



BSI Standards Publication

Pressure equipment and assemblies

Part 8: Proof test

National foreword

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A list of organizations represented on this committee can be obtained on request to its secretary.

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European foreword

This document (CEN/TS 764-8:2016) has been prepared by Technical Committee CEN/TC 54 “Unfired pressure vessels”, the secretariat of which is held by BSI.

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This European Standard consists of eight parts, which are currently:

- Part 1* Vocabulary;
- Part 2* Quantities, symbols and units;
- Part 4* Establishment of technical delivery conditions for metallic materials;
- Part 5* Inspection documentation of metallic materials and compliance with the material specification;
- Part 6* Structure and content of operating instructions [technical report];
- Part 7* Safety systems for unfired pressure equipment;
- Part 8* Proof test [technical specification].

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Introduction

This document is intended to establish a common approach for the proof testing by pressure test of items of pressure equipment and assemblies, in order to fulfil the essential requirement 3.2.2 of Annex 1 of the pressure equipment directive 97/23/CE.

It is intended to be used as a basis in the specific product standards, or directly by a manufacturer.

It takes into account the existing guidelines adopted by the European Commission, detailed in Annex A.

For the determination of the pressure test value, this document provides two methods in 5.1. Further investigation will take place, in order to better specify the method to be retained in the future. The determination of the nominal design stress will be part of this analysis.

CEN technical committees, which apply this document in their product standard, are encouraged to give feedback to CEN/TC 54, for the future revision of this document.

1 Scope

This document specifies the purpose, form and procedure of proof testing by pressure test of items of pressure equipment and assemblies.

It also specifies how to determine the value of the test pressure.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE Other useful definitions can be found in EN 764-1 to -7.

2.1

pressure equipment

vessel, piping, safety accessory or pressure accessory with a maximum allowable pressure PS greater than 0,5 bar

Note 1 to entry: Where applicable, pressure equipment includes elements attached to pressurized parts, such as flanges, nozzles, couplings, supports, lifting lugs, etc.

[SOURCE: Directive 97/23/CE]

2.2

assembly

several pieces of pressure equipment assembled by a manufacturer to constitute an integrated and functional whole

[SOURCE: Directive 97/23/CE]

2.3

product standard

standard that specifies requirements to be fulfilled by a product or a group of products, to establish its fitness for purpose

Note 1 to entry: For this document, a product standard is a standard dealing with a pressure equipment or an assembly.

[SOURCE: EN 45020]

2.4

maximum allowable pressure

PS

p_s

maximum pressure for which the equipment is designed, as specified by the manufacturer

Note 1 to entry: The subscript "max" is added to the symbol for maximum values.

[SOURCE: EN 764-1]