chapter 4 Computational Aerodynamics for Ground Vehicles -- Chapter 5 Vehicle Stability and Performance -- Chapter 6 Vehicle Sectional Design --Chapter 7 Trucks, Trailers, and Buses -- Chapter 8 Railroad Train Aerodynamics -- Chapter 9 Severe Service and Off-Road Vehicles --Chapter 10 Race Cars, Sports Cars, and Convertibles -- Chapter 11

Sommario/riassunto

This book provides an introduction to ground vehicle aerodynamics and methodically guides the reader through the various aspects of the subject. Those needing specific information or a refresher can easily jump to the material of interest. There is a particular emphasis on

Motorcycles -- Chapter 12 Internal Aerodynamics and Cooling System

-- Chapter 13 Concept Ground Vehicles -- Nomenclature --

Conversion Table.

various vehicle types (passenger cars, trucks, trains, motorcycles, race cars, etc.). However, the book is focused on cars and trucks, which are the most common vehicles in the speed range in which the study of ground vehicle aerodynamics is beneficial. Readers will gain a fundamental understanding of the topic, which will help them design vehicles that have improved aerodynamics; this will lead to better fuel efficiency, improved performance, and increased passenger comfort.