

Marking Services Incorporated

MSI MS-995 pipe markers provide an alternative for identifying pipes when standard legends won't work. Our MS-995 pipe markers relate P&ID's to the actual piping configuration within the facility.

- Reduce time spent tracing piping, especially in emergencies
- Teach new personnel plant piping layouts quickly and effectively
- Reduce the possibility for human errors
- Identify processes and improve overall efficiency for maintenance and operations
- Guaranteed for five years, MS-995 Markers eliminate the need for costly re-labeling

MSI offers the flexibility to create identification marking that conveys critical elements of each plant's unique asset information, thereby promoting safer work conditions and minimizing downtime due to errors or accidents. Our identification marking materials are far superior to conventional labeling such as adhesive tapes, paint/ stencil or stamped tags. Our methodology communicates critical information directly from your facility P&ID's at the point at which it is most needed.

MSI standardizes identification labeling, providing a full complement of identification products and turnkey services designed to fulfill all needs for identification in nearly any environment. We help our customers manage their facilities better; achieving long-term cost savings associated with faster, more efficient plant commission and start-ups, improved operator training, and enhanced plant safety for employees. Through our commitment to providing value-added services, high-quality products and on-time delivery, MSI offers you a one-stop, comprehensive source for all your identification needs.

For more information:

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MS-995 Pipe Markers



Marking Services Inc. (MSI) MS-995 pipe markers convey pertinent information taken from client P&ID's to the actual piping within the facility. MS-995 pipe markers are easily customized to client specifications of size, color and appearance. Our pipe markers can include P&ID, line number, drawing number, and/or FROM/TO information extracted from your P&ID's and asset databases; information critical to a reliable plant operation.

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MS-995 Pipe Markers

MS-995 pipe markers are manufactured for extended life in harsh surroundings involving process chemicals, food processing, pharmaceuticals, water treatment, and marine and offshore environments. Our pipe markers last significantly longer than stenciling or self-adhesive labels. MS-995 markers are tested and produced to withstand prolonged exposure to direct sunlight, salt water, harsh process chemicals, acids, caustics and hydrocarbons. This superior durability allows MSI to guarantee the markers for a minimum of five years or we will replace them at no charge.

- Pre-coiled markers install easily by wrapping entirely around the pipe diameter and self-seal with a permanent lock down strip
- Installation can be on either bare or insulated pipe, and requires no surface preparation for attachment since they bond to themselves, not the pipe surface
- Ideal for chemical process plants, pharmaceutical plants, pulp and paper mills and upstream and downstream oil and gas facilities
- Can be removed and reinstalled
- Service temperature range: -40°F to 250°F (-40°C to 121°C)
- Custom pipe markers available to meet plant specific needs for color, pipe diameter and information (including From/To, P&ID numbers, line numbers, pipe contents, flow direction, etc.)

| Style Marker | Pipe Diameter (including insulation) | Marker Width | Character Height | Marker Type |
|--------------|---|--------------|------------------|-------------|
| ТМ | $^{3}/_{8}" - \frac{1}{2}"$ | 3" | 1/4" | Wrap Around |
| A | ⁵ / ₈ " – 1" | 8" | 1/2" | Wrap Around |
| В | 1 ¹ / ₈ " – 2 ¹ / ₂ " | 8" | 3⁄4" | Wrap Around |
| D | 2 ¹ / ₂ " – 4 ³ / ₄ " | 12" | 1 ¼" | Wrap Around |
| E | 5"- 7 ⁷ / ₈ " | 12" | 1 ¼" | Wrap Around |
| J | 8" – 10" | 12" | 1 ¼" | Wrap Around |
| К | 11" – 12" | 12" | 1 ¼" | Wrap Around |
| L | 13" – 15" | 12" | 1 ¼" | Wrap Around |
| N | 16" – 18" | 12" | 1 ¼" | Wrap Around |
| М | 8" and up | 32" | 2 1⁄2" – 3 1⁄2" | Strap-on |

MS-995 High Temperature Stainless Steel Pipe Marker

MS-995 stainless steel pipe markers are for use on piping that has a surface temperature range up to 350°F (177°C).

- Markers consist of MS-995 label applied to a flat stainless steel carrier
- Stand-off brackets hold the printed pipe marker away from the heat of the pipe's surface
- HOT WATER RETURN Special heat reducing spacers prevent the heat from affecting the printed legend
- Pipe markers come complete with two stainless steel brackets, spacers and two stainless steel straps for easy installation
- Available in standard sizes: 2 ³/₄" x 18" (70 mm x 457 mm) or 4 ¹/₄" x 36" (114 mm x 914 mm)

HOT WATER RETURN

MS-995 Strap-on Pipe Markers (Style M)

MS-995 strap-on pipe markers consist of an MS-995 label bonded to a rigid formed plastic carrier for mounting on larger diameter piping. These carriers are heat and pressure-formed with two side legs running the



entire length of the part. This construction ensures marker rigidity and secure attachment when properly installed.

- For piping 8" and larger, the 4 ½" x 33" marker consists of an MS-1000[™] laminated legend label applied to a durable chemical and weather resistant carrier
- Markers are strapped to the pipe surface with stainless steel banding
- Markers include pipe-specific information for process lines, and pipe contents
- Flow direction is indicated by a separate arrow overlay label of the same material, applied to the carrier when the marker is installed
- For pipe surfaces up to 200°F (94°C)
- MS-995 style M strap-on pipe markers meet ASME A13.1-1996 standard

MS-1000[™] proprietary clear top laminate functions as an ultra-violet filter, providing maximum protection against fading due to prolonged exposure to direct sunlight. This also provides excellent resistance to chemicals including hydrocarbons, acids, bases and solvents.

While rigid carrier markers are intended for pipes > 8" (203 mm) diameter, they are also manufactured to fit smaller diameter piping for installation when space limitations due to flanges or equipment preclude the use of wrap around pipe markers.

Standards

MS-995 pipe markers comply with the standards set forth:

- ASME A13.1 "Scheme for the Identification of Piping Systems" standard (styles A through E and M meet ASME A13.1) • ANSI Z 535
- ISO-14726-1 & 2 "Ship and Marine Technology Identification Colors for the Content of Piping Systems" where outer bands (38mm) denote family colors (i.e. blue for fresh water, brown for fuel), and inner/center band (224mm) denotes specific services within the family (i.e. maroon for drill water, grey for distilled water, etc.)
- BS-1710/BS-4800 "Specification for Identification of Pipelines and Services" • NR-26
- IIAR Bulletin #114 (original and revised)
- NOM 062
- AS 1345-1995 "Identification of the contents of pipes, conduits and ducts"

HEATING WATER SUPPLY