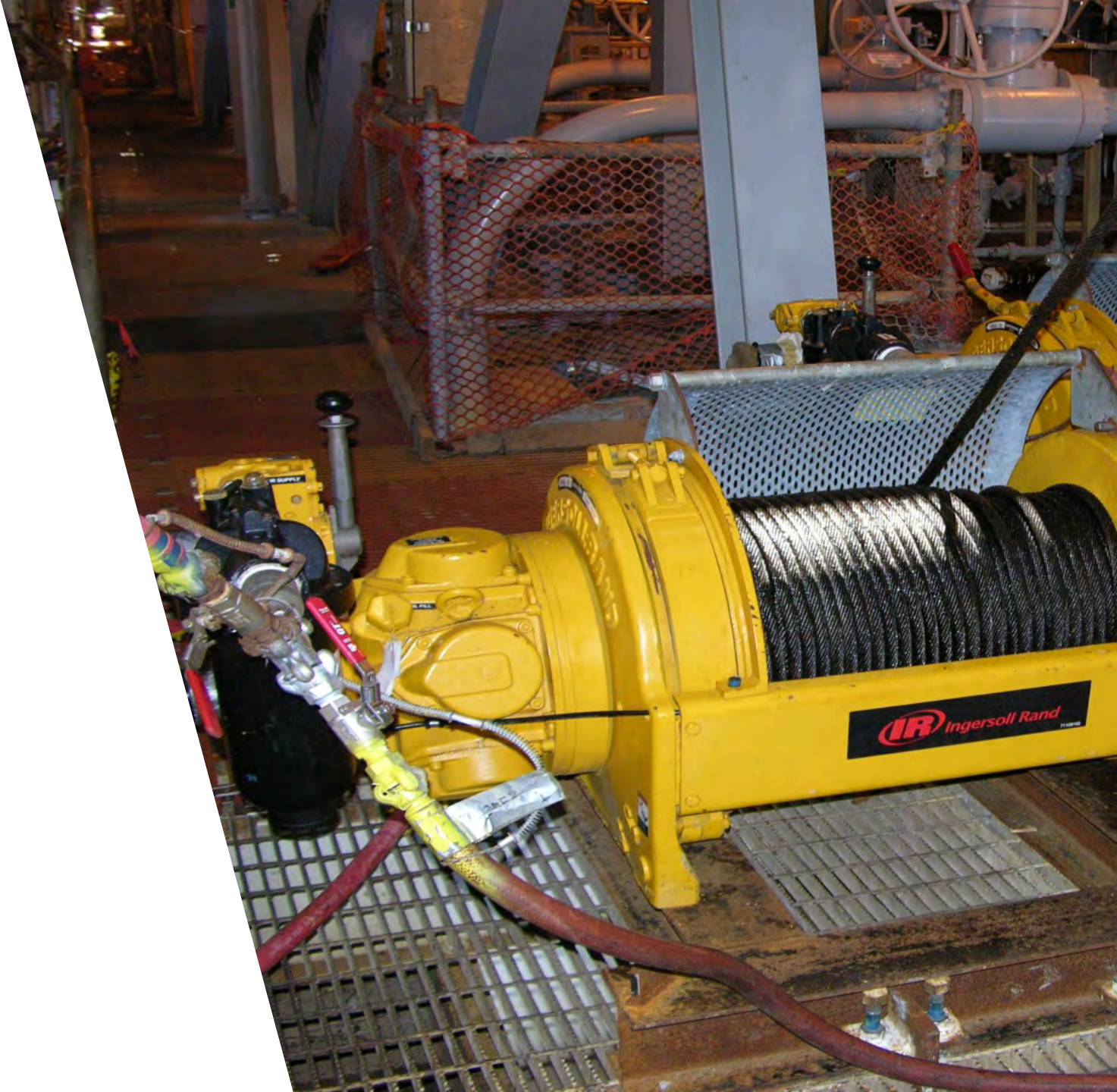




PROCEDURES AND BEST PRACTICES: AIR HOSES



Air Hose - Safe Practices

- ▶ All hose assemblies should be viewed as potential hazards. This document is designed to inform and educate proper selection and maintenance of hose, couplings, attachment devices for proper air hose safety.
- ▶ It is the end users responsibility to identify the application and any special conditions that the hose assembly must meet before use. Accidents and down time may occur if hose assemblies are not properly selected for the specific application.
- ▶ The performance and safety of the assembly is affected by the quality of the individual components.



Remember - S.T.A.M.P.E.D

S.T.A.M.P.E.D. (Size, Temperature, Application, Media, Pressure, Ends) will help in the proper selection of the hose assembly components.

Failure to use these procedures can result in serious injury and destruction of property and equipment.



Air Hose - Safe Practices - STAMPED

- ▶ **S**ize: What is the I.D. (Inside Diameter) of the hose? What is the O.D. (Outside Diameter) of both ends of the hose? What is the overall length of the assembly required?
- ▶ **T**emperature: What is the temperature range of the media (product) that is flowing through the hose assembly? What is the temperature range of the environment that surrounds the outside of the hose assembly?
- ▶ **A**pplication: How is the hose assembly actually being used? Is it a pressure application? Is it a vacuum (suction) application? Is it a gravity flow application? Are there any special requirements that the hose assembly is expected to perform? Is the hose being used in a horizontal or vertical position? Are there any pulsations or vibrations acting on the hose assembly?
- ▶ **M**edia: What is the media/material that is flowing through the hose assembly? Being specific is critical. Check for: Abrasive materials, chemical compatibility, etc.
- ▶ **P**ressure: What is the maximum pressure including surges (or, maximum vacuum) that this hose assembly will be subjected to? Always rate the maximum working pressure of your hose assembly by the lowest rated component in the system.
- ▶ **E**nds: What couplings have been requested by the user? Are they the proper fittings for the application and hose selected?



Air Hose - Safe Practices

- ▶ Hose assemblies must be inspected prior to each use. Worn out fittings, attachment devices, hose and accessory items must be replaced.
- ▶ Approved retaining devices (safety devices) such as clips, cables or chains must be used.
- ▶ Clamps must be checked regularly to the specified torque found in the Dixon literature.
- ▶ Under no circumstance should any coupling be disconnected while under pressure unless the coupling is specifically designed to do so.
- ▶ Disconnecting couplings under pressure could result in serious injury or death, and destruction to property and equipment.



Air Hose Safe Practices

- ▶ Before attempting to disconnect the hose from the air source, the air supply should be cut off and stored pressurized air released from air hose. Store hose coils off the floor promptly after use. A safety-check valve installed in the air line at the manifold will stop the air supply automatically if a line break occurs. A short short fastening strap/ whip check to the hose and to the tool housing can keep the hose from thrashing about if a coupling breaks
- ▶ Check to be sure the air hose is in good condition. Air hoses are designed to withstand pressure, but they become weakened at points where they have been bent, where they are attached to the shutoff valve and to the nozzle, and where they have been kinked. These weak points may swell like a balloon and burst.
- ▶ Storage - Always coil the hose without kinks and hanging it over a broad support, not over a hook, nail, or angle iron when it is not in use.



Air Hose Safe Practices

- ▶ An air hose presents the same tripping or stumbling hazard as cords on electric tools. Persons or materials accidentally hitting the hose may unbalance the operator or cause the tool to fall from an overhead place.
- ▶ Air hoses should be protected from trucks and pedestrians by runways or planks laid on either side of the hose;
- ▶ Do not use air hose for cleaning purposes.
- ▶ Air should be cut off before attempting to disconnect the air hose from the line. Air pressure in the hose should also be cleared before disconnecting;
- ▶ Eye protection is required when operating air power tools. (See OP-G-1.3.2);
- ▶ Safety-check valves are recommended to automatically shut off air supply if a crack or leak occurs.

