

VISION BORN OF EXPERIENCE



AREAS OF EXPERTISE

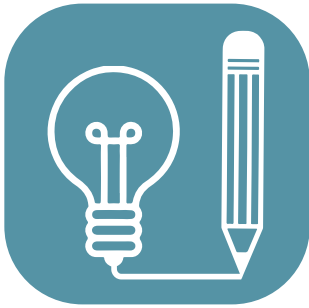


CAJUN ENGINEERING SOLUTIONS

Our mission is to help bring your project online faster featuring unparalleled value with the highest quality deliverables.

Cajun Engineering Solutions works with clients big and small across a wide range of industries. We utilize our very experienced engineering professionals to get your project done the right way. We believe the Cajun Engineering Solutions innovative team of employees is key to effectively completing your toughest challenges. We will work with you to fully understand your business objectives and to achieve the greatest ROI possible so you can see returns quickly from our engineering services. We

have a number of different groups within our Cajun family that specialize in all areas of construction so you can be sure that you won't receive a CES engineering package without thoughtful constructability planned throughout the design. We make continuing education a priority and our team is up to date with the latest software and technology. Cajun Engineering Solutions is ready to prove ourselves and provide the highest level of support that you and your business objectives require.



BASIC ENGINEERING & DESIGN

Cajun Engineering Solutions is a true industry leader combining technical expertise with engineering innovation.

Cajun Engineering Solutions provides a complete range of multi-disciplined engineering and design services.

Beginning with opportunity analysis, we cultivate forward-thinking solutions for our clients' most difficult challenges.

Our team's extensive experience with basic engineering design forms the basis for later successful

detailed engineering, procurement,

and construction completion. CES

engineers, designers and project

service personnel have the expertise

and commitment to overcome the

most sophisticated technical

challenges and deliver inspired, award

winning projects.

OPPORTUNITY ANALYSIS

Identify potentially beneficial business opportunity and perform initial analysis, scoping and order of magnitude estimate to determine whether the opportunity warrants further investigation.

KEY ACTIVITIES

- Identify business opportunity
- Assess market conditions
- Identify & evaluate options
- Obtain key technology supplier input
- Analyze internal & external risk & impacts
- Initiate project execution strategy
- Identify stakeholders & gate keepers



CONCEPTUAL DESIGN

Identify and analyze the best project approaches, options, and concept(s) and prepare study cost estimate(s), to confirm project viability and define a further refined path forward.

KEY ACTIVITIES

- Select team and align to project objectives
- Confirm preferred concepts, basis of design
- Complete alternative analyses and testing studies
- Develop concept(s) into preliminary scope documents
- Identify regulatory and permitting requirements
- Initiate environmental impact assessment
- Conduct workshops, safety, and constructability reviews, and initiate modular studies
- Initiate project execution plan including construction strategy, work sharing, modular opportunities
- Identify long lead/critical equipment
- Initiate geotechnical studies
- Conduct phase 2 gate review



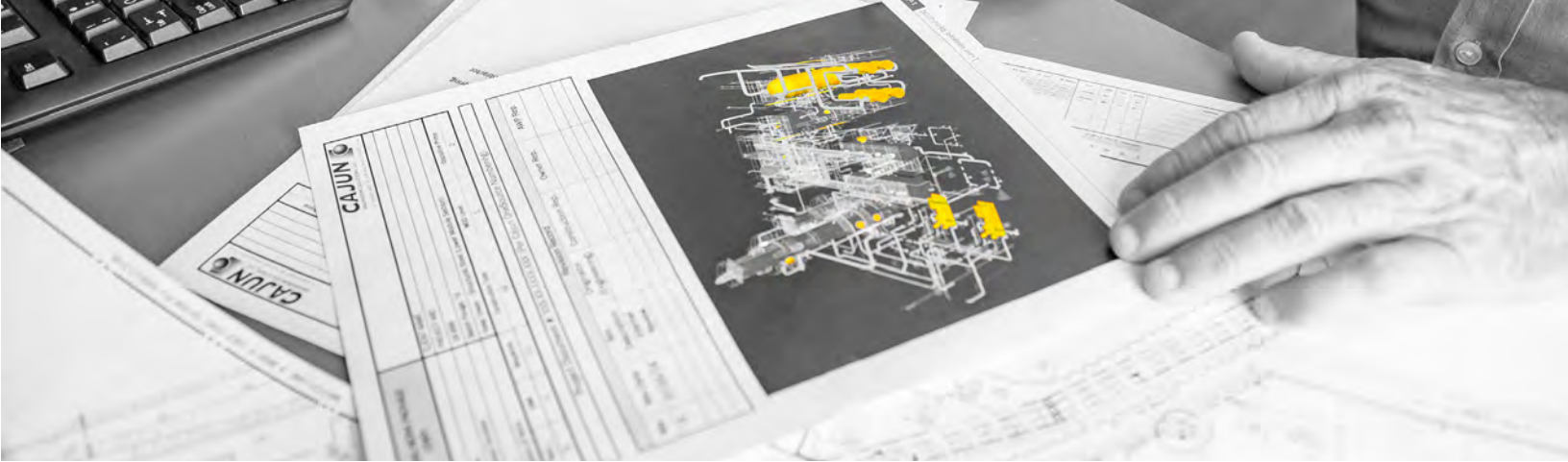


FRONT-END ENGINEERING & DESIGN

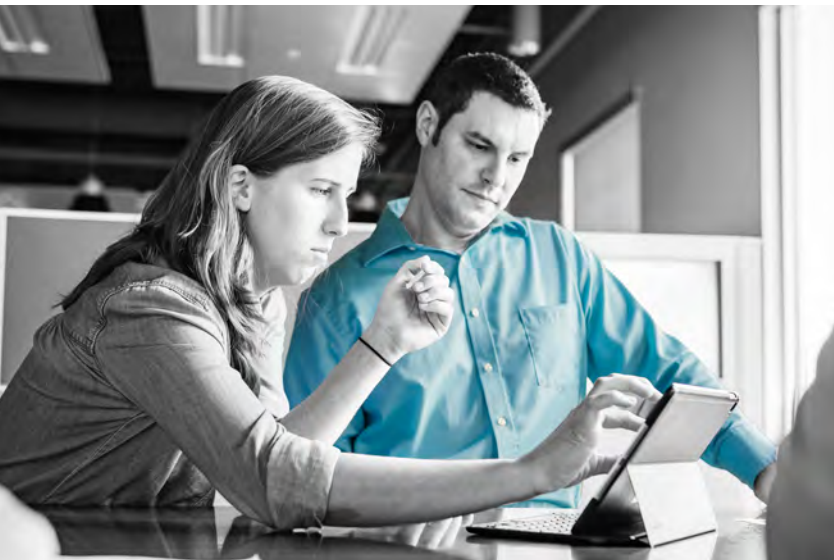
Cajun Engineering Solutions provides front-end engineering design services containing optimum detail with a construction driven design approach.

The FEED phase is essential in a project's lifecycle for controlling costs, improving the design and finalizing the most focused project execution strategy. Experience has shown us that a construction driven engineering approach drives an improvement in labor productivity and reduced construction rework. Early application of CES expertise at this stage minimizes delays, reduces risk and lowers costs.

The FEED package has always been used to set the project design basis but more and more of our clients use Cajun's quality, robust FEED as the basis for bidding EPC Contracts. CES' construction driven approach will result in fewer design changes, provide greater certainty and assist all stakeholders in realizing strategic objectives together.



During this phase we finalize technology, project objectives, process and design scope definition, including major equipment pricing and the project execution plan to support a budget cost estimate and funding request.



KEY ACTIVITIES

Confirm project objectives: scope, cost, schedule

Define construction strategy/ sequence/ package plan and gain pass gate approval

Translate project concepts into full project definition supported by engineering documents

Conduct AWP workshops, design reviews for constructability, safety, maintainability and operability

Prepare to procure critical and long lead equipment/materials

Prepare applications for necessary permits/licenses

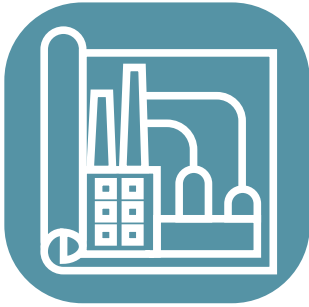
Finalize modular application plans

Complete project execution plan

Complete budget estimate and

Integrated project schedule

Conduct phase 3 gate review



DETAILED DESIGN ENGINEERING

Cajun Engineering Solutions' comprehensive engineering enables us to deliver consistently exceptional projects.

Detail Design Engineering is the essential bridge between the early engineering and the construction phase of a project, converting the ideas into reality. This involves close coordination and synchronization among our various disciplines of engineering.

Cajun Engineering Solutions' design execution method is structured to focus on a logical sequence of events and normal sequence of information. Additionally Cajun offers Advanced

Work Packaging (AWP), which provides numerous advantages, from enhanced project cost and schedule predictability to increased commissioning reliability and an overall improvement in safety awareness and performance. CES' detailed execution approach supports fast track execution, while controlling change and enables us to deliver consistently exceptional projects customized to our clients' needs.



WORKSHARE EXECUTION

The opportunities we face today are larger and more complex. This has made workshare execution a standard in the CES model. Since inception, workshare implementation has been fundamental to CES' project execution approach. It is a common practice that is rooted in our tools, processes, procedures and work methods.

KEY ACTIVITIES

Align team to project objectives

Initiate change management

Procure, expedite, and inspect equipment and materials

Manage vendor data

Conduct design reviews (constructability, safety, maintainability, operability) and incorporate into the design

Develop and issue construction documents (IFC) and subcontractor packages

Confirm construction scopes of work, control estimates and schedules

Coordinate internal and external AWP interfaces

Obtain regulatory authority approval (e.g. FDA, environmental)

PHA/HAZOP



VALUE ENGINEERING

Cajun Engineering Solutions is focused on achieving significant cost reduction benefits for our clients.

Every plan can be improved with critical analysis, expertise and experience. Value Engineering is a formal process, structured to ensure every project is focused on reducing capital and life cycle costs. Our project teams use value engineering throughout a project, evaluating options, eliminating unnecessary redundancies and inefficiencies, helping you accelerate time to completion all the while minimizing expenditures. We are ready to review all aspects of your project to identify opportunities for improvement.

01 OPPORTUNITY ANALYSIS

Identify beneficial business opportunity and perform initial analysis, scoping, and order of magnitude estimate to determine whether opportunity is worth further investigation.

02 CONCEPTUAL DESIGN

Select best of identified project approaches, analyze concept(s) and prepare Study Cost Estimate, to confirm project viability.

03 PROJECT DEFINITION

Finalize technology, project objectives, process and design scope definition, major equipment pricing, and project execution plan to support a budget cost estimate and funding request.

04 DETAILED DESIGN & PROCUREMENT

Manage, coordinate and perform all activities and equipment procurement necessary for design completion, procurement, construction, commissioning and start-up.

05 CONSTRUCTION

Mobilize and manage the construction forces and perform other activities including procurement necessary to construct the facility in accordance with the construction documents.

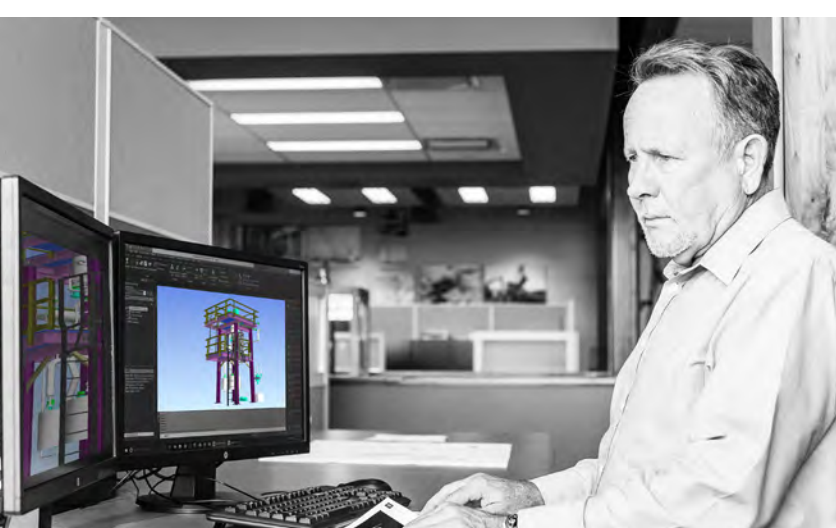
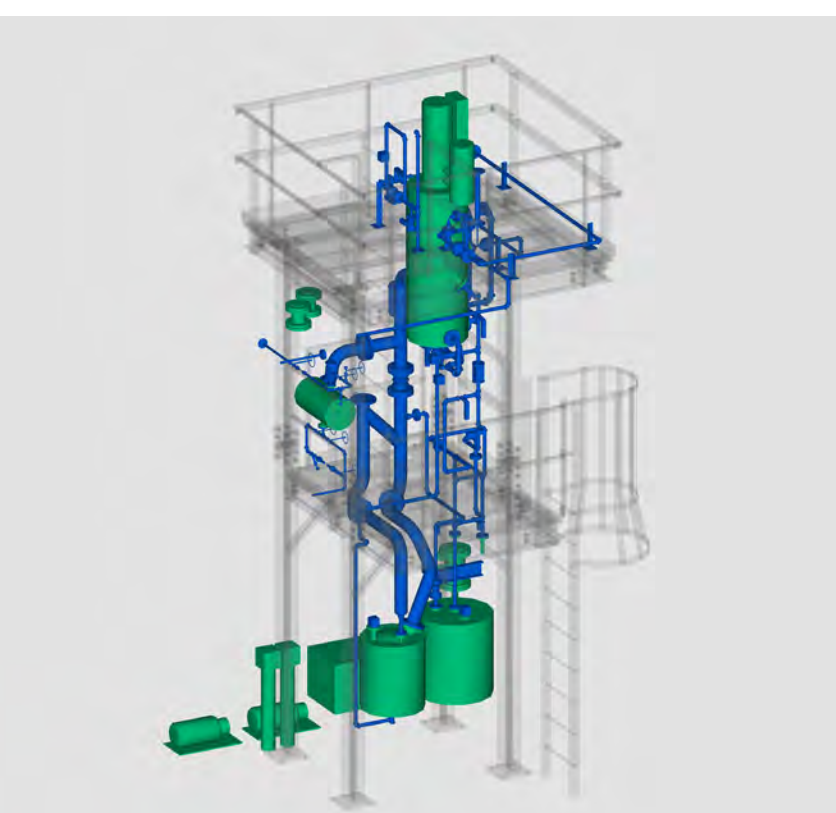
06 STARTUP

Perform commissioning and operating activities required to achieve design performance levels.

07 CLOSEOUT

Perform regulatory, contractual, archival and Cajun required activities to close the project in an orderly manner.

Experience shows that a construction driven engineering approach drives an improvement in labor productivity and reduced construction rework, all of which can lower construction costs from four to ten percent of total installed cost, according to Construction Industry Institute (CII) figures.



CAPABILITIES

Value engineering workshops

Validation, improvement, and integration of preliminary process designs

Engineering, procurement, and construction schedules

Technology selection

Piping and instrumentation diagrams

Equipment datasheets

OSBL and utility plans

Preliminary plot plans

RFQ and summary preparations

Capital cost estimates

Customization of standards and specifications

Process simplification

Waste minimization

Design to capacity



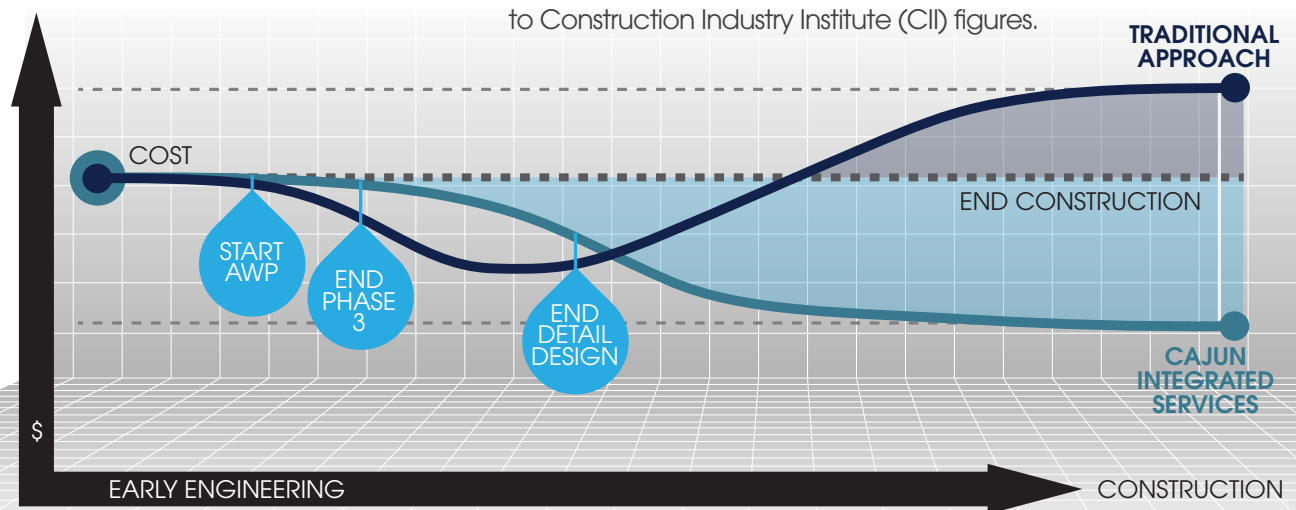
INTEGRATED SERVICES

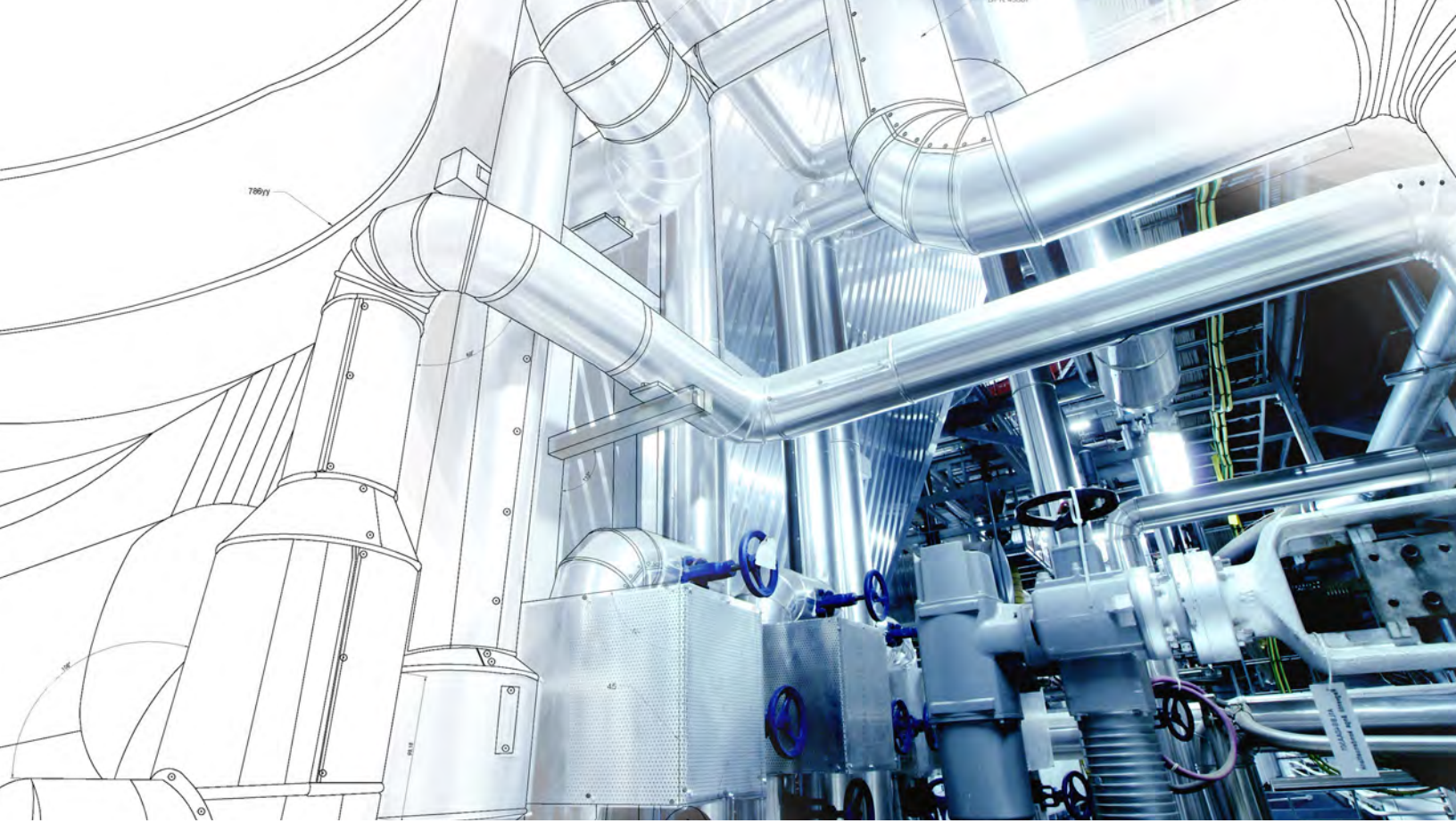
Cajun Engineering Solutions delivers turnkey, integrated services to our customers.

Cajun Engineering Solutions offers a full range of multi-disciplined engineering and procurement services to the following industries: petrochemical, oil and gas, refining, power, alternative energy, communications, commercial and industrial buildings, water treatment, and the public sector.

Integrated engineering services from Cajun Engineering Solutions provides numerous advantages, from enhanced

project cost and schedule predictability to increased commissioning reliability and an overall improvement in safety awareness and performance. Experience also shows that a construction driven engineering approach utilizing AWP drives an improvement in labor productivity and reduced construction rework, all of which can lower construction costs from four to ten percent of total installed cost, according to Construction Industry Institute (CII) figures.





INTEGRATED SERVICES

Multi-Discipline Engineering
Conceptual through Detailed Engineering
Procurement/Supply Management
Constructability
Advanced Work Packaging
Deep Fountains
Civil
Pipe Fabrication
Mechanical
Building
Marine Construction
Engineering Construction Support
Construction Management
EPC





TECHNICAL SERVICES

Cajun Engineering Solutions is committed to providing the highest quality site-based technical services employees.

At Cajun, our people make the difference. The CES commitment to place quality candidates is unmistakable. Our relationships are built and maintained by some of the region's most experienced engineering professionals. Regardless of the position that you are looking to fill, our team can help you efficiently staff positions with the best talent available in a cost effective model.

Site-based Technical Service employees are an essential part of our business. When our clients identify an in-plant need, we work with them to understand their expectations and specific requirements. CES pre-screens and interviews all candidates prior to submissions, ensuring the best fit for the job. We maintain an

evergreen database that includes countless resumes and potential leads.

Cajun insists our technical services staff maintain communication with management and the home office so we can assure the best performance to meet and exceed our client's high standards.

Our full-time employees are offered a competitive compensation package including a comprehensive benefit plan and continuous training in their discipline. Our team addresses coemployment concerns, provides human resources, accounting, benefits support and manages performance evaluations. This detailed approach leads to committed long-term employees with minimal turnover.



TECHNICAL PERSONNEL

Project Managers

Project Engineers & Coordinators

Designers/Drafters

Engineers

Construction Managers & Coordinators

Inspectors & Materials Coordinators

Procurement Support

Project Controls Professionals

Safety Professionals

QA/QC Professionals

Document Control Support

Administrative & Accounting Support

Operations Consultants & Specialists



VISION BORN OF EXPERIENCE

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To learn more about
Cajun Engineering Solutions, LLC,
Cajun Industries, LLC,
and our core competencies
visit us at
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