

Metal Hose



When to use Metal Hose:

There are many different types of hose available on the market. They include metal, rubber, composite, PTFE and fabric. The decision of which hose type to buy depends on the application for which the hose is being used. Generally, there are eight factors that should alert you to consider using metal hose:

1. **Temperature Extremes** - If either the temperature of the media going through the hose or the surrounding atmospheric temperature is very cold or hot, metal may be the only material that can withstand the temperature extremes.
2. **Chemical Compatibility** - Metal hose can handle a wider variety of chemicals than most of the other hose types. If the hose will be exposed to aggressive chemicals (either internally or externally), metal hose should be considered.
3. **Permeation Concerns** - Non-metal hose is susceptible to having gases permeate through the hose wall and into the atmosphere. Metal hose, on the other hand, does not allow permeation. If containing the gases inside the hose is important, metal hose may be required.
4. **Potential for Catastrophic Failure** - When a metal hose fails, it usually develops small holes or cracks. Other hose types tend to develop larger cracks or come apart completely. If a sudden failure of the hose can be catastrophic, a metal hose may help minimize the effects of a failure by leaking product at a slower rate.
5. **Abrasion and Overbending Concerns** - To prevent abrasion and overbending, a metal hose can be used as a protective cover over wires or even other hoses.
6. **Fire Safety** - Other hose types will melt when exposed to fire while metal hose maintains its integrity up to 1200° F.
7. **Achieving Full Vacuum** - Under full vacuum, metal hose maintains its shape while other hose types may collapse.
8. **Flexibility in Fitting Configuration** - Virtually any type of fitting can be attached to metal hose while other hose types require special shanks and collars.

Types of Metal Hose:

1. **Corrugated Metal Hose** - Corrugated metal hose can handle high pressures and is gas tight. It is excellent for gas and liquid transfers.
2. **Stripwound Metal Hose** - Stripwound metal hose, although not gas tight, is rugged, making it excellent for use as a guard, an open-ended exhaust hose, and for the transfer of dry bulk materials.

