



Engineering Excellence

Stellar Engineering Solutions

Electrical Engineering Design & Industrial Junction Box Solutions

● Oil & Gas ● Petrochemical ● Power ● Infrastructure

Stellar Engineering Solutions | Electrical Engineering Design & Industrial Junction Box Solutions

Who We Are

Stellar Engineering Solutions is an engineering-driven organization combining deep plant electrical expertise with precision-manufactured junction box solutions for mission-critical industries.

- **Specialization in electrical engineering design for complex industrial projects**
- **Supply of weatherproof, flameproof, explosion-proof, and customized junction boxes**
- **Strong EPC-aligned approach: technically sound, standards-compliant, and application-oriented**
- **Serving Oil & Gas, Petrochemical, Power, Refineries, Fertilizer Plants, and Infrastructure**



Engineering



Compliance



Supply



EPC Alignment



Our Vision & Mission

A trusted global partner anchored in technical soundness, quality compliance, and reliable delivery.

Vision



Trusted global partner for electrical engineering design and industrial junction box solutions

Delivering engineering excellence across Oil & Gas, Petrochemical, Power, and Infrastructure sectors worldwide.

Mission Pillars



Technically sound, application-oriented solutions



Compliance and quality at every stage



Reliable and timely execution



Strong, enduring client relationships

Industries We Serve

Purpose-built expertise across the full spectrum of energy, process, and infrastructure industries.



Oil & Gas

Upstream, midstream & downstream



Petrochemical & Refineries

Process plant electrical design



Fertilizer Plants

Continuous process facilities



Power Plants

Generation & transmission systems



Industrial & Manufacturing

Heavy & light industrial facilities



EPC & Project Contracting

Multi-discipline EPC environments

Electrical Engineering Design Services

End-to-end plant electrical design from concept through commissioning — covering every engineering discipline an EPC project demands.



Design & Layout

Plant Electrical Design · Substation Design · Electrical Layouts · Cable Routing & Cable Tray Layouts



Protection & Safety

Earthing & Lightning Protection Design · Hazardous Area Electrical Design Support



Diagrams & Studies

Single Line Diagram (SLD) Preparation · Load List & Load Summary · Power System Studies (ETAP): Load Flow, Short Circuit, Motor Starting, Relay Coordination



Project Support

3D Model Review & Design Coordination · As-built Engineering & Site Support



Sizing & Calculations

Cable Sizing & Voltage Drop · Transformer / DG / UPS & Battery Sizing · Capacitor Bank Sizing · Lighting Layout & Illumination Calculation



Standards & Compliance

All designs executed in alignment with IEC, IS, NEC, and project-specific standards for international EPC submittals

Power System Studies — ETAP Expertise

Rigorous power system analysis ensures safety, reliability, and regulatory compliance on every project.



Load Flow Study

Optimizing power distribution and network performance



Short Circuit Study

Fault current analysis for equipment protection ratings



Motor Starting Study

Ensuring stable voltage profiles during large motor energization



Relay Coordination

Selective protection ensuring minimal disruption on fault events

Powered by ETAP



ETAP Software

Industry-standard power analysis platform

Studies Performed

4 Core Analyses

Key Outcomes

- ✓ Safety compliance verified
- ✓ Equipment ratings confirmed
- ✓ Regulatory approval ready
- ✓ Network performance optimized

Engineered Junction Box Solutions

A complete portfolio of junction boxes engineered for safe and hazardous area applications — from standard weatherproof enclosures to fully certified explosion-proof assemblies.



Weatherproof Junction Boxes



Flameproof Junction Boxes



Explosion-Proof Junction Boxes



Instrument Junction Boxes



Monitoring Junction Boxes

Safe Area

Hazardous Area

ATEX / IECEx Certified

IP65 | IP66



Lighting Loop-in Loop-out JBs



Power Junction Boxes



Lighting Main Junction Boxes



Busbar Type Junction Boxes



Customized Junction Boxes

Product Specialization & Material Options

Precision-specified materials and product variants selected to match your hazardous area classification, environmental conditions, and project MTO.



Product Specializations

- **Lighting JBs**
- **Power JBs**
- **Instrumentation JBs**
IS / Non-IS configurations
- **LPR Probe Junction Boxes**
- **Customized JBs**
Per GA & MTO specifications



Material Options

- **SS304 / SS316** | Stainless Steel
- **GRP** | Glass Reinforced Plastic
- **Cu-Free Al Alloy** | Copper-Free Aluminium (Ex d)
- **Mild Steel** | Powder Coated

Hazardous Area Compliance

Every junction box solution is specified, certified, and documented to meet the most stringent global hazardous area requirements.



Zone Classification

Zone 1 / Zone 2

Rated for hazardous area installations



Protection Concepts

Ex d | Ex e

Flameproof & Increased Safety enclosures



International Certifications

ATEX | IECEx

Globally accepted third-party certifications



Ingress Protection

IP65 | IP66

Dust-tight & jet-water protected enclosures

Associated Brands

WAROM

BARTEC

CORTEM

FCG

Our Engineering-Driven Approach

From initial datasheet to final documentation package — our engineering backbone ensures every junction box is technically compliant, correctly assembled, and fully documented for project submission.



End-to-end traceability — every step generates auditable deliverables: GA drawings, datasheets, MTO, COC, and full documentation packages aligned with EPC transmittal requirements.

Documentation & Deliverables

Complete, project-ready documentation packages reduce your procurement and engineering review burden at every stage.



GA Drawings

General Arrangement drawings for each junction box type, detailing dimensions, mounting, and entry positions.



Datasheets

Fully populated technical datasheets covering specifications, materials, ratings, and performance parameters.



Certificate of Conformance (COC)

Formal conformance declaration confirming products meet specified standards and project requirements.



ATEX / IECEx Certificates

Third-party certified documentation for hazardous area products — accepted in international project jurisdictions.



Bill of Materials (BOM)

Comprehensive itemized materials list aligned with project MTO for seamless procurement and traceability.



Technical Compliance Sheets

Line-by-line Material Requisition compliance responses, ready for vendor document submission and client review.

Our Competitive Strengths

The combination of engineering expertise, EPC project experience, and supply capability makes Stellar a single-source partner that reduces interfaces and accelerates project timelines.



Engineering Background

Deep plant electrical design expertise across all project phases — from concept through commissioning.



Design + Supply

Unified responsibility — no gap between specification and product delivery. One partner for design and supply.



EPC Experience

Proven in fast-paced, multi-discipline EPC environments where technical precision and schedule adherence are non-negotiable.



Fast Execution

Agile team structures enabling rapid turnaround — critical for time-sensitive procurement and engineering cycles.



Cost-Effective

Competitive pricing without compromising technical standards — value delivered at every stage of the project.



Export-Ready

Internationally certified products and documentation — ATEX / IECEx compliant for global project jurisdictions.



Why Partner With Stellar

For EPC contractors and procurement professionals who need a technically credible, compliance-driven, and execution-oriented electrical engineering partner.

- 🛡️ Single point of accountability for electrical design and junction box supply
- ⚠️ Hazardous area expertise eliminates costly specification errors
- ⚙️ ATEX / IECEx certified products accepted in international project jurisdictions
- 📐 Engineering-led approach ensures accurate MTOs, fewer RFIs, and faster approvals
- 📄 Documentation packages aligned with EPC transmittal and vendor document requirements
- 🌐 Proven capability across Oil & Gas, Petrochemical, and Power sectors globally

⚡ Technically Sound. Compliance Driven. Reliably Delivered.



"Technically Sound. Compliance Driven. Reliably Delivered."

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Let's Engineer Your Next Project Together

Reach out to discuss your project requirements — electrical design, junction box supply, or integrated engineering and procurement support.



Electrical Engineering Design Services

Available for project engagement across all engineering disciplines



Engineered Junction Box Solutions

Inquiry, datasheet, and compliance support for any specification



Export-Ready Supply

Full ATEX / IECEx documentation for international project jurisdictions

 ATEX Certified

 IECEx Certified

 Export-Ready Documentation

 Oil & Gas | Petrochemical | Power



Get in touch — share your project scope, MTO, or specification and our engineering team will respond with a technically aligned proposal.