

This section includes nameplates, labeling, and identification methods for mechanical equipment and components. This section includes performance, proprietary, and descriptive type specifications. Edit to avoid conflicting requirements.

PART 1 General

1.1 SECTION INCLUDES

- A. Valve Tags.
- B. Pipe Markers.

1.2 RELATED SECTIONS

- A. Section 09900 - Paint and Coatings: Identification painting.
- B. Section [_____] - Medical Gas: Supply of pipe labels for placement by this section.

1.3 REFERENCES

List reference standards that are included within the text of this section. Edit the following as required for project conditions.

- A. ASME A13.1 - Scheme for the Identification of Piping Systems.
- B. International Institute of Ammonia Refrigeration (IIAR) Bulletin 114 - Guidelines for: Identification of Ammonia Refrigeration Piping and System Components.
- C. NFPA 99C - Standard on Gas and Vacuum Systems.

1.4 SUBMITTALS

Do not request submittals if drawings sufficiently describe the products of this section or if proprietary specifying techniques are used. The review of submittals increases the possibility of unintended variations to drawings, thereby increasing the Specifier's liability.

- A. Submit to Section [01300]. [_____].
- B. Submit list of wording, symbols, letter size, and color coding for mechanical identification.
- C. Submit valve chart and schedule, including valve tag number, location, function, and valve manufacturer's name and model number.
- D. Product Data: Provide manufacturers catalogue literature for each product required.

Include the following paragraph for submission of physical samples for selection of finish, color, texture, etc.

- E. Samples: Submit [two] [_____] [labels,] [tags,] [_____,] [____x____] mm
([____x____] inch) in size.

When manufacturer's instructions for specific installation requirements are referenced in PART 3 EXECUTION, include the following request for submittal of those instructions. Edit the PART 3 statements to avoid conflict with manufacturer's instructions.

- F. Manufacturer's Installation Instructions: Indicate special procedures, and installation.

1.5 QUALITY ASSURANCE

- A. Product Manufacturer: ISO 9001 Quality Certified.

1.6 PROJECT RECORD DOCUMENTS

- A. Submit to Section [01700]. [_____].
B. Record actual locations of tagged valves.

PART 2 Products

2.1 MANUFACTURERS

- A. Seton Identification Products

20 Thompson Road
P.O. Box 819
Branford, CT 06405-0819
Tel: 800-243-6624
Fax: 800-345-7819
Website: www.seton.com

- B. Substitutions: [Refer to Section 01600.] [Not permitted.] [Refer to Instructions to Bidders.]

2.2 VALVE TAGS

Specify all types of valve tags required or acceptable for the project, and delete inappropriate types. If more than one type is required or acceptable, specify the acceptable location of each type in the Schedule. Specify Teflon coated aluminum tags if bar codes are desired.

- A. Plastic Tags:
1. Plastic: Rigid 0.25 mm (10 mil) thick, with smooth write-on surface, Seton-Ply by Seton.
2. [Glass Fiber Overlaminates: Tag protected with a layer of glass fiber resin.]
3. Multi-purpose polyurethane: Poly-Tag, by Seton.
4. Laminated Valve Tags: Multi-layered plastic.
- B. Metal Tags:

1. Brass: 1.1 mm (0.044 inch) thick, with 3/16" (5 mm) top hole for fastener, [natural brass finish].
 2. Aluminum: [0.8] [1.1] mm ([0.032] [0.044] inch) thick [, anodized.] [Teflon coated both sides, with Code 39 bar codes.]
 3. Stainless Steel: 0.6 mm (0.025 inch) thick.
 4. Lettering: [Pre-stamped] [Stamped] [Engraved] letters; character size and words to ANSI A13.1.
- C. Beaded Chains: No. 6 [brass] [nickel over steel] [aluminum] [anodized aluminum] [stainless steel], 114 mm (4-1/2") long, with locking link.

[OR]

- D. Nylon Ties: [Clear] [Colored], [150] [200] [280] mm ([6] [8] [11] inches) long, non-conductive, [locking type].
- E. Chart: Typewritten letter size list in anodized aluminum frame.

2.3 PIPE MARKERS

Specify all types of pipe markers required or acceptable for the project, and delete inappropriate types. If more than one type is required or acceptable, specify the location or duty of each type in the Schedule.

- A. Mechanically Fastened Pipe Markers:
1. Vinyl: Factory fabricated vinyl, preformed to fit around pipe or pipe covering. Model: Setmark by Seton.
 2. Polyester: Factory fabricated polyester, 0.1 mm (4 mil) thick, laminated with UV-resistant poly vinyl fluoride (PVF), preformed to fit around pipe or pipe covering. Model: Ultramark, by Seton.
- B. Self-Adhesive Pipe Markers (Labels):
1. Vinyl: Factory fabricated vinyl, 0.13 mm (5 mil) thick, preformed to fit around pipe or pipe covering. Model: Opti-Code by Seton.
 2. Polyester: Factory fabricated polyester, 0.05 mm (2 mil) thick, coated with acrylic adhesive. Model: Poly-Code, by Seton.
 3. Plastic: Factory fabricated plastic film, roll formed, clear laminated to protect lettering.

Include the following paragraph only if strap-on (Sermark) or wrap-around (Ultramark) pipe markers are specified.

- C. Nylon Ties: [Clear] [Colored], [150] [200] [280] mm ([6] [8] [11] inches) long, non-conductive, [locking type].

Specify ASME colors below, or delete the paragraph and replace with a chart of colors in a Schedule at the end of this section.

- D. Color and Text:
1. Piping: to [ASME A13.1].

2. Ammonia Piping: to [IIAR 114]
 3. Gas Piping: [NFPA 99C].
- E. Identify fluid being conveyed, and include flow direction arrow [as indicated.]
1. [Include flow direction arrow.]
 2. Language: [English] [Spanish] [_____].
 3. Lettering: Size and color to ASME A13.1.

PART 3 Execution

3.1 PREPARATION

- A. Degrease and clean surfaces to receive adhesive for identification materials.

3.2 INSTALLATION

- A. Tags:
1. Install tags with corrosion resistant [chains] [ties].
 2. Identify valves in main and branch piping with tags.
 3. Identify small devices, such as in-line pumps, with tags.
 4. Identify air terminal units and radiator valves with numbered tags.
 5. Tag automatic controls, instruments, and relays. Key to control schematic.

- B. Pipe Markers:
1. Install pipe markers to manufacturer's instructions.
 2. Identify piping, concealed or exposed. Include service, flow direction, and pressure.
 3. [Identify piping 20 mm (3/4 inch) diameter and smaller with tags.]
 4. Provide [plastic] [polyester] [vinyl] self-adhesive pipe markers.

[OR]

5. Provide snap-on type for pipes 150 mm (6") and smaller. Use strap-on type for pipes over 150 mm (6") in size.
6. Provide wrap-around polyester pipe markers for [harsh environments] [outdoor pipes] [pipes carrying chemicals] [as scheduled]. Install wrap-around pipe markers completely around pipe.
7. Install in clear view and align with axis of piping.
8. Install underground pipe markers on pipes 150 to 200 mm (6 to 8 inches) below finished grade, directly above buried pipe.
9. Locate identification at maximum 6 m (20 feet) centers on straight runs including risers and drops, adjacent to each valve and Tee, at each side of penetration of structure or enclosure, and at each obstruction.

3.3 SCHEDULES

Provide a schedule when specific equipment will be identified in varying fashion.

<i>Type</i>	<i>Size</i>	<i>Color</i>	<i>Size</i>	<i>Color</i>

END OF SECTION