



Process Engineering Systems

Haley Ward's process engineers have the knowledge to work closely with owners and facility managers to design the required systems for the manufacturing of goods in chemical, pharmaceutical, semiconductor, food and beverage facilities, to ensure they are operating at maximum capacity, as efficiently as possible. Process engineering plays a crucial role in the development of new products, processes, and technologies, while optimizing the existing processes to improve efficiency, reduce costs, and minimize waste. Working with our process engineering team will help you make informed decisions with regards to process utilities and project decisions.

Haley Ward can be your partner as we have the experience to create a real work infrastructure assessment of existing and new equipment. Our team uses various tools and techniques to design and optimize the processes to improve efficiency, reduce costs, and minimize waste. We understand the construction process while working with the facility to outline the critical equipment, potential phased approach for replacement, while minimizing downtime and cost implications, to benefit the overall facility production.

A PROCESS UTILITY MAY INCLUDE but not be limited to:

- **Water** – Cooling water, Raw Water, Potable, Fire/Sprinkler, Treated (Softened, RO, RODI), Mechanical Make-up, Emergency (Tepid), etc.
- **Compressed Air** – CDA (Compressed Dry Air), OFA (Oil-free Air), IA (Instrument Air – 180-200 psig), etc.
- **Specialty Gases** – Bottled, Bulk, Specialty (Pyrophoric, Corrosive, Inert, etc).
- **Vacuum** – HCV (House-Cleaning Vacuum), DC (Dust collection), PVAC (Plant Vacuum)
- **Process Wastes** – AW (Acid Waste), HF (Hydrofluoric), Solvent, etc.

