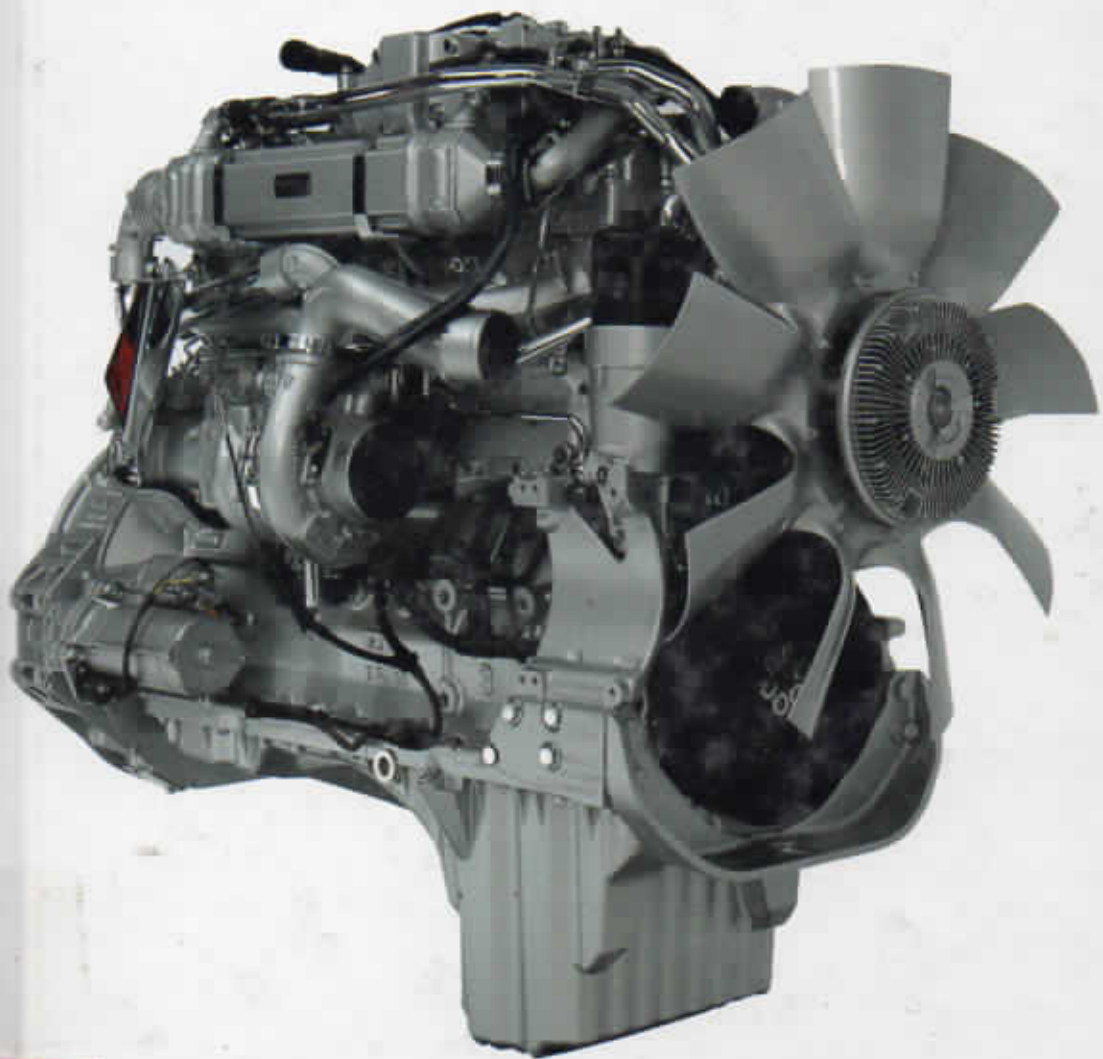


Diesel Engine Handbook



Nicole Maden

Contents

	Preface	VII
Section 1	Combustion and Emissions	1
Chapter 1	The Effect of Split Injection on the Combustion and Emissions in DI and IDI Diesel Engines S. Jafarmadar	3
Chapter 2	Study of PM Removal Through Silent Discharge Type of Electric DPF Without Precious Metal Under the Condition of Room Temperature and Atmospheric Pressure Minoru Chuubachi and Takeshi Nagasawa	33
Chapter 3	Analytical Methodologies for the Control of Particle-Phase Polycyclic Aromatic Compounds from Diesel Engine Exhaust F. Portet-Koltalo and N. Machour	61
Chapter 4	Combustion and Exhaust Emission Characteristics of Diesel Micro-Pilot Ignited Dual-Fuel Engine Ulugbek Azimov, Eiji Tomita and Nobuyuki Kawahara	87
Chapter 5	Structured Catalysts for Soot Combustion for Diesel Engines E.D. Banús, M.A. Ulla, E.E. Miró and V.G. Milt	117
Section 2	Exhaust Gas After Treatment and EGR	143
Chapter 6	NO_x Storage and Reduction for Diesel Engine Exhaust Aftertreatment Beñat Pereda-Ayo and Juan R. González-Velasco	145

Chapter 7	Optimization of Diesel Engine with Dual-Loop EGR by Using DOE Method Jungsoo Park and Kyo Seung Lee	181
Section 3	Engine Control and Conditioning Monitoring Systems	197
Chapter 8	Model-Based Condition and State Monitoring of Large Marine Diesel Engines Daniel Watzenig, Martin S. Sommer and Gerald Steiner	199
Chapter 9	Design and Field Tests of a Digital Control System to Damping Electromechanical Oscillations Between Large Diesel Generators Fabrício Gonzalez Nogueira, José Adolfo da Silva Sena, Anderson Roberto Barbosa de Moraes, Maria da Conceição Pereira Fonseca, Walter Barra Junior, Carlos Tavares da Costa Junior, José Augusto Lima Barreiros, Benedito das Graças Duarte Rodrigues and Pedro Wenilton Barbosa Duarte	213
Chapter 10	Hardware-in-Loop Simulation Technology of High-Pressure Common-Rail Electronic Control System for Low-Speed Marine Diesel Engine Jianguo Yang and Qinpeng Wang	231

Permissions**List of Contributors**