



“Engineering Excellence”

Serving the Texas Gulf Coast for Over 30 Years

Since Chemic's opening in 1977, the company has grown into a leading, full-service engineering firm and is established in the following markets:

- Refining
- Chemical/Petrochemical
- Gas Compression
- Power
- Catalyst/Metals Processing
- Pharmaceuticals



At Chemic Engineers, our goal is to be the preferred engineering services provider of the Texas Gulf Coast Area.

Chemic accomplishes this by being:

- **Dedicated** – The dedication of Chemic's engineering staff is second to none. Our teams know that "time is of the essence" and will work tirelessly to accommodate almost any project schedule.
- **Diverse** – With experienced personnel in all major engineering disciplines, Chemic is able to combine unique skill sets to provide innovative project solutions.
- **Flexible** – With a complete range of engineering and design services, Chemic can tailor its slate of offerings and project approach to meet distinct project needs.
- **Responsive** – Chemic lacks the red tape and rigid processes that are found at other engineering firms. Our goal is same-day response, so that you can get your projects off the ground and moving in the right direction.

Chemic Engineers provides our clients with a valuable partner to help them achieve the goals that are pertinent to their success.



WITH ALL MAJOR ENGINEERING DISCIPLINES AND SPECIALTY CAPABILITIES UNDER ONE

Chemic Project Services

Chemic can provide you support for various project activities . . .

FEED/FEL Engineering

- Preliminary Engineering
- Process Flow Diagrams
- Conceptual Plot Plans
- Equipment List and Layout
- Material Heat Balance
- Conceptual Design
- Scope Work Development
- Engineering for AFE Approval

Total Installed Cost Estimates

- Equipment Cost Tabulations
- Engineering Detailed Estimates
- TIC Estimates

Engineering Detail Design

- Complete Multidiscipline Detailed Drawing Packages

Field Support

- Engineering Consulting during Construction
- Field Follow up
- Project Question and Answer Support



Engineering Services and Disciplines

Process Engineering

Scope development
 Conceptual studies & designs
 Optimization & feasibility studies
 Process design/simulations
 Process Flow Diagrams
 P&ID's
 Mass & Energy Balances
 Utility & Energy Studies
 PSV sizing calculations
 Line sizing & piping network analysis
 Equipment sizing, selection & specifications
 Process debottlenecking
 Process optimization

Mechanical Engineering

Equipment arrangement & plot plan studies
 Piping designs in 2-D or 3-D format
 3-D model constructability operability, & maintainability analysis
 Pipe stress analysis
 Equipment specs, selection, & procurement support
 Pressure vessel calculations
 Tank & vessel design drawings
 Mechanical specifications for piping, painting, insulation & heat tracing
 Mechanical Integrity/FFS

I & E Controls Engineering

Process control systems
 Instrument sizing, specification, selection, & procurement support
 Instrument index
 Electrical design
 Instrument location plans
 Plant start-up and commissioning
 SIS
 DCS Migration
 CEMS
 Control & rack room design
 Material lists
 Control schemes
 Transformers substations
 MCC switchboards
 One line diagrams
 Substations
 Cable & conduit routing
 Electrical system studies

Civil/Structural Engineering

Specification of soil investigation
 Site preparation design
 Foundation design on roads, bridges, railroads, secondary containment, retaining walls, etc.
 Storm water run-off studies
 Facilities design
 Dock & wharf design
 Product loading & unloading stations
 Survey for construction staking
 Topographical surveys & drawings
 Pipe racks, steel bridges, multi-floor structures loading & unloading platforms, equipment supports, etc.
 Monorail systems
 Structural steel analysis

Project Management

Manpower planning staffing & definition
 Project execution & administration
 Project cost reporting & tracking
 Project scheduling



All Disciplines

P&ID updates
 P&ID walk-downs

ONE ROOF, CHEMIC ENABLES YOU TO RELY ON JUST ONE SOURCE FOR MANY SERVICES.

Chemic Engineers is . . .

CLIENT FOCUSED

Chemic's goal is to assign the most effective team to each client. An experienced Project Manager acts as the single point of contact and assumes the responsibility of overseeing and following through on every detail. This process produces better communication and the ability to anticipate a client's needs more accurately.

EXPERIENCED

Having more than 30 years of industry exposure and a team of professionals with an average of 15 or more years of experience, Chemic prides itself in its stability within the industry and vast knowledge in the various markets it serves.

LOCAL

Fast response and availability saves money. Chemic is 30-45 minutes in proximity to Houston, Freeport, Baytown/La Porte, and Texas City. We can address our client's needs at a moment's notice the old fashioned and most effective way, in person.

COMPETITIVE

Chemic offers quality engineering at a competitive price. By keeping our overhead cost low and eliminating the mid-level management that is necessary in larger firms, Chemic is able to provide our services at a price that will stay within budget.

Chemic uses software developed by:

- Aspen Icarus Project Manager
- Microstation (95, J, v8, XM)
- AutoPlant
- STAAD Pro.
- AutoCAD (2000-2009)
- AutoCAD Civil 3D (2009)
- SmartPlant Instrumentation
- PVElite
- Caesar II
- CADWorx P&ID
- ETank
- Fathom (Pipe Flow Analysis)
- ETAP
- SKM Power *Tools



Chemical | Electrical | Mechanical | Instrumentation | Civil

Area Offices:

Houston/Galveston

4820 FM 2004
Hitchcock, TX 77563
T: 409.986.6504
F: 409.986.6900

Brazosport

107 West Way Suite 31-32
Lake Jackson, TX 77566
T: 979.266.9393
F: 979.266.9396

www.chemic.com