

THE ENGINEERING EQUIPMENT AND MATERIALS USERS ASSOCIATION

SPECIFICATION FOR INTEGRAL BLOCK AND BLEED VALVE MANIFOLDS FOR DIRECT CONNECTION TO PIPEWORK

**(INCORPORATING INFORMATION SHEET NO 20:
APPLICATION GUIDELINES)**

(2nd EDITION)

PUBLICATION No 182 : 2004

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[INSIDE COVER PAGE]

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FOREWORD

The increasing use of block and bleed valve manifolds in piping systems coupled with uncertainty regarding their application and the absence of a recognised standard prompted the EEMUA Valves Committee to develop this Specification and the Application Guidelines. Block and bleed valve manifolds were originally used principally as replacements for individual block and bleed valves at tapping points in piping systems for the purpose of measurement and control. However, larger arrangements are now used for equipment and main process isolation. Because of this, coupled with changes to the applicable reference standards, the Committee has conducted a review of and updated the Specification. A subsection covering the requirements for subsea application has been incorporated.

The overall aim of the Specification and the appended Application Guidelines, which should be read in conjunction, remains to ensure that installations of these types are fit for purpose and of the required integrity.

Use of Language

In this document the words 'will', 'may', 'should', 'shall' and 'must', when used in the context of actions by the purchaser or others, have specific meanings as follows:

- i) 'Will' is used normally in connection with an action by the purchaser, rather than by a manufacturer or supplier.
- ii) 'May' is used to indicate that the manufacturer or supplier is permitted to do something, or the purchaser reserves the right to do something, according to context.
- iii) 'Should' is used where a provision is preferred.
- iv) 'Shall' is used where a provision is mandatory.
- v) 'Must' is used only where a provision is a statutory requirement.

Units

It should be noted that 'bar' signifies gauge pressure.

1 SCOPE

This Specification covers manifolds, comprising two or more isolating valves and a vent valve, in an integral body, intended for the following applications:

- having an inlet directly connected to the process pipework and an outlet connection not larger than DN 50 (NPS 2), whose principal use is as a replacement for individual block and bleed valves at tapping points in piping systems.
- arrangements having an inlet and outlet directly connected to the process pipework, whose principal use is for equipment or process isolation.

2 REFERENCES AND ABBREVIATIONS

This EEMUA Specification makes reference to the publications listed in 2.1 through 2.10 below. Unless otherwise stated, the latest editions of these publications including all amendments and addenda shall apply.

2.1 American Petroleum Institute

API Spec 6FA Fire Test for Valves

API Std 607 Fire Test for Soft-Seated Quarter-Turn Valves

2.2 American Society of Mechanical Engineers

ASME B16.5 Pipe Flanges and Flanged Fittings

ASME B16.9 Factory-made Wrought Butt welding Fittings

ASME B16.11 Forged Fittings, Socket-Welding and Threaded

ASME B16.34 Valves—Flanged, Threaded and Welding End

ASME B31.3 Process Piping

ASME Boiler and Pressure Vessel Code:

Sec V ('ASME V') Nondestructive Examination

Sec VIII ('ASME VIII') Pressure Vessels

Sec IX ('ASME IX') Welding & Brazing Qualifications

2.3 American Society for Testing and Materials

ASTM A 105 Specification for Carbon Steel Forgings for Piping Applications

ASTM A 182 Specification for Forged or Rolled Alloy-Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service

ASTM A 350 Specification for Carbon and Low-Alloy Steel Forgings, Requiring Notch Toughness Testing, for Piping Components

ASTM E 165 Test Method for Liquid Penetrant Examination

ASTM E 562 Test Method for Determining Volume Fraction by Systematic Manual Point Count

2.4 British Standards

BS 5793-1 Industrial-process Control Valves: Part 1: Specification and Terminology for Control Valves [identical to EN 60534-1]

BS 6755-2 Testing of valves: Part 2: Specification for Fire Type-Testing Requirements*

PD 5500 Specification for Unfired Fusion Welded Pressure Vessels

* BS 6755 Pt 2 will be withdrawn once BS EN ISO 10497 is published.