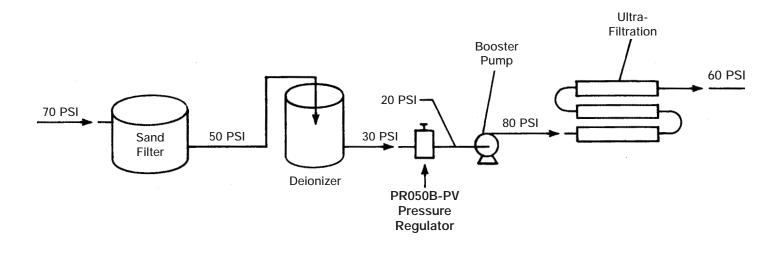
## PLAST-O-MATIC APPLICATION BULLETIN IA-1 & IB-1

MARKET \_\_\_\_ Water Purification PRODUCT(S) \_\_\_ Pressure Regulator, Series PR050B-PV

**REQUIREMENT** To provide constant feed pressure to suction of high pressure booster pumps.

PROCESS FLUID(S) Purified Water INLET PRESSURE/TEMPERATURE Varying / Ambient



During the purification process for ultra-pure water it passes through numerous pieces of equipment (sand filters, deionizers, R.O. (Reverse Osmosis), etc. As the water flows from stage to stage its pressure drops and must be increased at some point to enter the next piece of equipment. Booster pumps are used for this purpose-taking a lower pressure flow and increasing it to a desired higher pressure. However, these pumps work most efficiently if their suction pressure is constant. The installation of a Series PR Pressure Regulator on the suction feed provides a constant pressure to the pump regardless of varying line pressures into the Regulator.



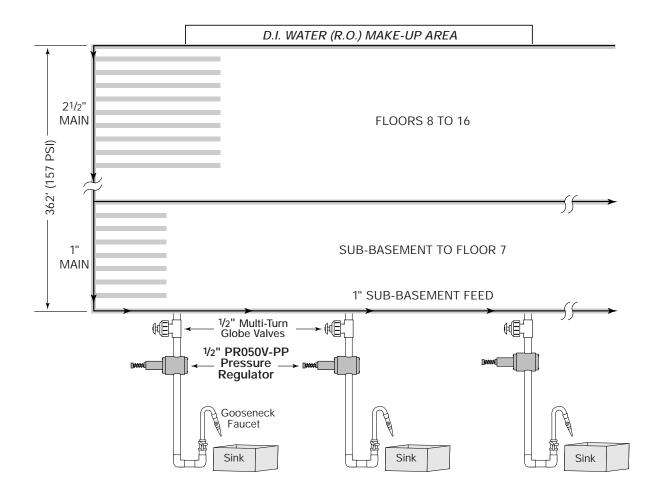


MARKET \_\_\_\_\_ Hospital / Research Center\_\_\_\_

PRODUCT(S) Pressure Regulator – PR050V-PP

REQUIREMENT \_\_\_\_\_ To provide assurance that lab sinks are protected from full head pressures.

PROCESS FLUID(S) R.O. (Reverse Osmosis) High Purity Water INLET PRESSURE/TEMPERATURE 157 PSI / Ambient



A world-renowned New York City hospital and research facility needed to protect its lab equipment and experiments from excessive pressure created by approximately 362 feet of head. The multi-turn globe pattern needle valves installed

prior to the pressure regulators (a.k.a. pressure reducing valves) ensure slow opening and eliminate water hammer that would develop if quick opening ball valves were used.

