

Pipe and Valve Identification



MARKING SERVICES INCORPORATED

800.234.0135 | Fax/800.627.6432 | sales@markserv.com | www.markserv.com

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.



CONTENTS



2 | Pipe Markers and Tapes

- 2 Introduction
- 4 Coiled plastic markers
- 8 Self-adhesive markers
- 10 Duct markers
- 11 Flow Directional ArrowTape
- 11 Color banding tape
- 12 Medical gas markers
- 12 Markers for tubing and small pipe
- 13 Mini-markers
- 14 Economy markers
- 16 Fire protection and fire sprinkler ID
- 18 Underground warning tape
- 19 Stencils
- 19 Plenum rated duct markers
- 20 Cable & Conduit markers
- 21 Maxilar™ markers
- 24 Customized Maxilar™ markers
- 24 High temperature stainless steel markers

26 | Ammonia Refrigeration

- 26 Pipe markers
- 28 Stainless steel tags
- 29 Max-Tek™ valve tags
- 30 Photoluminescent tags
- 30 Ammonia signage

32 | Valve and Equipment Tags

- 32 Max-Tek™ tags
- 33 Engraved plastic tags
- 34 Brass valve tags
- 35 Valve tag fasteners and accessories
- 36 Laser-etched stainless steel tags
- 37 Control valve and sample point location tags
- 37 Bar coded Max-Tek™ tags
- 38 Anodized aluminum tags
- 38 Aluminum equipment tags

39 | Signs

- 39 Introduction
- 40 Custom signs
- 41 OSHA Right-to-know signs
- 41 Max-Tek™ tank and vessel ID signs
- 42 Photoluminescent evacuation and escape signs
- 44 Safety/Operations signs
- 46 Accident prevention tags

48 | Turnkey installation

ENGINEERING

MATERIAL TAKE-OFFS

MANUFACTURING

INSTALLATION



Pipe Markers and Tapes



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.

1 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.

2 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.

3 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/MS-1000 material that offers proven durability on outdoor piping systems exposed to sunlight, chemicals or other harsh environmental conditions.

Pipe Markers

MS-970



Pipe diameter	Marker style	Marker width	Character height	Marker type
1/4" - 3/8"	TM	3"	1/4"	coil-on
1/2" - 1"	A	8"	1/2"	coil-on
1 1/8" - 2 1/4"	B	8"	3/4"	coil-on
2 3/8" - 3 1/4"	C	12"	1 1/4"	coil-on
3 3/8" - 4 1/2"	D	12"	1 1/4"	coil-on
4 5/8" - 5 7/8"	E	12"	1 1/4"	coil-on
6" - 7 7/8"	F	12"	1 1/4"	strap-on
8" - 10"	G	24"	2 1/2"	strap-on
over 10"	H	34"	3 1/2"	strap-on

Save installation time and cost

Coiled Markers provide the fastest, easiest method for installation of pipe markers.

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.

PIPE DIAMETER	MARKER STYLE
1/4" - 3/8"	TM
1/2" - 1"	A
1 1/8" - 2 1/4"	B
2 3/8" - 3 1/4"	C
3 3/8" - 4 1/2"	D
4 5/8" - 5 7/8"	E
6" - 7 7/8"	F
8" - 10"	G
over 10"	H

Diameter includes insulation thickness



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. Refer to the "Pricing Per Stock Marker" table for the best quantity price based on total number of markers ordered.



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
- Adheres to itself so it can be wrapped tightly without falling off.
- 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

PRICING PER STOCK MARKER				
Style	1-99	100-249	250-499	500 +
TM	\$2.04	\$1.97	\$1.83	Call for a quote
A	\$2.42	\$2.30	\$1.98	
B	\$3.16	\$3.03	\$2.59	
C	\$6.11	\$5.93	\$4.67	
D	\$6.40	\$6.23	\$5.13	
E	\$6.76	\$6.54	\$5.41	
F	\$6.76	\$6.54	\$5.41	
G	\$9.66	\$9.25	\$7.85	
H	\$13.23	\$12.92	\$10.69	

MS-970 Coiled Plastic Markers

Legend	Color	Part #	Legend	Color	Part #	Legend	Color	Part #
ACID	Yellow	9801	EXHAUST	Yellow	9825	PLANT AIR	Green	9847
ACID VENT	Yellow	9778	FILTERED WATER	Green	9885	PLANT WATER	Green	9702
ACID WASTE	Yellow	9779	FIRE PROTECTION WATER	Red	9826	POLYMER	Yellow	9742
AIR	Blue	9875	FIRE SPRINKLER WATER	Red	9736	POLYMER SOLUTION	Yellow	9743
ALUM	Yellow	9876	FREON	Green	9827	POTABLE WATER	Green	9848
AMMONIA	Yellow	9803	FUEL GAS	Yellow	9886	PROCESS WATER	Green	9853
ARGON	Green	9804	FUEL OIL	Yellow	9828	PROCESS WATER RETURN	Green	9703
ASBESTOS FREE INSULATION	Blue	9729	FUEL OIL RETURN	Yellow	9737	PROCESS WATER SUPPLY	Green	9704
BOILER FEEDWATER	Yellow	9805	FUEL OIL SUPPLY	Yellow	9738	PROPANE	Yellow	9849
BOILER BLOWDOWN	Yellow	9812	GAS	Yellow	9829	PUMPED CONDENSATE	Yellow	9705
BRINE	Yellow	9730	GLYCOL RETURN	Yellow	9774	RAW WATER	Green	9850
BYPASS	Yellow	9877	GLYCOL SUPPLY	Yellow	9775	REFRIGERANT LIQUID	Yellow	9706
CAUSTIC	Yellow	9806	HEATING HOT WATER RETURN	Yellow	9869	REFRIGERANT SUCTION	Yellow	9707
CARBON DIOXIDE	Yellow	9878	HEATING HOT WATER SUPPLY	Yellow	9870	RETURN	Green	9851
CHEMICAL FEED	Yellow	9879	HEATING RETURN	Yellow	9832	RETURN	Yellow	9852
CHILLED WATER	Green	9807	HEATING SUPPLY	Yellow	9833	ROOF DRAIN	Green	9872
CHILLED WATER RETURN	Green	9808	HEATING WATER RETURN	Yellow	9887	SANITARY DRAIN	Green	9708
CHILLED WATER SUPPLY	Green	9809	HEATING WATER SUPPLY	Yellow	9888	SANITARY SEWER	Green	9709
CHLORINE	Yellow	9810	HI PRESS CONDENSATE	Yellow	9834	SANITARY VENT	Green	9710
CHLORINE SOLUTION	Yellow	9731	HI PRESS GAS	Yellow	9871	SANITARY WASTE	Green	9755
CIRCULATING WATER	Green	9811	HI PRESS STEAM	Yellow	9835	SEAL WATER	Green	9711
CITY WATER	Green	9813	HOT WATER	Yellow	9836	SERVICE AIR	Yellow	9746
COLD WATER	Green	9814	HOT WATER RETURN	Yellow	9861	SOFT COLD WATER	Green	9756
COLD WATER RETURN	Green	9866	HOT WATER SUPPLY	Yellow	9862	SOFT WATER	Green	9712
COLD WATER SUPPLY	Green	9867	HYDRAULIC OIL	Yellow	9889	SPRINKLER WATER	Red	9854
COMPRESSED AIR	Yellow	9815	HYDROCHLORIC ACID	Yellow	9739	STEAM	Yellow	9855
COMPRESSED AIR	Blue	9732	HYDROGEN	Yellow	9890	LO PRESS STEAM	Yellow	9839
CONDENSATE	Yellow	9816	INDUSTRIAL COLD WATER	Green	9891	MED PRESS STEAM	Yellow	9841
CONDENSATE DRAIN	Yellow	9880	INDUSTRIAL HOT WATER	Yellow	9740	HI PRESS STEAM	Yellow	9835
LO PRESS CONDENSATE	Yellow	9838	INSTRUMENT AIR	Blue	9892	STEAM CONDENSATE	Yellow	9713
MED PRESS CONDENSATE	Yellow	9881	LAB AIR	Yellow	9893	STORM DRAIN	Green	9873
HI PRESS CONDENSATE	Yellow	9834	LAB VACUUM	Yellow	9894	STORM SEWER	Green	9868
CONDENSATE RETURN	Yellow	9817	LAB WASTE	Yellow	9895	STORM WATER	Green	9714
CONDENSATE SUPPLY	Yellow	9818	LO PRESS CONDENSATE	Yellow	9838	SULFURIC ACID	Yellow	9715
CONDENSER WATER	Green	9819	LO PRESS STEAM	Yellow	9839	SUMP PUMP DISCHARGE	Yellow	9716
CONDENSER WATER RETURN	Green	9864	LUBE OIL	Yellow	9896	SUPPLY	Green	9856
CONDENSER WATER SUPPLY	Green	9865	MAKE UP WATER	Green	9840	SUPPLY	Yellow	9857
COOLING WATER	Green	9820	MED PRESS CONDENSATE	Yellow	9881	TEMPERED WATER	Yellow	9717
COOLING WATER RETURN	Green	9882	MED PRESS STEAM	Yellow	9841	TOWER WATER RETURN	Green	9749
COOLING WATER SUPPLY	Green	9883	MEDICAL AIR	Yellow	9897	TOWER WATER SUPPLY	Green	9750
DEIONIZED WATER	Green	9821	MEDICAL VACUUM	White	9753	TREATED WATER	Green	9874
DOMESTIC COLD WATER	Green	9822	METHANOL	Yellow	9898	UTILITY WATER	Yellow	9751
DOMESTIC COLD WATER RETURN	Green	9770	MILL AIR	Blue	9727	VACUUM	Yellow	9858
DOMESTIC COLD WATER SUPPLY	Green	9771	MILL WATER	Green	9728	VACUUM	Green	9718
DOMESTIC HOT WATER	Yellow	9823	NATURAL GAS	Yellow	9842	VENT	Green	9859
DOMESTIC HOT WATER RECIRC	Yellow	9733	NITROGEN	Blue	9741	VENT	Yellow	9719
DOMESTIC HOT WATER RETURN	Yellow	9884	NITROUS OXIDE	Blue	9754	WASTE	Yellow	9720
DRAIN	Green	9824	NON POTABLE WATER	Yellow	9844	WASTEWATER	Yellow	9863
DRAIN	Yellow	9734	OIL	Yellow	9845	WATER	Green	9860
DRINKING WATER	Green	9735	OVERFLOW	Yellow	9899	WATER	Yellow	9752
DUAL TEMP RETURN	Yellow	9772	OXYGEN	Green	9701	WELL WATER	Green	9721
DUAL TEMP SUPPLY	Yellow	9773	OXYGEN	Yellow	9846			

Note: Black text on Yellow backgrounds
White text on Green, Blue and Red backgrounds

Pipe Markers

Custom MS-970



Pipe Diameter	Marker Style	Pipe Diameter	Marker Style
1/4" - 3/8"	TM	4 5/8" - 5 7/8"	E
1/2" - 1"	A	6" - 7 7/8"	F
1 1/8" - 2 1/4"	B	8" - 10"	G
2 3/8" - 3 1/4"	C	over 10"	H
3 3/8" - 4 1/2"	D		

For pipes with a 6" diameter or larger, use nylon straps to secure the plastic marker around the pipe (straps included)

ORDER EXTRA NYLON STRAPS IF NEEDED			
Part #	Size	1-49	50-99
15786	36"	\$0.79	\$0.72
15787	48"	\$1.30	\$1.12

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

TO ORDER

- 1] Submit a list of all markers needed. Specify legends, colors, quantities and styles, including insulation thickness.
- 2] Custom markers ship in 1-2 days
- 3] No minimum quantity required
- 4] For orders with 10 or more markers per legend, add them together for best price. For custom legends with a quantity of 9 or less, use first column pricing.

Example: 20 each B "Aeration Air" \$ 3.50
20 each D "Digester Gas" \$ 7.18
20 each G "Mixed Sludge" \$ 11.06

PRICING PER CUSTOM MARKER				
Style	1-9	10-49	50-99	100+
TM	\$2.70	\$2.51	\$2.29	Call for a quote
A	\$3.20	\$2.86	\$2.70	
B	\$4.11	\$3.87	\$3.50	
C	\$7.29	\$7.09	\$6.16	
D	\$7.52	\$7.37	\$7.18	
E	\$7.74	\$7.43	\$7.33	
F	\$7.74	\$7.43	\$7.33	
G	\$11.74	\$11.64	\$11.06	
H	\$16.29	\$15.91	\$15.14	

Pipe Markers

Custom MS-900

DIGESTED SLUDGE

AHU-12

FIRE DAMPER

EXHAUST AIR
EF-1

Marker style	Pipe Diameter	Marker Size	Letter Size
A	3/4" thru 2 1/4"	1" x 8"	3/4"
B	2 1/2" thru 7 7/8"	2 1/4" x 13"	1 3/4"
C	8" thru 10"	4" x 24"	2 1/2"
D	over 10"	4" x 32"	3 1/2"

SUPPLY AIR



RETURN AIR



EXHAUST AIR

Legend	Bkgrd Color	2 1/4" x 13"	4" x 24"
EXHAUST AIR	Yellow	92326	93326
INTAKE AIR	Blue	92428	93428
OUTSIDE AIR	Blue	92329	93329
RELIEF AIR	Blue	92281	93281
RETURN AIR	Blue	92282	93282
RETURN AIR	Green	92430	93430
SUPPLY AIR	Blue	92283	93283
SUPPLY AIR	Green	92431	93431
ARROW	Yellow	92208	93208
ARROW	Green	92209	93209
ARROW	Blue	92212	93212

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.

Customized MS-900 Self-Adhesive Pipe Markers

We will design the markers that best meet your needs.

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

CUSTOM PRICING PER MARKER					
Style	Size	1-9	10-49	50-99	100+
A	1" x 8"	\$1.46	\$0.92	\$0.74	Call for a quote
B	2 1/4" x 13"	\$1.91	\$1.64	\$1.56	
C	4" x 24"	\$4.33	\$3.45	\$3.14	
D	4" x 32"	\$5.51	\$4.70	\$4.44	

For piping less than 3/4" see pages 12-13.

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

STOCK PRICING PER MARKER				
Size	1-249	250-499	500-999	1,000 +
2 1/4" x 13"	\$1.40	\$1.32	\$1.12	call for a quote
4" x 24"	\$2.86	\$2.70	\$2.35	

ARROW PRICING PER MARKER				
Size	1-9	10-24	25-49	50 +
2 1/4" x 6 1/2"	\$0.75	\$0.72	\$0.67	call for a quote
4" x 12"	\$1.67	\$1.56	\$1.38	

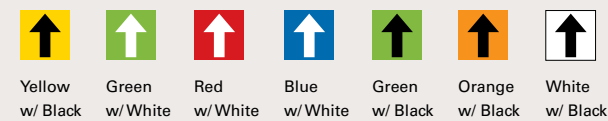
Tapes

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.

Size	Part numbers for color combinations available						
1" x 30 yd.	95101	95102	95103	95104	95105	95106	95107
2" x 30 yd.	95201	95202	95203	95204	95205	95206	95207
4" x 30 yd.	95401	95402	95403	95404	95405	95406	95407



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 Select part number and quantity of rolls needed. Combine total number of rolls for best pricing.

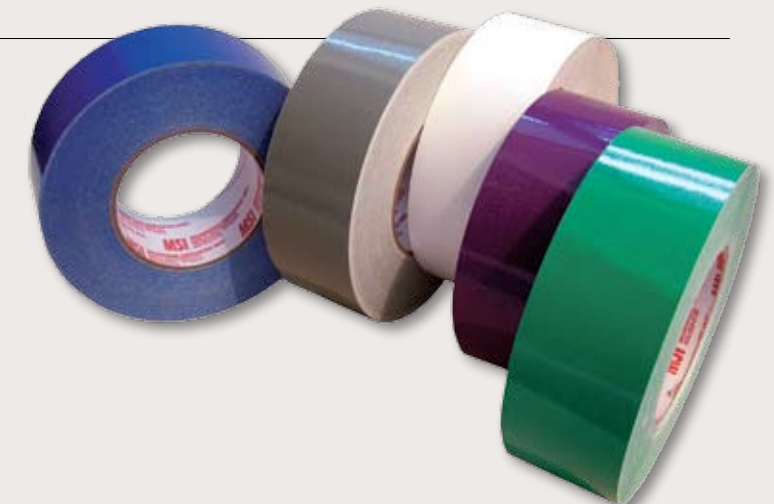
PRICE PER 50YD. ROLL OF BANDING TAPE				
Width	1-9	10-24	25-49	50 +
1"	\$19.53	\$18.17	\$15.86	Call for a quote
2"	\$35.81	\$33.81	\$29.56	



PRICE PER 30 YD ROLL OF ARROW TAPE				
Size	1-9	10-49	50-99	100 +
1"	\$19.42	\$17.66	\$16.03	Call for a quote
2"	\$37.34	\$33.66	\$29.82	
4"	\$74.26	\$67.92	\$60.15	

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.

Pipe Diameter	Tape Length	# Bands/Roll
2"	8" Band	135
4"	14" Band	77
6"	21" Band	51
8"	27" Band	40
10"	35" Band	30
12"	41" Band	26



	1" x 50 yd.	2" x 50 yd.
Yellow	96101	96201
Green	96102	96202
Red	96103	96203
Blue	96104	96204
Brown	96105	96205
White	96106	96206
Black	96107	96207
Grey	96108	96208
Orange	96109	96209
Purple	96110	96210

Custom colors available

Pipe Markers

MS-900



Legend	Background Color	Letter Color	Part Number
CARBON DIOXIDE	Gray	White	68501
CARBON DIOXIDE 50 PSI	Gray	White	68502
HELIUM	Brown	White	68503
LAB AIR	Yellow/White	Black	68518
LAB VAC	Black/White	Black	68519
MEDICAL AIR	Yellow	Black	68504
MEDICAL AIR 50 PSI	Yellow	Black	68512
MEDICAL EVAC	Purple	White	68510
MEDICAL VACUUM	White	Black	68506
NITROGEN	Black	White	68507
NITROGEN 160 PSI	Black	White	68514
NITROUS OXIDE	Blue	White	68508
NITROUS OXIDE 50 PSI	Blue	White	68516
OXYGEN	Green	White	68509
OXYGEN 50 PSI	Green	White	68517
WAGD	Purple	White	68511



Legend	Background Color	Part Number
ACETYLENE	Yellow	66501
ACID	Yellow	66502
AIR	Blue	66503
CAUSTIC	Yellow	66504
CHEMICAL FEED	Yellow	66505
CHLORINE	Yellow	66506
CHLORINE LIQUID	Yellow	66507
CHLORINE SOLUTION	Yellow	66508
CLEAN DRY AIR	Blue	66529
COMPRESSED AIR	Yellow	66509
DEIONIZED WATER	Green	66510
DEMINERALIZED WATER	Green	66511
DOMESTIC COLD WATER	Green	66512
DOMESTIC HOT WATER	Yellow	66513
EVACUATION VACUUM	Yellow	66514
GAS	Yellow	66528
HELIUM	Yellow	66527
HYDRAULIC OIL	Yellow	66515
HYDROGEN	Yellow	66516
INSTRUMENT AIR	Blue	66517
INSTRUMENT AIR	Red	66531
LAB AIR	Yellow	66519
LAB GAS	Yellow	66520
LAB VACUUM	Yellow	66521
LUBE OIL	Yellow	66522
NATURAL GAS	Yellow	66524
PLANT AIR	Blue	66518
SAMPLE	Yellow	66525
VACUUM	Yellow	66526
VENT	Yellow	66530

MS-900 Medical Gas Markers

Manufactured per NFPA-99C; CGA C-9-2002 "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 1/4" high
- Supplied in rolls of 100 labels or individual pieces
- Markers are 3"x 3" and wrap completely around the pipe

PRICE PER INDIVIDUAL MARKER					
Style	Size	1-99	100-249	250-499	500 +
TM	3" x 3"	\$0.55	\$0.51	\$0.45	call for quote

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 1/4" high.
- Supplied in individual pieces, or rolls of 100 per roll – order the exact quantity of labels you need.

STOCK PRICE PER MARKER					
Style	Size	1-99	100-249	250-499	500+
TM	3" x 3"	\$0.55	\$0.51	\$0.45	call for a quote

CUSTOM PRICE PER MARKER					
Style	Size	1-99	100-249	250-499	500+
TM	3" x 3"	\$0.93	\$0.85	\$0.72	call for a quote

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.



1/2" Arrow Tape available, please call.

MS-900 Mini-Markers

Use Style "T" mini-markers for labeling 1/4" to 3/4" 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 1/2" x 2 1/2" (10 labels per sheet)

STOCK PRICE PER SHEET OF 10				
Style	1 - 249	250 - 499	500 - 999	1,000+
T	\$1.37	\$1.13	\$1.02	call for quote

CUSTOM PRICE PER SHEET OF 10				
Style	1 - 249	250 - 499	500 - 999	1,000+
T	\$1.66	\$1.29	\$1.11	call for quote

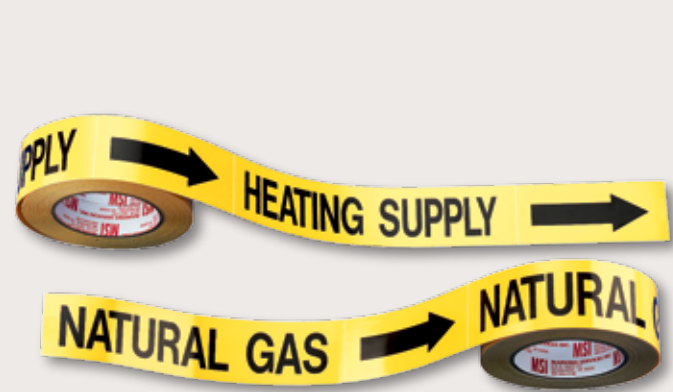
Legend	Color	Part Number
ACETYLENE GAS	Yellow	95000
ACID	Yellow	95001
ACID WASTE DRAIN	Yellow	95002
AMMONIA	Yellow	95003
AMMONIUM HYDROXIDE	Yellow	95004
ARGON	Blue	95073
ARROW →	Yellow	95005
ARROW →	Green	95006
ARROW →	Blue	95007
ARROW →	Red	95008
BORON TRICHLORIDE	Yellow	95009
BREATHING AIR	Blue	95010
CAUSTIC	Yellow	95011
CHEMICAL FEED	Yellow	95012
CHILLED WATER RETURN	Green	95013
CHILLED WATER SUPPLY	Green	95014
CHLORINE	Yellow	95015
CHLORINE SOLUTION	Yellow	95016
CITY WATER	Green	95017
CLEAN DRY AIR	Blue	95018
COMPRESSED AIR	Blue	95019
CORROSIVE VENT	Yellow	95020
DEIONIZED WATER	Green	95021
DEIONIZED WATER RETURN	Green	95022
DEIONIZED WATER SUPPLY	Green	95023
DEMINERALIZED WATER	Green	95024
DOMESTIC COLD WATER	Green	95025
DOMESTIC HOT WATER	Yellow	95026
ETHYLENE GLYCOL	Yellow	95027
EVACUATION VACUUM	Yellow	95028
FREON	Yellow	95029
GAS	Yellow	95030
HELIUM	Yellow	95031
HIGH PURITY NITROGEN	Yellow	95032
HYDRAULIC OIL	Yellow	95038
HYDROFLUORIC ACID	Yellow	95033
HYDROGEN	Yellow	95034
HYDROGEN BROMIDE	Yellow	95035
HYDROGEN CHLORIDE	Yellow	95036
HOUSE VACUUM	Yellow	95037
INDUSTRIAL COLD WATER	Green	95039
INDUSTRIAL HOT WATER	Yellow	95040
INSTRUMENT AIR	Blue	95041
INSTRUMENT NITROGEN	Blue	95042
ISOPROPYL ALCOHOL	Yellow	95043
LUBE OIL	Yellow	95044
METHANOL	Yellow	95045
NATURAL GAS	Yellow	95046
NITROGEN	Blue	95074
NITRIC ACID	Yellow	95047
NITROGEN TRIFLUORIDE	Yellow	95048
NITROUS OXIDE	Yellow	95049
OIL FREE AIR	Blue	95050
OXYGEN	Yellow	95051
OUTSIDE AIR	Blue	95052
OZONE	Yellow	95053
PHOSPHORIC ACID	Yellow	95054
PLANT AIR	Blue	95055
PROCESS COOLING WATER RET	Green	95056
PROCESS COOLING WATER SUP	Green	95057
PROCESS EXHAUST	Yellow	95058
PROCESS VACUUM	Yellow	95059
RO RETURN	Green	95060
RO SUPPLY	Green	95061
SILANE	Yellow	95063
SOLVENT RECLAIM	Yellow	95075
SOLVENT VENT	Yellow	95064
SULFUR HEXAFLUORIDE	Yellow	95065
SULFURIC ACID	Yellow	95066
ULTRA PURE NITROGEN	Blue	95072
ULTRA PURE WATER DI RET	Yellow	95076
ULTRA PURE WATER DI SUP	Yellow	95077
ULTRA PURE WATER RET	Green	95067
ULTRA PURE WATER SUP	Green	95068
UTILITY NITROGEN	Blue	95069
UTILITY WATER	Green	95070
VACUUM	Blue	95071
WATER	Green	95078

Pipe Markers

MS-900

Legend	Color	Part Number
ACID	Yellow	65101
AIR	Blue	65102
BOILER FEEDWATER	Yellow	65140
CHILLED WATER	Green	65106
CHILLED WATER RETURN	Green	65129
CHILLED WATER SUPPLY	Green	65130
CITY WATER	Green	65107
COLD WATER	Green	65108
COMPRESSED AIR	Yellow	65109
CONDENSATE	Yellow	65110
CONDENSATE RETURN	Yellow	65141
CONDENSER WATER	Green	65111
CONDENSER WATER RETURN	Green	65142
CONDENSER WATER SUPPLY	Green	65143
DEIONIZED WATER	Green	65144
DOMESTIC COLD WATER	Green	65131
DOMESTIC HOT WATER	Yellow	65132
DRAIN	Green	65112
EXHAUST AIR	Yellow	65160
FIRE PROTECTION WATER	Red	65113
FUEL OIL	Yellow	65145
GAS	Yellow	65114
GLYCOL	Yellow	65146
HEATING	Yellow	65115
HEATING RETURN	Yellow	65133
HEATING SUPPLY	Yellow	65134
HEATING WATER RETURN	Yellow	65156
HEATING WATER SUPPLY	Yellow	65157
HI PRESS CONDENSATE	Yellow	65147
HI PRESS STEAM	Yellow	65148
HOT WATER	Yellow	65135
HOT WATER RETURN	Yellow	65136
HOT WATER SUPPLY	Yellow	65137
INTAKE AIR	Blue	65161
LO PRESS CONDENSATE	Yellow	65149
LO PRESS STEAM	Yellow	65150
NATURAL GAS	Yellow	65116
NITROGEN	Green	65151
NON POTABLE WATER	Yellow	65138
OIL	Yellow	65117
OUTSIDE AIR	Blue	65162
OXYGEN	Yellow	65118
POTABLE WATER	Green	65119
RECIRCULATING HOT WATER	Yellow	65159
RELIEF AIR	Blue	65163
RETURN	Yellow	65120
RETURN	Green	65121
RETURN AIR	Blue	65164
ROOF DRAIN	Green	65152
SANITARY DRAIN	Green	65158
SANITARY SEWER	Green	65153
SPRINKLER WATER	Red	65122
STEAM	Yellow	65123
SUPPLY	Yellow	65124
SUPPLY	Green	65125
SUPPLY AIR	Blue	65165
VACUUM	Yellow	65126
VENT	Yellow	65127
WASTEWATER	Yellow	65154
WATER	Green	65128

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



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 1¼"
- Perforations between markers ensure easy handling and application
- Use separately or with color banding tape for a complete low-cost marking system [See page 11]

STOCK PRICING PER ROLL				
Size	1-4	5-9	10-29	30 +
2" x 9"	\$50.24	\$ 48.67	\$ 42.95	call for a quote

CUSTOM PRICING PER ROLL				
Size	1-4	5-9	10-29	30 +
2" x 9"	\$ 67.94	\$ 64.71	\$ 56.07	call for a quote

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



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 1¼" in height. Legends and flow arrows are printed every six inches.
- Roll size 6½" x 30'
- Legend is repeated 60 times per roll

STOCK PRICING PER ROLL				
Size	1-4	5-9	10-29	30+
6½" x 30'	\$57.57	\$54.48	\$47.59	call for a quote

CUSTOM PRICING PER ROLL				
Size	1-4	5-9	10-29	30+
6½" x 30'	\$62.76	\$59.76	\$53.66	call for a quote

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
COMPRESSED AIR	Yellow	64012
CONDENSATE	Yellow	64013
CONDENSATE RETURN	Yellow	64014
CONDENSER WATER	Green	64015
CONDENSER WATER RETURN	Green	64016
CONDENSER WATER SUPPLY	Green	64017
COOLING WATER RETURN	Green	64018
COOLING WATER SUPPLY	Green	64019
DOMESTIC COLD WATER	Green	64020
DOMESTIC HOT WATER	Yellow	64021
DRAIN	Yellow	64022
FIRE PROTECTION WATER	Red	64023
FUEL OIL	Yellow	64024
GAS	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
OXYGEN	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



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

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 1/4" through 5 7/8" [including insulation thickness]

STYLE	SIZE
TM	1/4" - 3/8"
A	1/2" - 1"
B	1 1/8" - 2 1/4"
C	2 3/8" - 3 1/4"
D	3 3/8" - 4 1/2"
E	4 5/8" - 5 7/8"
F*	6" - 7 7/8"
G*	8" - 10"
H*	over 10"

*strap-on

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

LEGEND	COLOR	PART #
FIRE PROTECTION WATER	Red	9826-
FIRE SPRINKLER WATER	Red	9736-

PRICING PER MS-970 STOCK MARKER				
Style	1-99	100-249	250-499	500 +
TM	\$2.04	\$1.97	\$1.83	
A	\$2.42	\$2.30	\$1.98	
B	\$3.16	\$3.03	\$2.59	
C	\$6.11	\$5.93	\$4.67	Call for a quote
D	\$6.40	\$6.23	\$5.13	
E	\$6.76	\$6.54	\$5.41	
F	\$6.76	\$6.54	\$5.41	
G	\$9.66	\$9.25	\$7.85	
H	\$13.23	\$12.92	\$10.69	

MS-900 Self-Adhesive Pipe and Fire Damper Markers

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

- Labels easily 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

LEGEND	COLOR	SIZE	PART #
FIRE DAMPER ACCESS DOOR	Red	3" x 3"	67000
FIRE/SMOKE DAMPER ACCESS DOOR	Red	3" x 3"	67001

LEGEND	COLOR	1" x 8"	2 1/4" x 13"	4" x 24"
FIRE DAMPER	Red	91433	92433	93433
FIRE/SMOKE DAMPER	Red	91434	92434	93434
FIRE PROTECTION WATER	Red	91142	92142	93142
FIRE SPRINKLER WATER	Red	91143	92143	93143

Style	Pipe Diameter with insulation	Marker size	Letter Size
A	3/4" thru 2 1/4"	1" x 8"	3/4"
B	2 1/2" thru 7 7/8"	2 1/4" x 13"	1 3/4"
C	8" thru 10"	4" x 24"	2 1/2"
D	over 10"	4" x 32"	3 1/2"

STOCK PRICING PER MS-900 MARKER				
Style	1-249	250-499	500-999	1,000 +
A	\$0.61	\$0.48	\$0.43	
B	\$1.40	\$1.32	\$1.12	Call for a quote
C	\$2.86	\$2.70	\$2.35	
D	\$4.27	\$4.17	\$3.99	

PRICE PER INDIVIDUAL MS-900 MARKER					
Style	Size	1-99	100-249	250-499	500 +
TM	3" x 3"	\$0.55	\$0.51	\$0.45	Call for a quote

Valve Tag Identification

MSI's valve tags are made of laser-etched red anodized aluminum, rigid engraved plastic or 20-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).

PRICE PER TAG				
SIZE	MATERIAL	1 - 99	100 - 249	250 +
1 1/2"	Round / Square Anodized Aluminum	\$2.78	\$2.46	
2"	Round / Square Anodized Aluminum	\$3.14	\$2.90	
1 1/2"	Round Brass	\$1.05	\$1.01	call for a quote
2"	Round Brass	\$1.45	\$1.39	
1 1/2"	Round Engraved Plastic	\$1.49	\$1.28	
2"	Round Engraved Plastic	\$2.00	\$1.61	



TO ORDER Combine quantities for best pricing.

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



TO ORDER Specify quantity of each tag or signs, legend, letter height, size, colors and whether you need adhesive backing or drilled mounting holes.

PRICE PER INDIVIDUAL ENGRAVED TAG/SIGN			
SIZE	UNIT PRICE	SIZE	UNIT PRICE
3/4" x 2 1/2"	\$2.49	1 1/2" x 4"	\$5.71
1" x 2 1/2"	\$3.45	2 1/2" x 4"	\$6.73
1" x 3"	\$4.79	2" x 6"	\$6.87

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



RISER DIAMETER	MARKER SIZE	UNIT PRICE
4" or less	10" x 3"	\$2.48
6" - 8"	12" x 4"	\$3.04
10" - 11"	16" x 6"	\$4.05

BRANCH DIAMETER	MARKER SIZE	UNIT PRICE
1 1/2"	1 1/2" x 6"	\$1.43
2" - 3"	2" x 8"	\$1.72

TO ORDER Specify riser number, size, and quantity

Pipe Markers

Specialty Items

Underground Warning Tape

Stock legend	Color text/ background	part # 3"x1000'	part # 6"x1000'
CAUTION BURIED ELECTRIC LINE BELOW	Black / Red	52201	52208
CAUTION BURIED FUEL LINE BELOW	Black / Yellow	52202	52209
CAUTION BURIED NATURAL GAS LINE BELOW	Black / Yellow	52203	52210
CAUTION BURIED PIPE LINE BELOW	Black / Yellow	52204	52211
CAUTION BURIED SEWER LINE BELOW	Black / Green	52205	52212
CAUTION BURIED STEAM LINE BELOW	Black / Yellow	52207	52213
CAUTION BURIED WATER LINE BELOW	Black / Blue	52206	52214
CAUTION CAUTION CAUTION	Black / Yellow	51116	NA



Detectable Underground Warning Tape

Stock legend	Color text/ background	part # 3"x1000'	part # 6"x1000'
CAUTION BURIED ELECTRIC LINE BELOW	Black/Red	52215	52220
CAUTION BURIED GAS LINE BELOW	Black/Yellow	52216	52221
CAUTION BURIED OXYGEN LINE BELOW	Black/Green	52226	52227
CAUTION BURIED PIPE LINE BELOW	Black/Yellow	52217	52222
CAUTION BURIED SEWER LINE BELOW	Black/Green	52218	52223
CAUTION BURIED WATER LINE BELOW	Black/Blue	52219	52224



Price Per Box 25 tacks per box

Part #	Color	1-9	10-24	25+
35501	Orange	\$20.19	\$19.56	
35502	Red	\$20.19	\$19.56	
35503	White	\$20.19	\$19.56	
35504	Yellow	\$20.19	\$19.56	Call for a quote
35505	Black	\$20.19	\$19.56	
35506	Green	\$20.19	\$19.56	
35507	Light Blue	\$20.19	\$19.56	



TO ORDER Specify the part number and quantity.

For custom legends, please call for a quote.

Underground Warning Tape

Color-coded tape guards against costly and dangerous "Dig-ins".

- Designed to be buried above metallic underground piping or cables to warn excavators of utility lines
- Non-adhesive 4 mil. polyethylene tape, surface-printed Available in: 3" or 6" x 1000 ft. rolls
- Custom legends available. Call for a quote.
- Conforms to the APWA Standard

STOCK PRICE PER ROLL			
SIZE	1-2	3-9	10+
3" x 1,000'	\$33.78	\$31.98	call for a quote
6" x 1,000'	\$66.85	\$63.86	

Detectable Underground Warning Tape

Locates buried non-metallic pipes before you dig.

- Printed, 4.5 mil. foil tape allows for 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.

STOCK PRICE PER ROLL			
SIZE	1-2	3-9	10+
3" x 1,000'	\$85.95	\$83.17	call for a quote
6" x 1,000'	\$165.68	\$159.24	

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
- 7/8" diameter heads can be written on with marking pen
- Available in orange, red, white, yellow, black, green and light blue

Pre-cut Oilboard Stencils and Reusable Plastic Stencils

- Available in several different sizes with larger stencils available upon request
- Standard letter heights: [ASME A13.1 letter sizes included] 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2" and 3 1/2"
- Reusable stencils are cut from 0.020" plastic and can be reused for multiple projects.

Letter Height	Oilboard		Reusable Plastic		Both
	1-24	25-49	1-24	25-49	
1/2"	\$8.39	\$8.09	\$10.08	\$9.70	call for a quote
3/4"	\$9.20	\$8.95	\$11.05	\$10.72	
1"	\$9.78	\$9.56	\$11.75	\$11.43	
1 1/4"	\$10.24	\$9.91	\$12.29	\$11.89	
1 1/2"	\$13.10	\$12.41	\$14.15	\$13.45	
2"	\$14.93	\$14.34	\$17.90	\$17.22	
2 1/2"	\$16.96	\$16.47	\$20.35	\$19.76	
3 1/2"	\$21.71	\$21.48	\$27.14	\$26.40	

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



PRICE PER CAN	
Part #	
61101 + Color	\$10.31

Plenum-Rated Duct Markers

- Metalized 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

Legend	Color	2 1/4" x 13"	4" x 24"
EXHAUST AIR	Metallic Grey	92601	93601
INTAKE AIR	Metallic Grey	92602	93602
OUTSIDE AIR	Metallic Grey	92603	93603
RELIEF AIR	Metallic Grey	92604	93604
RETURN AIR	Metallic Grey	92605	93605
SUPPLY AIR	Metallic Grey	92606	93606
ARROW	Metallic Grey	92607	93607



TO ORDER Specify part number and quantity. Combine all for best price.

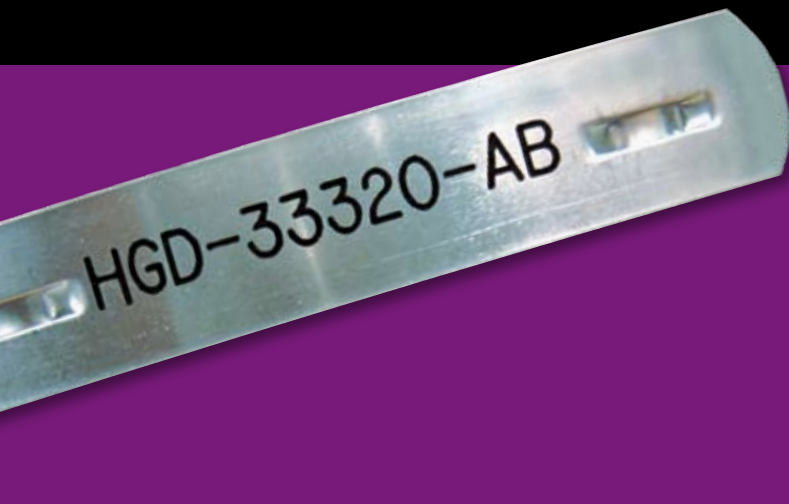
STOCK PRICING PER MARKER				
SIZE	1-49	50-99	100-249	250+
2 1/4" x 13"	\$2.73	\$2.15	\$1.86	call for a quote
4" x 24"	\$5.72	\$5.43	\$5.14	

ARROW PRICING PER MARKER				
SIZE	1-49	50-99	100-249	250+
2 1/4" x 6 1/2"	\$1.36	\$1.08	\$0.95	call for a quote
4" x 12"	\$2.86	\$2.72	\$2.57	



TO ORDER List stencil legends required, specify character height needed and quantity.

Cable & Conduit Identification



MS-900 Conduit & MS-970 Coiled Conduit (orange background only)

Stock legend	MS-900 Part Numbers			MS-970 Part Numbers
	1/2" x 2 1/2"	1" x 8"	2" x 9"	
110 VOLTS	70001	71001	72001	9780-
115 VOLTS	70002	71002	72002	9781-
120 VOLTS	70003	71003	72003	9782-
120/208 VOLTS	70004	71004	72004	9783-
208 VOLTS	70005	71005	72005	9784-
220 VOLTS	70006	71006	72006	9785-
230 VOLTS	70007	71007	72007	9786-
240 VOLTS	70008	71008	72008	9787-
277 VOLTS	70010	71010	72010	9788-
277/480 VOLTS	70011	71011	72011	9789-
440 VOLTS	70012	71012	73011	
480 VOLTS	70014	71014	72014	9790-
600 VOLTS	70016	71016	72016	9791-
4,160 VOLTS	70026	71026	72026	9792-
CONTROL	70027	71027	72027	9793-
DATA	70028	71028	72028	9794-
FIBER OPTIC CABLE	70029	71029	72029	9795-
FIRE ALARM	70030	71030	72030	9796-
LIGHTING	70017	71017	72017	9797-
POWER	70018	71018	72018	9798-
SECURITY	70025	71025	72025	9799-
SINGLE PHASE	70019	71019	72019	9696-
TELEPHONE	70031	71031	72031	9697-
THREE PHASE	70020	71020	72020	9698-

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

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

Stock Stainless Steel Cable Markers				
Size	1-24	25-99	100-249	250+
3/8" x 2 1/2"	\$3.83	\$3.70	\$3.56	Call for a quote
1/2" x 3"	\$4.15	\$4.01	\$3.87	
3/4" x 3 1/2"	\$4.46	\$4.31	\$4.14	
1" x 4"	\$4.88	\$4.73	\$4.59	

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-900 Stock Pricing Per Marker				
Size	1-49	50-99	100-249	250+
1/2" x 2 1/2"	\$1.35	\$1.11	\$1.00	Call for a quote
1" x 8"	\$0.62	\$0.49	\$0.44	
2" X 9"	\$1.04	\$1.01	\$0.92	

NOTE: 1/2" x 2 1/2" labels are supplied/priced ten markers per sheet.

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-970 Stock Pricing Per Marker					
Style	Diameter	1-99	100 - 249	250 - 499	500+
A	1/2" - 1"	\$2.42	\$2.30	\$1.98	Call for a quote
B	1 1/8" - 2 1/4"	\$3.16	\$3.03	\$2.59	
C	2 3/8" - 3 1/4"	\$6.11	\$5.93	\$4.67	
D	3 3/8" - 4 1/2"	\$6.40	\$6.23	\$5.13	
E	4 5/8" - 5 7/8"	\$6.76	\$6.54	\$5.41	

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.

Maxilar™ Markers MS-995



- Polyester/MS-1000 construction provides proven protection from sunlight and maximum resistance to acids and bases found in process operations
- Sub-surface printing and MS-1000 lamination protects graphics from damaging chemicals and sun fading
- Ideal for chemical process plants, pharmaceutical plants, pulp and paper mills, and upstream and downstream oil and gas facilities
- Precoiled markers install easily by wrapping completely around the pipe and affixing to themselves [not the pipe surface] with a MS-1000 sealing strip
- Service temperature range from -40° to 250° F
- Eliminates pipe surface preparation before installation
- Complies with ASME A13.1 "Scheme for the Identification of Piping Systems" standard with regard to color, marker size and letter height
- Markers for larger diameter pipe are secured by stainless steel straps
- Markers can be removed and reinstalled for re-insulation or repainting

Pipe Markers

MS-995



Pipe Diameter	Marker Style	Marker Width	Character Height	Marker Type
3/8" - 1/2"	TM	3"	1/4"	Wrap Around
5/8" - 1"	A	8"	1/2"	Wrap Around
1 1/8" - 2 1/2"	B	8"	3/4"	Wrap Around
2 1/2" - 4 3/4"	D	12"	1 1/4"	Wrap Around
5" - 7 7/8"	E	12"	1 1/4"	Wrap Around
8" - 10"	J	12"	1 1/4"	Wrap Around
11" - 12"	K	12"	1 1/4"	Wrap Around
13" - 15"	L	12"	1 1/4"	Wrap Around
16" - 18"	N	12"	1 1/4"	Wrap Around
8" and up	M	32"	2 1/2" - 3 1/2"	Strap-on

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 Maxilar™ Markers

Designed for the process chemical industry and outdoor environments.

Styles Available

Coiled polyester/MS-1000 pipe markers are available in ten standard sizes to fit pipes with overall outside diameters of 3/8" 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 4 1/2" x 33" marker consists of a MS-1000 laminated legend label applied to a durable chemical & weather resistant carrier. Markers are strapped onto the pipe using stainless steel straps. Meets ASME A13.1

See the Stainless Steel Straps and Locking Tools on page 25

STOCK PRICING PER MARKER				
Style	1 - 49	50 - 99	100 - 249	250+
TM	\$2.66	\$2.58	\$2.45	call for a quote
A	\$4.93	\$4.87	\$4.81	
B	\$5.60	\$5.52	\$5.43	
D	\$9.20	\$9.08	\$8.93	
E	\$11.17	\$11.11	\$11.02	
J	\$15.44	\$15.33	\$15.18	
K	\$19.29	\$19.14	\$18.93	
L	\$23.27	\$23.11	\$22.97	
N	\$28.73	\$28.57	\$28.45	
M [STRAP-ON]	\$17.81	\$17.71	\$17.54	

Legend	Color	Part#
ACID	Yellow	9902-
ALUM	Yellow	1006-
AMINE	Yellow	1054-
AMMONIA	Yellow	1005-
BIOCIDE	Yellow	1008-
BLACK DYE	Yellow	1009-
BLACK LIQUOR	Yellow	9903-
BLEACHED STOCK	Yellow	9904-
BLUE DYE	Yellow	1010-
BOILER BLOWDOWN	Yellow	1011-
BOILER DRAIN	Yellow	1012-
BOILER FEEDWATER	Yellow	9941-
BREATHING AIR	Blue	1102-
BROKE	Yellow	9905-
BROWN STOCK	Yellow	9906-
BUTADIENE	Yellow	1014-
BUTANE	Yellow	1013-
BUTENE	Yellow	1055-
CALCIUM CARBONATE	Yellow	9942-
CATALYST	Yellow	1015-
CAUSTIC	Yellow	9907-
CAUSTIC SODA	Yellow	9943-
CHILLED WATER RETURN	Green	1016-
CHILLED WATER SUPPLY	Green	1017-
CHLORINE	Yellow	9908-
CHLORINE DIOXIDE	Yellow	9909-
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	1021-
COATING SLURRY	Yellow	1056-
COLD WATER	Green	1141-
COMPRESSED AIR	Blue	1022-
COMPRESSED AIR	Yellow	1057-
CONDENSATE	Yellow	9944-
CONDENSER WATER RETURN	Green	1023-
CONDENSER WATER SUPPLY	Green	1024-
COOLING WATER	Green	1025-
COOLING WATER RETURN	Green	1106-
COOLING WATER SUPPLY	Green	1107-
CONTAMINATED CONDENSATE	Yellow	1028-
CRUDE OIL	Yellow	1026-
DEFOAMER	Yellow	9911-
DEMINEALIZED WATER	Green	1027-
DILUTION WATER	Yellow	9948-
DRAIN	Yellow	1029-
DRINKING WATER	Green	1030-
EFFLUENT	Yellow	1031-
ETHYLENE	Yellow	1032-
ETHYLENE GLYCOL	Yellow	1109-
FEED STOCK	Yellow	1033-
FILTERED WATER	Green	9914-
FILTRATE	Yellow	9913-
FIRE PROTECTION WATER	Red	1034-
FLARE	Yellow	1035-
FLOOR DRAIN	Yellow	1036-

Legend	Color	Part#
FLUSH WATER	Yellow	1061-
FOUL CONDENSATE	Yellow	9949-
FRESH WATER	Green	1037-
FUEL GAS	Yellow	1038-
FUEL OIL	Yellow	9950-
#2 FUEL OIL	Yellow	1039-
#6 FUEL OIL	Yellow	1040-
GAS	Yellow	1144-
GLYCOL	Yellow	1042-
GLYCOL RETURN	Yellow	1111-
GLYCOL SUPPLY	Yellow	1112-
GREEN LIQUOR	Yellow	9915-
GROUNDWOOD	Green	1041-
HARDWOOD STOCK	Yellow	9916-
HEATING WATER RETURN	Yellow	1145-
HEATING WATER SUPPLY	Yellow	1146-
HEAVY BLACK LIQUOR	Yellow	9951-
HEXANE	Yellow	1043-
HI PRESS CONDENSATE	Yellow	9947-
HI PRESS GAS	Yellow	1113-
HI PRESS SHOWER WATER	Yellow	1045-
HI PRESS STEAM	Yellow	1114-
HOT GAS	Yellow	1115-
HOT WATER	Yellow	1044-
HOT WATER RETURN	Yellow	1116-
HOT WATER SUPPLY	Yellow	1117-
HYDRAULIC OIL	Yellow	9917-
HYDROCHLORIC ACID	Yellow	1046-
HYDROGEN	Yellow	1047-
HYDROGEN PEROXIDE	Yellow	1048-
HYDROGEN SULFIDE	Yellow	1049-
IGNITER GAS	Yellow	1050-
INSTRUMENT AIR	Blue	9918-
INSTRUMENT NITROGEN	Blue	1118-
ISO-BUTANE	Yellow	1051-
ISO-BUTYLENE	Yellow	1052-
KEROSENE	Yellow	1062-
LO PRESS CONDENSATE	Yellow	9945-
LO PRESS STEAM	Yellow	1120-
LUBE OIL	Yellow	9920-
LUBE OIL RETURN	Yellow	1147-
LUBE OIL SUPPLY	Yellow	1148-
MAKEUP WATER	Green	1053-
MEDIUM PRESS CONDENSATE	Yellow	9946-
MEDIUM PRESS STEAM	Yellow	1156-
METHANOL	Yellow	9952-
MILL AIR	Blue	9921-
MILL WATER	Green	9922-
MTBE	Yellow	1063-
NATURAL GAS	Yellow	9923-
NITROGEN	Blue	9964-
NON CONDENSABLE GAS	Yellow	9953-
NON POTABLE WATER	Yellow	1066-
NORMAL BUTANE	Yellow	1067-
OFF GAS	Yellow	1068-
OVERFLOW	Yellow	9965-
OXYGEN	Green	1074-
PLANT AIR	Blue	9924-

Legend	Color	Part#
PLANT WATER	Green	9925-
POTABLE WATER	Green	9968-
PROCESS WATER	Green	1069-
PROCESS WATER RETURN	Green	1149-
PROCESS WATER SUPPLY	Green	1150-
PROPANE	Yellow	9971-
PULP	Yellow	9962-
QUENCH WATER	Yellow	1129-
RAFFINATE	Yellow	1070-
RAW WATER	Green	9963-
RED DYE	Yellow	9972-
REJECTS	Yellow	9927-
RELIEF	Yellow	9973-
RETENTION AID	Yellow	9974-
ROOF DRAIN	Green	9975-
SALTCAKE	Yellow	9976-
SANITARY DRAIN	Green	1131-
SANITARY SEWER	Green	1130-
SEAL WATER	Green	9928-
SHOWER WATER	Yellow	9977-
SIZE	Yellow	9978-
SOAP	Yellow	9979-
SODA ASH	Yellow	9980-
SODIUM CHLORATE	Yellow	9954-
SODIUM HYDROXIDE	Yellow	9955-
SOFT WATER	Green	1151-
SOFTWOOD STOCK	Yellow	9929-
STARCH	Yellow	9981-
STEAM	Yellow	9983-
50# STEAM	Yellow	9986-
150# STEAM	Yellow	9990-
STEAM CONDENSATE	Yellow	1152-
STOCK	Green	9930-
STORM DRAIN	Green	1153-
STORM SEWER	Green	1154-
STORM WATER	Green	1071-
STRONG BLACK LIQUOR	Yellow	9959-
SULFUR DIOXIDE	Yellow	9932-
SULFURIC ACID	Yellow	9931-
TALL OIL	Yellow	9995-
TITANIUM DIOXIDE	Yellow	9996-
TOWER WATER RETURN	Green	9997-
TOWER WATER SUPPLY	Green	9998-
TREATED WATER	Green	9999-
TURPENTINE	Yellow	1001-
UNBLEACHED STOCK	Yellow	9960-
UTILITY WATER	Yellow	1072-
VACUUM	Yellow	9933-
VENT	Yellow	9934-
WASTE OIL	Yellow	1073-
WASTE WATER	Yellow	1002-
WATER	Green	1159-
WEAK BLACK LIQUOR	Yellow	9937-
WEAK WASH	Yellow	9961-
WELL WATER	Green	1155-
WHITE LIQUOR	Yellow	9939-
WHITE WATER	Yellow	9940-
YELLOW DYE	Yellow	1003-

Pipe Markers

Custom MS-995



MS-995 Maxilar™ 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	Marker Style	Pipe Diameter
TM	3/8" – 1/2"	J	8" – 10"
A	1/2" – 1"	K	11" – 12"
B	1 1/8" – 2 1/4"	L	13" – 15"
D	2 1/2" – 4 3/4"	N	16" – 18"
E	5" – 7 7/8"	M*	8" and up

NOTE: Styles J,K,L,N do not meet the ASME A13.1-1966 standard regarding marker size and letter height.

STYLE M: For piping 8" and larger, the 4 1/2" x 33" marker consists of legend label applied to a durable chemical & weather resistant carrier. Markers are strapped onto the pipe using stainless steel straps. Meets ASME A13.1-1996.



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.

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
- Line Numbers
- Lines Origins [From] and Destination [To]
- P&ID Drawing Numbers

CUSTOM PRICING PER MARKER

Style	1-9	10-49	50-99	100+
TM	\$4.84	\$4.22	\$3.66	call for a quote
A	\$5.96	\$5.91	\$5.36	
B	\$6.54	\$6.49	\$5.93	
D	\$10.72	\$10.66	\$10.06	
E	\$12.10	\$12.01	\$11.52	
J	\$16.96	\$16.87	\$16.29	
K	\$20.96	\$20.90	\$20.31	
L	\$25.41	\$25.34	\$25.03	
N	\$31.55	\$31.43	\$30.64	
M (STRAP-ON)	\$18.69	\$18.61	\$18.36	

MS-995 High-Temperature 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

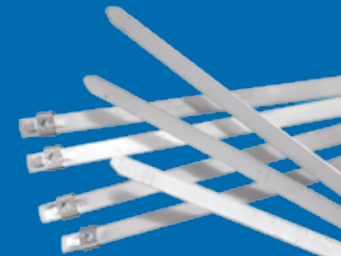
PRICING PER MARKER

Style	1-9	10-49	50+
2 3/4" x 18"	\$30.82	\$30.08	call for a quote
4 1/4" x 36"	\$61.99	\$60.06	

Pre-cut Stainless Steel Straps

Easy to install, cut-to-length stainless steel straps for use with Style M markers. Durable 1/4" wide stainless steel straps come with attached locking head. Use with Locking Tool #15715. No clips required.

Part #	Pipe Diameter	Strap Size	Unit Price
15710	8" thru 10"	35"	\$2.34
15711	11" thru 14"	47"	\$2.39
15712	15" thru 16"	60"	\$3.00



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.

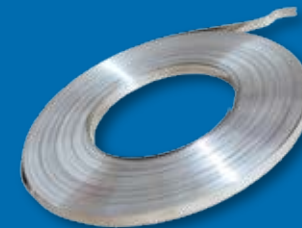
Stock #	Unit Price
15715	\$475.20



Coil of Strapping

200' coil of 3/8" stainless steel. Used for attaching Style M pipe markers. Used with locking clip (part #15735) and fastening tool (#15740)

Stock #	Unit Price
15730 [200']	\$121.49

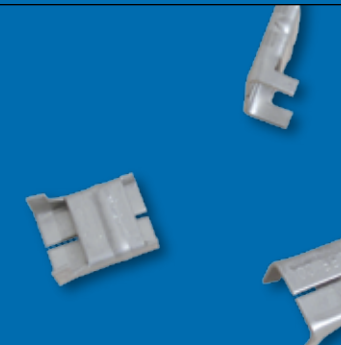


Stainless Steel Banding Tools and Mounting Brackets

Locking Clips for Strap

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

Stock #	Unit Price
15735	\$48.30



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.

Stock #	Unit Price
15740	\$540.75



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. Please note: 2 each are needed per marker.

Stock #	Unit Price
15601 1 1/4" Bracket	\$5.15
15743 1" Spacer	\$1.68



Ammonia Refrigeration Identification



Standard IAR Abbreviations

Part #	Legend	Abbv	State	Pres
3017	BOOSTER DISCHARGE	BD	VAP	LOW
3001	CONDENSER DRAIN	CD	LIQ	HIGH
3002	DEFROST CONDENSATE	DC	LIQ/VAP	HIGH
3018	ECONOMIZER SUCTION	ES	VAP	LOW
3003	EQUALIZER	EQ	VAP	HIGH
3019	FOUL GAS	FG	VAP	LOW
3005	HIGH PRESSURE LIQUID	HPL	LIQ	HIGH
3006	HIGH STAGE DISCHARGE	HSD	VAP	HIGH
3007	HIGH STAGE SUCTION	HSS	VAP	LOW
3008	HIGH TEMP RECIRCULATED LIQUID	HTRL	LIQ	LOW
3009	HIGH TEMP RECIRCULATED SUCTION	HTRS	LIQ/VAP	LOW
3020	HIGH TEMP SUCTION	HTS	VAP	LOW
3021	HOT GAS	HG	VAP	HIGH
3004	HOT GAS DEFROST	HGD	VAP	HIGH
3022	LIQUID DRAIN	LD	LIQ	LOW
3023	LIQUID INJECTION COOLING	LIC	LIQ	HIGH
3024	LIQUID TRANSFER	LT	LIQ	LOW
3010	LOW STAGE SUCTION	LSS	VAP	LOW
3011	LOW TEMP RECIRCULATED LIQUID	LTRL	LIQ	LOW
3012	LOW TEMP RECIRCULATED SUCTION	LTRS	LIQ/VAP	LOW
3025	LOW TEMP SUCTION	LTS	VAP	LOW
3026	MEDIUM TEMP RECIRCULATED LIQUID	MTRL	LIQ	LOW
3027	MEDIUM TEMP RECIRCULATED SUCTION	MTRS	LIQ/VAP	LOW
3028	MEDIUM TEMP SUCTION	MTS	VAP	LOW
3029	PUMP OUT	PO		
3030	PURGE LINE	PL	VAP	HIGH
3013	RELIEF VENT	RV		
3014	RELIEF VENT	RV	VAP	HIGH
3015	THERMOSYPHON RETURN	TSR	LIQ/VAP	HIGH
3016	THERMOSYPHON SUPPLY	TSS	LIQ	HIGH

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

MS-900 SELF ADHESIVE PIPE MARKERS *						
Style	Pipe Size	Marker Size	1-49	50-99	100-249	250+
AAL	¾" thru 2 ³ / ₈ "	1" x 12"	\$3.28	\$3.16	\$2.67	call for a quote
ABL	2½" thru 7 ⁷ / ₈ "	2¼ x 16"	\$4.15	\$4.06	\$3.87	
ACL	8" thru 10"	4" x 24"	\$5.40	\$5.26	\$4.87	
ADL	over 10"	4" x 32"	\$6.74	\$6.60	\$6.18	

* includes arrow

Also available in Spanish or French. Custom legends are available at no extra charge.

Ask for MS-1000 over-laminate for markers that need protection from UV fading and chemicals commonly used in process washdowns. Please call for a quote.



Component Markers

(yellow background only)

- Complete the Ammonia identification package by labeling the process equipment. MS-900 self-adhesive markers meet the IAR Bulletin #114 requiring 2½" letter heights.
- Custom sizes, legends and pressure designations available.

COMPONENT MARKERS			
Legend	Size	Part #	Unit Price
COMPRESSOR		65548	
EVAPORATOR		65549	
HI PRESS RECEIVER		65550	
HI TEMP ACCUMULATOR		65551	
INTERCOOLER		65552	
INTERMEDIATE RECIRCULATOR	4" x 32"	65553	\$7.12
LO PRESS RECEIVER		65554	
PROCESSING HOT GAS		65555	
PROCESSING RECIRCULATOR		65556	
SUCTION ACCUMULATOR		65557	

MS-995 Maxilar™ Polyester/MS-1000 Pipe Markers

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

- Polyester/MS-1000 construction provides proven protection from the effects of direct sunlight
- Sub-surface printing and MS-1000 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 MS-1000 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 2¾" x 18" style AMF and 4½" x 33" style AM markers consist of a legend label applied to a durable chemical & weather resistant 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

MS-995 MAXILAR POLYESTER COILED MARKERS					
Style	Pipe Size	1-49	50- 99	100-249	250 +
AB	¾" - 2½"	\$6.45	\$6.21	\$6.04	call for a quote
AD	2¾" - 4¾"	\$10.21	\$10.00	\$9.74	
AE	5" - 7 ⁷ / ₈ "	\$13.07	\$12.82	\$12.58	
AMF	5" - 7 ⁷ / ₈ "	\$10.21	\$10.00	\$9.74	
AM	8" and over"	\$17.64	\$17.55	\$17.38	

Styles AB, AD, AE are coiled markers. Styles AMF and AM are strap on. Include insulation in your pipe measurements.



STANDARD IAR ABBREVIATIONS				
Part #	Legend	Abbv	State	Pres
3101	BOOSTER DISCHARGE	BD	VAP	LOW
3102	CONDENSER DRAIN	CD	LIQ	HIGH
3116	DEFROST CONDENSATE	DC	LIQ/VAP	HIGH
3118	ECONOMIZER SUCTION	ES	VAP	LOW
3117	EQUALIZER	EQ	VAP	HIGH
3119	FOUL GAS	FG	VAP	LOW
3104	HIGH PRESSURE LIQUID	HPL	LIQ	HIGH
3105	HIGH STAGE DISCHARGE	HSD	VAP	HIGH
3106	HIGH STAGE SUCTION	HSS	VAP	LOW
3107	HIGH TEMP RECIRCULATED LIQUID	HTRL	LIQ	LOW
3108	HIGH TEMP RECIRCULATED SUCTION	HTRS	LIQ/VAP	LOW
3120	HIGH TEMPERATURE SUCTION	HTS	VAP	LOW
3121	HOT GAS	HG	VAP	HIGH
3103	HOT GAS DEFROST	HGD	VAP	HIGH
3122	LIQUID DRAIN	LD	LIQ	LOW
3123	LIQUID INJECTION COOLING	LIC	LIQ	HIGH
3124	LIQUID TRANSFER	LT	LIQ	LOW
3109	LOW STAGE SUCTION	LSS	VAP	LOW
3110	LOW TEMP RECIRCULATED LIQUID	LTRL	LIQ	LOW
3111	LOW TEMP RECIRCULATED SUCTION	LTRS	LIQ/VAP	LOW
3125	LOW TEMPERATURE SUCTION	LTS	VAP	LOW
3126	MEDIUM TEMP RECIRCULATED LIQUID	MTRL	LIQ	LOW
3127	MEDIUM TEMP RECIRCULATED SUCTION	MTRS	LIQ/VAP	LOW
3128	MEDIUM TEMP SUCTION	MTS	VAP	LOW
3129	PUMP OUT	PO		
3130	PURGE LINE	PL	VAP	HIGH
3112	RELIEF VENT	RV	VAP	HIGH
3113	RELIEF VENT	RV		
3114	THERMOSYPHON RETURN	TSR	LIQ/VAP	HIGH
3115	THERMOSYPHON SUPPLY	TSS	LIQ	HIGH

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

SECTION 1 - IIAR Approved Abbreviations (Partial List)	
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
Vapor	VAP

SECTION 3 - Ammonia

SECTION 4 - Pressure level abbreviation	
Low [70 PSIG and under]	LOW
High [over 70 PSIG]	HIGH

SECTION 5 - Flow Direction Arrow	
Left Pointing Arrow	← SCORED
Right Pointing Arrow	→ 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



PRICE PER TAG	
Tag Size	Unit Price
1" x 3"	\$6.04
2" x 4"	\$6.41
4" x 6"	\$16.45

TO ORDER Specify tag wording, size, color and quantity of each tag. If this information is available electronically simply email us the file.

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: -40° F to 200° 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



PRICE PER TAG				
Tag Size	1-49	50-99	100-249	250 +
2" Round	\$3.78	\$3.69	\$3.62	Call for a quote
2" Square	\$3.78	\$3.69	\$3.62	
2" x 4"	\$5.30	\$5.20	\$5.06	
1½" x 5"	\$6.05	\$5.96	\$5.88	



Ammonia Refrigeration Identification



TO ORDER TAGS - Fax or e-mail your list of tag legends.

Combine all tags for best pricing. Specify the number and location of stainless steel grommets.

INFORMATIONAL SIGNS - Specify quantity, size, color and customer specific information needed.

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.

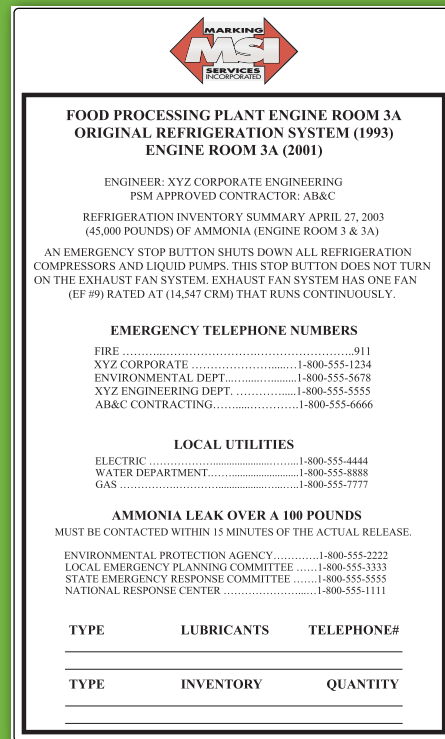
- Low light location tags are constructed of the same durable materials as our other MAX-TEK™ tags and the printed background glows for up to six hours in darkness.
- Available in two thicknesses:
 - 1) MS-215 R [125 mil] for rigid mounting applications
 - 2) MS-215 F [30 mil] for mounting to curved surfaces.
- Tags can be mounted using heavy duty adhesive (page 40) or hung with stainless steel fasteners (page 35)

PRICE PER TAG				
Size	1-49	50-99	100-249	250+
2" Round	\$4.96	\$4.81	\$4.62	call for a quote
2" x 2"	\$4.96	\$4.81	\$4.62	
1" x 3"	\$5.96	\$5.69	\$5.41	
2" x 4"	\$6.72	\$6.47	\$6.22	

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.

PRICE PER SIGN	
Sign Size	Unit Price
16" x 10"	\$42.90
24" x 16"	\$106.68
36" x 24"	\$253.16



TO ORDER AMMONIA IDENTIFICATION SIGNS -

Specify both the part number and quantity desired.

FLOW DIAGRAMS - E-mail drawing file and quantity.

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.

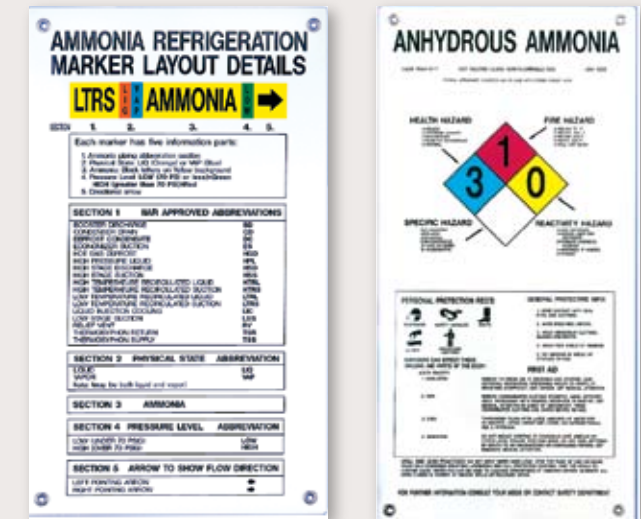
PRICE PER SIGN		
Part #	Size	Unit Price
65521	24" x 12"	\$68.57
65547	20" x 12"	\$59.66

MS-215 Max-Tek™ Ammonia System Flow Diagrams

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

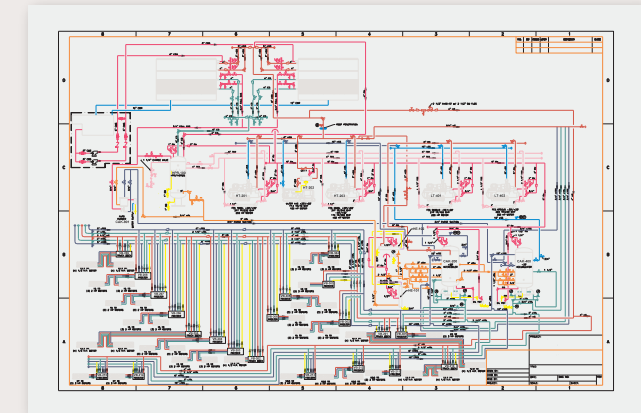
- Signs are an excellent training aid
- Available in 3 sizes

PRICE PER SIGN	
Sign Size	Unit Price
11" x 17"	\$59.38
20" x 24"	\$145.53
24" x 36"	\$303.87



Wall Chart Sign
Part # 65547

Ammonia Tank & Vessel Sign
Part # 65521



Tags



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

Material: MS-215 Tags

Service Temperature Range:	-40° F to 200° F
Water Resistance	Excellent
Outdoor Durability	Minimum 5 years
UV-Resistance	Excellent
Abrasion Resistance	Excellent

Chemically-resistant to strong acids and bases

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.

PRICE PER TAG				
Size	1 - 49	50 - 99	100 - 249	250 +
1½" Round	\$3.31	\$3.23	\$3.04	call for a quote
1½" Square	\$3.31	\$3.23	\$3.04	
2" Round	\$3.78	\$3.69	\$3.62	
2" Square	\$3.78	\$3.69	\$3.62	
1" x 3"	\$4.73	\$4.63	\$4.36	
2" x 3"	\$5.04	\$4.91	\$4.67	
2" x 4"	\$5.30	\$5.20	\$5.06	
3" x 6"	\$7.04	\$6.88	\$6.77	
4" x 8"	\$10.43	\$10.21	\$10.03	

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 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



PRICE PER INDIVIDUAL ENGRAVED TAG/SIGN

Size	1 - 10	11 - 49	50 +
¾" x 2½"	\$2.49	\$2.25	call for a quote
1" x 2½"	\$3.45	\$3.15	
1" x 3"	\$4.79	\$4.27	
1½" x 4"	\$5.71	\$5.16	
2" x 4"	\$6.73	\$6.09	
2" x 6"	\$6.87	\$6.24	
2" x 8"	\$7.30	\$6.81	
4" x 6"	\$7.93	\$7.58	

Engraved Plastic Valve & Instrument Tags

For color-coding valves or instrumentation.

- Excellent visibility
- Standard tags are engraved on 1/16" 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



PRICE PER TAG

Size	1 - 99	100 - 249	250 +
1½"	\$1.49	\$1.28	call for a quote
2"	\$2.00	\$1.61	
3"	\$4.22	\$3.79	
4"	\$5.62	\$5.50	

Tags



TOP LINE SERVICE

[NONE]	Numbers Only	FP	Fire Protection
AIR	Air	GAS	Gas
CHW	Chilled Water	HTG	Heating
CHWR	Chilled Water Return	HHWR	Heating Hot Water Return
CHWS	Chilled Water Supply	HHWS	Heating Hot Water Supply
COND	Condensate	HW	Hot Water
CW	Cold Water	HWR	Hot Water Return
CWR	Cold Water Return	HWS	Hot Water Supply
CWS	Cold Water Supply	HVAC	HVAC
DCW	Domestic Cold Water	PLBG	Plumbing
DHW	Domestic Hot Water	STM	Steam

TO ORDER TAGS - Fax, e-mail or call in your list of tag legends. Combine all tags for best pricing.

Brass Valve Tags

- 20-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)

PRICING PER STANDARD TAG - PKG/25			
Tag size/shape	1-100	101-250	251+
1½" Round	\$0.93	\$0.91	
1½" Square	\$1.05	\$1.01	call for a quote
2" Round	\$1.45	\$1.39	
2" Square	\$1.45	\$1.39	

PRICING PER BLANK TAG			
Tag size/shape	1-99	100-249	250+
1½" Round	\$0.55	\$0.53	
1½" Square	\$0.55	\$0.53	call for a quote
2" Round	\$0.87	\$0.85	
2" Square	\$0.87	\$0.85	

Note: All top-line legends ordered in sequence of 25 consecutive tags qualify for stock pricing even if they are different than legends shown. For longer number sequences, custom legends or different size tags, call for a quotation.

Valve Tag Fasteners & Accessories

1) Jack Chain

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

Stock number	Price / box
15760 [#16 solid brass]	\$37.28
15761 [304 stainless steel]	\$77.33

2) Bead Chain

- Flexible chain in 4½" lengths including locking link
- 100 lengths per bag

Stock number	Price / bag
15765 [#6 Brass]	\$18.01
15766 [304 stainless steel]	\$29.82

3) "S" Hooks

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

Stock number	Price / bag
15770 [Solid brass]	\$22.31
15767 [304 stainless steel]	\$52.40

4) Lead Meter Seals

- Fast, permanent way to attach valve tags
- Supplied in 10" lengths
- 100 lengths per pack

Stock number	Price / Pack
15795 [Copper]	\$25.80
15797 [Stainless Steel]	\$28.94

5) Zinc Snap Hooks

- Easy open/close snap hooks for valve tags
- 100 2½" hooks per box

Stock number	Price / Box
15798	\$26.96

6) 8" Nylon Tag Ties

- Simple, quick way to attach valve tags
- 100 ties per bag

Stock number	Price / bag
15785	\$17.17

7) Valve Chart Frame

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

Stock number	Price / each
15790	\$20.85

8) Sealing Press

- Tool for sealing lead meter seals

Stock number	Price / tool
15796	\$81.22

9) Stainless Steel Swage Sleeves

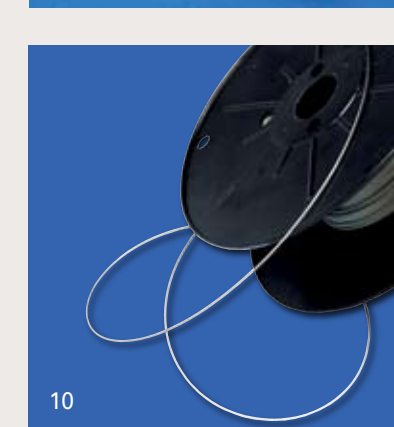
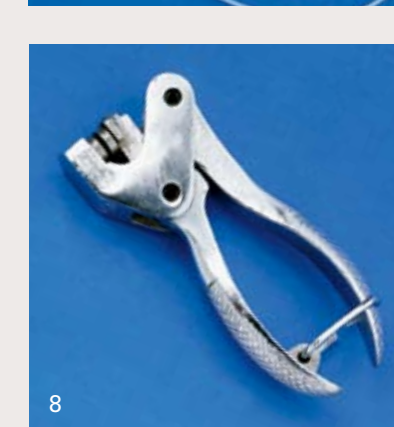
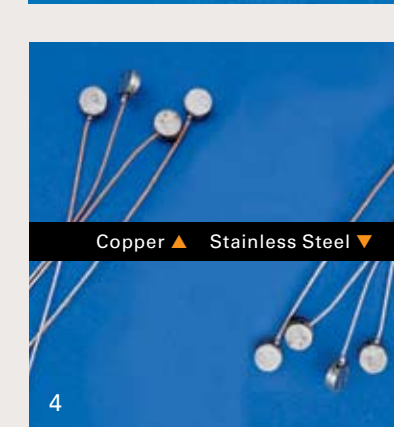
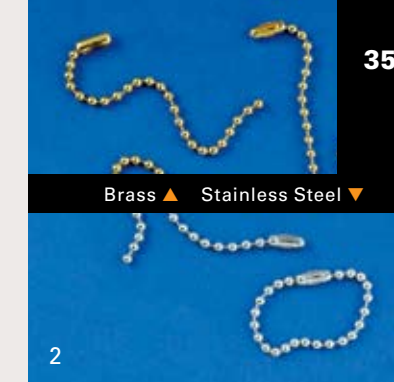
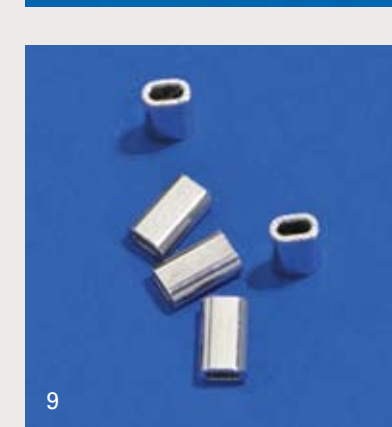
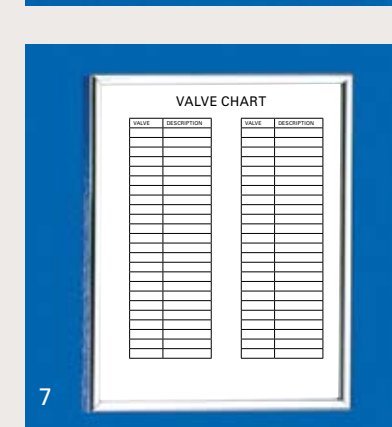
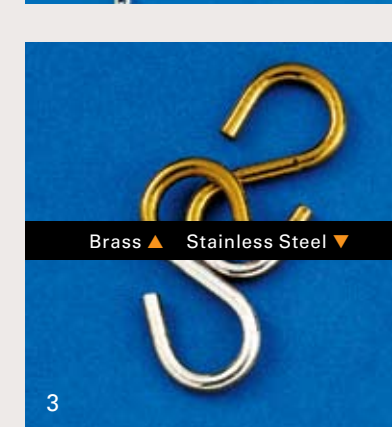
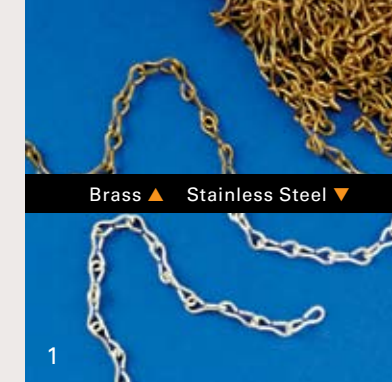
- 100 per bag • Type 316 stainless

Stock number	Price / bag
15746	\$129.83

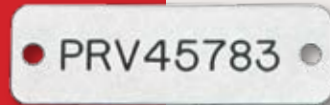
10) Stainless Steel Braided Wire

- 100' roll • Type 316 stainless

Stock number	Price / roll
15747	\$94.82



Tags



TO ORDER TAGS - Specify tag size, quantity and legends required. Other sizes available, please call for a quote.

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

PRICE PER TAG	
Tag Size	Unit Price
1" x 3"	\$6.04
2" x 4"	\$6.41
4" x 6"	\$16.45

Stainless Steel Valve Tags

PRICE PER TAG				
Size	1-49	50-99	100-249	250+
1½" Round	\$4.49	\$4.36	\$4.21	Call for a quote
1" x 3" Rectangle	\$6.04	\$5.86	\$5.68	
2" Round	\$5.03	\$4.90	\$4.81	
2" Square	\$5.03	\$4.90	\$4.81	

Control Valve & Sample Point Location Tags

- MS-215 tags are 3" 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.

PRICE PER 3" X 6" TAG	
Type	Unit Price
Rigid - includes bracket	\$26.78

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.

PRICE PER TAG				
Tag Size	1-49	50-99	100-249	250+
1" x 3"	\$4.73	\$4.63	\$4.36	Call for a quote
2" x 4"	\$5.30	\$5.20	\$5.06	
custom sizes available				



Tags



TO ORDER Choose the appropriate size tag and indicate the color and legend sequence needed. Submit your list via e-mail, on CD, fax or phone.

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" round or square, each with one 3/16" mounting hole
- Background colors available: Green, Red, Blue, Gold Black and Natural
- Standard engraved letter height: ¼"

NOTE: FASTENERS LISTED ON PAGE 35.

PRICE PER TAG [tags are engraved on one side]

Size	1-99	100-249	250+
1½" Round	\$2.78	\$2.46	
1½" Square	\$2.78	\$2.46	call for a quote
2" Round	\$3.14	\$2.90	
2" Square	\$3.14	\$2.90	

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 3/16" 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

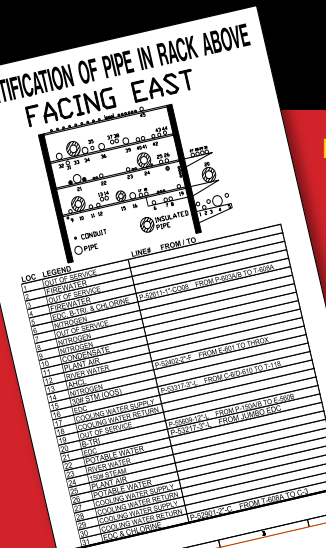
PRICE PER TAG

Tag Size	Unit Price
1" x 3"	\$6.17
2" x 4"	\$8.39
4" x 6"	\$10.77

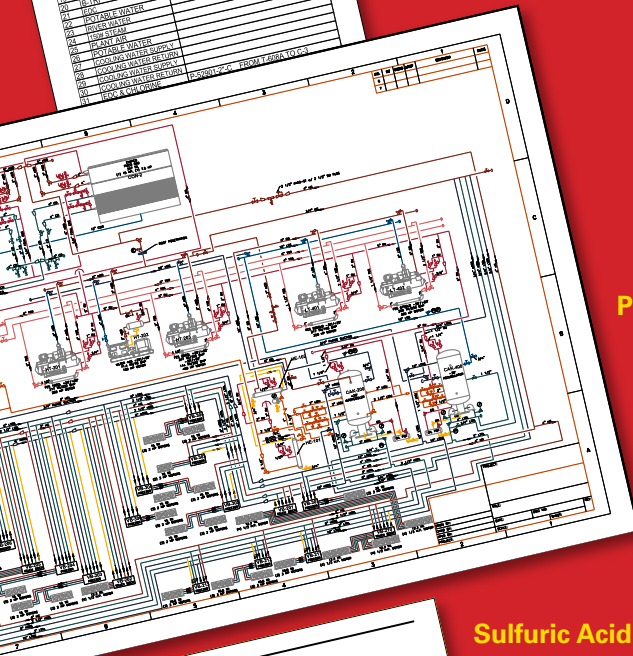
Signs



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.



Pipe Rack Locations



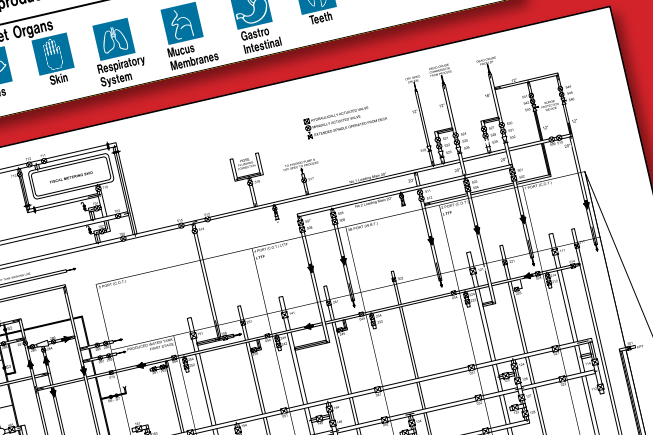
Process Flow

Sulfuric Acid
 Danger!
 4-93-9

to dark-brown, oil, odorless liquid
 , causes sever burns to
 n/respiratory tract. May cause
 s. Chronic tooth erosion. GI
 ances, and dermatitis. Reaction with
 produces excessive heat.

at Organs
 Skin
 Respiratory System
 Mucus Membranes
 Gastro Intestinal
 Teeth

Sulfuric Acid Hazard



Piping Diagram

TO ORDER SIGNS - Please call for assistance.

Custom Max-Tek™ 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 [.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)



Construction Adhesive Available in 10.2 oz. tubes

Heavy Duty Adhesive Part # 15769
 Silicone Sealant Part # 15756
 Adhesive cartridge fits most caulk guns.
 MSDS available.

\$7.07 Per Tube



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 layouts: 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

PRICE PER SIGN				
Sign Size	1-9	10-24	25-49	50+
6" x 20"	\$44.67	\$42.70	\$38.51	Call for a quote
12" x 20"	\$68.31	\$64.66	\$59.80	

PRICE PER SIGN [deduct 10% for MS-215 flexible signs]				
Size	1	2-3	4-9	10+
24" x 12"	\$81.53	\$74.30	\$67.57	Call for quote

Part #	Legend	Health	Fire	Reactivity	Specific Hazard
65520	ALUM	2	0	0	-
65522	BLACK DYE	1	1	1	-
65523	BLACK LIQUOR	2	0	2	-
65524	BLUE DYE	0	0	0	-
65525	CALCIUM CARBONATE	1	0	1	-
65526	CAUSTIC	3	0	1	-
65527	CHLORINE	3	1	0	W
65528	DEFOAMER	1	2	0	-
65529	DIESEL FUEL	0	2	0	-
65530	FUEL OIL	0	2	0	-
65531	GASOLINE	1	3	0	-
65532	GREEN LIQUOR	2	0	2	-
65534	HYDROGEN	3	4	0	-
65535	METHANE	1	4	0	-
65536	METHANOL	1	4	0	-
65537	NITRIC ACID	3	0	1	-
65538	NITROGEN	0	0	0	-
65540	PHOSPHORIC ACID	3	0	2	-
65539	POLYMER	0	0	0	-
65541	PROPANE	1	4	0	-
65542	RED DYE	0	1	0	-
65543	SODA ASH	1	0	0	-
65544	SULFURIC ACID	3	0	1	W
65545	TITANIUM DIOXIDE	0	0	0	-
65546	WHITE LIQUOR	3	0	2	OXY



Signs



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 Max-Tek™ 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

PRICE PER MS-960 LABEL				
Size	1-9	10-49	50-99	100+
4" x 12"	\$8.17	\$7.59	\$7.04	Call for a quote
6" x 18"	\$18.32	\$17.21	\$16.12	Call for a quote

PRICE PER MS-215F SIGN				
Size	1-9	10-49	50-99	100+
4" x 12"	\$20.29	\$19.50	\$18.34	Call for a quote
6" x 18"	\$39.22	\$38.06	\$37.01	Call for a quote



Size: 6" x 18" Part # IMO 201



Size: 6" x 18" Part # IMO 202



Size: 6" x 18" Part # IMO 203



Size: 6" x 18" Part # IMO 204



Size: 6" x 18" Part # IMO 205



Size: 6" x 18" Part # IMO 206



Size: 6" x 18" Part # IMO 207



Size: 6" x 18" Part # IMO 208



Size: 6" x 18" Part # IMO 209



Size: 6" x 18" Part # IMO 210



Size: 6" x 18" Part # IMO 213



Size: 6" x 18" Part # IMO 216



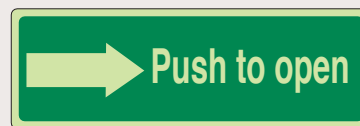
Size: 6" x 18" Part # IMO 219



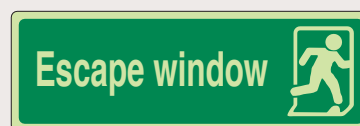
Size: 6" x 18" Part # IMO 222



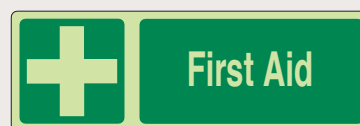
Size: 4" x 12" Part # IMO 225



Size: 4" x 12" Part # IMO 228



Size: 4" x 12" Part # IMO 231



Size: 4" x 12" Part # IMO 234



Size: 6" x 18" Part # IMO 211



Size: 6" x 18" Part # IMO 214



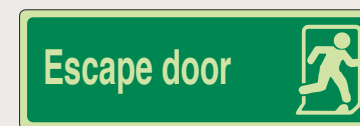
Size: 6" x 18" Part # IMO 217



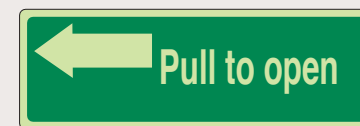
Size: 6" x 18" Part # IMO 220



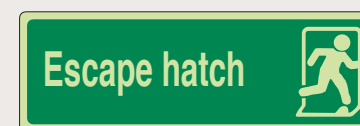
Size: 6" x 18" Part # IMO 223



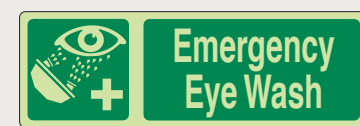
Size: 4" x 12" Part # IMO 226



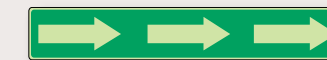
Size: 4" x 12" Part # IMO 229



Size: 4" x 12" Part # IMO 232



Size: 4" x 12" Part # IMO 235



Low-Level Lighting Arrows
Part #: IMO 237
Size: 3" x 18"
\$19.50 215F Sign



Size: 6" x 18" Part # IMO 212



Size: 6" x 18" Part # IMO 215



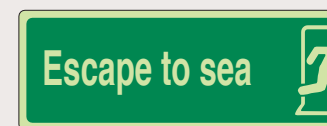
Size: 6" x 18" Part # IMO 218



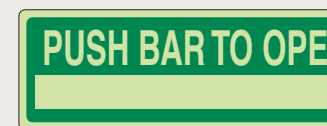
Size: 6" x 18" Part # IMO 221



Size: 6" x 18" Part # IMO 224



Size: 4" x 12" Part # IMO 227



Size: 4" x 12" Part # IMO 230



Size: 4" x 12" Part # IMO 233



Size: 4" x 12" Part # IMO 236

Signs

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

PRICE PER SIGN

Size	1-9	10-24	25+
7" x 12"	\$18.38	\$17.25	
10" x 14"	\$36.65	\$35.81	call for a quote
12" x 20"	\$46.77	\$44.80	

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.

PRICE PER SAS SIGN

Size	1-9	10-24	25+
7" x 12"	\$6.89	\$6.64	
10" x 14"	\$11.36	\$10.25	call for a quote
12" x 20"	\$17.27	\$16.25	

TO ORDER Select part number and quantity needed.



Size 215-R SAS
7"x12" 80000 82000
10"x14" 80001 82001
12"x20" 80002 82002



Size 215-R SAS
7"x12" 80003 82003
10"x14" 80004 82004
12"x20" 80005 82005



Size 215-R SAS
7"x12" 80036 82036
10"x14" 80037 82037
12"x20" 80038 82038



Size 215-R SAS
7"x12" 80039 82039
10"x14" 80040 82040
12"x20" 80041 82041



Size 215-R SAS
7"x12" 80042 82042
10"x14" 80043 82043
12"x20" 80044 82044



Size 215-R SAS
7"x12" 80045 82045
10"x14" 80046 82046
12"x20" 80047 82047



Size 215-R SAS
7"x12" 80048 82048
10"x14" 80049 82049
12"x20" 80050 82050



Size 215-R SAS
7"x12" 80006 82006
10"x14" 80007 82007
12"x20" 80008 82008



Size 215-R SAS
7"x12" 80009 82009
10"x14" 80010 82010
12"x20" 80011 82011



Size 215-R SAS
7"x12" 80051 82051
10"x14" 80052 82052
12"x20" 80053 82053



Size 215-R SAS
7"x12" 80054 82054
10"x14" 80055 82055
12"x20" 80056 82056



Size 215-R SAS
7"x12" 80057 82057
10"x14" 80058 82058
12"x20" 80059 82059



Size 215-R SAS
7"x12" 80060 82060
10"x14" 80061 82061
12"x20" 80062 82062



Size 215-R SAS
7"x12" 80063 82063
10"x14" 80064 82064
12"x20" 80065 82065



Size 215-R SAS
7"x12" 80012 82012
10"x14" 80013 82013
12"x20" 80014 82014



Size 215-R SAS
7"x12" 80015 82015
10"x14" 80016 82016
12"x20" 80017 82017



Size 215-R SAS
7"x12" 80066 82066
10"x14" 80067 82067
12"x20" 80068 82068



Size 215-R SAS
7"x12" 80069 82069
10"x14" 80070 82070
12"x20" 80071 82071



Size 215-R SAS
7"x12" 80072 82072
10"x14" 80073 82073
12"x20" 80074 82074



Size 215-R SAS
7"x12" 80075 82075
10"x14" 80076 82076
12"x20" 80077 82077



Size 215-R SAS
7"x12" 80078 82078
10"x14" 80079 82079
12"x20" 80080 82080



Size 215-R SAS
7"x12" 80018 82018
10"x14" 80019 82019
12"x20" 80020 82020



Size 215-R SAS
7"x12" 80021 82021
10"x14" 80022 82022
12"x20" 80023 82023



Size 215-R SAS
7"x12" 80081 82081
10"x14" 80082 82082
12"x20" 80083 82083



Size 215-R SAS
7"x12" 80084 82084
10"x14" 80085 82085
12"x20" 80086 82086



Size 215-R SAS
7"x12" 80087 82087
10"x14" 80088 82088
12"x20" 80089 82089



Size 215-R SAS
7"x12" 80090 82090
10"x14" 80091 82091
12"x20" 80092 82092



Size 215-R SAS
7"x12" 80093 82093
10"x14" 80094 82094
12"x20" 80095 82095



Size 215-R SAS
7"x12" 80024 82024
10"x14" 80025 82025
12"x20" 80026 82026



Size 215-R SAS
7"x12" 80027 82027
10"x14" 80028 82028
12"x20" 80029 82029



Size 215-R SAS
7"x12" 80096 82096
10"x14" 80097 82097
12"x20" 80098 82098



Size 215-R SAS
7"x12" 80099 82099
10"x14" 80100 82100
12"x20" 80101 82101



Size 215-R SAS
7"x12" 80102 82102
10"x14" 80103 82103
12"x20" 80104 82104



Size 215-R SAS
7"x12" 80105 82105
10"x14" 80106 82106
12"x20" 80107 82107



Size 215-R SAS
7"x12" 80108 82108
10"x14" 80109 82109
12"x20" 80110 82110



Size 215-R SAS
7"x12" 80030 82030
10"x14" 80031 82031
12"x20" 80032 82032



Size 215-R SAS
7"x12" 80033 82033
10"x14" 80034 82034
12"x20" 80035 82035



Size 215-R SAS
7"x12" 80111 82111
10"x14" 80112 82112
12"x20" 80113 82113



Size 215-R SAS
7"x12" 80114 82114
10"x14" 80115 82115
12"x20" 80116 82116



Size 215-R SAS
7"x12" 80117 82117
10"x14" 80118 82118
12"x20" 80119 82119

CUSTOM SIGNS AVAILABLE

Call us and we'll create your custom sign.

Signs



Back 1



Back 2

TO ORDER

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 # 40042.

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.

Premium Self-Laminating Accident Prevention Tags

- For durability and flexibility, these heavy duty 5 3/4" 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.

PRICE PER TAG				
Size	1-99	100-249	250-499	500+
5 3/4" x 3"	\$2.36	\$2.13	\$1.89	call for a quote

CUSTOM PRICE PER TAG				
Size	1-99	100-249	250-499	500+
5 3/4" x 3"	\$2.56	\$2.18	\$2.01	call for a quote

Part # SL4001 Part # SL4002 Part # SL4009 Part # SL4028 Part # SL4029 Part # SL4030 Part # SL4031 Part # SL4032 Part # SL4033

Part # SL4003 Part # SL4004 Part # SL4008 Part # SL4034 Part # SL4035 Part # SL4036 Part # SL4037 Part # SL4038 Part # SL4039

Part # SL4005 Part # SL4006 Part # SL4007 Part # SL4040 Part # SL4041 Part # SL4042 Part # SL4043 Part # SL4044 Part # SL4045

Part # SL4010 Part # SL4011 Part # SL4012 Part # SL4013 Part # SL4014 Part # SL4015

Part # SL4016 Part # SL4017 Part # SL4018 Part # SL4019 Part # SL4020 Part # SL4021

Part # SL4022 Part # SL4023 Part # SL4024 Part # SL4025 Part # SL4026 Part # SL4027

Turnkey Installation

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, direction of flow, origin and destination, as well as its 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.



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.

TERMS OF SALE:
Net 30 Days F.O.B. Milwaukee, WI

CREDIT TERMS:
All orders are subject to acceptance of Marking Services, Inc. Customers with established credit or well-rated by Dun & Bradstreet are normally on open account. First-time customers are requested to send a bank statement and three references along with the first order, or send a check, or accept C.O.D. shipment, or use your Mastercard, Visa, American Express or Discover.

RETURN POLICY:
Full packages of stock products in resalable condition will be accepted for return within thirty days from date of invoice. All returns must be shipped freight-paid after receipt of written authorization. A 15% restocking charge may apply. Returns of custom and one-of-a-kind printed products will not be accepted.

WARRANTY STATEMENT:
Marking Services, Inc. warrants, for a period of one year, that its products are free from defects in material and workmanship. Marking Services, Inc.'s obligation under this warranty is limited to replacement of the product if Marking Services, Inc.'s examination shall disclose to its satisfaction to have been defective at the time of sale. This is Marking Services, Inc.'s sole warranty. This warranty does not extend to any person or persons acquiring the product from the home buyer. MARKING SERVICES, INC. MAKES NO OTHER WARRANTIES OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESAID OBLIGATION ARE HEREBY DISCLAIMED BY MARKING SERVICES, INC. Under no circumstances shall Marking Services, Inc. be liable for any loss, damage, cost of repair or consequential damages of any kind in connection with the sale, use or repair of any product purchased from the company.

CORPORATE HEADQUARTERS
800.234.0135
414.973.1331
Fax/800.627.6432
8265 N. Faulkner Road
P.O. Box 240027
Milwaukee, Wisconsin 53224

ENGINEERING & INSTALLATION HEADQUARTERS
800.813.8642
281.424.6710
Fax/877.259.0134
5518 N. Decker Dr.
Houston, Texas 77520

EASTERN REGIONAL OFFICE
888.300.6202
302.478.0381
Fax/888.300.6231
Suite 208H
Plaza Centre
3505 Silver Side Road
Wilmington, Delaware 19810

WESTERN REGIONAL OFFICE
800.689.8233
Fax/800.896.5697
1921 N. Gaffey Street
Suite B
San Pedro, CA 90731

CANADIAN OFFICE
Marking Services Canada, Ltd.
780.955.9303
Fax/780.955.9322
702-12 Bay #6
Edmonton, Alberta T9E7P7

ASIAN OFFICE
Marking Services Inc (S) PTE LTD
65-6-872-1529
Fax/65-6-872-1669
Pantech Industrial Complex
196 Pandan Loop #07-15
Singapore 128384
sales@markingservices.com.sg

SALES OFFICES:
Dallas
800.378.3574
Fax/817.419.0036

Los Angeles
888.391.0777
Fax/951.246.1535

Virginia
804.687.9203
Fax/800.627.6432

Idaho
414.429.5250
Fax/208.429.1286

sales@markserv.com | www.markserv.com | 1.800.234.0135

Presorted
Standard
U.S. Postage
PAID
Milwaukee, WI
Permit No. 4134