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Service Clearances; Factors Affecting Performance; System Airflow Requirements; Indoor Installation; Chapter 8: Microturbine Maintenance, Availability, and Life Cycle Usage; Maintenance; Availability and Life; Part 2: Microturbine System Applications and Case Studies; Chapter 9: Microturbines Operating in Power-Only Applications; Case 9-1: Chemical Plant; Case 9-2: Factory Commissary Case 9-3: Hospital Case 9-4: Dairy Farm; Case 9-5: Mass Transit HEV Buses; Case 9-6: Office/Factory Building; Case 9-7: University; Case 9-8: Consumer Electronics Manufacturing; Project Development; Chapter 10: Combined Head and Power With Microturbines; Types of Plants; Microchp; What Makes a Plant a Good Candidate for CHP?; Microturbine CHP Systems; CHP Funding Oportunities; Economics of CHP; Chapter 11: Unconventional Microturbine Fuels; Case 11-1: Microturbine Generator Running on Landfill Gas in Florida; Case 11-2: Fuel Gas from Cow Manure Case 11-3: Extracts from "Economic and Financial Aspects of Landfill Gas to Energy Project Development in California""Chapter 12: Competition for the Microturbine Industry; Competing Distributed Energy Systems; Wind Hybrids and Other Sources; Biodiesel-Fueled Wind-Diesel Hybrids; Producer Gas Hybrids; Biogas Hybrids; Solar Hybrids; Micro-Hydroelectric Hybrids; Annex 1; Chapter 13: Microturbines in Integrated Systems, Fuel Cells, and Hydrogen Fuel; 1-MW Solid Oxide Fuel Cell-Hybrid Fuel Cell/ Microturbine System; Microturbine-Wind Hybrids; Fuel Cells; Biofuels for Fuel Cells; Fuel Reforming Stationary and Transport Applications of Fuel Cells

Sommario/riassunto

Small-scale gas turbines, known as Microturbines, represent an exciting new development in gas turbine technology. They can run in size from small, human-scale machines down to micro-sized mini-machines that can barely be seen by the naked eye. They also run a great diversity of fuel types, from various types of commercial gases to waste-generated gases. This new book by industry expert Claire Soares will fully describe the various types of microturbines, their applications, and their particular requirements for installation, maintenance and repair. It will explain how a microturbine the siz