Our professional sales staff is experienced in developing specifications and recommending product solutions. We produce a wide variety of products affording our customers many options for meeting their labeling requirements. As an installation contractor we offer professional installation services and a single source of accountability from materials selection through installation. Our customers count on MSI for high-quality products, professional installation services and prompt delivery worldwide.

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Wilmington, Delaware 19810

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sales@markingservices.com.sg

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Fax/817.419.0036
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Fax/951.246.1535

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804.687.9203
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Pipe and Valve Identification
MSI products provide highly visible information that clearly communicates the origin, destination and contents of piping systems, identifies location of valves and equipment and the presence of safety hazards. When properly installed, our products become an integral part of safe and efficient plant operations.

Our objective at Marking Services Incorporated is to raise the level of safety awareness by standardizing hazard identification and piping system layouts to better promote safe work conditions that minimize downtime due to errors or accidents. It’s a comprehensive approach to mechanical identification that we back up with our long-standing commitment to innovative products, quality service and on-time delivery. And it’s why we ask to be your pipe identification specialist.
Our pipe identification labels provide a quick, accurate snapshot of critical information such as pipe content, flow direction, origin and destination. Proper pipe labeling eliminates the need to trace lines and promotes a greater understanding of piping layouts, translating to a quicker commissioning of a new building or facility upgrade. See page 24 for these customized labels.

MSI offers three main choices of pipe marking materials, each designed for use in a specific environment.

**MS-970 Coiled Plastic Markers:**
Recommended for indoor use on dirty, oily or existing piping systems, especially where surface preparation for adhesive markers would require substantial labor costs. Coiled plastic markers are simply wound or snapped into place around piping, allowing for quick application without adhesives.

**MS-900 Self-Adhesive Markers and Tapes:**
Recommended for newly-installed piping in environments that are not exposed to sunlight or harsh environmental conditions. After the backing is removed, these markers simply may be applied directly to the pipe.

**MS-995 Maxilar Markers:**
Recommended for use in applications involving process chemicals, food processing, pharmaceuticals, water treatment facilities, and in marine and offshore environments. These markers are made of a Polyester/Tedlar material that offers proven durability on outdoor piping systems exposed to sunlight, chemicals or other harsh environmental conditions.
Pipe Markers
MS-970

MS-970 Coiled Plastic Markers

For indoor environments where high heat and harsh chemicals are not present.

MS-970 coiled plastic pipe markers are constructed of 20 mil. vinyl, and are designed to identify piping in a wide variety of environments, especially in applications where the pipe surface is rough, oily, wet or rusty. They stay in place on pipes due to the memory of the coiling process, and therefore do not rely on adhesives.

No pipe surface preparation is required for application, so installation time is reduced. These markers wrap completely around the pipe (up to 6” diameter). For pipes with a diameter of 6” or larger, a nylon strap-on version is provided. Flow direction arrows are included on all markers. Legends are sub-surface printed to protect them from environmental deterioration.

Complies with ASME A13.1 “Scheme for the Identification of Piping Systems” with regard to color, letter height and marker size.

Features

- Coiled construction quickly snaps around pipe
- Ideal for rusty, dirty or sweating pipes where adhesive markers cannot be used
- No pipe surface preparation needed
- Self-locking strip keeps marker in place even on vertical pipes
- Plastic nylon straps are included to secure marker in place on larger pipes (6” and larger)
- Can be removed and reused
- No minimum quantity is required on orders
- Service temperature range: -40°F to 160°F
- Flow direction arrows are printed on each marker
- Standard background colors: Yellow, Green, Red, Blue, White, Orange
- Standard copy colors: White, Black

To Order

1) Submit a list of all markers needed. Specify legend and outside pipe diameter (include any insulation).
2) Determine the four-digit part number for each legend (from the list on the following page) along with the marker style letter indicating the pipe size. (Example: The marker “CHILLED WATER” for a 4” outside diameter pipe would have part number 9807-D)
3) Determine the price per marker by adding all stock markers together regardless of size.

Pipe Markers

Diameter includes insulation thickness
**MS-970 Coiled Plastic Markers**

**Legend**

<table>
<thead>
<tr>
<th>Color</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>7/8&quot; – 8&quot;</td>
</tr>
<tr>
<td>Blue</td>
<td>9/16&quot; – 1&quot;</td>
</tr>
<tr>
<td>Red</td>
<td>3/8&quot; – 3/4&quot;</td>
</tr>
<tr>
<td>White</td>
<td>5/16&quot; – 6&quot;</td>
</tr>
</tbody>
</table>

**Pipe Markers Custom MS-970**

**Pipe Diameter**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Marker Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot; – 6&quot;</td>
<td>TM ( \frac{3}{16} ) – 5/8&quot;</td>
</tr>
<tr>
<td>7/8&quot; – 1&quot;</td>
<td>A ( \frac{1}{2} ) – 7/8&quot;</td>
</tr>
<tr>
<td>9/16&quot; – 3/4&quot;</td>
<td>B ( \frac{1}{4} ) – 10&quot;</td>
</tr>
<tr>
<td>5/16&quot; – 3/4&quot;</td>
<td>C over 10&quot;</td>
</tr>
</tbody>
</table>

**To Order**

1. Submit a list of all markers needed. Specify legends, colors, quantities and styles.
2. Custom markers ship in 1-2 days
3. No minimum quantity required

**Customized MS-970 Coiled Plastic Markers**

Let MSI customize your MS-970 markers to your exact needs. It's fast, easy and economical. Most orders ship in 24 to 48 hours.

- No setup charges
- No minimum order quantity
- Include any combination of the following items to make up the marker legend:
  - Pipe contents
  - Origin [from] and Destination [to]
  - Line numbers
  - Equipment numbers
  - Flow direction
- Standard background colors: White, Yellow, Green, Blue, Red, Orange, Purple, Brown and Black
- Standard text colors: Black and White
- Custom colors available

**Pipe with a 6" diameter or larger, use nylon straps to secure the plastic marker around the pipe (straps included)**
<table>
<thead>
<tr>
<th>Legend</th>
<th>Color</th>
<th>Style</th>
<th>Pipe Markers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MS-900 Self-Adhesive Pipe Markers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td><strong>Legend</strong></td>
<td></td>
<td><strong>Color</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yellow</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Green</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blue</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>White</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pipe Markers</strong></td>
<td></td>
<td><strong>Color</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Red</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Green</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yellow</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blue</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>White</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>For line service identification and system color coding</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Complies with the ASME A13.1.1 “Scheme for the Identification of Piping Systems” regarding color, label size and letter size.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Printed on premium-quality, fade-resistant vinyl.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Adheres well to pipe and insulation with only limited surface preparation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Legend markers can be used with arrow tape or separate arrow markers to indicate flow direction (see page 11 for arrow tape).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Fast, 24-hour turnaround on stock and custom legends.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Customized MS-900 Self-Adhesive Pipe Markers

- Fast delivery; usually ships within 24 hours, complete and ready to install
- No set-up charges or minimum quantities requirement
- Colors available: White, Yellow, Green, Blue, Red, Orange, Brown, Black, Grey and Purple

MS-900 Duct Markers

- Highly-visible color-coded labels make it easy to differentiate between different systems
- Individual arrow markers designate direction of flow
- Markers can be customized to designate the specific system or equipment of origin
- Sized to meet ASME-A13.1 Standard

MS-900 Flow Directional Arrow Tape

- Designed to indicate direction of flow when used with MS-900 pipe markers.
- Standard roll sizes are 1”, 2” & 4” wide by 30 yds long. Custom colors are also available. Call for a quote.
- Satisfies ASME A13.1 requirement to show flow direction

Tapes

MS-900 Color Banding Tape

- When Engineering Specifications or customer preference require pipe color coding, use MS-900 Color-Banding Tape.
- For color coding in high sunlight areas request UV-protective over-laminate to triple useful life
- Complies with MIL-SPEC 101B
- Standard sizes: 1” and 2” wide by 50 yds long
- Also available in 3”, 4” and 6” rolls.

TO ORDER
- CUSTOM MS-900 MARKERS: Specify legend wording, style, colors and quantity of markers required. Combine total number of markers for best price.
- MS-900 DUCT MARKERS: Specify the part number and quantity. Combine all legends for best pricing.

TO ORDER
- CUSTOM MS-900 MARKERS: Specify legend wording, style, colors and quantity of markers required. Combine total number of markers for best price.
- MS-900 DUCT MARKERS: Specify the part number and quantity. Combine all legends for best pricing.

 MS-900 Duct Markers
Use to identify the air flow and equipment in a Ductwork System.

- Highly-visible color-coded labels make it easy to differentiate between different systems
- Individual arrow markers designate direction of flow
- Markers can be customized to designate the specific system or equipment of origin
- Sized to meet ASME-A13.1 Standard

MS-900 Flow Directional Arrow Tape
Designed to indicate direction of flow when used with MS-900 pipe markers.

- Standard roll sizes are 1”, 2” & 4” wide by 30 yds long. Custom colors are also available. Call for a quote.
- Satisfies ASME A13.1 requirement to show flow direction

Use the chart below to determine how many rolls of tape are required. It lists the amount of tape bands that can be cut from a roll for various pipe diameters.

<table>
<thead>
<tr>
<th>Product codes for color combinations available</th>
<th>1” x 30yd.</th>
<th>2” x 30yd.</th>
<th>4” x 30yd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>93201</td>
<td>93202</td>
<td>93203</td>
<td>93204</td>
</tr>
</tbody>
</table>

Legend
- Bkgrd Color
- 2½” x 13
- 4” x 24”

<table>
<thead>
<tr>
<th>Legend</th>
<th>Bkgrd Color</th>
<th>2½” x 13</th>
<th>4” x 24”</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXHAUST AIR</td>
<td>Yellow</td>
<td>93235</td>
<td>93336</td>
</tr>
<tr>
<td>INTAKE AIR</td>
<td>Blue</td>
<td>93239</td>
<td>93339</td>
</tr>
<tr>
<td>OUTSIDE AIR</td>
<td>Blue</td>
<td>93239</td>
<td>93339</td>
</tr>
<tr>
<td>RELIEF AIR</td>
<td>Blue</td>
<td>93267</td>
<td>93268</td>
</tr>
<tr>
<td>RETURN AIR</td>
<td>Blue</td>
<td>93262</td>
<td>93262</td>
</tr>
<tr>
<td>RETURN AIR</td>
<td>Green</td>
<td>93430</td>
<td>93430</td>
</tr>
<tr>
<td>SUPPLY AIR</td>
<td>Blue</td>
<td>93263</td>
<td>93263</td>
</tr>
<tr>
<td>SUPPLY AIR</td>
<td>Green</td>
<td>93431</td>
<td>93431</td>
</tr>
<tr>
<td>ARROW</td>
<td>Yellow</td>
<td>93208</td>
<td>93208</td>
</tr>
<tr>
<td>ARROW</td>
<td>Green</td>
<td>93209</td>
<td>93209</td>
</tr>
<tr>
<td>ARROW</td>
<td>Blue</td>
<td>93210</td>
<td>93210</td>
</tr>
<tr>
<td>ARROW</td>
<td>Black</td>
<td>93212</td>
<td>93212</td>
</tr>
</tbody>
</table>
Pipe Markers
MS-900

Legend
Background Color | Letter Color | Part Number
---|---|---
CARBON DIOXIDE | GREY | 66501
CARBON DIOXIDE 50 PSI | GREY | 68502
HELIUM | WHITE | 68503
LAB AIR | YELLOW/WHITE | 68518
LAB VAC | BLACK/WHITE | 68519
MEDICAL AIR | BLACK | 68544
MEDICAL AIR 50 PSI | BLACK | 68552
MEDICAL EVAC | PURPLE | 68510
MEDICAL VACUUM | WHITE | 68506
NITROGEN | WHITE | 68517
NITROGEN 100 PSI | BLACK | 68514
NITROUS OXIDE | BLUE | 68508
NITROUS OXIDE 50 PSI | WHITE | 68538
OXYGEN | GREEN | 68559
OXYGEN 50 PSI | GREEN | 68517
WASD | PURPLE | 66501

Color, legend and flow direction arrows combined on one pressure-sensitive marker.

- Clear shows contents (legend) and flow direction on one pressure-sensitive marker for easy installation.
- Letters are ¼” high.
- Supplied in rolls of 100 labels or individual pieces.
- Markers are 3” x 3” and wrap completely around the pipe.

MS-900 Medical Gas Markers

Manufactured per NFPA-99C; CGA C-8-2002 “Standard Industry Color Coding Recommendations for Medical Gases.”

- Clearly shows contents (legend) and flow direction on one pressure-sensitive marker for easy installation.
- Letters are ¼” high.
- Supplied in rolls of 100 labels or individual pieces.
- Markers are 3” x 3” and wrap completely around the pipe.

TO ORDER
Specify the part number and quantity.
Combine total number of stock markers for best price.
For large quantities, please call for a quotation. For custom markers, specify the legend, color and quantity required.

MS-900 Markers for Tubing & Small-Bore Piping

Identifies tubing or piping less than 1” in diameter.

- Color, legend and flow direction arrows combined on one pressure-sensitive marker.
- Markers are 3” x 3” and wrap completely around the pipe for easy installation. Letters are ¼” high.
- Supplied in individual pieces, or rolls of 100 per roll – order the exact quantity of labels you need.

MS-900 Mini-Markers

Use Style “T” mini-markers for labeling ¼” to ⅝” process lines, tool connections or utility piping.

- Identify the piping carrying chemicals and gases used in the production of semi-conductors and components.
- Easy-to-install, adhesive-backed, permanent markers.
- Custom legends; chemical abbreviations and point of connection labels are available.
- Style T markers are ½” x 2½” (10 labels per sheet)
Pipe Markers

MS-900

Legend | Color | Part Number
--- | --- | ---
ACID | Yellow | 65141
AIR | Blue | 65142
BOILER FEEDWATER | Yellow | 65143
CHILLED WATER | Green | 65144
CHILLED WATER RETURN | Green | 65145
CHILLED WATER SUPPLY | Green | 65146
CITY WATER | Green | 65147
COLD WATER | Green | 65148
COMPRESSED AIR | Blue | 65149
CONDENSATE | Yellow | 65150
CONDENSATE RETURN | Yellow | 65151
CONDENSER WATER | Green | 65152
CONDENSER WATER RETURN | Green | 65153
CONDENSER WATER SUPPLY | Green | 65154
DEIONIZED WATER | Green | 65155
DOMESTIC COLD WATER | Green | 65156
DOMESTIC HOT WATER | Yellow | 65157
DRAIN | Green | 65158
EXHAUST AIR | Yellow | 65159
FIRE PROTECTION WATER | Red | 65160
FUEL OIL | Yellow | 65161
GAS | Yellow | 65162
GLYCOL | Yellow | 65163
HEATING | Yellow | 65164
HEATING RETURN | Yellow | 65165
HEATING SUPPLY | Yellow | 65166
HEATING WATER SUPPLY | Yellow | 65167
HI PRESS CONDENSATE | Yellow | 65168
HI PRESS STEAM | Yellow | 65169
HOT WATER | Yellow | 65170
HOT WATER RETURN | Yellow | 65171
HOT WATER SUPPLY | Yellow | 65172
INAKE AIR | Blue | 65173
LO PRESS CONDENSATE | Yellow | 65174
LO PRESS STEAM | Yellow | 65175
NATURAL GAS | Green | 65176
NITROGEN | Green | 65177
NON POTABLE WATER | Yellow | 65178
OIL | Yellow | 65179
OUTSIDE AIR | Blue | 65180
OXIDYN | Yellow | 65181
POTABLE WATER | Green | 65182
RECIRCULATING HOT WATER | Yellow | 65183
RELIEF AIR | Blue | 65184
RETURN | Yellow | 65185
RETURN AIR | Blue | 65186
ROD DRAIN | Green | 65187
SANITARY DRAIN | Green | 65188
SANITARY SEWER | Green | 65189
SPRINKLER WATER | Red | 65190
STAIN | Yellow | 65191
SUPPLY | Yellow | 65192
SUPPLY | Green | 65193
SUPPLY AIR | Blue | 65194
VACUUM | Yellow | 65195
WASTEWATER | Yellow | 65196
WATER | Green | 65197

MS-900 Economy Pipe Markers

- Each economy MS-900 adhesive marker is supplied in rolls of 50 identical markers and flow directional arrows.
- Markers are 2” x 9” and the directional arrows are 2” x 4½”. Letter/arrow height is 1½”.
- Perforations between markers ensure easy handling and application.
- Use separately or with color banding tape for a complete low-cost marking system.

MS-900 Adhesive Roll Markers

Convenient “one-size-fits-all”. MS-900 roll markers wrap around all diameters of pipe.
- Easy-to-use adhesive markers wrap around any size pipe. Simply peel the liner from the label and adhere the marker around the pipe.
- Rolls are 6½” wide and can be cut to the length needed to fit around the pipe.
- Letters are 1½” in height. Legends and flow arrows are printed every six inches.
- Roll size 6½” x 30’
- Legend is repeated 60 times per roll

Note: This product does not meet ASME A13.1-1996 Standard regarding marker size and letter height.

Note: Longer legends are abbreviated to fit available space. This product does not meet ASME A13.1 Standard regarding marker size and letter height.

Legend | Color | Part Number
--- | --- | ---
ACID | Yellow | 64001
AIR | Blue | 64002
ASBESTOS FREE INSULATION | Blue | 64003
BOILER FEEDWATER | Yellow | 64004
CAUSTIC | Yellow | 64005
CHILLED WATER | Green | 64006
CHILLED WATER RETURN | Green | 64007
CHILLED WATER SUPPLY | Green | 64008
CITY WATER | Green | 64009
COLD WATER | Green | 64010
COMPRESSED AIR | Blue | 64011
CONDENSATE | Yellow | 64012
CONDENSATE RETURN | Yellow | 64013
CONDENSER WATER | Green | 64014
CONDENSER WATER RETURN | Green | 64015
CONDENSER WATER SUPPLY | Green | 64016
COOLING WATER RETURN | Green | 64017
COOLING WATER SUPPLY | Green | 64018
DOMESTIC COLD WATER | Green | 64019
DOMESTIC HOT WATER | Yellow | 64021
DRAIN | Yellow | 64022
DRAIN | Yellow | 64023
FIRE PROTECTION WATER | Red | 64024
FUEL OIL | Yellow | 64025
GLYCOL RETURN | Yellow | 64026
GLYCOL SUPPLY | Yellow | 64027
HEATING RETURN | Yellow | 64028
HEATING SUPPLY | Yellow | 64029
HEATING WATER RETURN | Yellow | 64030
HEATING WATER SUPPLY | Yellow | 64031
HI PRESS CONDENSATE | Yellow | 64032
HI PRESS STEAM | Yellow | 64033
HOT WATER | Yellow | 64034
HOT WATER RETURN | Yellow | 64035
HOT WATER SUPPLY | Yellow | 64036
LO PRESS CONDENSATE | Yellow | 64037
LO PRESS STEAM | Yellow | 64038
MEDIUM PRESS STEAM | Yellow | 64039
NATURAL GAS | Yellow | 64040
NITROGEN | Green | 64041
NON POTABLE WATER | Yellow | 64042
OIL | Yellow | 64043
OXIDYN | Yellow | 64044
POTABLE WATER | Green | 64045
RETURN | Yellow | 64046
RETURN | Green | 64047
ROOF DRAIN | Green | 64048
SANITARY DRAIN | Green | 64049
SANITARY SEWER | Green | 64050
SPRINKLER WATER | Red | 64051
STEAM | Yellow | 64052
SUPPLY | Yellow | 64053
SUPPLY | Green | 64054
VACUUM | Yellow | 64055
VENT | Yellow | 64056
WASTEWATER | Yellow | 64057
WATER | Green | 64058
**Pipe Markers**

**Fire Protection & Fire Sprinkler ID**

**MS-970 Coiled Plastic Markers**

For indoor environments WITHOUT high heat & harsh chemicals.

- Complies with ASME A13.1 “Scheme for the Identification of Piping Systems”
- Coiled plastic pipe markers are available in six sizes to fit pipe with overall outside diameters of \( \frac{1}{2} \)" through \( 5\frac{7}{8} \)" [including insulation thickness]

For pipe \( 6" \) in diameter and larger, use nylon straps to secure the plastic marker around the pipe (straps included).

**MS-900 Self-Adhesive Pipe Markers and Fire Damper Markers**

Use MS-900 labels to identify the Fire Protection Piping and Fire Damper Access Doors

- Self-adhesive labels simply adhere to access doors and piping
- Markers can be customized to designate the specific system or zone
- Sizes and colors meet the ASME-A13.1 Standard

**Valve Tag Identification**

MSI’s valve tags are made of laser-etched red anodized aluminum, rigid engraved plastic or 19-gauge brass tags as noted in 3-8.3 of NFPA Standard #13 for valve identification. The tags can be secured with various fasteners (see page 35 for fasteners).

**Engraved Plastic Tags & Access Door Signs**

- Engraving provides high contrast between letter color and background color for easy visibility
- Standard tags are engraved on 1/16” plastic stock with mounting holes or adhesive backing
- Colors: red with white letters; white with black or red letters
- Larger sizes are available; call for a quote

**MS-900 Self-Adhesive Fire Riser and Sprinkler Labels**

- Identify each riser to isolate it for testing/maintenance
- Install labels at manifolds and major changes in direction
- Highly-visible white on red printing provides quick identification for fire departments or in-house personnel
- Mark branch lines from control valve to isolate branch and eliminate the need to shut down the entire main header

**Pipe Markers**

**Fire Protection & Fire Sprinkler ID**

**TO ORDER** Specify the part number and quantity. Combine total number of stock rolls for best price. For custom labels/tags specify the legend, color and quantity of rolls needed.
**Underground Warning Tape**

**Stock legend**

<table>
<thead>
<tr>
<th>Legend</th>
<th>Color text/ background</th>
<th>part # 3&quot;</th>
<th>part # 6&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAUTION BURIED ELECTRIC LINE BELOW</td>
<td>Black/Red</td>
<td>52207</td>
<td>52214</td>
</tr>
<tr>
<td>CAUTION BURIED FUEL LINE BELOW</td>
<td>Black/Yellow</td>
<td>52202</td>
<td>52203</td>
</tr>
<tr>
<td>CAUTION BURIED NATURAL GAS LINE BELOW</td>
<td>Black/Yellow</td>
<td>52200</td>
<td>52201</td>
</tr>
<tr>
<td>CAUTION BURIED PIPE LINE BELOW</td>
<td>Black /Green</td>
<td>52205</td>
<td>52212</td>
</tr>
<tr>
<td>CAUTION BURIED SEVER LINE BELOW</td>
<td>Black/Yellow</td>
<td>52207</td>
<td>52213</td>
</tr>
<tr>
<td>CAUTION BURIED STEAM LINE BELOW</td>
<td>Black/Yellow</td>
<td>52200</td>
<td>52204</td>
</tr>
<tr>
<td>CAUTION BURIED WATER LINE BELOW</td>
<td>Black/Blue</td>
<td>52206</td>
<td>52208</td>
</tr>
<tr>
<td>CAUTION CAUTION CAUTION</td>
<td>Black/Yellow</td>
<td>52216</td>
<td>NA</td>
</tr>
</tbody>
</table>

**Pre-cut Oilboard Stencils and Reusable Plastic Stencils**

- Available in several different sizes with larger stencils available upon request
- Reusable stencils are cut from 0.020" plastic and can be reused for multiple projects.

**Legend**

<table>
<thead>
<tr>
<th>Legend</th>
<th>Color of background</th>
<th>2 ½&quot; x 13&quot;</th>
<th>4&quot; x 24&quot;</th>
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<td>Metallic Grey</td>
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<td>$33003</td>
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<td>Metallic Grey</td>
<td>$2062</td>
<td>$33002</td>
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<tr>
<td>OUTSIDE AIR</td>
<td>Metallic Grey</td>
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<tr>
<td>RETURN AIR</td>
<td>Metallic Grey</td>
<td>$2065</td>
<td>$33005</td>
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<tr>
<td>SUPPLY AIR</td>
<td>Metallic Grey</td>
<td>$2066</td>
<td>$33006</td>
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<tr>
<td>ARROW</td>
<td>Metallic Grey</td>
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**Detectable Underground Warning Tape**

**Stock legend**

<table>
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<th>part # 6&quot;</th>
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<td>Black/Red</td>
<td>52215</td>
<td>52220</td>
</tr>
<tr>
<td>CAUTION BURIED GAS LINE BELOW</td>
<td>Black/Yellow</td>
<td>52216</td>
<td>52217</td>
</tr>
<tr>
<td>CAUTION BURIED OXYGEN LINE BELOW</td>
<td>Black/Green</td>
<td>52226</td>
<td>52227</td>
</tr>
<tr>
<td>CAUTION BURIED PIPE LINE BELOW</td>
<td>Black/Yellow</td>
<td>52217</td>
<td>52222</td>
</tr>
<tr>
<td>CAUTION BURIED SEVER LINE BELOW</td>
<td>Black/Green</td>
<td>52218</td>
<td>52223</td>
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<tr>
<td>CAUTION BURIED WATER LINE BELOW</td>
<td>Black/Blue</td>
<td>52219</td>
<td>52224</td>
</tr>
</tbody>
</table>

**Detectable Underground Warning Tape**

- Located buried non-metallic pipes before you dig.
- Printed, 4.5 mil foil tape allows any standard metal detector to quickly locate underground services.
- Available in: 3" or 6" x 1000 ft. rolls.
- Recommended burial depths: 3" tape = less than 24" deep; 6" = more than 24" deep.
- Custom legends available. Call for a quote.

**Equipment Locator Tacks**

- Ideal for marking the location of valves, dampers, booster coils and controllers above acoustical ceiling tiles.
- Simply push tack into ceiling tile or insulation near closest access point.
- ⅛" diameter heads can be written on with marking pen.
- Available in orange, red, white, yellow, black, green and light blue.

**12 oz. Spray Stencil Ink**

- Permanent, quick-drying, weather-resistant ink.
- Provides high-contrast marking on pipes and insulation.
- Colors: Black, White, Blue, Red, Yellow and Green.

**Plenum-Rated Duct Markers**

- Metallized self-adhesive labels tested to meet the requirements of E-84-03 "Standard Test Method" for surface burning characteristics of building materials.
- Available with black text on metallic grey background.
- Designed for use in plenums to help prevent the spread of smoke and gases in the event of a fire.

**To Order**

Specify part number and quantity. Combine all for best price.
Cable & Conduit Identification

Maxilar Markers

MS-995 Designed for use in the process chemical industry and for outdoor applications. Five year guarantee is our promise that MS-995 markers will stand up to high heat, harsh chemicals and direct exposure to sunlight.

High-Performance Stainless Steel Cable Markers

- Use laser etched #316 stainless steel strap-on cable markers for marine, chemical or high heat environments.
- Text is permanently etched into stainless steel
- Tags are strapped to cable using plastic or stainless steel cable ties

MS-900 Electrical System ID

- Designed for labeling conduit, panel boxes, circuit breakers, cable trays and connections to equipment.
- Black text on orange labels provide a highly-visible warning of potential electrical hazards
- Premium MS-900 material insures long-lasting durability

MS-970 Coiled Conduit & Cable ID

- Designed to eliminate confusion of tightly packed conduit and cable.
- Markers quickly snap around conduit or cable, clearly identifying voltages or functions
- To indicate diameter of cable or conduit insert Style letter after four digit part number

MS-900 Conduit & MS-970 Coiled Conduit

(orange background only)

<table>
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<tr>
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<th>MS-900 Part Numbers</th>
<th>MS-970 Part Numbers</th>
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<tr>
<td>½” x 2½”</td>
<td>70001</td>
<td>70001</td>
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<tr>
<td>1” x 8”</td>
<td>70002</td>
<td>71002</td>
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<tr>
<td>2” x 9”</td>
<td>70003</td>
<td>72003</td>
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<tr>
<td>110 VOLTS</td>
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<td>115 VOLTS</td>
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<td>120 VOLTS</td>
<td>70003</td>
<td>72003</td>
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<td>120/208 VOLTS</td>
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<td>73004</td>
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<td>208 VOLTS</td>
<td>70005</td>
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<td>220 VOLTS</td>
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<td>230 VOLTS</td>
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<td>240 VOLTS</td>
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<td>70010</td>
<td>79010</td>
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<td>277/480 VOLTS</td>
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<td>79011</td>
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<td>440 VOLTS</td>
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<td>480 VOLTS</td>
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<td>CONTROL</td>
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<td>DATA</td>
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<td>Fiber Optic Cable</td>
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<td>Fire Alarm</td>
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<td>Single Phase</td>
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<td>Telephone</td>
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<tr>
<td>Three Phase</td>
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</tr>
</tbody>
</table>

TO ORDER

MS-900 - Select part number from chart above.
MS-970 - Select part number, but add letter from chart at right that corresponds to pipe diameter.

TEDLAR is a trademark of DuPont Corporation
Pipe Markers MS-995

TO ORDER Complete the four digit part number for each legend using the letter indicating the pipe size.

Example: BOILER FEED WATER for a 6” outside diameter pipe would have the part number 9941-E.
Combine total quantity of stock markers for best price.

MS -995 Maxilair Markers
Designed for the process chemical industry and outdoor environments.

Styles Available
Coiled polyester/TEDLAR pipe markers are available in ten standard sizes to fit pipes with overall pipe diameter of 1/8” through 18” [including insulation thickness]. MS-995 Markers are designed to meet ASME A13.1-1996 “Scheme for the Identification of Piping Systems” except styles J,K,L & N, which do not meet the ASME A13.1,1996 standard regarding marker size and letter height. Note: Coiled, wrap-around markers can be custom made for any diameter pipe. Call for a quote.

Style M:
For piping 8” and larger, the 4½” x 33” marker consists of a TEDLAR laminated legend label applied to the marker size and letter height.

See the Stainless Steel Straps and Locking Tools on page 25

Legend
Color
Part#  
ACID
Yellow 9920-

Alum
Yellow 1006-

Amine
Yellow 1004-

Ammonia
Yellow 1005-

Biocide
Yellow 1008-

Black Dye
Yellow 1009-

Bolier Blowdown
Yellow 1011-

Bolier Drain
Yellow 1012-

Bolier Feedwater
Yellow 9941-

Breaching Air
Blue 1102-

Broke
Yellow 9905-

Brown Stock
Yellow 9930-

Butadiene
Yellow 1014-

Butane
Yellow 1013-

Buteine
Yellow 1055-

Calcium Carbonate
Yellow 9942-

Catalyst
Yellow 1015-

Caustic
Yellow 9907-

Cathode Soda
Yellow 9943-

Chilled Water Return
Green 1016-

Chilled Water Supply
Green 1017-

Chlorine
Yellow 9930-

Chlorine Dioxide
Yellow 9939-

CIP Return
Yellow 1142-

CIP Supply
Yellow 1143-

City Water
Green 1140-

Clarified White Liquor
Yellow 1018-

Clean Condensate
Yellow 1019-

Cloudy White Water
Yellow 1020-

Coated Broke
Yellow 1031-

Coating Slurry
Yellow 1056-

Cold Water
Green 1141-

Compressed Air
Blue 1022-

Compressed Air
Yellow 1017-

Condenstate
Yellow 9944-

Condenser Water Return
Green 1033-

Condenser Water Supply
Green 9945-

Cooling Water
Green 1025-

Cooling Water Return
Green 1106-

Contaminated Condensate
Yellow 1028-

Crude Oil
Yellow 1026-

deoxaner
Yellow 9931-

demeralized Water
Green 1027-

dilution Water
Yellow 9946-

DRAIN
Yellow 1029-

Drinking Water
Green 1030-

Effluent
Yellow 1031-

Ethylene
Yellow 1032-

Ethylene Glycol
Yellow 1109-

Feedstock
Yellow 1033-

FILTERED WATER
Green 9914-

FILTERATE
Yellow 9915-

FIRE PROTECTION Water
Red 1024-

Flare
Yellow 1035-

Floor Drain
Yellow 1036-

Flush Water
Yellow 1061-

Legend
Color
Part#  
FOUL CONDENSATE
Yellow 9949-

FRESH WATER
Green 1027-

FUEL GAS
Yellow 1038-

#2 FUEL OIL
Yellow 1039-

#6 FUEL OIL
Yellow 1040-

GAS
Green 1128-

Glycol
Yellow 1042-

Glycol Return
Yellow 1111-

Glycol Supply
Yellow 1122-

Green LIQUOR
Yellow 9915-

GROUNDDWOD
Green 1041-

Hardwood Stock
Yellow 8916-

Heating Water Return
Yellow 1145-

Heating Water Supply
Yellow 1146-

Heavy Black Liquid
Yellow 1147-

Hexane
Yellow 1043-

HI PRESS CONDENSATE
Yellow 9947-

HI PRESS GAS
Yellow 9847-

HI PRESS WATER
Yellow 1045-

HI PRESS STEAM
Yellow 1114-

HOT GAS
Yellow 1115-

HOT WATER RETURN
Yellow 1116-

HOT WATER SUPPLY
Yellow 1117-

HYDRAULIC OIL
Yellow 9917-

HYDROCHLORIC ACID
Yellow 1048-

HYDROGEN
Yellow 1049-

HYDROGEN PEROXIDE
Yellow 1048-

HYDROGEN SULFIDE
Yellow 1049-

INERT GAS
Yellow 9916-

INSTRUMENT AIR
Blue 9916-

INSTRUMENT NITROGEN
Blue 1118-

ISO BUTANE
Yellow 1032-

ISO BUTYlene
Yellow 1052-

KIRESHONE
Yellow 1063-

LO PRESS CONDENSATE
Yellow 1022-

LO PRESS STEAM
Yellow 1120-

LUBE OIL
Yellow 9823-

LUBE OIL RETURN
Yellow 1148-

LUBE OIL SUPPLY
Yellow 1146-

MAKEUP WATER
Green 1053-

MEDIUM PRESS CONDENSATE
Yellow 9946-

MEDIUM PRESS STEAM
Yellow 1156-

METHANOL
Yellow 9932-

MILL AIR
Blue 9923-

MILL WATER
Green 9823-

MTBE
Yellow 9934-

NATURAL GAS
Yellow 9923-

NITROGEN
Blue 9944-

NON CONDENSABLE GAS
Yellow 9933-

NON POTABLE WATER
Yellow 1068-

NORMAL BUTANE
Yellow 1067-

OFF GAS
Yellow 1068-

OVERFLOW
Yellow 9945-

OXYGEN
Green 1074-

PLANT AIR
Blue 9824-

PLANT WATER
Yellow 9940-

PLANT DYE
Yellow 1020-

Legend
Color
Part#  
POTABLE WATER
Green 9938-

PROCESS WATER
Green 1069-

PROCESS WATER RETURN
Green 1146-

PROCESS WATER SUPPLY
Yellow 9956-

PROPANE
Yellow 9931-

PULP
Yellow 9932-

GURMUCH WATER
Yellow 1128-

RAFFINATE
Yellow 1070-

RAW WATER
Yellow 8916-

RED DYE
Yellow 9922-

REJECTS
Yellow 9927-

RELIEF
Yellow 9933-

RETENTION AID
Yellow 9976-

ROOF DRAIN
Green 9937-

SALTICKE
Yellow 9976-

SANITARY DRAIN
Yellow 1120-

SANITARY SEWER
Yellow 9928-

SEAL WATER
Yellow 9939-

SHOWER WATER
Yellow 9873-

SIZE
Yellow 9928-

SOAP
Yellow 9939-

SODA ASH
Yellow 9950-

SODIUM CHLORINATE
Yellow 9954-

SODIUM HYDROXIDE
Yellow 9955-

SOFT WATER
Yellow 9975-

SOFTWOOD STOCK
Yellow 9929-

STARCH
Yellow 9981-

STEAM
Yellow 9983-

STEAM RETURN
Yellow 9986-

STeam SUPPLY
Yellow 9930-

STOCK
Green 9930-

STORM DRAIN
Green 1152-

STORM SEWER
Green 1154-

STORM WATER
Green 1071-

STRONG BLACK LIQUOR
Yellow 9959-

SULFUR ACID
Yellow 1049-

SULFURIC ACID
Yellow 1049-

TALL OIL
Yellow 9933-

TITANIUM DIOXIDE
Yellow 9939-

TOWER WATER RETURN
Yellow 9927-

TOWER WATER SUPPLY
Yellow 9958-

TREATED WATER
Yellow 9959-

TURPENTINE
Yellow 1011-

UNLEANED STOCK
Yellow 9963-

UTILITY WATER
Yellow 1062-

VACCUM
Yellow 9933-

VENT
Yellow 9934-

WASTE OIL
Yellow 1022-

WASTE WATER
Yellow 1002-

WATER
Green 1159-

WEAR BLACK LIQUOR
Yellow 9927-

WEAK WASH
Yellow 9961-

WELL WATER
Green 1155-

WHITE LIQUOR
Yellow 9823-

WHITE WATER
Yellow 9940-

YELLOW DYE
Yellow 1020-

Pipe Diameter  Marking Style  Marking Width  Character Height  Marker Type
1/8” – 1/4” TM 3” 1/4” Wrap Around
1/4” - 1” A 8” 1/4” Wrap Around
1 1/16” – 1/2” B 8” 1/4” Wrap Around
1/2” – 2” C 12” 1/4” Wrap Around
2” – 2 1/2” D 12” 1/4” Wrap Around
2 1/2” – 3” E 12” 1/4” Wrap Around
8” – 10” J 12” 1/4” Wrap Around
11” – 12” K 12” 1/4” Wrap Around
13” – 15” L 12” 1/4” Wrap Around
16” – 18” N 12” 1/4” Wrap Around
18” and up M 32” 2 1/2” – 3” Strap-on
Pipe Markers

Custom MS-995

To Order Custom MS-995 Markers
Fax or e-mail a list of all markers needed.
Include marker style, color, and legend information.
Determine the price per marker by referring to the "Custom Pricing Per Marker" table. Combine total quantity of markers for best price.

MS-995 Markers
Coiled polyester pipe markers are available in ten standard sizes to fit pipes with overall outside diameters of 3/8" through 18" [including insulation thickness].

NOTE: Coiled wrap around markers can be made for any diameter of pipe. Specify pipe diameter when ordering.

Marker Style | Pipe Diameter | Markers Style | Pipe Diameter
---|---|---|---
A | 15/32" - 1" | K | 11/8" - 12"
B | 5/16" - 25/32" | L | 13/16" - 15"
C | 3/8" - 45/64" | M | 16 1/8" - 18"
E | 5/8" - 7/8" | N | 8" and up


STYLE M: For piping 8" and larger, the 45/64" x 33" marker consists of legend label applied to a durable high-density polyethylene carrier. Markers are strapped onto the pipe using stainless steel straps. Meets ASME A13.1-1996.

Customized MS-995
Maxilar Markers
Designed for the process chemical industry to relate P&IDs to the actual piping configuration through the use of specialized markers and tags.

- Reduce time spent to trace piping, especially in emergencies
- Familiarize new personnel with plant piping layouts quickly
- Significantly reduces the possibility of human errors
- Identify processes and improve overall efficiency for maintenance and operations
- Guaranteed for five years; Maxilar Markers eliminate the need for costly relabeling

Choose the options that best suit your needs—include the following:
- Pipe Contents
- Lines Origins [From] and Destination [To]
- P&ID Drawing Numbers

MS-995 High-Temperatures
Stainless Steel Pipe Marker
Use stainless steel markers on piping that has a surface temperature range from 250°F to 350°F.

- Markers consist of a MS-995 label applied to a flat stainless steel carrier
- Stand-off brackets hold the printed marker away from the heat of the pipe’s surface
- Special heat-reducing spacers prevent the heat from affecting the printed legend
- Markers come complete with 2 stainless steel brackets, spacers and 2 stainless steel straps for easy installation

Pre-cut Stainless Steel Straps
Easy to install, cut-to-length stainless steel straps for use with Style M markers. Durable 1/8" wide stainless steel straps come with attached locking head. Use with Locking Tool #15715. No clips required

Coil of Strapping
200' coil of 1/8" stainless steel. Used for attaching Style M pipe markers. Used with locking clip (part #15735) and fastening tool (#15740)

MS-995 High-Temperature Stainless Steel Banding Tools and Mounting Brackets

Locking Tool for 35" – 60" Strap
This pocket-size tool punches a dimple and a fold into the strap, forming a permanent lock. Fast and easy to use.

Locking Clips for Strap
Stainless steel clips designed to be used with continuous-length strapping. Clips packaged 100 per bag.

Locking Tool for Coil Strap
This tool is used to attach a coil strap, cut to size, from 200’ coil. The tool easily tightens the strap forming a permanent lock.

Stainless Steel Mounting Brackets
Used to mount signs or pipe markers onto piping or tanks. Bolt and hardware included. Use stainless steel straps to affix. Use heat-reducing spacers if surface is at or above 250°F.
TO ORDER STOCK ITEMS---Complete the four-digit part number for each legend followed by style letters indicating pipe size. Example: The part number of a marker "HIGH PRESSURE LIQUID" for a 4" outside diameter pipe would be "3005–ABL".

MS-900 Self-Adhesive Ammonia Refrigeration Pipe Markers

Indoor application that is ideal for cold-storage areas where pipe surface temperature is above 35°F.

- Adheres well to pipe and insulation with limited surface preparation
- Fast turn-around time with off-the-shelf delivery on standard legends
- Convenient scored arrow eliminates the need to determine flow direction at time of order

Also available in Spanish or French. Custom legends are available at no extra charge. Ask for TEDLAR over-laminate for markers that need protection from UV fading and chemicals commonly used in process washdowns. Please call for a quote.

Component Markers

- Complete the Ammonia identification package by labeling the process equipment. MS-900 self-adhesive markers meet the IIA Bulletin #114 requiring 21⁄2" letter heights.
- Custom sizes, legends and pressure designations available.

MS-995 MAXILAR Polyester/TEDLAR Pipe Markers

Maximum-performance markers stand up to high heat, harsh chemicals and direct exposure to sunlight.

- Polyester/TEDLAR construction provides proven protection from the effects of direct sunlight
- Sub-surface printing and TEDLAR lamination protects graphics from damaging chemicals used in process washdowns
- Service temperature range from -40°F to 250°F
- Eliminates need for pipe surface preparation
- Markers can be removed for re-insulation or re-painting
- Precoiled markers install easily by wrapping completely around pipe and affixing to themselves (not the pipe surface) with a TEDLAR sealing strip.

Styles AB, AD, & AE MS-995 MAXILAR coiled markers are for outdoor piping and for existing facilities where the surface temperature of the pipe is between -40°F and 250°F

- The 21⁄2" x 18" style AMF and 41⁄2" x 33" style AM markers consist of a legend label applied to a durable high-density polyethylene carrier. Markers are strapped to larger diameter pipes using stainless steel straps. They are designed for easy installation and high visibility on rooftop or elevated piping.
- For pipe surface temperature 250°F - 350°F use stainless steel markers on page 24

Standard IIAAR Abbreviations

<table>
<thead>
<tr>
<th>Part #</th>
<th>Legend</th>
<th>Abbv</th>
<th>State</th>
<th>Press</th>
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<tbody>
<tr>
<td>3014</td>
<td>RELIEF VENT</td>
<td>RV</td>
<td>VAP</td>
<td>LOW</td>
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<td>RELIEF VENT</td>
<td>RV</td>
<td>VAP</td>
<td>HIGH</td>
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<td>RV</td>
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<td>HIGH</td>
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<td>TSR</td>
<td>LID/VAP</td>
<td>HIGH</td>
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<td>3009</td>
<td>THERMOSYPHON SUPPLY</td>
<td>TSS</td>
<td>LID</td>
<td>HIGH</td>
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</table>

MS-995 MAXILAR Polyester/TEDLAR Pipe Markers

Maximum-performance markers stand up to high heat, harsh chemicals and direct exposure to sunlight.

- Polyester/TEDLAR construction provides proven protection from the effects of direct sunlight
- Sub-surface printing and TEDLAR lamination protects graphics from damaging chemicals used in process washdowns
- Service temperature range from -40°F to 250°F
- Eliminates need for pipe surface preparation
- Markers can be removed for re-insulation or re-painting
- Precoiled markers install easily by wrapping completely around pipe and affixing to themselves (not the pipe surface) with a TEDLAR sealing strip.

Styles AB, AD, & AE MS-995 MAXILAR coiled markers are for outdoor piping and for existing facilities where the surface temperature of the pipe is between -40°F and 250°F

- The 21⁄2" x 18" style AMF and 41⁄2" x 33" style AM markers consist of a legend label applied to a durable high-density polyethylene carrier. Markers are strapped to larger diameter pipes using stainless steel straps. They are designed for easy installation and high visibility on rooftop or elevated piping.
- For pipe surface temperature 250°F - 350°F use stainless steel markers on page 24
Ammonia Refrigeration Identification

Ammonia Refrigeration Marker Layout
Each marker has five information parts
1. Ammonia piping abbreviation section
2. Physical State: LIq [Orange] and/or VAP [Blue]
3. Ammonia: black letters on yellow background
4. Pressure Level: LOW [70 PSIG or less] = Green
   HIGH [greater than 70 PSIG] = Red
5. Directional arrow [printed on marker] - scored

Laser Etched Stainless Steel Equipment Tags
For use in: Food Processing Plants, Oil and Gas Facilities, Power Generating Stations and Marine and Offshore.
- #316 Stainless Steel
- Standard tags have round corners and mounting holes for ease of installation
- Black text is laser-etched for visibility and durability

IDEAL FOR:
- Equipment subject to frequent washdowns or chemical cleanings
- Nameplates on machinery that continually run at high temperatures
- Valve or instrument identification in highly-corrosive or caustic environments
- Bar-coded asset tags

SECTION 1 - ISAR Approved Abbreviations

Legend
Abbv
Condenser Drain
CD
Defrost Condensate
DC
Hot Gas Defrost
HGD
High Pressure Liquid
HPL
Highstage Discharge
HSD
High Stage Suction
HSS
High Temp Recirculated Liquid
HTRL
High Temp Recirculated Suction
HTRS
Low Temp Recirculated Liquid
LTRL
Low Temp Recirculated Suction
LTRS
Relief Vent
RV
Thermosyphon Return
TSR
Thermosyphon Supply
TSS

SECTION 2 - Physical State Abbreviation

Liquid LIq
High HIGH

SECTION 3 - Ammonia

SECTION 4 - Pressure level abbreviation

Low [70 PSIG or under] LOW
Vapor [over 70 PSIG] VAP

SECTION 5 - Flow Direction Arrow

Left Pointing Arrow SCORED
Right Pointing Arrow SCORED

MS-215 Max-Tek™ Valve Tags
The highest-quality tags available for marking valves, instrumentation and equipment.
- Rigid, high-performance 125 mil. tags protect the graphics between two layers of chemically-resistant plastic
- Complete printing flexibility – each tag can include multiple lines of text, equipment number, operation and maintenance instructions, safety precautions, or other critical information.
- Service temperature range: -40º F to 200º F
- Background colors: Yellow, Green, Red, Blue, White, Black, Orange
- Legend colors are available in either Black or White
- Each tag comes with stainless steel grommets
- Custom colors are available
- Available in a 30 mil. flexible version for mounting on curved surfaces
- 5-year outdoor life

TO ORDER Specify tag wording, size, color and quantity of each tag. If this information is available electronically simply email us the file.
**Photoluminescent [glow-in-the-dark] MS-215 Max-Tek™ Tags**

Used to label valves or equipment that would be hard to find or identify in the event of power failure.

- Low light location tags are constructed of the same durable materials as our other MAX-TEK tags and the printed background glows for up to six hours in darkness.
- Tags can be mounted using heavy duty adhesive (page 40) or hung with stainless steel fasteners (page 35).

**MS-215 Max-Tek™ Ammonia Identification Signs**

Specifically designed to provide a clear hazard warning for employees in food processing plants, mills and cold-storage facilities.

- Follows the NFPA system to denote the severity of hazard with regard to flammability, reactivity, health and specific chemical characteristics.
- Includes information about physical and health hazards, as well as proper safety and first aid procedures [in accordance with OSHA 29 CFR1910.1200].
- Wall chart sign provides a detailed explanation of ammonia marker layout and abbreviations helpful in training new personnel.
- Colors: Red, Blue, Yellow and Black on a White background.

<table>
<thead>
<tr>
<th>Wall Chart Sign</th>
<th>Part #</th>
<th>Wall Chart Sign</th>
<th>Part #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia Tank &amp; Vessel Sign</td>
<td>65547</td>
<td>Ammonia Refrigeration Identification Signs</td>
<td>65521</td>
</tr>
</tbody>
</table>

**MS-215 Max-Tek™ PSM Approved Contractor Informational Signs**

- Control box for fire departments
- Authorized installation and repair contractors
- King valve locations
- Safety warnings
- System charges
- Use a permanent marker to write in lubricant and inventory information; text is easily removed with isopropyl alcohol when lubricant and/or inventory information changes.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>INVENTORY</th>
<th>QUALITY</th>
</tr>
</thead>
</table>

---

**MS-215 Max-Tek™ Ammonia System Flow Diagrams**

Display ammonia system diagrams in each engine room or in process areas near equipment.

- Signs are an excellent training aid
- Available in 3 sizes
**Tags**

**Engraved Plastic Equipment Tags & Signs**
Bright, durable tags for labeling pumps, fans, air handling units and other equipment.

- Engraving provides high contrast between letter color and background color for easy visibility
- Excellent for in-house maintenance programs; use to verify machinery numbers shown on work orders, reducing costly errors and accidental shutdowns
- Ideal for providing building graphics and door signs
- For indoor applications (for outdoor applications see pages 32 and 40-45, MS-215 Max-Tek™ Tags & Signs)
- Standard tags are engraved on 1/16” plastic stock with mounting holes or adhesive backing [1/8” thick, 3 ply, or phenolic material is also available]
- Colors available: Black, Green, Red, and Blue with White letters; Yellow, Orange and White with Black letters
- Custom colors available; Yellow with Green letters

**TO ORDER**
TAGS & SIGNS - Specify quantity of each tag or sign. Determine legend, letter height, size, colors, whether you need adhesive backing or drilled mounting holes. For quicker delivery e-mail us your list.

**Engraved Plastic Valve & Instrument Tags**
For color-coding valves or instrumentation.

- Excellent visibility
- Standard tags are engraved on 1/8” plastic
- Colors available: Black, Green, Red, and Blue with White letters; Yellow and White with Black letters
- Standard sizes: 1½”, 2”, 3”, and 4” round, square or triangle shapes

**MS–215 Max-Tek™ Tags**
Constructed of printed legends sealed between two layers of chemically-resistant plastic. This sealed construction offers excellent resistance to chemicals, abrasion and the fading effects of the sun. Tags are available in two thicknesses: MS–215 R [125 mil] for rigid requirements and MS-215 F [30 mil] flexible. For mounting signs on curved surfaces, we recommend the flexible construction. Use construction adhesive for secure installation (see page 40).

- Highest quality tag available
- For marking valves, instrumentation and equipment
- High-performance tags protect graphics from environmental conditions both indoor and outdoor
- Complete printing flexibility – each unique tag can include multiple lines of text, equipment number, operation and maintenance instructions, safety precautions, or other critical information
- Background colors: Yellow, Green, Red, Blue, White, Black or Orange
- Legend Colors: Black or White
- Each rigid tag comes with stainless steel grommets (as required)
- Also available: custom colors and sizes, double sided tags, bar-coding, photoluminescent material, and reflective material

**TO ORDER**
MAX-TEK TAGS OR SIGNS - Specify tag or sign wording, size, color, rigid or flexible, and quantity of each tag. If this information is available electronically, simply e-mail us the file.

<table>
<thead>
<tr>
<th>Material: MS-215 Tags</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Temperature Range:</td>
</tr>
<tr>
<td>Water Resistance</td>
</tr>
<tr>
<td>Outdoor Durability</td>
</tr>
<tr>
<td>UV-Resistance</td>
</tr>
<tr>
<td>Abrasion Resistance</td>
</tr>
</tbody>
</table>

Chemically-resistant to strong acids and bases
Brass Valve Tags
- 19-gauge brass tags are available from stock in 1½" and 2" diameters and 1½" and 2" squares
- Each tag is stamped and black-filled with ¼" service indicator on the top line and ½" numbers below
- Number sequences from 001 thru 999 for all legends are available as stock
- Packaged in sets of 25 consecutive numbers
- Tags can be customized (please call for a quote)

Valve Tag Fasteners & Accessories

1) Jack Chain
- Durable chain for fastening valve tags
- Packed 50 feet / box to hang approximately 60 tags

2) Bead Chain
- Flexible chain in 4½" lengths including locking link
- 100 lengths per bag

3) "S" Hooks
- Sturdy easy-to-close hooks for attaching valve tags
- 100 hooks per bag
- 1¼" Brass or 1" Stainless Steel

4) Lead Meter Seals
- Fast, permanent way to attach valve tags
- Supplied in 10" lengths
- 100 lengths per pack

5) Zinc Snap Hooks
- Easy open/close snap hooks for valve tags
- 100 2½" hooks per box

6) 8" Nylon Tag Ties
- Simple, quick way to attach valve tags
- 100 ties per bag

7) Valve Chart Frame
- Aluminum frame holds 8½" x 11" valve chart
- Plastic lens included; glass lens available
- Durable and easy to install

8) Sealing Press
- Tool for sealing lead meter seals

9) Stainless Steel Swage Sleeves
- 100 per bag • Type 316 stainless

10) Stainless Steel Braided Wire
- 100' roll • Type 316 stainless
**Laser-Etched Stainless Steel Equipment Tags**

For use in: Food Processing Plants, Oil and Gas Facilities, Power Generating Stations and Marine and Offshore.

- #316 Stainless Steel
- Standard tags have round corners and mounting holes for ease of installation
- Black Text is laser etched for visibility and durability

**Ideal for:**

- Equipment subject to frequent washdowns or chemical cleanings
- Nameplates on machinery that continually run at high temperatures
- Valve or instrument identification in highly-corrosive or caustic environments
- Bar-coded asset tags

**Control Valve & Sample Point Location Tags**

- MS-215 tags are 3½” x 6” and each can be hung or directly affixed to pipe immediately adjacent to sample points or control valves
- Significantly increases amount and legibility of information (ie: valve number, description, function, P&ID number, color coding, even sampling procedures)
- Tags are resistant to chemicals and fading and are for indoor and outdoor use
- Tags can be easily mounted using stainless steel brackets. Tags are bolted to stand-off brackets then fastened to pipe using stainless steel straps. Rigid tags are supplied ready-for-installation with bolts and mounting bracket.

**Stainless Steel Valve Tags**

- MS-215 valve tags are 3½” x 6” and each can be hung or directly affixed to pipe immediately adjacent to sample points or control valves
- Significantly increases amount and legibility of information (ie: valve number, description, function, P&ID number, color coding, even sampling procedures)
- Tags are resistant to chemicals and fading and are for indoor and outdoor use
- Tags can be easily mounted using stainless steel brackets. Tags are bolted to stand-off brackets then fastened to pipe using stainless steel straps. Rigid tags are supplied ready-for-installation with bolts and mounting bracket.

**Bar Coded MS-215 Max-Tek™ Tags**

Use for asset management or inventory control. Bar code makes capturing and tracking asset data easy and accurate

- Make sure critical maintenance checks or process readings are completed as scheduled and all vital information is transferred correctly to the master data base or maintenance management system.
- Tags are constructed from two layers of high-performance plastic which ensures that the bar code and printing are completely resistant to chemicals and fading
- Tags can be printed directly from data-base files
- Standard colors: Black, Red, Green, White, and Yellow.

**NOTE:** FASTENERS LISTED ON PAGE 35.
**Anodized Aluminum Tags**

Used to tag valves, instruments, small piping, cables or fugitive emission locations. These easy to read tags provide a highly visible contrast between the engraved legend and the colored background.

- Extremely durable, .020” thick tags can be used indoors and outdoors and are especially useful in environments with extreme heat or cold
- Available in 1½” and 2” circles and squares, each with one ⅜” mounting hole
- Background colors available: Green, Red, Blue, Gold Black and Natural
- Standard engraved letter height: ¼”

**Aluminum Equipment Tags**

Use for equipment plates to show model name and characteristics specific to a piece of equipment or maintenance instructions and operating procedures.

- Durable for indoor and outdoor use
- Available in 1”x 3”, 2”x 4” and 4”x 6” plates
- Come with standard ⅜” mounting holes
- Two side holes for 1” x 3” and 2” x 4” tags; four corner holes for 4” x 6” size
- Engraved legend and Black enamel background provides high-contrast for enhanced legibility

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Clear and well-placed plant signage is critical for employee safety and operational efficiency. MSI specializes in creating custom, highly-descriptive signage to provide plant personnel with necessary information regarding safety hazards, operating procedures and equipment identification.
**Construction Adhesive**

Available in 10.2 oz. tubes

Heavy Duty Part # 15769
Silicone Adhesive Part # 15756

Adhesive cartridge fits most caulk guns. MSDS available.

**Custom Signs**

Use MS-215 Signs to communicate specific information to operators, maintenance or contractor personnel; indicating critical instrument procedures, lockout valve procedures, operating process flow diagrams, or emergency shut down configurations.

- Signs can be mounted directly in operating units, control rooms or at battery limit locations
- Completely resistant to chemicals and fading
- Available in 2 materials:
  1. MS-215 F a flexible (0.30”) sign material used for application on flat or curved surfaces. Use our heavy duty adhesives to attach the signs.
  2. MS-215 R a rigid sign (0.125”) material used for hanging or mounting, using screws, bolts or rivets.
- Photoluminescent or reflective material available
- Custom sizes up to 36” x 48” (call for larger sizes)

**For Compliance with OSHA Right-to-Know Laws**

Specifically designed to provide a clear hazard warning for employees in industrial plants, mills and chemical storage facilities

- Follows the NFPA system to denote the severity of hazard with regard to flammability, reactivity, health and specific chemical characteristics.
- Includes information about physical and health hazards as well as proper safety and first aid procedures (in accordance with OSHA 29 CFR 1910.1200)
- Colors: Red, Blue, Yellow, and Black on a White background
- For custom sizes: forward a copy of the MSDS (Material Safety Data Sheet) and designate the NFPA diamond hazard numbers

**MS-215 MAX-TEK Tank & Vessel Identification Signs**

Use MS-215 flexible signs to name and number each tank or vessel

- Extremely durable signs are designed to be printed with the unique name and number of each tank or vessel
- Flexible sign construction allows for easy installation, conforming to the contours of the tank. Use heavy duty adhesive to attach sign to tank (page 40)
- Background colors available: White, Blue, Red, Black, or Yellow with Black or White letters
- Excellent outdoor life and chemical-resistance
TO ORDER

Select a part number and quantity required for self-adhesive label or .030 flexible signs. Combine total number of labels or signs for best price. If you need custom signage, please call.

MS-215 Photoluminescent Signs for Evacuation and Escape

- Clearly identify a safe pathway for evacuation in stairwells, basements, hallways, warehouses, below decks on ships or offshore installations
- Illuminate exits or escape routes for personnel
- Glow time is 6 hours and recharges after 30 minutes exposure to sunlight, incandescent or fluorescent lighting
- Meets ASTM E 2072, ISO/CD 15370, and IMO Resolution A.752[18] requirements
- Available in MS-215F outdoor-grade plastic signs or in MS-960 self-adhesive labels

Low-Level Lighting Arrows
Part #: IMO 237
Size: 3” x 18”
Safety/Operational Signs
MS-215 MAX-TEK

When you need the most long-lasting high-performance signs available:

- For the ultimate in outdoor durability; MS-215 MAX-TEK signs are designed to shield the printed legends between two layers of high-performance plastic. The sealed sign provides maximum protection against moisture, sunlight, and the effects of harsh chemicals.

- Highly-visible printed legends will remain effective outdoors for years because of the UV-protective layer inherent in the construction.

- Stainless steel grommets in each corner are standard to insure maximum life.

- Available in magnetic material - call for quote.

MS-900 Self Adhesive Signs (SAS)

Use MSI’s Self-Adhesive Signs in environments that are not subject to washdowns chemicals or UV exposure. MSI’s SAS signs comply with OSHA requirements for signage. Also available with magnetic backing. Please call for a quote.
Premium Self-Laminating Accident Prevention Tags

- For durability and flexibility, these heavy duty 5⅜” x 3” plastic tags are designed with a protective, over-laminating layer.
- Write your message on the tag, remove the liner and press the protective layer onto the tag. The sealed tag provides protection of vital text information against moisture, sunlight, and exposure to chemicals.
- Use for lockout of equipment, to warn of immediate or potential hazards or to convey maintenance instructions and operating procedures.
- Stainless steel grommets are used to ensure maximum life. Tags are supplied with nylon ties.
- Standard (non-self-laminating) tags also available in the part numbers listed. Call for a quote.

**SELF-LAMINATING TAGS** - Choose part number for each tag legend and select the type of back legend needed. Example: DANGER CAUSTIC with back number 2 would have a part # SL40042.

**CUSTOM TAGS** - Specify legend, colors and quantity required. See custom price table. Combine total number of tags for best price. Other sizes available, call for more information.
MSI is a turnkey contractor who has developed a unique methodology for labeling complex piping systems as well as implementing effective safety and equipment signage programs. Our facilities in Milwaukee, Houston, Singapore and Canada provide single-source accountability for all phases of complex labeling and safety signage projects worldwide.

When properly executed, pipe identification does more than merely satisfy regulatory requirements. It aids in routine plant operations, assists new operators in understanding the physical layout of piping systems, and provides vital, time-saving information assistance during emergencies when there is no time to trace lines.

Our products become an integral part of operator training during commissioning and start-up of new projects, providing the essential benefit of instantly identifying the contents of a pipe, it’s direction of flow, origin and destination, as well as it’s line number and associated P&ID number.

MSI Installation Teams:

1. Focus solely on labeling pipes, tagging valves and installing signs. Our concentrated approach allows projects to be completed in weeks rather than months.

2. Take a detailed approach to each project. Special attention is paid to pipe racks, equipment and control valves, eliminating the need for client personnel to trace lines on a day-to-day basis and in times of emergency.

3. Are properly equipped and trained to function independently, preventing disruptions with the clients’ normal activities.

4. Have extensive safety training and the latest equipment to ensure that each project is completed safely.

5. Guarantee the client receives maximum value by applying their wealth of experience to ensure that all process labels, tags and signs are installed correctly and in areas that provide maximum visibility for facility operators.