



Mechanical & Piping Engineering

With 20 years devoted to a variety of process/mechanical-dominated manufacturing industries, ITAC offers a wide range of mechanical engineering experience to its clients. Our mechanical engineering strengths include a variety of process and mechanical equipment, storage vessels, HVAC and material handling systems, boilers and chillers, and the many other components found in today's factories. Our piping design capabilities are unsurpassed as we are proficient with modeling piping and process systems in several 3-D CAD platforms.



We offer a wide array of services and resources:

MECHANICAL & PIPING EXPERTISE

- Equipment Design Specifications
 - Gas, Oil, and Electric Water Boilers and Heaters
 - Chillers
 - Cooling Towers
 - Storage Tanks (API, UL, AWWA)
 - Pressure Vessels
 - Compressors
 - Pumps
 - Vacuum Systems
 - Dust Collectors
 - Fans
 - Extruders
 - Winders
 - Pneumatic Conveying Systems
 - Heat Exchangers
 - Scrubbers
 - Distillation Systems
 - Belt Conveyors
- Process Venting & Relief Design
- Caesar II Pipe Stress Analysis
- Steel, Plastic, FRP, Glass and Exotic Metals Piping Design.
- Sanitary Piping Design
- Machine Design (2D or 3D)
- Power Transmission
- ASME B31.1 Power Piping Design
- ASME B31.3 Process Piping Design
- ASME Pressure Vessel Calculations & Welding Procedures
- ASME Section I, IV, and VIII
- National Boiler Inspection Codes Calcs
- Emergency Overpressure Protection
- Piping Network Analysis for Compressible and Non-Compressible Fluids
- Steam/Condensate System Design
- Control Room & Process HVAC
- Bulk Chemical Unload & Storage Systems
- Utilities Studies
- Facility & Utilities Design
- OSHA 1910 Compliance Reviews
- Cadworx 3-D Pipe Design Software
- 3D Solid Modeling
- Piping & Construction Specifications
- Project Scoping and Estimating

