

Testing of valves —

Part 2: Specification for fire type-testing requirements

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Piping Systems Components Standards Committee (PSE/-) to Technical Committee PSE/7, upon which the following bodies were represented:

Amalgamated Union of Engineering Workers
 Associated Offices Technical Committee
 Association of Bronze and Brass Founders
 British Chemical Engineering Contractors' Association
 British Compressed Gases Association
 British Fluid Power Association
 British Foundry Association
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 British Maritime Technology
 British Shipbuilders
 British Valve Manufacturers' Association Ltd.
 Copper Development Association
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 Electricity Supply Industry in England and Wales
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 Institution of Chemical Engineers
 Institution of Gas Engineers
 Institution of Mechanical Engineers
 Institution of Water Engineers and Scientists
 Society of British Gas Industries
 Steel Casting Research and Trade Association
 Water Authorities Association
 Water Companies Association

This British Standard, having been approved under the direction of the Piping Systems Components Standards Committee, was published under the authority of the Board of BSI and comes into effect on 31 July 1987

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Foreword

This British Standard has been prepared under the direction of the Piping Systems Components Standards Committee and is published in two Parts:

- *Part 1: Specification for production pressure testing requirements;*
- *Part 2: Specification for fire type-testing requirements.*

This Part of BS 6755 embodies the technical content of API Specification 6FA for fire type-testing of valves, including valves to API Specification 6D, and of API Standard 607, published by the American Petroleum Institute (API), but differs in presentation. It covers the requirements for testing and method of test for evaluating the performance of valves when exposed to defined fire conditions. The performance requirements are intended to establish limits of acceptability of a valve regardless of size, nominal pressure (PN) or Class rating. The burn period has been established on the basis that it represents the maximum time required to extinguish most fires. Fires of longer duration are considered to be of a major magnitude with consequences greater than those anticipated in the test.

Permission from API to incorporate the relevant technical content of API Standard 607 and API Specification 6FA into this Part of BS 6755 is gratefully acknowledged.

It is intended that this Part of BS 6755 will eventually supersede the fire test specified in clause 21 and described in appendix A of BS 5146-1:1974. However, to allow for the construction of fire testing equipment and for valve manufacturers to obtain approval for valves made to a fire type-test design the following applies.

- a) For a period of 3 years from the publication of this standard, valves of existing design may be tested in accordance with either:
 - 1) this Part of BS 6755; or
 - 2) appendix A of BS 5146-1:1974.
- b) Valves submitted for first time fire type-testing starting from a date 1 year after publication of this Part of BS 6755 should be tested in accordance with this standard.
- c) Three years after publication of this Part of BS 6755, the fire testing requirements given in BS 5146-1:1974 will be withdrawn.

It is intended that this Part of BS 6755 be used in conjunction with the appropriate valve product standard when specified wholly or in part only by the product standard or with a valve application standard, when applicable. In addition, this Part of BS 6755 may be used for the fire type-testing of valves not covered by product standards.

The method for carrying out the fire test is given in appendix A of this Part of BS 6755 and the representative size and pressure range of the valve tested is given in appendix B.

Until such time that sufficient experience is gained with this particular fire test it is not possible to make definitive statements regarding qualification of valves of the same basic design as the test valve, but made using different metals (see note 3 to B.1).

It has been assumed in the drafting of this Part of BS 6755 that the execution of its provisions is entrusted to appropriately qualified and experienced people because it calls for procedures that may be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 12, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

