



## Safety Information

*This catalog is intended as a product offering. It is not intended to be a user or technical manual. Information in this catalog is subject to change without notice. All users and distributors of products sold through this catalog should contact Dixon with questions of use, compatibilities, coupling procedures and life of product. Dixon's full-time engineering and test staff is always available to recommend uses and to assist distributors and users with any questions. For safety related information, please refer to pages 2 - 7.*



*This safety alert logo, which appears throughout our catalog, is used as a reminder that the user should carefully review for safety the appropriateness of the product for the media, application and environment in which it will be used.*

All cast dimensions are nominal as defined in ANSI Y14.5-1973 paragraph 5-1.6.8

## Hose and Hose Coupling Safety

***"The very properties that make compressed gases useful in almost every area of modern life can also make them dangerous when mishandled. Years of experience with compressed gases have led to practices and equipment which, if employed, result in complete safety."***<sup>1</sup>

Dixon hose couplings have been carefully engineered to meet specific requirements. If hose or couplings are not used in correct applications or are incorrectly applied, accidents and downtime can result. It is up to the end user to inform the distributor of the application and pressures involved when ordering hose assemblies and it is up to the distributor to supply the right hose and coupling for that application. When in doubt, Dixon is here to help you with a proper coupling recommendation.

- 1. Air hose couplings** - This form of energy can be one of the most dangerous because it is used in so many applications and, when mishandled, can have more serious results than fluids. Air, as a gas, is compressible (fluids press only against hose or vessel walls and lose little volume under pressure). When pressurized air releases suddenly, it does so with explosive force and can cause rapid hose whip, which can do serious physical harm to personnel or damage to nearby objects. This is why the selection of proper hose and couplings for air lines is so important, along with their proper installation and maintenance. Never take for granted that a coupling is installed properly or a clamp fully tightened on an air hose - check it regularly and use safety devices (see paragraph 4).
- 2. Steam and gas** - The same rules apply for steam and gas, but, because these are inherently more hazardous materials, personnel tend to treat hose and couplings on these lines with more respect and care. Checking clamp tightness is very important with steam hose, where it is not unusual for clamps to loosen in service, in which case they *must be retightened!* Safety devices should also be used (see paragraph 4).
- 3. Fluid hose couplings** - Again, nothing should be taken for granted - in particular, check clamps for tightness each time the lines are used - especially when petroleum products or other hazardous liquids are involved. Large diameter hose, when suspended, can also be quite dangerous if it drops unexpectedly due to a coupling "pull-out" or sudden disconnection. A heavy fitting or clamp, plus the weight of the hose itself falling from any significant height, can cause injuries or damage. Be sure to use safety devices (see paragraph 4).
- 4. All hose assemblies** - All hose assemblies should be treated with respect as potential hazards. Worn-out fittings should be replaced. Retaining devices such as clips, cables or chains should be used. Clamps should be checked regularly. Under no circumstances 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 of property and equipment.

<sup>1</sup> "Handbook of Compressed Gases"