



Delivering Predictable Outcomes in Complex Industrial Environments

How Integrated EPC Execution and Self-Perform Capabilities
Drive Measurable Performance Gains



Executive Summary

In today's industrial landscape, downstream facilities face increasing pressure to execute capital projects and maintenance initiatives with greater speed, precision, and cost control—without compromising safety or operational uptime.

Liberty Flare Mechanical addresses this challenge through a fully integrated Engineering, Procurement, and Construction (EPC) model, combining in-house fabrication, disciplined project controls, and hands-on execution.

Over the past 24 months, this approach has delivered:

- \$22M+ in successfully executed EPC projects
- >95% on-time project completion rate
- >98% weld first-pass acceptance rate
- 10–20% cost savings through prefabrication and procurement strategy
- Up to 25% reduction in field installation time
- Zero lost-time incidents on key projects

These outcomes demonstrate that when engineering, fabrication, and construction are tightly integrated and critical scopes are self-performed - industrial operators gain measurable improvements in schedule certainty, cost efficiency, and long-term asset reliability.



The Shift in Industrial Project Execution

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Downstream oil & gas and industrial facilities - particularly across the Gulf Coast - operate in environments defined by:

- Continuous production requirements
- High-pressure, high-temperature systems
- Dense and complex piping infrastructure
- Strict regulatory and safety standards

Traditional project delivery models often introduce risk through fragmented execution, multiple subcontractors, and limited visibility across phases.

The result:

- Schedule delays
- Cost overruns
- Rework and quality inconsistencies
- Operational disruption

The need is clear: **a more integrated, accountable approach to project delivery.**

COMPANY EVOLUTION:

From Specialty Contractor to Integrated EPC Provider

Liberty Flare has long been recognized for its expertise in pipe fabrication and specialty welding. With the expansion into a full EPC division, the company has evolved into a multidisciplinary project delivery partner.

Core Capabilities:

- Pipe fabrication and specialty welding
- Structural steel fabrication
- Civil and soft craft services
- Industrial I&E (Instrumentation & Electrical)
- Full EPC project execution (up to \$25M)

Proven Growth:

- **\$22M+ in EPC projects delivered in the last 24 months**
- Expansion into fully integrated project delivery
- Increased ability to self-perform critical scopes

This evolution enables Liberty Flare to deliver **end-to-end solutions with fewer interfaces, greater control, and more predictable outcomes.**

CORE CHALLENGE: Executing in Live, High-Stakes Environments

Industrial facilities - particularly downstream operations—require:

- **Minimal downtime during tie-ins and upgrades**
- **Precision execution in constrained environments**
- **Strict adherence to safety and compliance standards**
- **Coordination across multiple disciplines and stakeholders**

Even small inefficiencies can create outsized impact.

Key client objectives include:

- Maintaining uptime during construction
 - Ensuring long-term reliability of installed systems
 - Reducing schedule risk during turnarounds
 - Controlling total project cost—not just upfront spend
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SOLUTION FRAMEWORK: Integrated EPC + Self-Perform Model

Liberty Flare's approach centers on **integration, control, and front-end planning**.

Assessment & Planning

- Detailed site and constructability analysis
- Early identification of risks and constraints
- Alignment with operational schedules

Engineering & Pre-Construction

- Fabrication-driven design approach
- Early procurement of critical materials
- Pre-fabrication strategies implemented upfront

Execution Through Self-Performance

Direct control of:

- Pipe fabrication
- Specialty welding
- Steel fabrication
- Civil scopes

Reduced reliance on subcontractors

Operational Integration

- Work executed within active facilities
- Alignment with shutdowns and turnaround windows
- Minimal disruption to ongoing operations

Project Controls & Delivery

- Real-time visibility into:
 - Cost
 - Schedule
 - Performance

EXECUTION IN PRACTICE:

Fully Integrated Project Delivery

To illustrate how this model performs in real-world conditions, Liberty Flare Mechanical recently delivered a fully integrated EPC project—executed from initial concept through final commissioning—with complete control across all phases.

End-to-End Project Scope

This project reflects Liberty Flare’s ability to deliver true turnkey EPC execution, including:

- Full project delivery from concept through commissioning
 - In-house design and engineering development
 - Complete shop fabrication of all structural steel, piping, and specialty weld components
 - Full field installation across civil, mechanical, and process scopes
 - On-site project and contractor management with daily schedule and cost tracking
 - Delivery of as-built drawings and full turnover documentation
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Engineering-Led Execution

A key differentiator in this project was the front-end engineering approach, which relied heavily on field-driven accuracy.

Rather than depending on incomplete legacy drawings, the team conducted detailed field verification of existing components and dimensions, ensuring:

- Accurate system integration
- Reduced rework and design revisions
- Minimized scope changes and cost overruns
- Seamless installation within an active facility

This level of precision in early-stage planning directly contributed to improved schedule performance and overall project predictability.



Self-Perform Fabrication & Installation

Liberty Flare maintained full control over critical scopes through its self-perform model:

- 100% of structural and piping components fabricated in-house
- Specialty welding executed to strict AWS and ASME standards
- **Coordinated field installation across:**
 - Civil
 - Mechanical
 - Process systems

By eliminating fragmentation between fabrication and installation, the team achieved:

- Greater quality consistency
- Reduced field delays
- Faster installation timelines

Project Controls & On-Site Management

Throughout execution, Liberty Flare provided dedicated site management across all contractors, maintaining:

- Daily schedule tracking
- Real-time cost analysis
- Continuous coordination across trades

This ensures:

- Alignment with client expectations
- Proactive issue resolution
- Strong adherence to both schedule and budget



Commissioning & Turnover

Upon completion, the project included:

- Full system commissioning
- Updated as-built documentation
- Delivery of a complete turnover package

This ensures the client receives not only a completed installation—but a fully documented, operational asset ready for long-term performance.

Quantitative Performance Outcomes

The effectiveness of this model is best demonstrated through measurable results:

PROJECT EXECUTION METRICS

- **\$22M+ EPC work delivered in 24 months**
- **>95% on-time completion rate**
- **Up to 25% faster installation timelines**

QUALITY METRICS

- **>98% weld first-pass acceptance rate**
- **Reduced rework and inspection delays**

COST EFFICIENCY

10–20% cost savings achieved through:

- Prefabrication
- Optimized procurement
- Reduced field labor

SAFETY PERFORMANCE

- Industry-leading safety metrics
- **Zero lost-time incidents on key projects**





OPERATIONAL IMPACT FOR CLIENTS

These performance gains translate directly into business outcomes:

1. Reduced Downtime

Efficient planning and prefabrication enable faster tie-ins and upgrades.

2. Increased Reliability

High-quality fabrication reduces long-term maintenance needs.

3. Greater Schedule Certainty

Integrated execution minimizes coordination breakdowns.

4. Improved Cost Control

Early-stage planning and transparency reduce financial risk.

5. Scalable Execution

Capability to handle projects from small modifications to \$25M capital scopes.

Technical Excellence & Compliance

All work is executed in accordance with leading industry standards:

- **AWS D1.1 / D1.6** – Structural Welding Codes
- **ASME Section IX** – Welding Qualifications
- **ASME B31.1 / B31.3** – Piping Codes
- **AISC Standards** – Steel Construction
- **ACI 318** – Structural Concrete

Quality assurance includes:

- Full QA/QC programs
- NDE testing (RT, UT, MT, PT, VT)
- Material traceability and documentation

LESSON LEARNED:

What Drives Performance

From executing over \$22M in EPC projects, several key principles have emerged:

FRONT-END INTEGRATION IS CRITICAL

Aligning engineering, procurement, and construction early reduces rework and delays.

PREFABRICATION IS A FORCE MULTIPLIER

- Improves quality
- Reduces field congestion
- Accelerates schedules

SELF-PERFORM = CONTROL

Owning critical scopes ensures:

- Consistency
- Accountability
- Higher performance

COORDINATION WITH OPERATIONS IS NON-NEGOTIABLE

Success in live environments depends on tight alignment with facility operations.

Conclusion

As industrial projects become more complex and performance expectations increase, traditional fragmented delivery models fall short.

Liberty Flare Mechanical's integrated EPC approach - combined with strong self-perform capabilities - offers a proven alternative:

- Faster execution
- Lower costs
- Higher quality
- Greater predictability

Backed by **\$22M+ in recent project delivery and measurable performance metrics, this model demonstrates that integration isn't just operational - it's a competitive advantage.**