

Product Information Report

Industrial Hose Overview



Overview

An industrial hose is a flexible reinforced tube for conveying liquids, solids and gases at pressures lower than hydraulic hoses (tens to hundreds of PSI vs. thousands of PSI). A typical industrial hose is dragged, coiled, run over, kinked and subjected to all kinds of abuse. Therefore the application and environment must be taken into consideration for proper hose selection. Selection of the proper hose and materials will increase hose life, improve performance and ensure safety.

Hoses in this Category

Lawson carries a broad offering of industrial hoses covering a wide range of applications and conditions. These hoses can be combined with application-specific fittings to make custom hose assemblies on site. The five main categories of industrial hoses offered are:

- Air and Water
- Food Processing
- Chemical Transfer
- Suction and Discharge
- Petroleum Transfer

Each of these categories contains multiple hoses arranged in a **Good – Better – Best** product offering. This means that the right hose is available for almost any application. In most instances no special assembly equipment is needed to make the hose assembly.

Applications



- Agriculture
- Assembly/Manufacturers
- Construction
- Food Industry
- Metalworking
- Mining
- Oil Industry
- Paper/Pulp
- Ship Building
- Forest Industry
- Tank Trucks
- Chemical Industry
- Oil Field Equipment
- Drilling Equipment
- Maritime Industry
- Landscaping/Lawn Care Services
- Dairies
- Poultry Processing

Making Industrial Hose Assemblies



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Choosing the correct coupling is important for maximum hose efficiency and safety. Couplings must be attached properly. Incorrect or improperly installed couplings can result in shorter hose life and hose failures. These failures can result in serious bodily harm or property damage. Hose couplings have been carefully engineered over the years to meet specific safety requirements.

Some factors you should consider when choosing the proper coupling for a particular application are:

1. What is the material to be handled?
 - a) Is it dangerous?
 - b) Is it corrosive?
 - c) Is it abrasive?
2. What are the pressures involved?
 - a) High pressure
 - b) Medium pressure
 - c) Low pressure
 - d) Suction
3. What means of connection are required?
 - a) Threads
 - b) Special locking
 - c) Flanged ends

All hose assemblies should be treated with respect as potential hazards. Fittings, clamps or clips should be checked on a regular basis and removed from service if damaged. Shank length of coupling should be 1-1/2 times the inside diameter of the hose.

The PIRs in this series are designed to provide the information necessary to make industrial hose assemblies. They contain brief descriptions of the couplings (fittings), clamps, ferrules and industrial hoses that Lawson offers. With each hose description there is a chart that lists the couplings, clamps and ferrules that can be used to terminate the hose to make a custom assembly.

The final working pressure of a hose assembly is the lesser of the following: hose working pressure or the pressure listed on the chart. The final hose assembly should be marked accordingly. Also, next to the pressure in the charts there is a number in parenthesis (#); this number corresponds to the number of clamps necessary to make a hose connection.

The necessary steps required to make the hose assembly are listed in the charts under the Assembly Procedures Column.