

FOR THE DESIGNER OF HYDRO-PNEUMATIC APPLICATIONS IN ENGINEERED MECHANICAL SYSTEMS...

This design handbook concerns the design, selection and application of hydro-pneumatic components in commercial, industrial, institutional and high-rise residential mechanical piping systems.

Hydro-pneumatics—Can best be defined as the use of a gas, (usually air), in a liquid-filled piping system to control operating pressure, liquid expansion, and water hammer during system operation in applications for space heating and cooling; water heating (potable and process); and water supply applications (well systems and pressure booster systems).

Section A, beginning on page A-1, will deal with the fundamentals of hydro-pneumatics in liquid heating and cooling systems.

Section B, beginning on page B1, will cover sizing and design requirements, sizing procedures, installation and application variations of EXTROL hydro-pneumatic (expansion) tanks for hot water and chilled water hydronic systems.

Section C, beginning on page C-1, will deal with air removal procedures in large hot water heating and cooling systems.

The contents of each section are provided to aid the professional designer, specifier and estimator of engineered mechanical systems in selecting and applying hydro-pneumatic products as originally designed and produced by AMTROL Inc., to arrive at the most efficient and dependable system operation possible. In the future, the contents of this binder will be up-dated as new breakthroughs in the ever-changing mechanical systems field are made.

The Reference Section contains appropriate data tables as referenced throughout the text.

