

# METAL INDUSTRIAL HOSE



CSA standard B51 certified. Inspected and tested by the Technical Standards and Safety Authority of Canada.



## TRADITIONS WILL NEVER MEAN LIMITS.

We understand that no customer's requirements are exactly the same. That our audience is targeted to engineers, designers and construction contractors whose responsibilities are to oversee costs and quality in the physical realm of installation of piping systems to existing and newly constructed buildings.

That's why Flex-Hose Co. pays so much attention to the details of your experience. Our employees will greet you in such a way that says we truly care and appreciate the opportunity to meet your performance expectation. Flex-Hose Co. personnel have the technical training and ability to provide solutions to the most demanding application. Our support also extends through specific job analysis services which recommends product placement within a piping system, perfectly integrating them into the overall theme of your project, saving you both time and money. This is the result of staying true to what is essentially right.

## ANYTHING WORTH DOING IS WORTH DOING RIGHT.

It's not very hard to understand that people are influenced by innovation, long-term reliability, ease of installation, and extreme cost savings. It's a no-brainer. This essence is built into the very fabric of our business and products since 1968.

Flex-Hose Co. operates under an ISO 9000 model quality plan. We carry third party listings under Underwriters Laboratories and hold a CSA B51 certificate to meet the high quality standards of the Canadian market.

Flex-Hose Co. industrial metal hose assemblies are engineered and manufactured for a broad range of requirements. They have been used in some of the most demanding applications worldwide. They are capable of isolating critical mechanical equipment from piping stress, thermal growth, dampen vibration, and reduce noise. Our renowned products are manufactured with a 4:1 safety factor to ensure safety and performance.

All Flex-Hose industrial metal hose assemblies are 100% tested at the factory to insure trouble free installation. and years of quality service.

So enjoy years of service with our flexible piping connections. Flex-Hose Co. products give you that choice. Don't compromise.

Phil Argersinger, President/Owner

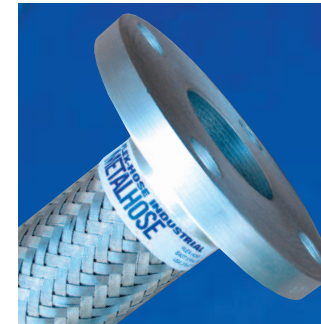
# INDUSTRIAL METAL HOSE SELECTION GUIDE

## AVAILABLE ALLOYS:

- 316 STAINLESS STEEL
- 321 STAINLESS STEEL
- BRONZE
- HASTELLOY®
- INCONEL®
- MONEL®

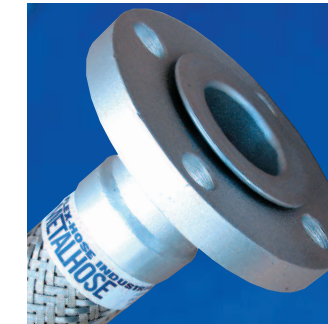
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## STAINLESS STEEL HOSE AND BRAID



**FIXED FLANGE**

- 150/300/600 ANSI
  - Raised Face/Flat Face
  - Forged/Plate (Type C)
  - Carbon Steel/Stainless Steel
- HOSE DIAMETER ½"-24"**



**FLOATING FLANGE**

- 150/300/600 ANSI
  - Forged/Plate (Type C)
  - Carbon Steel/Stainless Steel
- HOSE DIAMETER ½"-24"**



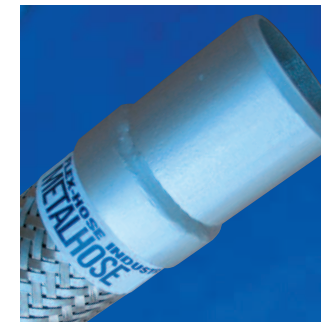
**MALE PIPE NIPPLE**

- Sch 40/80
  - Carbon Steel/Stainless Steel
  - MONEL®
- HOSE DIAMETER ¼"-6"**



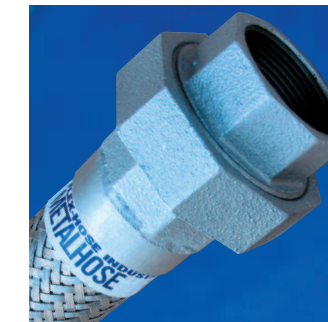
**HEX MALE PIPE NIPPLE**

- Carbon Steel/Stainless Steel
- HOSE DIAMETER ¼"-4"**



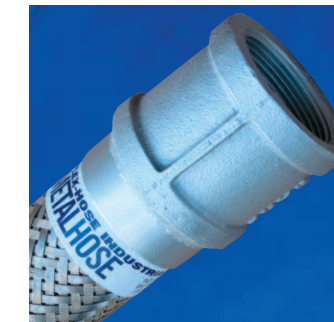
**WELD END**

- Square Cut/Bevel Cut
  - Sch 10/40/80
  - Carbon Steel/Stainless Steel
- HOSE DIAMETER ½"-24"**



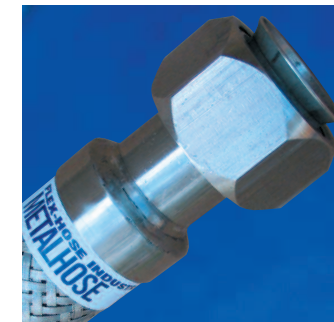
**FEMALE UNION**

- 150/300/3000#
  - Carbon Steel/Stainless Steel
- HOSE DIAMETER ¼"-4"**



**FEMALE COUPLING**

- 150/300/3000#
  - Carbon Steel/Stainless Steel
- HOSE DIAMETER ¼"-4"**



**FEMALE JIC SWIVEL**

- Stainless Steel
- HOSE DIAMETER ¼"-2"**

## BRONZE HOSE AND BRAID



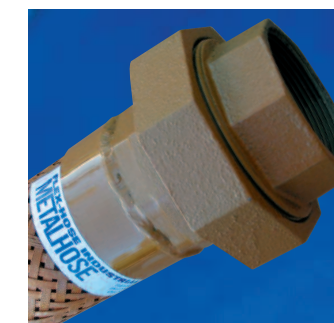
**FEMALE SWEAT**

**HOSE DIAMETER ½"-3"**



**HEX MALE PIPE NIPPLE**

**HOSE DIAMETER ½"-3"**



**FEMALE UNION**

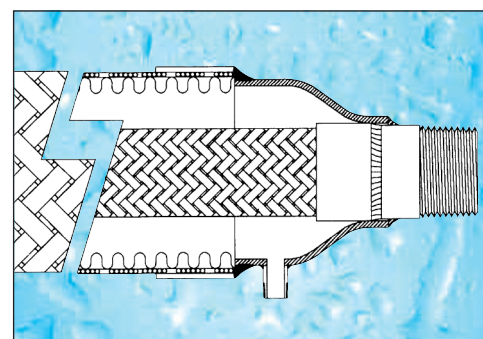
**HOSE DIAMETER ½"-3"**



**MALE UNION**

**HOSE DIAMETER ½"-3"**

# INDUSTRIAL METAL HOSE SAFETY OPTIONS



Jacketed Assembly



Armor Guard



Heat Safety Shield

## METAL HOSE JACKETED ASSEMBLIES

### SAFETY JACKET

Flex-Hose *Safety Jacket* assemblies incorporate an outer hose assembly to meet the same pressures as the inner hose assemblies. Gauges are utilized at tapplings to monitor the integrity of the inner hose. If inner assembly becomes compromised, the safety jacket assembly will safely contain the media.

### HEAT JACKET

Flex-Hose *Heat Jacket* assemblies are designed so that there is no media pathway between the inner and outer assembly. They are commonly used when the media must be maintained at a given temperature. For viscous material, steam is typically circulated through the outer assembly to keep media flowing in the inner hose. For cryogenic service, a vacuum is commonly pulled through the outer hose to insulate cryogenic liquids conveyed in the inner assembly.

## WORKING PRESSURES

STAINLESS STEEL - UP TO 1500°F						
ID (In.)	70°F	200°F	300°F	400°F	500°F	600°F
1/4	2375	2185	2043	1948	1829	1734
3/8	1650	1518	1419	1353	1271	1205
1/2	1100	1012	946	902	847	803
3/4	800	736	688	656	616	584
1	750	690	645	615	578	548
1 1/4	725	667	624	595	558	529
1 1/2	565	520	486	463	435	412
2	500	460	430	410	385	365
2 1/2	400	368	344	328	308	292
3	288	265	248	236	222	210
4	285	262	245	234	219	208
5	250	230	215	205	193	183
6	200	184	172	164	154	146
8	175	161	151	144	135	128
10	175	161	151	144	135	128
12	160	147	138	131	123	117
14	110	101	95	90	85	80

BRONZE - UP TO 400°F				
ID (In.)	70°F	200°F	300°F	400°F
1/2	566	521	487	464
3/4	468	431	402	384
1	334	307	287	274
1 1/4	306	282	263	251
1 1/2	297	273	255	244
2	210	193	181	172
2 1/2	194	178	167	159
3	166	153	143	136

Data based on standard stainless steel hose and single outerbraid. Higher pressure ratings are available by using multiple braids and/or heavier hose wall.

## PROTECTIVE HOSE COVERS

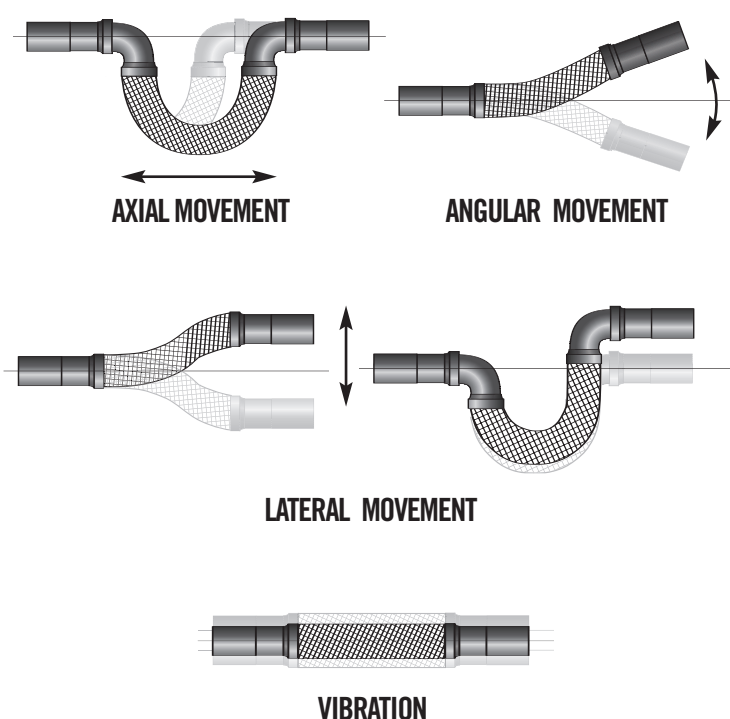
### FLEXIBLE ARMOR GUARD

Flexible rugged armor protects an assembly from overbending, external abrasion, and impact. Although *Armor Guard* is not pressure tight, it may offer added safety to help minimize the effects of a potential failure by redirecting leaking product to the ends of an assembly at a slower rate. When internally applied as a flow liner to corrugated metal hose it is utilized in a high velocity system application or abrasion media.

### HEAT SAFETY SHIELD

Don't be burned conveying hot media. If there is potential for skin contact, insist on Flex-Hose's *Heat Safety Shield*. The Heat Safety Shield consists of a tubular braided fiberglass insulation covered with silicone rubber and is applied over the hose assembly and secured at each end. The Heat Safety Shield is also utilized to insulate and protect assembly from external heat.

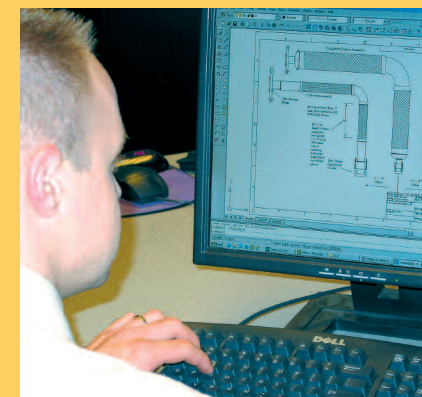
## MOVEMENT CAPABILITIES



## WHY METAL HOSE?

Flex Hose Co. industrial metal hoses can be supplied up to 24" in diameter. Major applications include absorbing vibration, compensating for misalignment, and accommodating offset motion.

Our metal Hose assemblies are widely used in mechanical and process piping systems for conveying high pressure and/or high temperature media as well as corrosive and non-corrosive media including gas.



## IF IT CAN BE WELDED...

...we can build it, attach it or incorporate it into your industrial metal hose assembly. So don't limit our ability to meet your requirements by what you see or don't see in our published catalog.

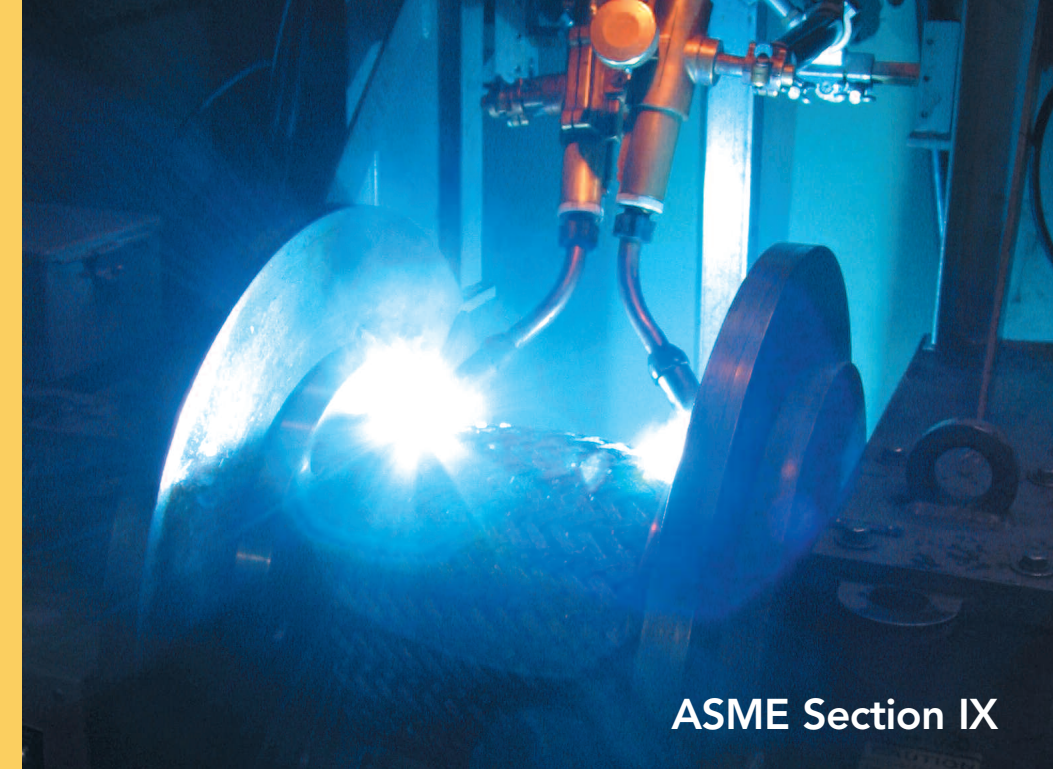
Flex-Hose Co. personnel have the technical training and ability to provide solutions to the most demanding applications. Our support also extends through specific job analysis which recommends product placement within a piping system, perfectly integrating them into the overall theme of your project – saving you both time and money!



## COMPRESSED AND COMBUSTIBLE GASES

If you require UL listed connectors approved for compressed and combustible gases, then ask about the UltraFuel Flex!

CALL 1.877.874.3539



ASME Section IX

## IF IT'S NOT BUILT TO LAST, IT SHOULDN'T BE BUILT.

If our beginnings in 1968 has shown us anything, it is the commitment that our customers make when they plunk down their hard earned reputation to recommend and utilize our product in their plant's demanding applications.

We will meet your most challenging service condition utilizing highest quality materials and manufacturing process. Flex-Hose industrial metal hose manufacturing process incorporates the removal of the first convolution lip at the crest, creating a smooth transition. This eliminates internal sharp edges or burrs which may break off during operation, thus causing damage to pumps and precision equipment. Our design and manufacturing utilizes state-of-the-art welding technology. Flex-Hose Co. has welders certified to ASME Section IX. We are regularly inspected by Underwriters Laboratory for our UL Listed gas assemblies. We build it to last!

## PASSING THE TEST...

Manufactured with a 4:1 safety factor, all Flex-Hose Co. industrial metal hose is pressure tested for manufacturing integrity prior to release for shipment. Testing options include: standard leak testing, hydrostatic testing, dye penetrant, and helium mass spectrometer.

## MEDICAL GASES AND CRYOGENIC SERVICE

Flex-Hose Co. industrial hose manufacture forming process does not utilize oil lubricants, yielding a very clean finished product. For critical applications conveying medical gases and cryogenic service it may be necessary to further clean and bag the assemblies for the intended service. Please consult the factory with your specific requirements.

## PACKAGING/PRODUCT IDENTIFICATION

All assemblies are carefully packaged with protective caps and sleeving over flanged faces and fittings to assure integrity of fitting sealing surfaces. Spacer bars are installed on all short face to face flanged assemblies to prevent compression of the assembly during shipping and handling. All Flex-Hose industrial metal hose assemblies are labeled for manufacturer's identification. Custom metal tagging with job and drawing numbers, pressure, temperature, etc. is available upon request.