

TABLE OF CONTENTS

910424	Potential for Lightweight Design of a Hybrid Connecting Rod for Automobile Applications	1
	Ingo Kuch and Peter Kümmerlen Daimler Benz AG	
910425	A Free Machining Titanium Alloy for Connecting Rods	9
	Atsuyoshi Kimura, Sadayuki Nakamura, and Sachihiko Isogawa Daido Steel Co., Ltd. Toshihiko Matsubara, Kenji Kimura, and Yasunori Sato Honda R & D Co., Ltd.	
910426	A Study of Jump and Bounce in a Valve Train	17
	Toru Kurisu, Kouichi Hatamura, and Hirotsumi Omoti Mazda Motor Corp.	
910427	Camshaft Chain Drive Package Components for Internal Combustion Engines — The System Approach	25
	P. J. Owen, J. R. Evans, and J. L. Pochet Renold Automotive	
910428	Development of Titanium Alloy Valve Spring Retainers	41
	Moriyuki Mushiaki, Kenichi Asano, Noriyuki Miyamura, and Shuji Nagano Mitsubishi Motors Corp.	
910429	Development of Nickel-Base Superalloy for Exhaust Valves	51
	Yoshitoshi Hagiwara, Masao Ishida, and Tomoo Oka Honda R&D Co., Ltd. Asaka Center Rikizo Watanabe and Koji Sato Hitachi Metals, Ltd. Metallurgical Laboratory	
910430	Analysis of Thermal Fatigue Resistance of Engine Exhaust Parts	63
	K. Akiyama, M. Ike, and M. Tsuda Nissan Motor Co., Ltd. K. Otsuka Hitachi Metals Ltd.	
910431	Nissan's New V8 and L4 Aluminum Cylinder Block — Design and Production	73
	Etsuo Ohgami, Namieki Ohsawa, Tetsuo Saito Nissan Motor Company, Ltd.	
910433	Evaluation of Cylinder Bore and Cylinder Head Deformations Using Holographic Interferometry	85
	Richard B. Hathaway, John E. Turley, and Chien Yi-Ho Western Michigan University	
910434	Development of Light Weight High Strength Aluminum Alloy Piston with Cooling Gallery Manufactured Using Squeeze Casting Technique	93
	Masato Sasaki, Masayoshi Sasaki, Yoichi Nishimura, and Eiji Okamura Atsugi Unisia Corp.	

910435	A Study of Decrease Oil Consumption for NSOR-Two-Ring Package Piston	101
	Shoichi Furuhashi, Tetsu Hyuga, Masaaki Takiguchi, and Shinji Serizawa Musashi Institute of Technology	
910676	Saturn DOHC and SOHC Four Cylinder Engines	111
	Donald J. Reilly, Richard P. Andersen, Robert J. Casparian, and Peter H. Dugdale Saturn Corp.	
910677	A New 1.6-Liter Twin-Cam 16-Valve Nissan Engine	127
	Makoto Yasuda and Hirostugu Maruyama Nissan Motor Co., Ltd.	
910678	The New Audi V6 Engine	139
	Gunter Krömer, Hans-Werner Pölzl, Martin Thude, and Peter Leitner Audi AG	
910679	General Motors 3.4L "Twin Dual Cam V6" Engine	151
	Jay W. Subhedar G.M. Powertrain Division Warren, MI Paul M. Leskiw G.M. Powertrain Division St. Catharines, Ontario Charles J. Hahn and Thomas P. Langdon G.M. Powertrain Division Warren, MI	
910680	Ford's All New 4.6 Liter SOHC V-8 Engine for the Lincoln Town Car	173
	James R. Clarke and Michael J. Evans Ford Motor Co.	
910681	An Application of Ejector Type Exhaust System to a Small Spark Ignition Engine	181
	Shuichi Kajitani and Norihiro Sawa Faculty of Engineering Ibaraki Univ. Japan	
910682	The Turbo/Intercooled Syclone Engine	189
	Volker W. Harhaus GM Powertrain Division Michael Pocobello Triad Services Frank G. Tenkel GM Powertrain Division	
910683	Review of Saturn's Powertrain Analysis Methodology	199
	Thomas E. Cardinal, Peter S. Dugdale, and Dermot G. Madden Saturn Powertrain/Chassis Team Peter S. MacDonald ADAPCO	
910685	The General Motors Supercharged 3800 Engine	223
	Ronald Kociba and Michael D. Parr General Motors Powertrain Division	

910686	Central Hydraulic Systems for Use in Manufacturing	233
	Daniel McCauley Ford Motor Co.	
910687	Dynamic Analysis of Belt Drive Tension Forces During Rapid Engine Acceleration	239
	Clark R. Barker University of Missouri-Rolla Mechanical and Aerospace Engineering and Engineering Mechanics Dept. Larry R. Oliver and William F. Breig Dayco Technical Center Springfield, MO	