

1. Record Nr.	UNINA9910790031503321
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Titolo	Engine testing [[electronic resource]] : the design, building, modification and use of powertrain test facilities // A.J. Martyr, M.A. Plint
Pubbl/distr/stampa	Amsterdam, : Butterworth Heinemann, 2012
ISBN	1-280-58161-1 9786613611390 0-08-096950-X
Edizione	[4th ed.]
Descrizione fisica	1 online resource (601 p.)
Altri autori (Persone)	PlintM. A (Michael Alexander)
Disciplina	621.430287 629.25
Soggetti	Internal combustion engines - Testing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	CONTENTS; Foreword to the Fourth Edition; About the Authors; Introduction; 1 Test Facility Specification, System Integration, and Project Organization; 2 Quality and H&S Legislation and Management, Type Approval, Test Correlation, and Reporting of Results; 3 The Test Cell as a Thermodynamic System; 4 Powertrain Test Facility Design and Construction; 5 Electrical Design Requirements of Test Facilities; 6 Ventilation and Air-Conditioning in Powertrain Test Facilities; 7 Test Cell Cooling Water and Exhaust Gas Systems; 8 Fuel and Oil Storage, Supply and Treatment; 9 Vibration and Noise 10 Dynamometers: The Measurement of Torque, Speed and Power 11 Rigging the Engine and Shaft Selection; 12 Test Cell Safety, Control and Data Acquisition; 13 Data Handling, the Use of Modeling, and Post-Test Processing; 14 Measurement of Fuel, Combustion Air and Oil Consumption; 15 The Combustion Process and Combustion Analysis; 16 Engine Exhaust Emissions; 17 Chassis or Rolling-Road Dynamometers; 18 Anechoic Test Cells: NVH and EMC Testing; 19 The Pursuit and Definition of Accuracy; 20 Tribology, Fuel, and Lubrication Testing; 21 Thermal Efficiency, Measurement of Heat, and Mechanical Losses

Sommario/riassunto

Engine Testing is a unique, well-organized and comprehensive collection of the different aspects of engine and vehicle testing equipment and infrastructure for anyone involved in facility design and management, physical testing and the maintenance, upgrading and trouble shooting of testing equipment. Designed so that its chapters can all stand alone to be read in sequence or out of order as needed, Engine Testing is also an ideal resource for automotive engineers required to perform testing functions whose jobs do not involve engine testing on a regular basis. This recognized standard refer