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NSAI Standards

Irish Standard
I.S. EN 14870-1:2011

Petroleum and natural gas industries - Induction bends, fittings and flanges for pipeline transportation systems - Part 1: Induction bends (ISO 15590-1:2009 modified)

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EUROPEAN STANDARD

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Erdöl- und Erdgasindustrie - Im Induktionsverfahren gefertigte Rohrbögen, Fittings und Flansche für Rohrleitungs-Transportsysteme - Teil 1: Im Induktionsverfahren gefertigte Rohrbögen

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Foreword

This document (EN 14870-1:2011) has been prepared by Technical Committee CEN/TC 12 “Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries ”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.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 14870-1:2004.

The text of ISO 15590-1:2009 has been adopted by CEN/TC 12 with some modifications. These modifications are indicated by a vertical line in the left margin of the text.
Where the expression “International Standard” is used, it is understood as “European Standard”.

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.

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Introduction

This International Standard makes reference to line pipe and bends with delivery conditions based on ISO 3183. Following significant revision of ISO 3183 (ISO 3183:2007), ISO 15590-1 has been reviewed and redrafted taking cognizance of the changes to ISO 3183. In addition to general revision, and in common with ISO 3183:2007, the Technical Committee has introduced additional requirements for special applications as follows:

— Manufacturing procedure specification (Annex A);

— PSL 2 bends for sour service (Annex B).

The requirements of the annexe(s) apply only when it is (they are) specified on the purchase order.

This International Standard does not provide guidance on when it is necessary to specify the above supplementary requirements. Instead it is the responsibility of the purchaser to specify, based upon the intended use and design requirements, which, if any, of the supplementary requirements apply for a particular purchase order.

Users of ISO 15590 need to be aware that further or differing requirements can be needed for individual applications. This part of ISO 15590 is not intended to inhibit a manufacturer from offering, or the purchaser from accepting, alternative equipment or engineering solutions for the individual application. This can be particularly applicable where there is innovative or developing technology. Where an alternative is offered, it is the responsibility of the manufacturer to identify any variations from this part of ISO 15590 and provide details.

ISO 15590 consists of the following parts, under the general title *Petroleum and natural gas industries — Induction bends, fittings and flanges for pipeline transportation systems*:

— *Part 1: Induction bends;*

— *Part 2: Fittings;*

— *Part 3: Flanges.*

ISO 15590-1:2009, developed within ISO/TC 67/SC2, has been adopted as EN 14870-1:2011 (ISO 15590-1:2009 modified).

The scope of ISO/TC 67/SC2 is pipeline transportation systems for the petroleum and natural gas industries without exclusions. However in CEN, the scopes of CEN/TC 12 and CEN/TC 234 overlapped until 1995. This scope overlap caused problems for the parallel procedure for the above-mentioned items. The conflict in scope was resolved when both the CEN/Technical Committees and the CEN/BT took the following resolution:

> *Resolution BT 38/1995: Subject: Revised scope of CEN/TC 12*
> *“BT endorses the conclusions of the coordination meeting between CEN/TC 12 “Materials, equipment and offshore structures for petroleum and natural gas industries” and CEN/TC 234 “Gas supply” and modifies the CEN/TC 12 scope, to read:*
> *“Standardization of the materials, equipment and offshore structures used in drilling, production, refining and the transport by pipelines of petroleum and natural gas, excluding on-land supply systems used by the gas supply industry and those aspects of offshore structures covered by IMO requirement (ISO/TC 8). The standardization is to be achieved wherever possible by the adoption of ISO Standards.”*

In 2009, CEN/TC 12 changed its scope to be in coherency with the last CEN/TC 234's scope changes, as follows (resolution CEN/BTC 19/2009):

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Standardisation of the materials, equipment and offshore structures used in the drilling, production, transport by pipelines and processing of liquid and gaseous hydrocarbons within the petroleum, petrochemical and natural gas industries, excluding on-land supply systems used by the gas supply industry excluding gas infrastructure from the input of gas into the on-shore transmission network up to the inlet connection of gas appliances. (covered by CEN/TC 234) and those aspects of offshore structures covered by IMO requirements (ISO/TC 8).

The standardisation is to be achieved wherever possible by the adoption of ISO standards.

Resulting from these resolutions, "*on-land supply systems used by the gas supply industry excluding gas infrastructure from the input of gas into the on-shore transmission network up to the inlet connection of gas appliances* " has been excluded from the scope of ISO 15590-1:2009 for the European adoption by CEN/TC 12.

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