Gas Distribution Equipment for Laboratory Pipelines

Basis of Design NFPA 55 & ASME B31.3

At Beacon, safety and reliability of our products are of paramount concern. The users of our products rely on us and trust us to provide the best equipment design for their given application, including both functionality and safety. That's why all of our products are designed and built in accordance with the appropriate codes and standards found in publications from the following industry leading organizations: the National Fire Protection Association* or NFPA, the American Society of Mechanical Engineers or ASME, and the Compressed Gas Association or CGA.

NFPA 55 - Compressed Gases and Cryogenic Fluids Code - 2010 Edition

This code shall apply to the installation, storage, use, and handling of compressed gases and cryogenic fluids in portable and stationary containers, cylinders, equipment, and tanks in all occupancies.

"NFPA" 55 was developed by the Industrial and Medical Gases Committee in recognition of the need to provide information on the use of cylinder gases in one standard" (Copyright © 2009 National Fire Protection Association*). The code, which was originally introduced in 1993, has been updated and revised continuously since then as technology and products have changed, but it is still considered to be the "bible" of requirements for the storage, installation and usage of gases in portable cylinders.

ASME B31.3 - Process Piping - 2006 Edition

This code applies to piping typically found in petroleum refineries, chemical, pharmaceutical, textile, paper, semiconductor, and cryogenic plants, and related processing plants and terminals. B31.3 sets forth engineering requirements deemed necessary for the safe design and construction of pressure piping.

"Project B31", as it was originally called in March 1926, was the beginning of both new standards and new organizations. With much collaboration between many engineering organizations, industry leaders and trade associations, the American Tentative Standard Code for Pressure Piping was "born" in 1935. Like NFPA® 55, it has undergone many updates, revisions, additions and transformations to bring us to the code that we know and respect today as the groundwork for the safe design and installation of process piping for all compressed gases and cryogenic fluids.