

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)**

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45 Beech Street
London
EC2Y 8AD

Tel 0171 628 7878
Fax 0171 628 7862



THE ENGINEERING EQUIPMENT AND MATERIALS USERS ASSOCIATION

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MANIFOLDS FOR DIRECT CONNECTION TO PIPEWORK**

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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 has prompted the EEMUA Valves Committee to develop this specification and the appended Application Guidelines which should be read in conjunction. The overall aim is to ensure that installations of this type 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

This specification employs SI units, but additionally includes Imperial units where appropriate to common usage. *Note:* 'bar' signifies bar gauge.

1. SCOPE

This specification covers manifolds, comprising two or more isolating valves in an integral body and having an inlet with direct connection to the piping system and an outlet connection not larger than DN 50 (2"), whose principal use is as a replacement for individual block and bleed valves at tapping points in piping systems.

2. REFERENCES

This EEMUA specification makes reference to the publications listed below. Unless otherwise specified the latest editions of these publications including all addenda and revisions shall apply.

2.1 British Standards

- BS 1134 ~ Assessment of surface texture
- BS 1780 ~ Bourdon tube pressure and vacuum gauges
- BS 5500 ~ Unfired fusion welded pressure vessels
- BS 6755 ~ Testing of valves — Part 1: Production pressure testing requirements
Part 2: Fire type-testing requirements
- BS EN 287 ~ Approval testing of welders for fusion welding
- BS EN 288 ~ Specification and approval of welding procedures for metallic materials

2.2 American National Standards: American Society of Mechanical Engineers

- ASME* B16.5 ~ Pipe flanges and flanged fittings, steel, nickel alloy and other special alloys
- ASME* B16.11 ~ Forged steel fittings, socket welding and threaded
- ASME* B16.34 ~ Valves — flanged, threaded and welding end
- ASME* B31.3 ~ Chemical plant and petroleum refinery piping

* Previously ANSI

ASME Boiler and Pressure Vessel Code:

- ASME V ~ Sec. V — Nondestructive examination
- ASME VIII ~ Sec. VIII — Pressure vessels
- ASME IX ~ Sec. IX — Welding & brazing qualifications

2.3 American Petroleum Institute

- API Spec 6FA ~ Fire test for valves

2.4 American Society of Testing and Materials

- ASTM ~ various

2.5 International Organization for Standardization

- ISO 5208 ~ Industrial valves V — pressure testing for valves
- ISO 10474 ~ Steel and steel products — inspection documents
- ISO 10497 ~ Testing of valves — fire type testing requirements

2.6 National Association of Corrosion Engineers

NACE MR 01 75 ~ Sulfide stress cracking resistant metallic materials for oil field equipment

3. CONFIGURATION

The configuration of the manifold shall be double block and bleed or single block and bleed as specified on the order. Other arrangements or assemblies (eg for sample or injection points) may be provided to the general requirements of this specification by agreement with the purchaser.