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Industrial valves — Design validation- testing of valves

*Robinetterie industrielle - Essais de validation de la conception des
appareils de robinetterie*



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Contents		Page
Foreword		iv
Introduction		v
1 Scope		1
2 Normative references		1
3 Terms and definitions		1
4 Type test		3
4.1 Test condition.....		3
4.1.1 General.....		3
4.1.2 Closure test.....		3
4.1.3 Torque measurement.....		4
4.1.4 Temperature measurement.....		4
4.1.5 Test facility and safety rules.....		6
4.1.6 Mechanical-cycle classes.....		6
4.2 Test description.....		7
4.2.1 General.....		7
4.2.2 Test temperatures.....		7
4.2.3 Closure test.....		8
4.2.4 Unseating torque.....		8
4.2.5 Maximum allowable stem torque (MAST).....		8
4.2.6 Post-test examination.....		8
4.2.7 Qualification.....		8
4.3 Test report.....		9
5 Extensions of qualification to the product range		9
Annex A (informative) Report template		12
Bibliography		14

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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This document was prepared by Technical Committee ISO/TC 153, *Valves*.

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Introduction

The scope of this document is currently limited to ball and butterfly valves.

The objective of this document is to outline the requirements and methods for evaluating the performance of metallic industrial valves with respect to seat performance and operating torque capability. Fugitive emission performance was omitted, as it is covered by ISO 15848-1. The number of cycles (205) is consistent with the number in C01 of ISO 15848-1:2015. It serves to test the accuracy and dependability of the measurements and capabilities of a valve as published by the manufacturer in the valve's technical documentation.

Type validation is the most reliable method to validate a range of valve products, covering many aspects, such as its design, material selection and manufacturing processes. It will also serve as a guide for valve selection, allowing customers to compare different valve types, designs and brands.

Several major customers already require type tests, each having their own requirements and specifications. Introducing a defined International Standard will reduce manufacturer's costs by decreasing the number of qualifications, as well as decreasing end-user total cost-of-ownership, by eliminating the possibility of unintentional design flaws.

This validation will improve performance and safety in the plants by enabling any customer to specify durable type-tested industrial valves.