



ENGINEERING/DESIGN & PROJECT SCOPING SERVICES

For jobs large or small, our engineering and design teams are experts in strategically creating plans to meet your project goals.

With a reputation for efficient layouts and the latest in computer-aided design and drafting tools. ECF works with our clients in all phases of their project from initial concept through commissioning.

ECF can provide design documents ranging from PFD's and preliminary site layouts through full construction design and specifications packages.

Our expertise in project scoping provides our clients with a clear identification of the scope of work, detailed planning of the project and effective project closeout.

The ECF team can meet with you and discuss in detail your needs and answer specific questions to ensure your project goals are met and correlating construction estimate is provided to you.

EXAMPLES OF OUR ENGINEERING/DESIGN PROJECTS INCLUDE:

- *Asphalt Terminals*
- *Biodiesel Plants*
- *Emulsion Plants*
- *Crude Oil and Light Products*
- *PMAC Blending Plants*
- *Heating Systems Upgrades*
- *Ethanol Plants*
- *Tank Conversions/Coil Installation*



DESIGN-BUILD & PROJECT MANAGEMENT SERVICES



Rely on ECF to successfully plan, manage and complete your project from initial consultation, through project completion.

Our Design-Build Service is a fully integrated process, collaborating with our clients in project planning, scheduling, engineering, design, procurement and full turnkey construction services. ECF can provide expertise in all phases of project development.

ECF's Project Management Services provides real time project status reports with single source direct communication to our clients.

In providing these services, ECF can offer a true competitive advantage with exceptional project management when it comes to choosing an EPC provider, which translates to saving valuable time and money.



ECF's PROJECT MANAGEMENT SERVICES INCLUDE:

- *Project Planning*
- *Budgeting*
- *Permitting*
- *Scheduling*
- *Specifications*
- *Conceptual Design/Layouts*
- *Engineering & Design*
- *Customer Communication*
- *Material & Equipment Procurement*
- *Turnkey Construction Management*



MECHANICAL INSTALLATION SERVICES

ECF specializes in field fabrication of process piping systems and the installation of equipment in multiple industries.

With over 25 years of experience in field fabrication and installation services, ECF provides the expertise necessary to install equipment, structural steel and the fabrication of process piping systems for optimum efficiency and ease of operation.

Certified to ASME BPV Section IX code, our employees are uniquely qualified and available for any duration and size of project throughout the US.

ECF can provide field fabrication services for process piping systems, terminal piping, structural steel and installation services including loading racks, rail loading and offloading systems, process equipment skids, blending skids, heating systems and heat trace and insulation services.

Safety is our number one priority at ECF. Our safety program is certified and approved by ISNetwork and PEC Premier.





HEAT TRACING SERVICES

ECF Heat Tracing Division has the design know-how and installation experience to keep your product flowing year round.

ECF's Heat Tracing Division can design and install any form of heat tracing system, which includes hot oil, warm oil, electric, steam and hot water.

ECF can install the following heat tracing systems:

- *Stainless Steel Tubing*
- *Copper Tubing*
- *MI Cable*
- *Self-Regulating Cable*

Since 1994, ECF has been delivering a high level of expertise and solutions to meet the needs of each customer and project application.

Our skilled installation teams can install the proper heat tracing system specifically designed for optimal efficiency and for maintaining proper product fluid flow.





INSULATION SERVICES

ECF's Insulation Division has the knowledge and expertise to design and install the ideal insulation for any application.

ECF's Insulation Division installs a wide variety of insulation and jacketing for pipe, tanks and equipment.

Types of insulation material include:

- Fiberglass
- Mineral Wool
- Calcium Silicate Insulation

Types of insulation coverings include:

- Aluminum
- Stainless Steel
- PVC Jacketing

Whether you need a complete insulation system for a new construction project or simply want to optimize your existing facility for energy and cost savings, ECF's Insulation Division has the industry knowledge and project expertise to design and install the ideal insulation system for any application.





FABRICATION & SKID DESIGN SERVICES



ECF offers a wide range of process and blending systems to meet a variety of terminal operations.



ECF's Fabrication Division offers a full line of process and blending systems to meet the high demands of product modifying. ECF can design, fabricate and install standard or customized blending and process systems.

ECF specializes in the fabrication and installation of the following systems:

- Polymer Modified Asphalt Blending Systems
- Polyphosphoric Acid (PPA) Skids
- Automated Molten Sulfur Injection Skids
- Material Reclaim Boxes
- Warm Oil Heating Skids (Warm Oil Loop)
- Product Additive Systems



ECF's Mechanical Installation Division has the expertise to install this equipment and provide a full system integration including, equipment tie-ins, startups and operational support once installed.

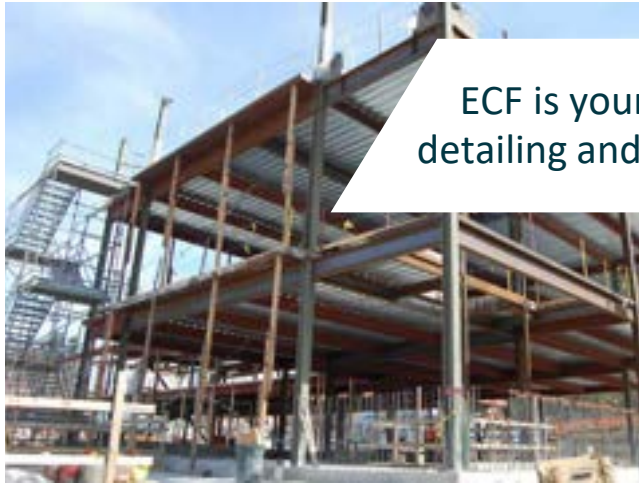


3D Conceptual Drawing – PMAC Skid



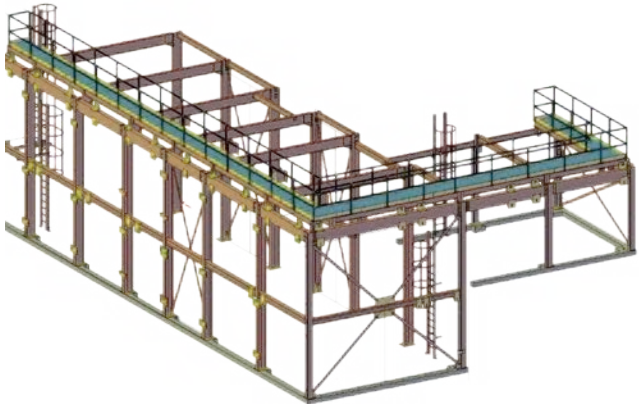
STRUCTURAL DETAILING SERVICES

ECF is your partner in accurate and precise structural steel detailing and engineering services.



Detailing:

ECF utilizes the latest 3D modeling software through Tekla Structures to detail your project. Our modeling capability provides accurate BIM coordination, shop drawings, and CNC machine information for any shop setup. Our detailing and engineering work is *never* subcontracted overseas. Our staff is well versed in the steel fabrication industry, providing structural design and detailing services across the United States.



Delegated Design:

Don't let delegated design stop you from bidding a project. As popularity of design-build projects grow, more and more engineering responsibilities are being delegated to the fabricators- from connection design to miscellaneous structures. ECF can take on any engineering aspect of your project and provide you with a complete calculation report using the most up to date software, stamped by a Professional Engineer.



Structural:

Whether you are looking for design of a commercial building, or addition of a new floor or stair tower, ECF can help. ECF can provide design calculations and assist our clients visualize their plans before their project is executed. Whether it's large or small scale, our team will work with you until you are completely satisfied with the design.