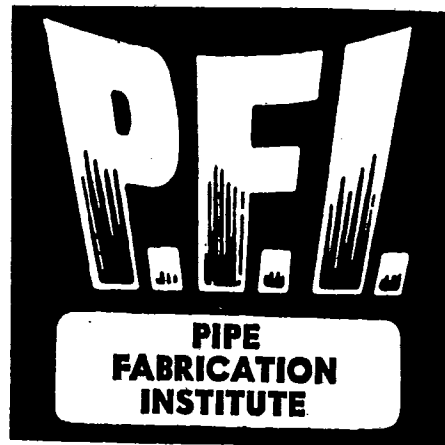


Permanent Marking on Piping Materials

Prepared by
Pipe Fabrication Institute Engineering Committee



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PERMANENT MARKING ON PIPING MATERIALS

1. Scope

- 1.1 This Standard covers recommended methods for marking on piping materials, application of welder's symbols or other data where not otherwise covered by the various Codes. These recommendations have proven to be both economically and metallurgically satisfactory, and do not preclude the use of supplemental color code identification.
- 1.2 Methods of marking only are involved. The actual data to be recorded is usually within the scope of the various Codes or is determined by agreement between the customer and fabricator.

2. Carbon and Chromium-Molybdenum Alloy Steel Materials

- 2.1 Low stress (blunt-nosed-continuous or blunt-nosed-interrupted-dot die) steel stamps are recommended for use on the following materials; except that, where the depth of impression may infringe on design minimum wall, the use of steel stamps is not recommended, and the recommended marking shall be by rotary tool, electric-chemical etch or electric arc.

Carbon Steels – ASME P Number 1

Alloy Steels – ASME P Numbers 3, 4 and 5

3. High Alloy and Nickel Alloy Steel Materials

- 3.1 Marking by low stress steel stamps, rotary tool, electric-chemical etch, or electric arc is recommended for use on the following materials except that, where the depth of impression may infringe on the design minimum wall, the use of steel stamps is not recommended, and the recommended marking shall be by rotary tool, electric-chemical etch or electric arc. Caution

should be observed so that the resulting marking will not contaminate the surface of the piping material.

High Alloy Martensitic Steels – ASME P Number 6

High Alloy Ferritic Steels – ASME P Number 7

High Alloy Austenitic Steels – ASME P Number 8

Nickel Alloy and Mn-V Steels – ASME P Nos. 9 and 10

Quenched and Tempered Steels – ASME P Number 11

4. Non-Ferrous Materials

- 4.1 Marking by rotary tool or by low stress steel stamps is recommended for use on all non-ferrous materials, ASME P Numbers 21 and higher except that where the depth of impression may infringe on the design minimum wall the use of steel stamps is not recommended, and the recommended marking shall be by rotary tool.

5. General Comments

- 5.1 All of these methods are recommended for general applications where the ASME or ANSI Codes govern, except any specific requirement stated in the Codes shall take preference over the methods stated in this Standard.
- 5.2 In instances where extensive permanent markings are required, as in the case of ASME Code piping, it is permissible, as well as metallurgically satisfactory, to provide the required data on a light gauge plate which should be permanently affixed by a method that will not affect the integrity of the finished product.

NOTE: The ASME P Numbers referenced herein are those listed in the ASME Boiler & Pressure Vessel Code, Section IX, Welding and Brazing Qualifications.

A current index of the latest revised ES Standards and Technical Bulletins is available from the Pipe Fabrication Institute.

PFI Standards and Technical Bulletins are published to serve proven needs of the pipe fabricating industry at the design level and in actual shop operations. Hence, such needs are continually considered and reviewed by the Engineering Committee of the Pipe Fabrication Institute to provide recommended procedures which have been demonstrated by collective experiences to fulfill requirements in a manner for Code compliance. However, as the PFI Standards are for minimum requirements the designer or fabricator always has the option of specifying supplementary conditions in the form of requirements beyond the scope of the PFI publications.