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**On Line Calibration Specification for Coriolis Mass Flowmeters
by Master Meter Method
(English Translation)**

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Introduction

After the Coriolis mass flowmeter in use is disassembled and sent for re-installation, problems such as misalignment are likely to occur.

Line calibration is a suitable method to solve the traceability of this type of flowmeter. The standard method used in this specification is One of them.

This specification is based on the use of Coriolis mass flowmeters in China and the status of online calibration, refer to JJG643-2003 "Standard Table Method Flow Standard Device", combined with JJG1038-2008 "Coriolis Mass Flowmeter" verification procedure the formulation of the line, the determination of the main technical indicators are also referred to implementation.

In addition to the terms specifically defined in this specification, JJF 1001-2011 General Terms and Definitions and JJF 1004-2004 "Flow Terms Terms and Definitions" are applicable to this specification.

According to JJF 1071-2010 "National Metrology Calibration Specification Writing Rules", 5.9, this specification will show the value error and Repeatability is listed as a metrology feature and serves as the primary task of metrology calibration.

This specification refers to the JJG643-2003 "Standard Table Method Flow Standard Device" to the measurement standard measurement performance Seek the requirements of JJG1038-2008 Coriolis Mass Flowmeter for the verification of environmental conditions.

This specification is the first release.

Standard gauge method Coriolis mass flowmeter Online calibration specification

1 Scope

This specification applies to the measurement of DN50~DN300 Coriolis mass flow in full pipe liquid media in closed pipes.

Online calibration of the meter.

2 reference files

This specification refers to the following documents.

JJG643-2003 standard table method flow standard device JJG1038-2008 Coriolis mass flowmeter JJF 1001-2011 General Measurement Terms and Definitions JJF 1004-2004 Flowmeter terminology and definition GB/T 20728-2006 Measurement of fluid flow in closed pipes Selection and installation of Coriolis flowmeters and usage guide for dated references, only dated versions apply to this specification; undated quotations the latest version (including all amendments) applies to this specification.

3 Terms and definitions

3.1 Online calibration Determining the relationship between the magnitude indicated by the flowmeter under actual operating conditions and the corresponding magnitude reappeared by the standard A set of operations.

3.2 Coriolis mass flowmeter online calibration device
onlinecalibrationdeviceofCoriolisMassFlowme-Ters an on-line calibration of Coriolis mass flow meters that provides accurate flow values and a mobile measurement system.

3.3 zero stability After the zero adjustment, when the medium in the flowmeter is stationary, the instantaneous mass flow of the flowmeter is indicated with time or ring.

The degree of change in the condition of the environment is expressed by the absolute value of the instantaneous flow.

3.4 Flow calibration coefficient flowcalibrationfactor A correction factor that is set in order to reduce system errors in relation to mass flow measurement.

3.5 Pressure compensation Correct the effect of working medium pressure on Coriolis mass flowmeter measurements.

Note: When the calibration pressure of the standard instrument and the mass flow meter in the laboratory is inconsistent with the online calibration pressure, it should be the pressure correction factor is supplied for pressure compensation.

4 Overview

4.1 Coriolis mass flowmeter