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Safety devices for protection against excessive pressure —

Part 2:
Bursting disc safety devices

Dispositifs de sécurité pour protection contre les pressions excessives —

Partie 2: Dispositifs de sûreté à disque de rupture

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 4126-2 was prepared by the European Committee for Standardization (CEN) in collaboration with Technical Committee ISO/TC 185, *Safety devices for protection against excessive pressure*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 4126-2, together with that of ISO 4126-6, cancels and replaces ISO 6718:1991.

Throughout the text of this document, read "...this European Standard..." to mean "...this International Standard...".

ISO 4126 consists of the following parts, under the general title, *Safety devices for protection against excessive pressure*:

— *Part 1: Safety valves*

— *Part 2: Bursting disc safety devices*

— *Part 3: Safety valves and bursting disc safety devices in combination*

— *Part 4: Pilot-operated safety valves*

— *Part 5: Controlled safety pressure relief systems (CSPRS)*

— *Part 6: Application, selection and installation of bursting disc safety devices*

— *Part 7: Common data*

For the purposes of this part of ISO 4126, the CEN annex regarding fulfilment of European Council Directives has been removed.

Contents

Foreword

This document (EN ISO 4126-2:2003) has been prepared by Technical Committee CEN/TC 69 "Industrial valves", the secretariat of which is held by AFNOR, in collaboration with ISO/TC 185 "Safety devices for protection against excessive pressure".

This European Standard EN ISO 4126-2:2003 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2003, and conflicting national standards shall be withdrawn at the latest by July 2003.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

This standard for safety devices for protection against excessive pressure consists of seven parts of which this is Part 2. The various parts are:

— *Part 1: Safety valves.*

— *Part 2: Bursting disc safety devices.*

— *Part 3: Safety valves and bursting disc safety devices in combination.*

— *Part 4: Pilot operated safety valves.*

— *Part 5: Controlled safety pressure relief systems (CSPRS).*

— *Part 6: Application, selection and installation of bursting disc safety devices.*

— *Part 7: Common data.*

Part 7 contains data that is common to more than one of the parts of this standard to avoid unnecessary repetition.

Annex A is normative. Annex B is informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

A bursting disc safety device is a non-reclosing pressure relief device used to protect pressure equipment such as pressure vessels, piping, gas cylinders or other enclosures from excessive pressure and/or excessive vacuum.

A bursting disc safety device typically comprises an assembly of components including a bursting disc, a bursting disc holder and, where necessary, other components such as back pressure supports, stiffening rings etc.

The bursting disc is a pressure-containing and pressure-sensitive part of the bursting disc safety device and is designed to open by bursting at a pre-determined pressure. There are many different types of bursting disc safety devices manufactured in corrosion resistant materials, both metallic and non-metallic, to cover a wide range of nominal sizes, burst pressures and temperatures.