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Standards

Irish Standard
I.S. EN 15776:2011

Unfired pressure vessels - Requirements for the design and fabrication of pressure vessels and pressure parts constructed from cast iron with an elongation after fracture equal or less than 15 %

I.S. EN 15776:2011

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English Version

Unfired pressure vessels - Requirements for the design and
fabrication of pressure vessels and pressure parts constructed
from cast iron with an elongation after fracture equal or less than
15 %

Réceptifs sous pression non soumis à la flamme -
Exigences pour la conception et la fabrication des
réceptifs sous pression et des parties sous pression
moulés en fonte à allongement après rupture inférieur ou
égal à 15 %

Unbefeuerte Druckbehälter - Anforderungen an die
Konstruktion und Herstellung von Druckbehältern und
Druckbehälterteilen aus Gusseisen mit einer Bruchdehnung
von 15 % oder weniger

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Foreword

This document (EN 15776:2011) has been prepared by Technical Committee CEN/TC 54 “Unfired pressure vessels”, the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by August 2011, and conflicting national standards shall be withdrawn at the latest by August 2011.

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

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Introduction

For pressure equipment, special precautions are required when using grey cast iron grades or spheroidal graphite cast iron grades with an elongation after fracture equal to or less than 15 % to attain the same safety level as when using spheroidal graphite cast iron grades with an elongation after fracture higher than 15 %. Service restrictions and limitations are given in Clause 4.

Attention is drawn to the references to EN 13445-6 for design and fabrication according to specific grades of material standards EN 1563 and EN 13835 which are found in some clauses of this standard, EN 15776. Requirements for the design, material, manufacturing and testing of pressure vessels and pressure vessel parts made from ferritic or austenitic spheroidal graphite cast iron grades with an elongation after fracture higher than 15 % are given in EN 13445-6.

Cast iron with elongation after fracture equal or less than 15 % may only be used for pressure equipment when operational and technical advantages are dictating its use instead of the cast iron grades given in EN 13445-6 with elongation after fracture higher than 15 %.

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