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Measurement Maintenance; Effects of Liquids and Solids on Orifice Measurement; Effects on Other Meters; General Maintenance of Liquid Meters; Specific Liquid Maintenance Problems; CHAPTER 10. Measurement and Meters; Meter Characteristics; Types of Meters; CHAPTER 11. Differential (Head) Meters; Orifice Meter; Meter Design Changed; Orifice Meter Description; Sizing; Equations; Maintenance; Flow Nozzles; Venturi Meters; Venturi Installation; Other Head Meters CHAPTER 12. Linear and Special MetersNon-Intrusive Meters; Intrusive Linear Meters; Other and Special-Purpose Meters; References; CHAPTER 13. Readouts and Related Devices; Electronics; Related Devices; Crude Oil Sampling; Natural Gas Sampling; Calorimetry; References; CHAPTER 14. Proving Systems; Liquid Provers; Gas Provers; Critical Flow Provers; Central Test Facility; References; CHAPTER 15. "Loss and Unaccounted for" Fluids; Introduction; Liquid; Gas; CHAPTER 16. Auditing; Introduction; Gas Meters; Liquid Meters; Analysis Equipment; Audit Principles; Objective; Procedures; Evidence Definitive TestingSources of Information; Contract Review; Field Measurement Equipment Review; Data Review and Comparison; Auditing Gas Measurement Systems; Chart Review; Auditing Liquid Measurement; Finalizing the Audit; Conclusion; Index

Sommario/riassunto

There is a tendency to make flow measurement a highly theoretical and technical subject but what most influences quality measurement is the practical application of meters, metering principles, and metering equipment and the use of quality equipment that can continue to function through the years with proper maintenance have the most influence in obtaining quality measurement. This guide provides a review of basic laws and principles, an overview of physical characteristics and behavior of gases and liquids, and a look at the dynamics of flow. The authors examine applications of specific met
