

**TIER /
SIXTEEN /**

CONSULTING | AUTOMATION SOFTWARE | INFRASTRUCTURE | OPERATIONAL DATA | ENGINEERING SUPPORT

OPERATIONAL TECHNOLOGY EXPERTS



OVERVIEW

Founded in 2016, Tier Sixteen is a **specialist engineering and automation** services company, delivering expert consultation and advisory solutions across a full spectrum of industrial operational technologies.

We help clients **select, design, and implement** robust industrial automation systems spanning hardware, software, and digital infrastructure.

Our expertise lies in **engineering seamless, integrated OT environments** that connect with corporate IT systems to enhance reporting, connectivity and data flow. From compute and storage architecture to connectivity and management platforms, we design industry solutions that empower intelligent automation and drives operational efficiency.

OUR MISSION

Is empowering businesses to enhance productivity and drive business growth through operational technology digitalisation, industrial automation and workforce development.

OUR VISION

We **harness the transformative potential of automation** in operational technologies and **build engineering capabilities** to shape the future technology leaders.

OUR VALUES

Of **leadership, integrity, innovation, accountability, teamwork and personal development**, we champion a culture of creative engineering excellence.



INDUSTRIES & CLIENTS /



MINING

PROCESS PLANT / NON-PROCESS INFRASTRUCTURE / MATERIALS HANDLING
DEWATERING / UTILITIES / HYDROCARBON SYSTEMS



ENERGY



BESS / SOLAR / WIND / POWER
GENERATION / GAS TRANSMISSION



Our business is built on **five core pillars** that work in concert to transform industrial operations - from strategy and infrastructure to automation, data, and ongoing engineering excellence. Together, these pillars deliver end-to-end solutions that **drive innovation, resilience, and results**.

5 SERVICE PILLARS /

Empowering Industry Through Smart OT Automation Systems and Expert Support



CONSULTING SERVICES

/ We guide clients with expert architecture, technology evaluations, governance, risk assessment, and compliance strategies to ensure their OT systems are future-ready, secure and aligned with long-term goals.

AUTOMATION SOFTWARE

/ From PLC programming to advanced SCADA, alarm management and configuration solutions, we create smarter control environments that elevate performance and reduce operational complexity.

INFRASTRUCTURE DELIVERY

/ We bridge IT/OT domains with infrastructure that is virtualised, secure, cloud-enabled and communication rich, laying the groundwork for seamless and resilient operations.

OPERATIONAL DATA SERVICES

/ We turn operational data into a strategic asset, providing centralised, real-time dashboards, historians, and reporting tools that empower smarter decisions and continual optimisation.

ENGINEERING SERVICES

/ From owners engineering and commissioning to production support and service-level agreements, we sustain client operations with hands-on expertise, assurance and ongoing service excellence.

Through our **Consulting Services**, we equip organisations with the frameworks and expertise to evolve confidently and compliantly in a fast-changing environment. Together, these services empower clients to build a **robust, future-ready** enterprise that's both **compliant and competitive**.

CONSULTING SERVICES /



KEY FUNCTIONS

- / **Strategic clarity and scalability** via enterprise data architecture and technology roadmaps that align IT and OT systems with long-term business goals.
- / **Strong governance and standards** to ensure consistency, accountability, and performance across operations and technology decision-making.
- / **Informed investment decisions** through technical product evaluations and feasibility studies that de-risk choices and drive ROI.
- / **Operational safety and compliance** with OT cyber security governance and SOCI gap assessments to meet industry regulations and safeguard critical infrastructure.
- / **Resilience and risk mitigation** via CHAZOPS / CRAWS analysis and system resilience planning that minimise downtime and prepare for contingencies.
- / **Optimised asset utilisation** through effective lifecycle management of software and hardware, increasing efficiency and cost-effectiveness.

SUMMARY OVERVIEW

- / Enterprise Data Architecture
- / Technology Roadmaps
- / Business Governance and Standards
- / Technical Product Evaluations
- / OT Cyber Security Governance
- / SOCI Act Compliance Gap Assessments
- / Feasibility Studies
- / CHAZOPS / CRAWS
- / System Resilience
- / Asset Management (software/hardware)

We specialise in end-to-end **Automation Software** that empowers clients to manage complex operational environments with precision, reliability, and insight. Together, these services create smarter industrial ecosystems that **optimise performance, minimise downtime, and reduce operational risk**.

AUTOMATION SOFTWARE



KEY FUNCTIONS

- / **Streamlined control systems** with expert PLC/RTU programming that ensures responsive, efficient field automation.
- / **Real-time visibility and interaction** through SCADA/HMI development that enables intuitive monitoring and control across all assets.
- / **Consistency and quality assurance** via software standards development that unifies code practices and minimises system variability.
- / **Actionable data intelligence** with Historian configuration that unlocks long-term operational trends and performance insights.
- / **Robust, secure connectivity** through network configuration that supports scalable, resilient OT communications.
- / **Design integrity and traceability** using OT design and test documentation that safeguards project continuity and compliance.
- / **Configuration precision and efficiency** with tailored configuration management solutions that track, version, and govern software assets.
- / **Safer, smarter operations** through alarm management and rationalisation that reduce alert fatigue and prioritise actionable events.

SUMMARY OVERVIEW

- / PLC/RTU Programming
- / SCADA/HMI Development
- / Software Standards Development
- / Historian Configuration
- / Network Configuration
- / OT Design and Test Documentation
- / Configuration Management Software Solutions
- / Alarm Management, Rationalisation and Optimisation

Our **Infrastructure Delivery** services build the foundation for resilient, high-performing systems across IT and OT landscapes. We merge industrial and digital environments. This pillar enables organisations to modernise confidently - **reducing downtime, strengthening cyber resilience and accelerating digital transformation.**

INFRASTRUCTURE DELIVERY



KEY FUNCTIONS

- / **Unified IT/OT operations** through seamless convergence that bridges control systems and enterprise networks for improved interoperability.
- / **Stable, optimised platforms** with OS platform management and operating environment configurations tailored to your workload needs.
- / **Efficient resource use** via platform virtualisation that reduces hardware dependency and enhances scalability.
- / **Reliable connectivity** through expert network configuration, WAN/VPN design, and protocol connection that support enterprise-wide communication.
- / **Protected environments** with firewall configuration and security services that safeguard against threats and ensure compliance.
- / **Mobile and flexible access** via wireless communication setups that empower systems wherever they operate.
- / **Cloud-driven agility** through cloud deployment solutions that future-proof infrastructure and enable dynamic scaling.
- / **End-to-end infrastructure governance** with security and management services that ensure continual oversight, performance, and peace of mind.

SUMMARY OVERVIEW

- / IT/OT Convergence
- / OS Platform Management
- / Operating Environment
- / Platform Virtualisation
- / Network Configuration
- / WAN/VPNs
- / Firewall Configuration
- / Protocol Connection
- / Wireless Communication
- / Cloud Deployment
- / Security and Management Services

We deliver powerful **Data Services** that transform operational information into actionable insight, helping organisations run smarter, faster, and with more confidence. This pillar empowers enterprises to unlock the full potential of their **operational data** - turning it into a **strategic asset** that drives **continual improvement** and **informed action**.

OPERATIONAL DATA SERVICES /



KEY FUNCTIONS

- / **Configuration consistency and control** via software configuration management that ensures accuracy, reduces risk, and streamlines updates.
- / **Seamless data integration** with Historian interfaces that collect and normalise time-series data for deep analysis and traceability.
- / **Real-time operational intelligence** through production management reporting that enhances visibility into processes, performance, and productivity.
- / **Intuitive visualisation tools** via dashboarding that translate complex data into meaningful, user-friendly insights for decision-makers.
- / **Secure centralisation of knowledge** with central data repositories that consolidate valuable information for access, governance, and scalability.

SUMMARY OVERVIEW

- / Software Configuration Management
- / Historian Interfaces
- / Production Management Reporting
- / Dashboarding
- / Central Data Repositories

Our **Engineering Services** provide expert oversight, technical insight, and reliable execution across every stage of industrial operations. With this pillar, clients gain not only solutions but **sustained technical leadership** that keeps **operations safe, efficient, and productive**.

ENGINEERING SERVICES /



KEY FUNCTIONS

- / **Strategic alignment and technical integrity** through owners engineering that protects stakeholder interests from design through delivery.
- / **Optimised process performance** via process control and simulation that enables precision tuning, scenario testing, and system validation.
- / **Flawless execution** with commissioning support that ensures smooth handover, rigorous verification, and rapid readiness for operations.
- / **Reliable uptime and performance** through ongoing production support that resolves issues, enhances system output, and prevents disruptions.
- / **Clear expectations and accountability** using service level support agreements that ensure consistent service, measurable outcomes, and peace of mind.

SUMMARY OVERVIEW

- / Owners Engineering
- / Process Control and Simulation
- / Commissioning
- / Production Support
- / Service Level Support Agreements

PARTNERS & CERTIFICATIONS /

Tier Sixteen is an approved integrator of leading automation technologies, demonstrating a high level of commitment, professionalism, and competency.



TECHNOLOGY PARTNERS

Our engineers received portfolio training, successfully passed the designated examination and demonstrated advanced technical expertise to design, program and commission solutions.

Tier Sixteen engineers have achieved:

- ✓ Schneider/Aveva EcoStruxure Plant Certified (Control Systems)
- ✓ AVEVA System Platform Certified
- ✓ Inductive Automation Ignition SCADA Gold Certified



SOFTWARE PACKAGES /

SCADA / HMI



PLC / RTU



HISTORIAN



CHANGE MANAGEMENT





CLARIFIED WATER TANK AND PUMP STATIONS

PROJECT SUMMARY

The supply and construction of a new fully clarified water tank (CWT) and 6 new pump stations to replace pumps that are at end of life for an iron ore miner.

SCOPE OF WORKS

- / Provide engineering design, software development, integration and implementation of new mines SCADA ASM standards.

TECHNOLOGIES

- / Schneider PLCs (M340, M580)
- / Aveva Plant SCADA
- / Magellan Touch Screen
- / TIA Portal (Simocode commissioning)
- / ABB VSD Commissioning



WATER INFRASTRUCTURE AND PROCESS PLANT

PROJECT SUMMARY

Resolve bottlenecks in the existing process plant, new process water dam/pumping stations, water substations, water boosters and a new desands circuit for an iron ore miner.

SCOPE OF WORKS

- / The control systems integration package was for the engineering design, supply, test and delivery of the communications, PLC, SCADA process control system, a CCTV system and all associated programming.

TECHNOLOGIES

- / Rockwell PlantPax System
- / Rockwell ControlLogix PLC
- / Rockwell FactoryTalk View SCADA
- / Rockwell Historian



DEWATERING SERVICES SUPPORT LEVEL AGREEMENT

PROJECT SUMMARY

Support the infrastructure and dewatering teams for a tier-1 miner.

SCOPE OF WORKS

- / Provide PLC, SCADA, HMI and networking systems support.
- / Technical advisory on control system interfaces and related technologies and modifications of these systems.

TECHNOLOGIES

- / Schneider PLC (Quantum, M340, M580)
- / EcoStruxure Control Expert
- / Aveva Plant SCADA
- / Aveva System Platform HMI
- / ComAp Engine Controllers
- / Schneider Trio JR900 Radio Data Modems
- / NetModule LTE Radio Data Modems



BORE SKIDS COMMISSIONING

PROJECT SUMMARY

An iron ore site which included greenfield and brownfield components, and a crucial aspect of the non-process infrastructure is the dewatering system and bore pumps.

SCOPE OF WORKS

- / Provide PLC/SCADA set-up.
- / Network integration.
- / I/O testing and drive testing (sequence and Interlock) and alarm testing.
- / P&ID loop tuning.
- / Commissioning and support (onsite/remote).

TECHNOLOGIES

- / Schneider PLCs (M340, M580)
- / Aveva Plant SCADA



PROJECTS /

NPI



BORE HOLE INFRASTRUCTURE

PROJECT SUMMARY

A dewatering project included 6x bores equipped with dewatering abstraction infrastructure, submersible bore pumps and associated downhole equipment.

SCOPE OF WORKS

- / Provide design, integration, software development, FAT/SAT and onsite implementation of PLC, SCADA and HMI.
- / Develop project documentation to include functional specification, FAT/SAT, operator manual, MoC, IP address list and IO list.

TECHNOLOGIES

- / Schneider PLCs (M340)
- / Schneider Control Expert
- / Aveva Plant SCADA
- / Magelis HMI



DEWATERING SKIDS

PROJECT SUMMARY

A sustaining capital project to maintain mine capacity at 25mtpa which included dewatering bores and pipe infrastructure for a tier-1 iron ore miner.

SCOPE OF WORKS

- / Perform PLC and SCADA engineering design, integration, software development and implementation into the production water system network.
- / Develop project documentation to include functional specification, FAT/SAT, operator manual, MoC, IP address list and IO list.

TECHNOLOGIES

- / Schneider PLCs (M340)
- / Schneider Control Expert
- / Aveva Plant SCADA



SEWERAGE PUMP STATION

PROJECT SUMMARY

The miner's project was for a new 302 bed camp as part of an expansion which included WWTP, new power station and maintenance facilities.

SCOPE OF WORKS

- / Provide PLC and HMI software development and engineering (system overview, pump control, setpoints, active alarms and alarms history).
- / Software and hardware FAT, site commissioning and develop testing documentation for (2) fixed-speed 3-phase 11 kW submersible pumps, that operated in a duty standby configuration.

TECHNOLOGIES

- / Siemens S7-1200 (TIA Portal)
- / Weintek HMI



PROJECTS /



F/A-18 FUEL FACILITY UPGRADE

PROJECT SUMMARY

Upgrade the current Aviation Carrier Turbine Fuel (AVCAT) system to increase the export rate to the local wharves where AVCAT is exported to operating vessels.

SCOPE OF WORKS

- / Perform all PLC/SCADA engineering design, inter-PLC communication functions and software development.
- / Software testing (SFAT) and documentation.
- / Site acceptance testing (SFAT) and documentation.
- / Onsite commissioning.
- / Develop training/operator manual.

TECHNOLOGIES

- / Avea Plant SCADA
- / Schneider Control Expert
- / Harmony HMI
- / Rockwell ControlLogix PLC
- / Rockwell Studio 5000 Logix Designer
- / Rockwell PanelView Plus 7
- / Rockwell FactoryTalk View SCADA



OFI FILTER HOUSE

PROJECT SUMMARY

Major diesel filtration facility capable of filtering 17,000L/minute of fuel, comprised of two high volume pre-filtration vessels, six high volume coalesces and filtration vessels.

SCOPE OF WORKS

- / Perform all PLC/SCADA engineering design, inter-PLC communication functions and software development.
- / Software testing (SFAT) and documentation.
- / Site acceptance testing (SFAT) and documentation.
- / Onsite commissioning.
- / Develop training/operator manual.

TECHNOLOGIES

- / Rockwell ControlLogix PLC
- / Rockwell Studio 5000 Logix Designer
- / Rockwell PanelView Plus 7
- / Rockwell FactoryTalk View SCADA



MANAGED AQUIFER REINJECTION SCHEME

PROJECT SUMMARY

Completions and commissioning support for a tier-1 miners MAR scheme - injecting treated wastewater or excess surface water into underground aquifers.

SCOPE OF WORKS

- / Perform HMI software development.
- / Perform PLC and communication rectification works.
- / Roll out version changes to pumps.
- / Commissioning and support (onsite/remote).

TECHNOLOGIES

- / Schneider PLCs (M340)
- / Schneider Harmony GTO HMI
- / Avea Plant SCADA



PROJECTS /

CONTACT US /



CLAYTON DUNCAN
Business Development Manager



RHEINHARDT PEENS
Managing Director

/ E | clayton.duncan@tier16.com

/ E | rheinhardt@tier16.com

/ Tier16 Pty Ltd

/ A | Level 2, 10 Ord Street, West Perth WA 6005

/ T | +61 8 6270 6307

/ W | tier16.com

