

Static Gravimetric Method with Flying Start-and-Finish for Calibration of Small Hydrocarbon Flow

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Static gravimetric method with flying start-and-finish is widely used for calibration of large and medium liquid flow for its advantage of maintaining continuous flow through the flowmeter. However one needs to take certain considerations in implementing this method in small flow systems to obtain good accuracy. At NMIJ, we adopted this calibration method for small hydrocarbon flow facility using newly designed diverting systems. This paper discusses the design features and operation of a gravimetric system using a compact conical double-wing rotating diverter. Performance of the gravimetric system is also discussed, giving focus to the timing error of the diverting system and evaporation rate of the weighing tank.
