



Pharmaceuticals

ITAC's dedicated staff of pharmaceutical engineers specializes in sanitary bulk material handling systems, including control systems and the manufacturing and validation of process systems. These engineers provide clients with over a century of combined pharmaceutical experience.



PHARMACEUTICALS EXPERTISE

ITAC is experienced in pharmaceutical processes ranging from batch reaction processing and glass-lined reactors to purified water systems and recipe management systems.

- Process Building & Structure
- Batch Processing
- Continuous Processing
- Recipe Management
- Blenders & Mixers
- Hazardous Area Classification
- Process Hazard & Safety Reviews
- Process Safety Management
- Probable Loss & Risk Studies
- Material Handling & Packaging
- Fume & Vapor Removal
- Waste Handling & Reclaim Systems
- Dry Material Handling
- Gas Scrubbing Systems
- Gelatine Capsule Manufacturing
- Capsule Sorting/Classification
- Capsule Filling & Propagation
- Preparation of Protocols & Validation Manuals
- Validation Implementation & Compliance
- Controls Support

RECENT PHARMACEUTICALS PROJECTS

- Anhydrous Chlorine Railcar Unloading System
- Distributive Control System & Instrumentation Upgrade
- Bulk Storage & Mixing System Upgrade for Sanitary Operation & CIP
- Thermal Oxidizer and Scrubber Facility
- Glass-Lined Reactor and Centrifuge Installation
- Horizontal Centrifuge Automation, Data Collection & Validation
- High-Pressure Reactor System
- Hydrogenation Plant Programming, Process Optimization & Validation
- Fiber Optic NT Network
- Horizontal Centrifuge Automation with PLC/PC-Based Process
- Siemens S7 Controls System – 700 I/O – Construction Support & Startup
- Design of Allen-Bradley PLC-Based Control System for Monitoring & Control of Wastewater Discharge
- Modicon 984 PLC Control Design for New Conveyor & Packing Line