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Standards

Irish Standard
I.S. EN 746-2:2010 (JUNE 2010)

Industrial thermoprocessing equipment - Part 2: Safety requirements for combustion and fuel handling systems

I.S. EN 746-2:2010 (June 2010)

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KAA

It has been brought to our attention that the title pages issued on 2010-05-12 requires modification. The English title has been updated to include the wording "Part 2".

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English Version

Industrial thermoprocessing equipment - Part 2: Safety requirements for combustion and fuel handling systems

Equipements thermiques industriels - Partie 2:
Prescriptions de sécurité concernant la combustion et la
manutention des combustibles

Industrielle Thermoprozessanlagen - Teil 2:
Sicherheitsanforderungen an Feuerungen und
Brennstoffführungssysteme

This European Standard was approved by CEN on 11 March 2010.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 746-2:2010) has been prepared by Technical Committee CEN/TC 186 "Industrial Thermoprocessing Equipment", 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of an identical text or by endorsement, at the latest by November 2010, and conflicting national standards shall be withdrawn at the latest by May 2011.

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 746-2:1997.

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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

Following a request from CEN/TC 186, CEN has agreed to defer the date of withdrawal of EN 746-2:1997 for a transitional period of 12 months.

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

Introduction

This European Standard is a Type C standard as defined in EN ISO 12100-1.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered, is indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

This Part of EN 746 assumes that the equipment is not creating any potentially explosive atmosphere and is located in a normally ventilated area.

This European Standard forms one part of a series of safety standards covering Industrial Thermoprocessing Equipment (IThE). The full list of these standards is given below:

EN 746, *Industrial thermoprocessing equipment*

- Part 1: Common safety requirements for industrial thermoprocessing equipment
- Part 2: Safety requirements for combustion and fuel handling systems
- Part 3: Safety requirements for the generation and use of atmosphere gases
- Part 4: Particular safety requirements for hot dip galvanising thermoprocessing equipment
- Part 5: Particular safety requirements for salt bath thermoprocessing equipment
- Part 6: Particular safety requirements for material melting, re-melting and liquid phase maintaining thermoprocessing equipment
- Part 7: Particular safety requirements for vacuum thermoprocessing equipment
- Part 8: Particular safety requirements for quenching equipment

Compliance with European product standards e.g. EN 267, EN 12952-8, EN 12953-7 or EN 676 is not sufficient to ensure the minimum safety requirement for industrial thermoprocessing equipment. This part 2 of EN 746 shall always have priority for IThE.

An IThE generally consists of the following components:

- processing chamber (e.g. steel construction with lining);
- heating system;
- protective system;
- control and instrumentation system/operator-control level.

It is assumed that (IThE) will only be operated and maintained by trained personnel.

1 Scope

This part of EN 746 together with EN 746-1 specifies safety requirements for single and multiple burners that are part of Industrial Thermoprocessing Equipment. (In this standard referred to as IThE).

This document deals with significant hazards, hazardous situations and events relevant to combustion and fuel handling systems that are part of IThE as listed in Clause 4, when used as intended and under the conditions foreseen by the manufacturer.

This European Standard covers:

- fuel pipework downstream of and including the manual isolating valve;
- burner(s), burner system and ignition device;
- safety related control system (protective system).

This European Standard applies to any oxidation with air or other gases containing free oxygen of gaseous, liquid and solid fuels or any combustion of them to release thermal energy.

For thermal or catalytic post combustion and waste incineration, this European Standard applies only to auxiliary burners designed to start-up and/or support the process.

The pressure hazard of the piping and components covered by this standard is within the limits of maximum pressure/size relationship as described in normative Annex E.

This European Standard also gives the necessary requirements for the information for use.

This European Standard does not cover hazards from heating generated by electricity.

This European Standard does not deal with the hazards created by the release of flammable substances from the products processed in the IThE.

NOTE EN 1539, *Dryers and ovens, in which flammable substances are released — Safety requirements*

This European Standard is not applicable to combustion and fuel handling systems

- of welding and soldering machines;
- up-stream of the IThE manual isolating valve.

This European Standard is not applicable to electricity cabling and power cabling upstream of the IThE control panel/protective system.

Noise can be a significant hazard for combustion and fuel handling systems. It is not dealt with in this standard.

This European Standard is not applicable to combustion and fuel handling systems as part of IThE which is manufactured before the date of its publication as EN.

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