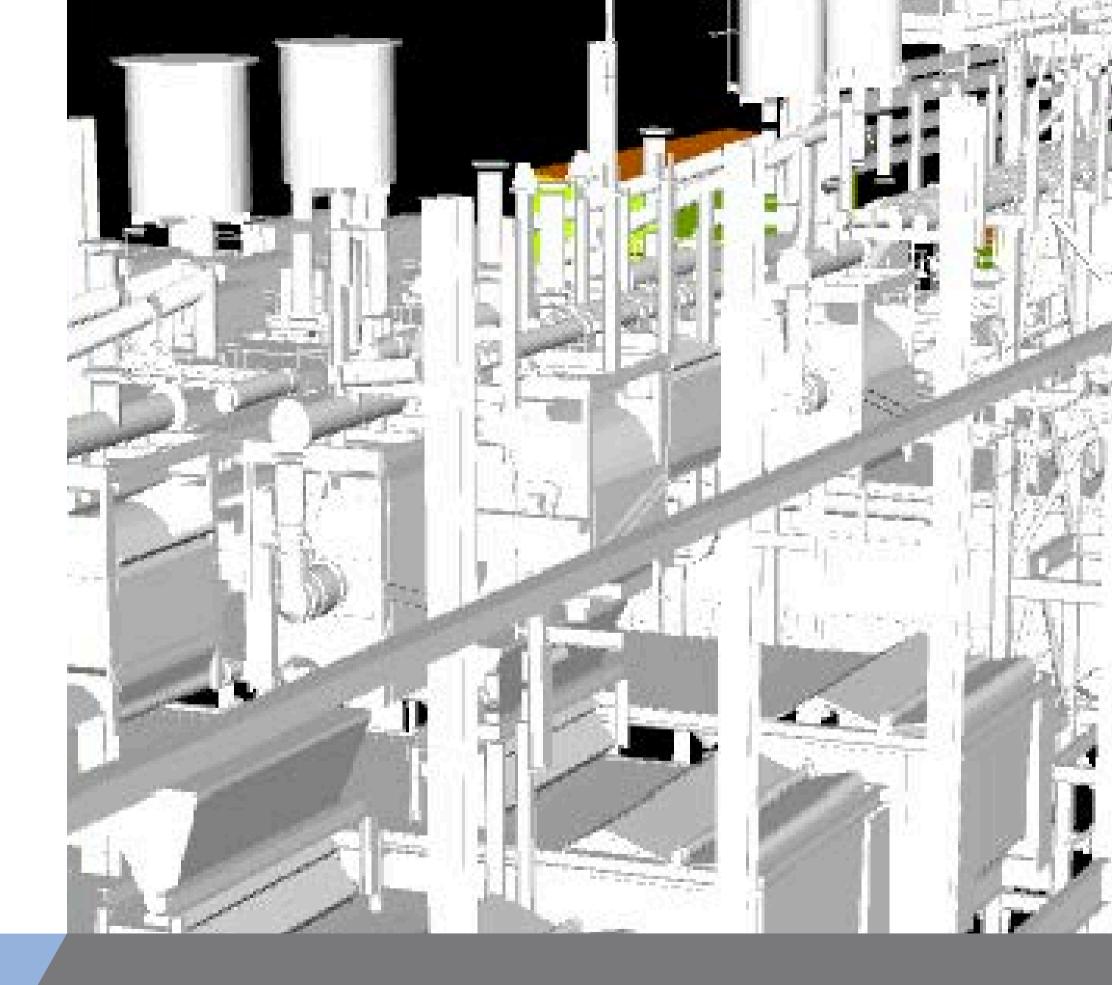


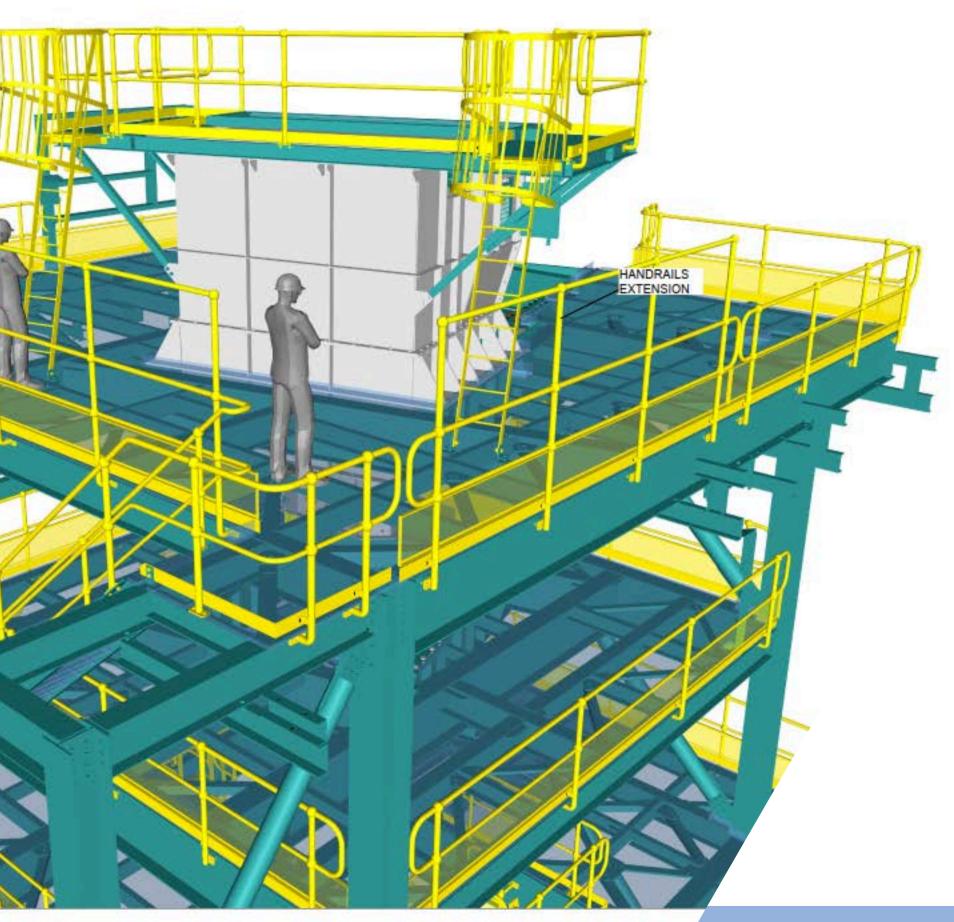
ENGINEERING ASSOCIATES

SUPPORTING,
MANAGING,
EXECUTING &
DELIVERING YOUR
ENGINEERING NEEDS

# ENGINEERING ASSOCIATES

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### **ABOUT US**

TP Engineering Associates, established in 2018, has rapidly distinguished itself as a leader in the Management, Engineering, and Construction sectors. With strategic office locations in Australia, Malaysia, and South Africa, the company is well-positioned to deliver a wide array of services across these key regions and beyond.

Our firm provides a comprehensive suite of services that covers a broad spectrum of engineering disciplines and design & construction paradigms. This extensive range includes project management, engineering design, construction execution, and tailored maintenance solutions to meet the specific needs of each client and project.

We place a strong emphasis on sectors such as mining, oil and gas, and infrastructure projects, where our expertise and experience are most pronounced. Our capability to support, manage and execute projects is reinforced by our substantial and skilled workforce, ensuring that both small and large-scale projects are delivered efficiently and effectively. This capability highlights our proficiency in handling intricate and challenging projects with a high degree of competency and precision.

**5** LOCATIONS

5

433+

**92** 

OFFICES PF

PPROJECTS

**HAPPY CLIENTS** 











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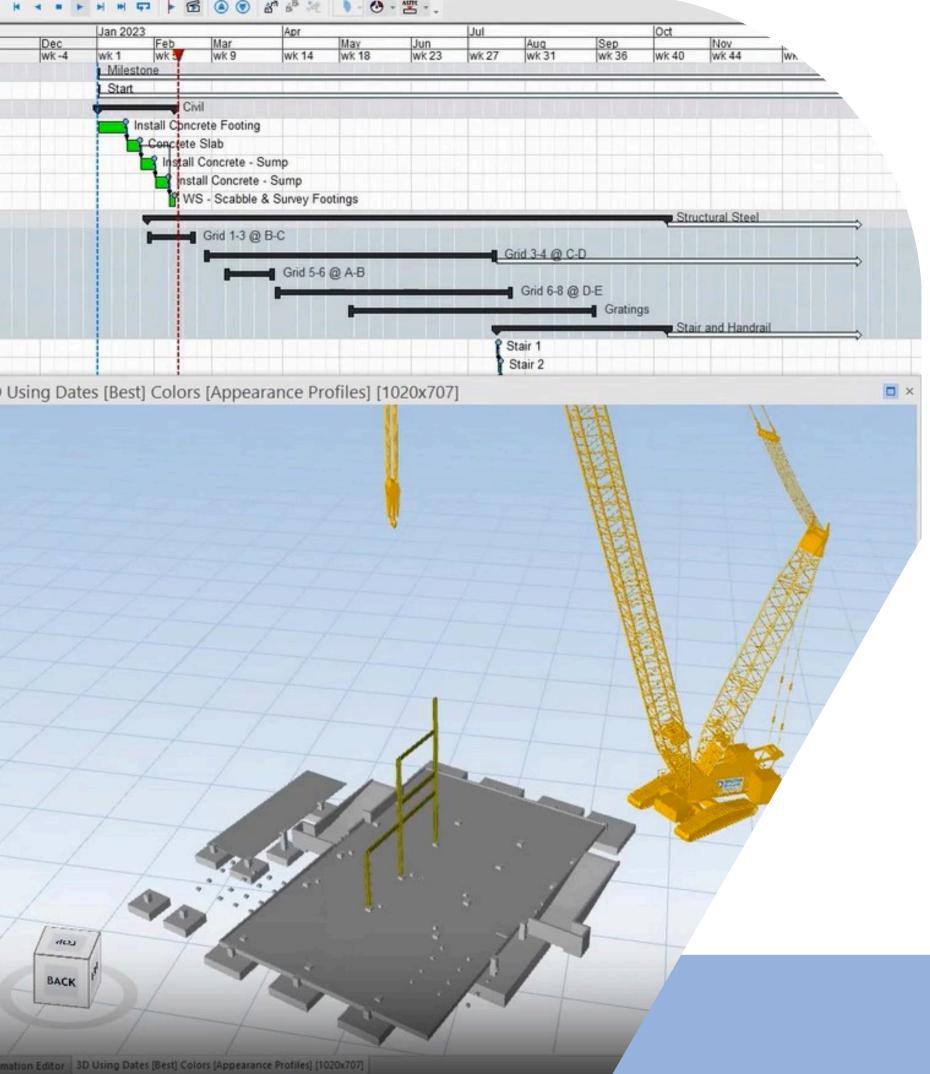


### PROJECT MANAGEMENT SERVICES

Our comprehensive project management services tailored to for each clients engineering and construction requirements. With a proven track record of supporting clients in delivering successful project outcomes and transforming difficult projects to successful projects. Our expertise spans across various sectors including infrastructure, mining, oil and gas and commercial.

- Project Management Consulting: We provide expert consulting services to enhance project performance and efficiency. Our consulting services include:
  - Project Strategy Development: Formulating strategies to achieve project objectives and align with client goals.
  - Process Improvement: Analysing and improving project management processes for better outcomes.
  - Training & Development: Offering training programs to build project management skills within client organisations.
  - Performance Assessment: Evaluating project performance and providing recommendations for optimization.
- **EPCM Services:** We offer comprehensive Engineering, Procurement, Construction, and Management (EPCM) services. Our EPCM services ensure seamless project execution from concept to completion, covering:
  - Engineering: Conceptual and detailed engineering designs.
  - Procurement: Efficient sourcing of materials, equipment, and services.
  - Construction Management: On-site supervision, quality control, and safety management.
  - Project Management: Integrated management of all project phases.
- Multidisciplinary Project Engineering: We offer comprehensive multidisciplinary project engineering services, integrating various engineering disciplines to deliver cohesive and efficient project solutions. Our expertise includes civil, structural, mechanical, electrical, and instrumentation engineering.
- Quality Assurance: We uphold the highest standards of quality in every project. Our quality management processes include rigorous inspections, testing, and adherence to industry best practices to ensure the durability and reliability of the construction work.
- Contract Administration: From contract negotiation to execution, we manage all contractual obligations and ensure compliance with legal and regulatory requirements. Our goal is to protect the interests of our clients and foster transparent relationships with all stakeholders.
- Stakeholder Communication: Effective communication is key to project success. We maintain clear and consistent communication with all stakeholders, providing regular updates and addressing concerns promptly.
- Sustainability and Safety: We prioritize sustainable practices and safety in all our projects. Our team implements environmentally friendly solutions and adheres to stringent safety protocols to create safe and sustainable construction environments.







### PROJECT CONTROLS & 4D PLANNING

We excel in providing top-tier project controls and planning services, tailored to the unique needs of engineering and construction firms. Our team of experienced professionals is dedicated to ensuring that projects are meticulously planned, controlled, and executed, resulting in successful and timely project completions. We support clients across various industries, helping them achieve their project goals with precision and efficiency.

- **Project Planning and Scheduling:** We develop detailed project plans and schedules to ensure every phase of the project is meticulously organized and executed. Our proactive approach helps in identifying potential risks and mitigating them effectively.
- **4D Planning:** Our advanced 4D planning services integrate time-related data with 3D models to provide a comprehensive visual representation of the project timeline. This approach enhances planning accuracy, facilitates better decision-making, and improves project outcomes. Our 4D planning services include:
  - 4D Scheduling: Creating detailed 4D schedules that link project activities with 3D models, allowing for visual simulation of the construction process.
  - Clash Detection: Identifying and resolving potential conflicts in the project timeline and construction sequence to prevent delays.
  - Progress Tracking: Monitoring project progress against the 4D schedule to ensure timely completion and identifying areas that need attention.
  - Scenario Analysis: Conducting what-if scenarios to assess the impact of changes and make informed decisions.
- **Resource Allocation:** We optimize the allocation of resources, including labor, equipment, and materials, to ensure that projects are completed efficiently and on schedule. Our resource management strategies minimize waste and maximize productivity.
- Earned Value Management (EVM): We utilize Earned Value Management techniques to measure project performance and progress. EVM provides a comprehensive view of project health, enabling timely corrective actions.
- **Progress Monitoring and Reporting:** We provide regular progress reports and updates, keeping clients informed about project status and performance. Our transparent reporting helps in making informed decisions and maintaining control over the project.
- Change Management: We manage project changes effectively, ensuring that any alterations to the project scope, schedule, or budget are properly documented and controlled. Our change management processes minimize disruptions and ensure project continuity.





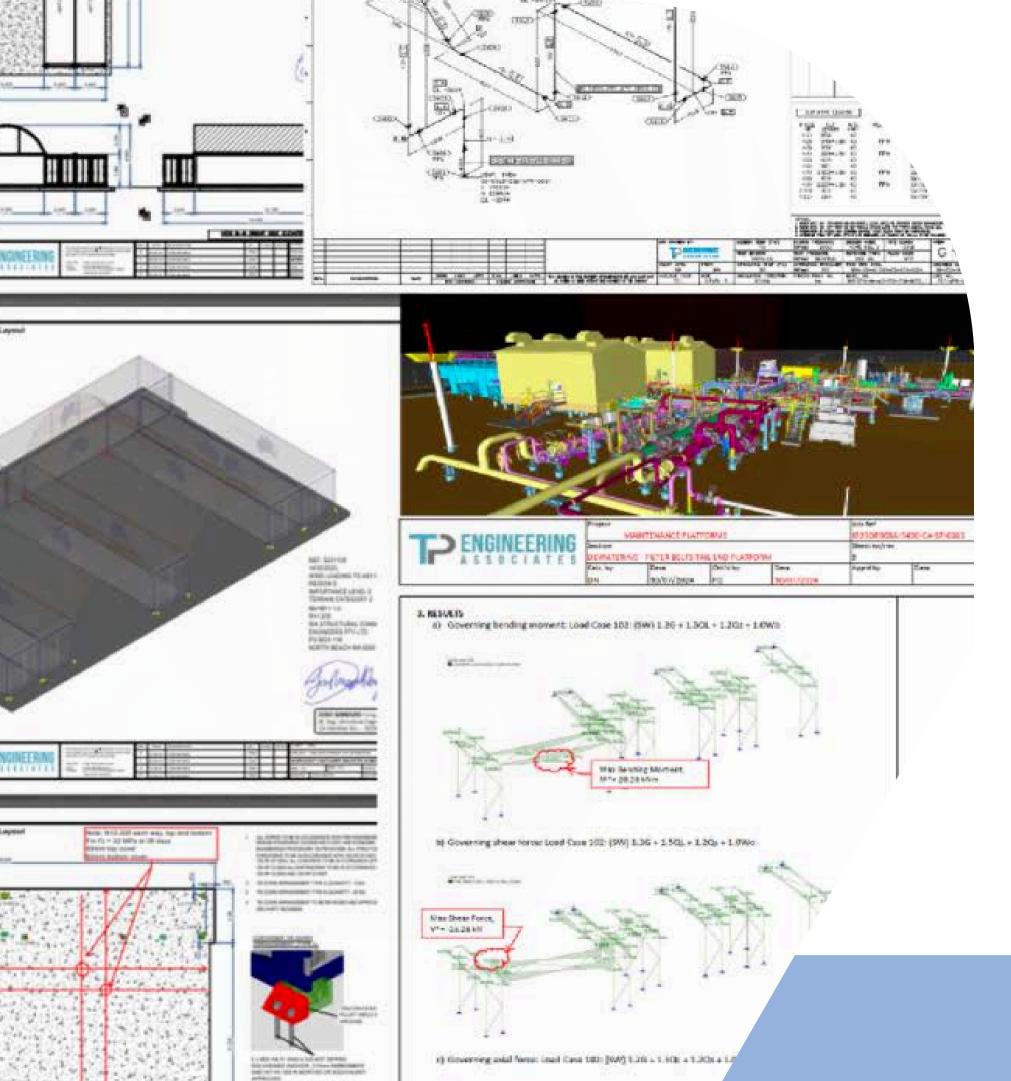


### **QUANTITY SURVEYING & ESTIMATING**

We provide exceptional quantity surveying and estimating services. Our team of experienced quantity surveyors and estimators is dedicated to delivering accurate and reliable cost assessments, ensuring the highest standards of quality and precision. We support clients across various industries, helping them manage their budgets effectively and optimize project costs.

- Cost Planning and Control: We develop detailed cost plans and control measures to ensure that projects stay within budget. Our proactive approach helps in identifying potential cost overruns and implementing effective cost-saving strategies.
- **Estimating:** Our estimating services provide accurate and comprehensive cost estimates for all project phases, from initial concept to final completion. We utilize advanced software and industry-standard methodologies to deliver precise estimates.
- Quantity Surveying: We offer thorough quantity surveying services, including measurement, valuation, and cost management. Our team ensures that all quantities are accurately calculated and that costs are effectively managed throughout the project lifecycle.
- **Bill of Quantities (BoQ) Preparation:** We prepare detailed bills of quantities, providing a comprehensive breakdown of all materials, labour, and equipment required for the project. This helps in accurate budgeting and procurement planning.
- **Tender Documentation:** We assist in the preparation of tender documentation, including detailed cost estimates, bills of quantities, and specifications. Our comprehensive tender packages help clients secure competitive bids from contractors.
- Value Engineering: Our value engineering services focus on optimizing project costs without compromising on quality. We identify opportunities for cost savings and implement innovative solutions to enhance project value.
- Cost Reporting: We provide regular cost reports, keeping clients informed about project expenditures and budget status. Our transparent reporting helps in making informed decisions and maintaining financial control.
- **Risk Management:** We identify, assess, and manage cost-related risks throughout the project lifecycle. Our risk management strategies are designed to minimize the impact of unforeseen events on the project budget.





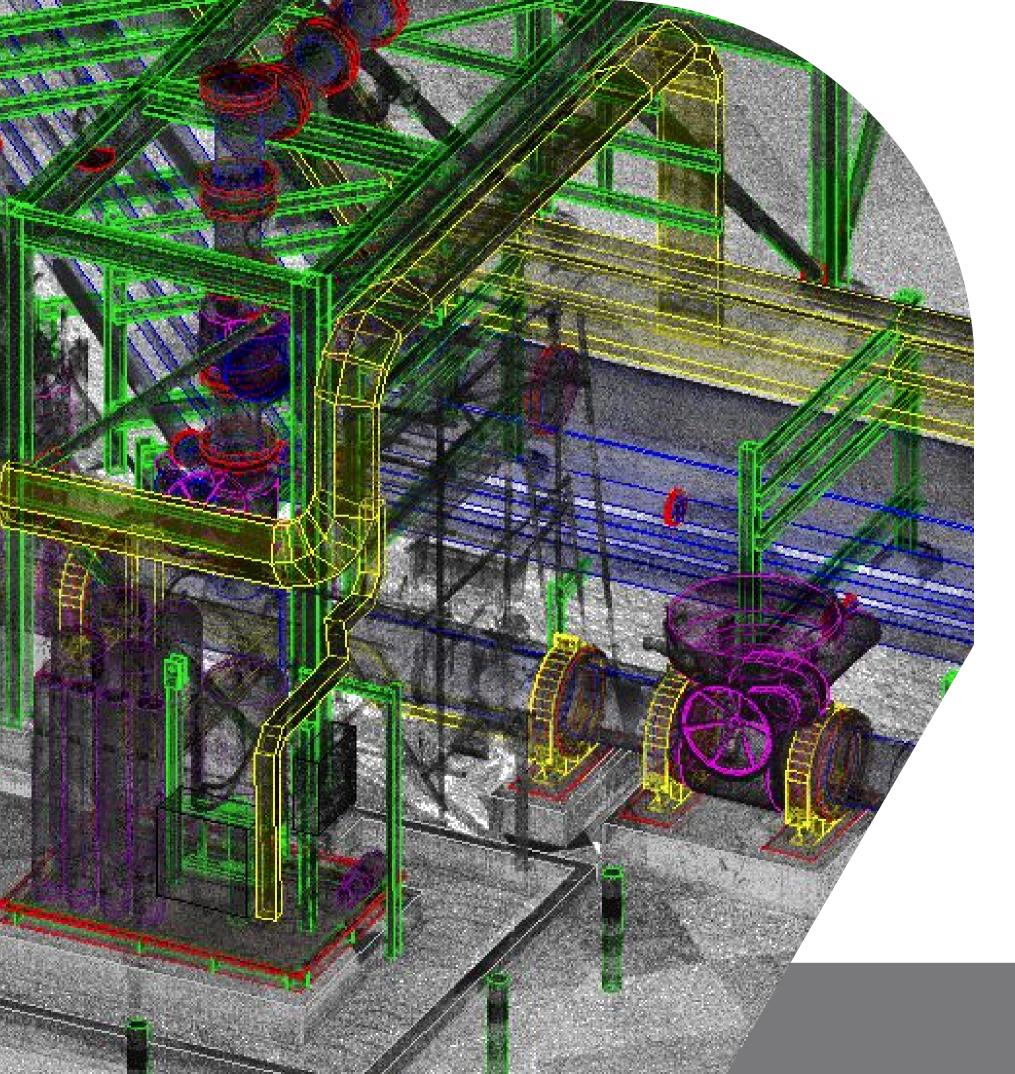


### **DESIGN ENGINEERING & 3D MODELLING**

We excel in providing top-notch design engineering, 3D modelling and drafting services tailored to meet the diverse needs of our clients across various industries. Our team of experienced certified engineers and drafters is dedicated to transforming ideas into detailed and accurate designs, ensuring the highest standards of quality and precision. From initial concept to final documentation, we support our clients at every stage of the pre-feed studies, engineering design, execution and commissioning process.

- **Engineering Management:** We offer full-scale project management services, from initial planning and feasibility studies to execution and close-out. Our experienced project managers ensure that projects are completed on time, within budget, and to the highest quality standards.
- Detailed Engineering: Our detailed engineering services include the development of comprehensive plans, specifications, and calculations. We ensure that every aspect of the design meets industry standards and project specifications.
- **Conceptual Design:** We collaborate with clients to develop innovative and practical design concepts. Our team transforms initial ideas into feasible designs, considering all project requirements and constraints.
- **Engineering Optimization:** We perform detailed engineering calculations and optimization to enhance the efficiency, performance, and cost-effectiveness of our designs. Our focus is on delivering solutions that meet all technical and regulatory requirements.
- **Civil / Structural Design:** Our civil/structural engineering services safe and efficient structures for various applications, including buildings, bridges, cover site development, grading, drainage, and industrial facilities. We focus on stability, strength, and compliance with relevant codes and standards. We ensure that all civil/structural works are designed to optimize functionality and sustainability.
- **Mechanical Design:** We offer comprehensive mechanical design services, including equipment selection, mechanical analysis, design of conveyors, drives, motors, pumps, HVAC systems, plumbing systems, tanks and chutes, ensuring optimal performance and efficiency.
- **Piping Design:** Our piping design services include the development of efficient and reliable piping systems for various applications. We ensure optimal layout, material selection, and compliance with industry standards.
- **Electrical Design:** Our electrical engineering services encompass the design of power distribution systems, lighting, and control systems. We ensure all designs are energy-efficient and comply with safety regulations.
- **3D Modelling:** We specialise in creating highly detailed 3D models that provide a comprehensive view of the project. These models help in visualizing the design and making informed decisions.







### 3D SURVEYING & PRECISION MODELLING

We provide cutting-edge 3D surveying and precision modelling services. Our team of skilled professionals is dedicated to capturing and transforming spatial data into highly accurate 3D models, ensuring the highest standards of quality and precision. We support our clients across various industries, helping them visualize and evaluate their projects with unparalleled detail and accuracy.

- **3D Surveying:** Our 3D surveying services utilize advanced technology to capture accurate spatial data of existing conditions. This includes high-definition laser scanning and photogrammetry, providing detailed and precise data for planning and design.
- **Point Cloud Processing:** We convert raw point cloud data into usable formats, ensuring all spatial information is accurately represented. Our point cloud processing services include data cleaning, alignment, and integration into various CAD and BIM systems.
- **Precision 3D Modelling:** We specialize in creating highly detailed 3D models that provide a comprehensive view of the project. These models help in visualizing the design, conducting clash detection, and making informed decisions. Our expertise includes:
  - Architectural Modelling: Detailed models of buildings and structures for design, renovation, and construction planning.
  - Structural Modelling: Accurate representations of structural elements for analysis and design validation.
  - Mechanical, Electrical, and Plumbing (MEP) Modelling: Precise models of MEP systems to ensure optimal integration and performance.
- **As-Built Documentation:** We provide accurate as-built documentation by capturing the exact conditions of completed structures. This ensures that any modifications or renovations are based on precise and up-to-date information.
- **3D Visualization and Animation:** Our advanced 3D visualization and animation services help clients better understand and evaluate their projects. We create realistic renderings and animations that provide a clear and detailed representation of the final product.
- **Topographic Surveys:** We conduct detailed topographic surveys to capture the physical features of the land, providing essential data for site development and planning.
- **BIM Integration:** We integrate our 3D models into Building Information Modeling (BIM) systems, facilitating seamless collaboration and coordination among all stakeholders. This enhances project efficiency and reduces the risk of errors







## CIVIL & STRUCTURAL INSPECTION

We provide comprehensive civil and structural inspection services. Our team of highly skilled professionals is dedicated to ensuring the integrity and safety of infrastructure across various industries. With a thorough understanding of structural design, fabrication, inspection, construction, and repair processes, we deliver meticulous inspections that meet the highest standards of quality and compliance.

- Civil and Structural Inspections: We provide thorough civil and structural inspections to ensure the integrity and safety of infrastructure. Our inspections identify potential issues early, allowing for timely corrective measures.
- Structural Integrity Assessments: TPEA regularly carries out structural integrity assessments on structures including crushers, conveyers, tunnels, and retaining walls. Our assessments ensure compliance with clientspecific requirements and Australian standards, including:
  - AS1170: Structural Loading Series
  - AS3600: Concrete Structures
  - AS3990: Mechanical Equipment Steelwork
  - AS4100: Steel Structures
  - AS1554.1: Welding of Steel Structures General Requirements
  - AS5131: Structural Steelwork Fabrication and Erection
  - AS1657: Fixed Platforms, Walkways, Stairways, and Ladders Design, Construction, and Installation
- Inspectors: Our inspection personnel possess a thorough understanding of structural steel design, fabrication, inspection, construction, and repair processes and techniques. They are knowledgeable about all modes of failure and how associated faults will present for the types of structures being inspected. Our team can identify structural defects, assess the risk posed, and undertake independent checks of structural reports and calculations.
- **Comprehensive Reporting and Recommendations:** We provide detailed reports that include our findings and recommendations for rectification of any defects identified during inspections. Our comprehensive reports help clients make informed decisions and take appropriate corrective actions to maintain the safety and integrity of their structures.







### SMPE&I CONSTRUCTION SERVICES

We specialise in delivering comprehensive construction services across a wide range of sectors, including infrastructure, mining, oil and gas and commercial. With decades of experience and a team of highly skilled professionals, we are committed to excellence in every project we undertake. Our focus is on providing safe, efficient, and innovative construction solutions that meet the complex demands of the industrial sector.

### **OUR SERVICES**

### Structural Erection and Alignement:

- Erecting robust structures for mining operations, including crushers and conveyors.
- Constructing structural access solutions and installations for onshore oil & gas facilities.
- Building bridges, tunnels, and retaining walls for infrastructure projects.
- Developing commercial buildings, warehouses, and industrial facilities.
- Constructing facilities for gold and other mineral processing operations.
- Building water stations and water treatment facilities.

### Mechanical Installation and Commissioning:

- Installing and maintaining mining equipment such as crushers and mills.
- Commissioning mechanical systems in refineries, pipelines, and storage facilities.
- Deploying HVAC systems, plumbing, and mechanical equipment for infrastructure.
- Setting up HVAC systems and plumbing in commercial buildings.
- Installing pumps and pump stations for various applications.

### Piping Installation and Commissioning:

- Fabricating and installing slurry pipelines and utility piping for mining.
- Constructing complex piping systems for oil and gas processing and distribution.
- Installing water, sewage, and stormwater piping for public infrastructure.
- Implementing piping systems for heating, cooling, and plumbing in commercial facilities.
- Setting up piping networks for mineral processing plants.
- Constructing piping systems for water stations and water treatment facilities.

### • Electrical and Instrumentation Installation and Commissioning:

- Wiring and installing electrical systems for mining equipment and power distribution.
- Executing electrical and instrumentation installations for offshore and onshore oil & gas facilities.
- Setting up electrical systems for bridges, tunnels, and public transportation infrastructure.
- Installing power systems, lighting, and control systems in commercial buildings.
- Establishing electrical and instrumentation systems for gold and mineral processing plants.
- Installing instrumentation systems for monitoring and controlling mining operations.
- Setting up electrical and instrumentation systems for water stations and water treatment facilities.







### CIVIL CONSTRUCTION SERVICES

We provide targeted civil construction services designed to meet the specific needs of diverse projects. Our dedication to quality ensures efficient, timely, and budget-conscious completion of every project.

#### **OUR SERVICES**

### • Excavation and Earthworks:

- Precision trenching and excavation for utilities and foundations.
- Detailed earthmoving and site grading.

#### Concrete Works:

- Constructing concrete structures, including walls, footings, and pads.
- Performing concrete repairs and maintenance.

#### Roads and Pavements:

- Building and maintaining roads, pavements, and access routes.
- Constructing parking lots and driveways.

#### • Structural Installations:

- Installing structural elements such as retaining walls and foundations.
- Erecting frameworks and supports for various structures.

### Water and Waste Management:

- Dewatering: Implementing effective dewatering systems to manage groundwater and surface water during construction.
- Tailings Management: Developing and maintaining systems for managing and processing tailings in mining operations.
- Water Stations: Constructing and upgrading water treatment facilities.

### • Site Preparation and Development:

- Preparing sites for construction, including grading and leveling.
- Setting up infrastructure for future development.







### MAINTANANCE / SHUTDOWN SERVICES

We offer expert maintenance and shutdown services tailored to the unique needs of infrastructure, mining, oil and gas and commercial clients. Our comprehensive solutions ensure operational efficiency and minimize downtime through specialized mechanical and maintenance services.

#### **OUR SERVICES**

#### Mechanical Maintenance and Repairs

- Pump and Piping Systems: Installation, maintenance, and repair of pumps and piping to ensure efficient fluid handling and system reliability.
- Conveyor Systems: Upgrades and maintenance for conveyor components, including rollers and drive systems.
- Fixed Plant Equipment: Comprehensive upkeep for mechanical equipment such as crushers, mills, and other processing units.
- Chute and Tank Maintenance: Plate repairs and liner replacements for chutes and tanks, ensuring structural integrity and functionality.
- Structural Integrity Repairs: Assessment and repair of structural supports, including welding and reinforcement for machinery and infrastructure.

#### **Shutdown Services**

- Scaffold Access Solutions: Safe installation and removal of scaffolding to facilitate maintenance and repairs at
- General Shutdown Coordination: Planning, scheduling, and managing site-specific shutdowns to ensure minimal disruption and efficient execution.
- Emergency Mechanical Repairs: Rapid response to mechanical failures to restore operations swiftly and reduce downtime.

### Skilled Labor Supply

- Technical Expertise: Provision of highly skilled S26 Supervision and engineers for various mechanical and maintenance tasks.
- Labor Management: Efficient coordination of labor resources to meet project demands and ensure timely completion.

### Safety and Compliance

- Regulatory Compliance: Adherence to industry safety standards and regulations to ensure a safe working environment.
- Safety Audits: Regular audits to maintain high safety standards and address any potential risks.





### **COMPANY VALUES**

**TRANSPARENCY:** We are committed to maintaining openness in all our communications, fostering trust between employees and clients. This transparency ensures alignment among all parties, contributing to smooth project execution and successful outcomes.

**PEOPLE:** We prioritize placing the right talent in the right positions, recognizing that the quality of our work is directly influenced by our team's skills and expertise. By ensuring our people are well-suited to their roles, we create a supportive environment where hard work is facilitated, and success is achieved.

**EXCELLENCE:** Our pursuit of excellence is ingrained in our culture and work ethic. We are dedicated to continually enhancing our processes and outcomes, striving to exceed expectations and deliver superior results. This commitment to excellence, combined with a focus on safety and quality, drives us to create a better future for all stakeholders involved.

**ACCOUNTABILITY:** Accountability is the cornerstone of our operations, binding our commitment to clients and team members. We uphold the highest standards of performance and integrity, ensuring that we meet our commitments and deliver results that reflect our dedication to excellence, safety, and quality.



# ENGINEERING ASSOCIATES

# CONTACT US

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