



## Glossary of Terms

**3A** Symbol for 3A Sanitary Standards Symbol Administrative Council. The 3A Sanitary Standard were created by the dairy industry as a voluntary benchmark for product performance and sanitary safety. The standard, collaboratively developed by a group of processors, suppliers, regulatory officials and sanitation specialists, is accepted by federal, state and local regulatory authorities. Our products have earned the 3A symbol, through third party verification. This assessment makes certain each product conforms in all respects to the published standards. Dixon Sanitary is proud to be a participant in the 3A program.

**3A Finish** Product surface finish equivalent to 150 grit or better OD, and 180 grit or better ID. A maximum of Ra 32 microinch (0.8 micron) is indicated.

**ABS** (Acrylonitrile-butadiene-styrene) a thermoplastic resin with an excellent resistance to acids, bases, salts and some solvents. It is heat resistant to 230 °F.

**ANSI** American National Standards Institute, Inc.

**ASME** American Society of Mechanical Engineers

**ASTM** American Society for Testing and Materials

**Acme Thread** A flat grooved helical ridge on a nut or bolt. This typically has a 29° included angle. Used on bevel seat and John Perry fittings

**Anneal** Stress relief of stainless steel, a heat treatment to remove the stresses generated in forming and welding operations. This heat treatment is best done under controlled atmosphere or vacuum to maintain the mill finish. The fittings are not quenched, as in solution annealing; this would reintroduce residual stresses. Done correctly, parts are processed to provide minimum residual stresses and full corrosion resistance.

**Available NPSH (Net positive suction head)** A characteristic of the system and is defined as the energy which is in a liquid at the suction connection of the pump (regardless of the type of pump) over and above that energy in the liquid due to its vapor pressure.

**Bevel Seat Ferrules** A set of plain (male) and externally threaded (female) bushings with matching bevel angles that produce a leak-proof seal when connected with a hex union nut. The threads used are Acme form.

**Bright Anneal** Annealing in a protective medium to prevent discoloration of the surface.

**Bright Annealed Finish** A silvery satin surface, approximately the mill finish of stainless steel.

**Buna** Synthetic rubber, a copolymer of acrylonitrile and butadiene

**Burst Pressure** The pressure at which rupture occurs.

**Cavitation** When the NPSH required by the pump is greater than the NPSH available by the system, cavitation occurs. Vapor is formed and moves along with the stream. These vapor bubbles or "cavities" collapse when they reach regions of higher pressure on their way through the pump cavities are forming in the liquid being pumped. When these cavities form at the suction of the pump several things happen all at once.

- Loss in capacity.
- Loss of head (pressure)
- The efficiency drops.
- The cavities or bubbles will collapse when they pass into the higher regions of pressure causing noise, vibration, and damage to many of the components.

**CW** Clockwise

**CCW** Counter clockwise

**Clamp** A device used to join mechanical parts, fittings, ensuring a quick leak-proof connection and enabling easy take down.

**Cold Flow** Continued deformation or movement of rubber or PTFE under stress.

**Compression Set** The deformation that remains in rubber or PTFE after it has been subjected to and released from stress such as a clamp. The longer the stress is maintained the more definitive the deformation

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