

**Safety and control devices for oil burners and
oil-burning appliances - Particular requirements - Part 1:
Automatic and semi-automatic valves (ISO 23553-1:2014)**

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NATIONAL FOREWORD

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ICS 27.060.10

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English Version

Safety and control devices for oil burners and oil-burning appliances - Particular requirements - Part 1: Automatic and semi-automatic valves (ISO 23553-1:2014)

Dispositifs de commande et de sécurité pour brûleurs à combustible liquide et pour appareils à combustible liquide - Exigences particulières - Partie 1: Robinets automatiques et semi-automatiques (ISO 23553-1:2014)

Sicherheits-, Regel- und Steuereinrichtungen für Ölbrenner und Öl verbrennende Geräte - Spezielle Anforderungen - Teil 1: Automatische und halbautomatische Ventile (ISO 23553-1:2014)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

This document (EN ISO 23553-1:2014) has been prepared by Technical Committee ISO/TC 161 "Control and protective devices for gas and/or oil burners and appliances" in collaboration with Technical Committee CEN/TC 47 "Atomizing oil burners and their components - Function - Safety - Testing" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2014, and conflicting national standards shall be withdrawn at the latest by November 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 23553-1:2009.

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Endorsement notice

The text of ISO 23553-1:2014 has been approved by CEN as EN ISO 23553-1:2014 without any modification.

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Introduction

This part of ISO 23553 is designed to be used in combination with ISO 23550. This part together with ISO 23550 establishes the full requirements as they apply to the product covered by this part of ISO 23553. This part of ISO 23553 adapts ISO 23550, where needed, by stating “with the following modification”, “with the following addition”, “is replaced by the following” or “is not applicable,” in the corresponding clause.

In order to identify specific requirements that are particular to this part of ISO 23553, that are not already covered by ISO 23550, this document may contain clauses or subclauses that are additional to the structure of ISO 23550. These clauses are numbered starting from 101 or, in the case of an Annex, are designated AA, BB, CC etc.

In an attempt to develop a fully International Standard, it has been necessary to take into consideration the differing requirements resulting from practical experience and installation practices in various regions of the world and to recognize the variation in basic infrastructure associated with oil controls and appliances, some of which are addressed in [Annexes E, F and G](#). This part of ISO 23553 intends to provide a basic framework of requirements that recognizes these differences.

Safety and control devices for oil burners and oil-burning appliances — Particular requirements —

Part 1: Automatic and semi-automatic valves

IMPORTANT — When reference is made in this part of — ISO 23553 to ISO 23550, the word “gas” shall be replaced by “oil” as appropriate. The current base standard, ISO 23550:2011, focuses on gas controls only. It is, however, the intention to revise the base standard in such a fashion that both, gas and oil product standards can be used in conjunction with the base standard. Attention is drawn especially to the following subclauses: [6.4](#), [7.4](#) and [7.5](#).

1 Scope

This part of ISO 23553 specifies safety, constructional and performance requirements and testing of automatic and semi-automatic valves for oil.

It applies to automatic and semi-automatic valves which are:

- normally closed;
- used in combustion plants to interrupt the oil flow with or without delay on closing;
- for use with oil types (e.g. middle distillate fuel oil, crude oil, heavy fuel oil or kerosene) without gasoline;

NOTE 1 For other oil types (e.g. oil emulsions), additional test methods can be agreed between the manufacturer and the test authority.

NOTE 2 Oil types from petroleum refining processes are classified ISO-F-D in ISO 8216-99 and form part of a device having other function(s), such as oil pumps. In this case the test methods apply to those parts or components of the device forming the automatic and semi-automatic valves, i.e. those parts which are necessary for the closing function;

- for use on burners or in appliances using oil;
- directly or indirectly operated, electrically or by mechanical or hydraulic means;
- fitted with or without closed-position indicator switches.

This part of ISO 23553 covers type testing only.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 272, *Fasteners — Hexagon products — Widths across flats*

ISO 1179-1, *Connections for general use and fluid power — Ports and stud ends with ISO 228-1 threads with elastomeric or metal-to-metal sealing — Part 1: Threaded ports*