

Glossary

A

abrasion: external damage to a hose assembly caused by its being rubbed on a foreign object; a wearing away by friction. **adhesion:** the strength of bond between cured rubber surfaces or between a cured rubber surface and a non-rubber surface.

ambient/atmospheric conditions: The surrounding conditions, such as temperature, pressure, and corrosion, to which a hose assembly is exposed.

ANSI: American National Standards Institute.

application working pressure: unique to customer's application. See pressure, working.

assembly: a general term referring to any hose coupled with end fittings of any style attached to one or both ends.

ASTM: American Society for Testing and Materials.

axial movement: compression or elongation along the longitudinal axis.

B

bend radius: the radius of a bent section of hose measured to the innermost surface of the curved portion.

bend radius, minimum: the smallest radius at which hose or tubing can be used. For Metal Hose: the radius of a bend measured to the hose centerline, as recommended by the manufacturer.

blister: a raised spot on the surface or a separation between layers, usually form-

ing a void or air-filled space in the vulcanized hose.

bloom: a discoloration or change in appearance of the surface of a rubber hose caused by the migration of a liquid or a solid to the surface. Examples—Sulfur bloom, wax bloom. Not to be confused with dust on the surface from external sources.

bore: a fluid passageway.

braid: the woven portion of a hose used as reinforcement to increase pressure rating and add hoop strength.

Various materials such as polyester, cotton or metal wire are used. A hose may have one or more braids, outside or between layers of hose material.

braided hose: hose in which the reinforcing material has been applied by braiding.

braider: a machine for making braid. The yarn is drawn off of several bobbins while they move in and out during their travel around the center of the machine. These yarns are thus intertwined in a regular manner according to the desired pattern.

braided ply: a layer of braided reinforcement.

brand: a mark or symbol identifying or describing a product and/or manufacturer, that is embossed, inlaid or printed.

burst pressure: pressure at which a hose will fail and burst. Most Boston hoses are rated with working pressures of 4 times the minimum burst pressure. Steam hoses are rated with a working pressure of 10 times the minimum burst pressure.

C

capped end: a seal on the end of a hose to protect internal reinforcement.

carcass: the fabric, cord and/or metal reinforcing section of a hose as distinguished from the hose tube or cover.

cemented end: a capped end accomplished by means of cement

chalking: the formation of a powdery surface condition due to disintegration of surface binder or elastomer by weathering or other destructive environments.

checking: the short, shallow cracks on the surface of a rubber product resulting from damaging action of environmental conditions.

chemical compatibility: the relative degree to which a material may contact another without corrosion, degradation or adverse change of properties.

chemical resistance: the ability of a particular polymer, rubber compound, or metal to exhibit minimal physical and/or chemical property changes when in contact with one or more chemicals for a specified length of time, at specified concentrations, pressure, and temperature.

cold flex: act or instance of bending or bowing a rubber hose under conditions of cold environment.

cold flexibility: relative ease of bending while being exposed to specified low temperature.

collar: 1) the portion of a fitting that is compressed by

crimping to seal the hose onto the fitting barbs and create a permanent attachment; also called a ferrule. (With field attachable fittings, the lock and seal are accomplished mechanically by the collar without crimping); 2) a raised portion on the hose shank which functions as a connection for a ferrule or other locking device or functions as a hose stop.

Coll-O-Crimp: a line of hydraulic and pneumatic hose, hose end fittings, and fabrication equipment that is a registered trademark of Eaton Corporation.

combustible liquid: a combustible liquid is one having a flash point at or above +100°F (37.8°C).

compound: the mixture of rubber or plastic and other materials, which are combined to give the desired properties when, used in the manufacture of a product.

conductive: the ability to transfer electrical potential.

core: the inner portion of a hose, usually referring to the material in contact with the medium.

corrosion: the process of material degradation by chemical or electrochemical means.

corrosion resistance: ability of metal components to resist oxidation.

coupled lengths: individual lengths of hose with couplings attached. This may be, as specified, either the length of exposed hose or the overall length including couplings.