



SYNERTEC

Synertec Capability



expertise  experience

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Introduction to Synertec

Who we are

Synertec is a diversified Technology and Engineering company focused on developing and delivering environmentally sustainable solutions for challenging industry sectors. Established in 1996 and publicly listed on the Australian Stock Exchange in 2017, Synertec employs more than 140 professional staff with offices in Melbourne, Brisbane, and Perth, with strong future growth prospects.

From blue-chip Tier-1 industry giants to established Tier-2 firms and emerging players in key markets, we work closely with our clients to design, implement, and maintain their mission-critical systems and processes. Year after year, repeat clients contribute the majority of our annual revenue because we understand the value of consistently delivering outstanding work.

In recognition of the vital importance of the issues and challenges facing the world today, we operate within an Environmental, Social, and Governance (ESG) framework.



What we do

Synertec's Technology division focusses our design and development activity on the global energy sector to deliver technologies that increase the profitability of our partners while reducing their environmental footprint. Our Engineering division provides specialist multi-discipline engineering services to our clients through all stages of a project lifecycle from inception through to design, construction, commissioning, validation, and compliance.

We work across a range of disciplines including:

- ✓ Automation ✓ Systems Engineering ✓ Electrical & Instrumentation
- ✓ Design ✓ Project Management ✓ Process & Mechanical
- ✓ Compliance & Validation

We service a broad range of industry sectors including:

- ✓ Power & Gas ✓ Transport ✓ Resources ✓ Water
- ✓ Life Sciences ✓ Future Energy ✓ Manufacturing

We have the people and the technology to design, supply, and install solutions to the most complex technical and engineering challenges.

Sustainable Solutions

Complex environmental problems exist today that are already affecting the global population and will continue to do so in the future. As occupants of Planet Earth, we no longer have the luxury of ignoring our impact on the environment. Collectively, we impact our physical environment by pollution, burning fossil fuels, overpopulation, and deforestation, consequently triggering issues such as poor air quality, poor water quality, soil erosion, extreme weather events, and climate change.

At Synertec, we firmly believe we can be part of the solution to overcome some of these global environmental challenges. As a specialist Technology and Engineering company, we are at the cutting edge of innovative new strategies for solving difficult problems with global impact. As a business, we are committed to doing our part to support environmentally sustainable development and are focused on assisting our industry partners to improve their environmental performance.

Synertec Industry Sectors

Water

Synertec offers a range of engineering services within the water industry, and we serve clients in the water sector with our expertise in design, integration, construction, commissioning, and operation of water projects. We provide multi-faceted engineering skills across the entire spectrum of water solutions, including automation, instrumentation, control systems, functional safety, engineering, construction management, and water analysers.



Power and Gas

We provide specialist engineering services to the power and gas industry with a team of engineers who design and implement efficient, robust, and reliable solutions and provide ongoing services to ensure accuracy through programs of regular validation, calibration, and servicing. Our showcase product is Synertec's proprietary LNG Custody Transfer System, which is installed at both Wheatstone and Gorgon in Western Australia.

Transport

We provide premium quality safety control systems for the transport industry, including on projects such as the Melbourne Underground Rail Loop (MURL), where we designed, supplied, and installed new technology to improve fire and life safety systems. Our innovative solution made MURL one of the first rail safety systems in Australia to use the Siemens Automation SIMATIC WinCC Open Architecture technology.



Life Sciences

Synertec provides specialist engineering, construction, validation, risk management, regulatory compliance, and Good Manufacturing Practice services to the life sciences industry. We have extensive experience and knowledge of the requirements in this highly regulated industry and provide a range of services to companies engaged in the development and manufacture of therapeutic products in the life sciences sector.

Future Energy

Powerhouse is our field proven, cost effective, zero emission, industrial scale, dependable energy system to power remote sites. It is mobile, leverages smart Predictive Intelligence, and eliminates the need for fossil fuel backup. It is a 100% continuous electrical energy system that can be easily deployed via a stable microgrid to deliver base load distributed power for a viable, powerful, and immediate transition to a low carbon future.



Advanced Manufacturing

We have deep expertise in control systems, automation, functional safety, human factors engineering, manufacturing execution systems, simulation testing, cyber security, and Internet of Things (IoT) solutions. This capability empowers us to provide services in Advanced Manufacturing to support our clients as they adapt to the innovations of the next industrial revolution of Industry 4.0 that is rapidly transforming modern industry.

Resources

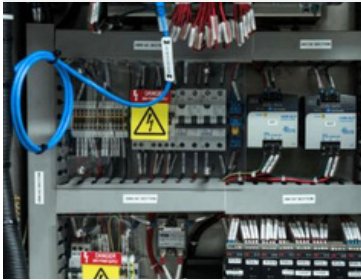
Automation and remote operations are prominent technological trends in the resources sector that can increase productivity, reduce operational costs, improve health and safety, manage emissions, and enable 24/7 operations to maximise input use and production. These trends are underpinned and enabled by electrification and by digital and automation technologies. Synertec supports the resources sector in this digital transformation.



Synertec Disciplines

Automation

Synertec provides automation and control systems across a wide range of industries. We have a highly experienced team of automation engineers who implement innovative, cost effective, and best practice solutions and we are a certified solutions provider with major vendors including Siemens, Schneider, Rockwell, and General Electric. We have broad experience and deep knowledge across various platforms and are proudly independent.

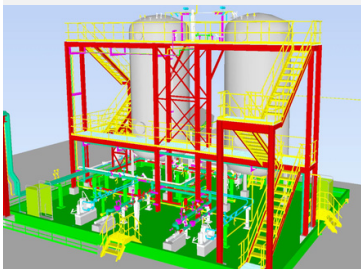


Electrical and Instrumentation

Synertec provides complete solutions for Electrical and Instrumentation Engineering across a broad range of services from heavy-duty industrial electrical work to delicate instrumentation. Synertec's experience with equipment rooms, control panels, gas analysers, automation, instrumentation, and hazardous area identification ensures our work complies with strict regulatory requirements and achieves the highest of safety standards.

Process and Mechanical

Synertec's process and mechanical engineers are experts in various industrial processes from clean rooms to large-scale industrial piping and tank farms. The team has the expertise and experience to offer a wide range of process and mechanical design services extending from feasibility studies through to full-scale design and construction projects. Synertec's experienced software engineers achieve functional, efficient, and cost-effective outcomes.

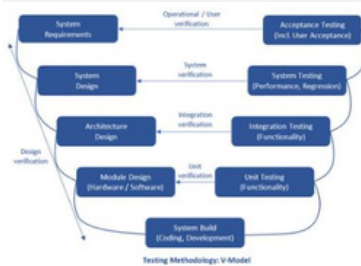


Design

Synertec utilises a range of 2-D and 3-D design packages including Revit, AutoCAD, Plant3D, CADWorx, Elecdes, and Navisworks, and conform to ISO9001 and relevant drafting standards. We utilise intelligent drafting tools to create smart Piping and Instrumentation Diagrams (P&IDs) and use electrical design and drafting software to ensure consistency between the P&ID, the 3D model, and the electrical / instrumentation database.

Project Management

Synertec operates a dedicated Project Management Office (PMO) to ensure high standards of project management, set quality benchmarks, develop strategy, provide resources, manage documentation, and track performance on projects. The team have a well-established and systematic approach to project management and are particularly skilled in the management of complex projects in highly regulated environments with multiple stakeholders.



Systems Engineering

Synertec implements a Systems Engineering approach to managing the project lifecycle to ensure requirements are fully understood from the beginning of a project and risks are identified and mitigated early in the project staging. This process considers technical, commercial, regulatory, and operational requirements. We utilise specially designed software to enhance visibility and traceability of requirements and testing.

Compliance and Validation

Synertec provide validation and compliance services across various industries. We identify applicable regulatory requirements and standards, then implement a compliant strategy that is sustainable, risk based, cost-effective, and pragmatic. Our services include GMP compliance, audits, quality systems, continuous improvement, risk assessment, training, process mapping, and verification and validation of equipment, systems, and processes.



Powerhouse by Synertec



DELIVERING INDUSTRIAL SCALE AI DRIVEN CLEAN ENERGY MICROGRIDS.

Powerhouse offers a cost-effective, mobile, 100% continuous advanced renewable energy system without the need for fossil fuel backup. The system can be easily deployed via a stable microgrid to deliver base load distributed power and immediate transition to a low carbon future. The solution has been designed, developed and delivered by Synertec Engineers and provides our partners with a proven and immediate transition toward their carbon reduction targets. It is also modularised and easily scalable – up or down in size – to suit a wide variety of applications and situations.

Powerhouse Predictive Intelligence (PI) leverages real-time data insights to optimise the supply and demand of clean energy with certainty, reliability and security – no fossil fuel backup is required. Flexible, remote and off grid applications mean Powerhouse has:

- Compatibility with multiple renewable energy sources
- Many use cases across oil & gas, mining, community batteries, manufacturing, agriculture, defense, data centers, etc.
- Importantly, it optimises the output of all battery and solar componetry, enabling a very small system footprint.

Powerhouse fits a wide-range of critical market applications

Many energy-intensive sectors can leverage the advanced control system, novel modular design, rapid deployment, and flexible functionality. Our build-own-operate model and team of experienced engineers empower Synertec to customise Powerhouse to fit the exact energy needs of companies, communities, and governments across many use cases.

- Oil and Gas
- Resources
- Community Batteries
- Agriculture
- Data Centers
- Manufacturing

Stand alone and Grid Firing

For industrial applications, Powerhouse fills the gap for diesel generator replacement with clean energy, and can be mobilised and demobilised to different sites with complete flexibility or communities at the end of the grid, Powerhouse can generate clean power with complete reliability and is also an adaptable solution for supplying renewable energy into the grid at an industrial scale. This can significantly reduce emissions and modernise the grid.

Synertec Clients

Synertec work with a diverse range of clients across challenging industry sectors including:

- ✓ Power & Gas
- ✓ Transport
- ✓ Resources
- ✓ Water
- ✓ Life Sciences
- ✓ Future Energy
- ✓ Manufacturing

From blue-chip Tier-1 industry giants to established Tier-2 firms and emerging players in key markets, we work closely with our clients to design, implement, and maintain their mission-critical systems and processes. Year after year, repeat clients contribute the majority of our annual revenue because we understand the value of delivering outstanding work. Clients we have worked with include:



Technical Standards

Synertec complies with a range of technical standards administered by various governing bodies appropriate to the particular industry sector, including (but not limited to) the following:



- Life Sciences: USFDA, TGA, EMEA, ICH, and PIC/S
- Good Manufacturing Practices (GMP): TGA, Medsafe, and NPC
- Oil & Gas: ISO10723 Gas Chromatograph Performance Evaluations
- Safety: AS60079 Electrical equipment for explosive atmospheres & AS3000 Wiring rules
- Data Security: ISO 27001 Information security management systems
- Trained IEC-62443 engineers
- Rail systems: EN50126, EN50128, EN50129, & SCADA UI development ANS/ISA 101.01-2015
- Custody Transfer System: Certified to CE European Standard requirements, and all major ship classifications including DNV, ABS, Bureau Veritas, and Lloyd's Register

BUILDING A BETTER TOMORROW

Why Chose Synertec?

Quality Management System

Synertec operates a proven Quality Management System (QMS), which is accredited to ISO9001. Central to Synertec's quality management system is the practice of identifying client requirements up-front and using standard systems to track each item to completion. Our QMS comprises standards, policies, procedures, and forms to define how projects are managed. Quality requirements for the following areas are addressed:

- Project definition and planning
- Design development, including prototyping
- Design reviews, risk assessments, and code reviews
- Standard operating procedures and operating manuals
- Installation, commissioning, qualification, handover, and training
- Software module integration testing and system integration testing



Quality
ISO 9001



ISO 45001
Occupational
Health and
Safety



Occupational Health and Safety Management System

Synertec is accredited to ISO45001. Together with our clients, Synertec has very high expectations regarding safety. All Synertec personnel required to work on site are fully trained on compliance of statutory safety requirements, and most personnel have extensive safe-site experience. We recognise that safety on site begins at design, and understand a design that can be safely implemented and maintained minimises the risk during the implementation phase. We ensure all staff who work on site:

- Always wear required PPE
- Operate under a compliant company safety policy
- Fully comply with all relevant statutory requirements
- Are inducted with specific site requirements (and are not allowed to work on site until inducted)

Environmental Management System

Synertec is accredited to ISO14001. Our Environment Policy directs our activities to maximise net environmental benefit and facilitate sustainable use. We have embraced the following goals:

- Utilise sustainable work practices
- Protect and conserve the resources of our clients
- Maximise resource recovery and minimise waste during construction
- Build cooperation with clients and all levels of government and regulators
- Improve the environment, improve biodiversity, and maximise resource efficiency
- Improve environmental outcomes from all aspects of our business and that of our clients



Environment
ISO 14001



DESE ISMS
SAI GLOBAL

Information Security, Cyber security and Privacy Protection Management

Synertec is accredited to ISO 27001, the globally recognized standard for Information Security Management Systems. This accreditation provides clients with several benefits:

- Assurance that their data is managed and protected with the highest level of security and confidentiality.
- Confidence in Synertec's commitment to identifying and managing potential risks related to information security.
- Trust in the strength of Synertec's information security management system, which adheres to globally recognized best practices.
- Understanding that safety begins at the design stage, minimizing risk during the implementation phase.

Why Chose Synertec?

- ✓ Certified to ISO9001 (Quality), ISO 14001 (Environment), ISO45001 (OH&S), ISO 270001 (Information security) and key technical standards
- ✓ Multi-discipline specialist engineers
- ✓ Extensive experience delivering projects across a broad range of disciplines
- ✓ Strong communication and management skills
- ✓ Key relationships with clients and partners in various industry sectors
- ✓ Independent, with no supplier affiliations, meaning a value-for-money solution to achieve best-for-project outcomes
- ✓ Automation expertise using state-of-the-art systems from specialist suppliers such as
- ✓ Siemens, Rockwell Automation, Schneider Electric, and General Electric
- ✓ Broad skills and experience in both hardware and software
- ✓ Expertise in project management and construction management

Values-driven organisation



Safety

We value the health and personal wellbeing of people before all else.



Integrity

Our people have the resolve to do the right thing at all times, even when nobody's watching.



Relationships

We work with trust and respect to build strong, positive relationships with our Clients, Stakeholders and each other



Leadership

Our people have the courage to take ownership and embrace the responsibility that comes with new challenges.



Excellence

We are passionate and deliver the highest value outcomes, always striving to do things in the best possible way.

Our People - Leadership Team



Michael Carroll - Managing Director / Chief Executive Officer

Michael is a founding principal, Managing Director and Chief Executive Officer of Synertec and a significant beneficial owner. He has successfully grown the business of Synertec since it was first established in 1996. His leadership style is 'hands-on' and visionary, ensuring efficient and robust internal processes that directly support the strategic direction of Synertec. Michael is a member of the Australian Institute of Company Directors and holds a Degree in Applied Science (Applied Chemistry) and a postgraduate qualification in Chemical Engineering.

David Harris - Executive Director and Chief Financial Officer

David oversees Future Business and Technology, as well as corporate development, investor relations, and finance functions for the Group. David is a graduate of the Australian Institute of Company Directors, an Australian Chartered Accountant, and fellow of both the Financial Services Institute of Australasia and the Governance Institute of Australia. He has over 25 years of local and international experience in senior leadership and board positions for global and ASX-listed companies and is also an experienced Board member and Audit Risk Committee Chair.



Andrew Lawrie - General Manager Engineering

Andrew is a professional engineer and project manager with over 20 years of experience. He has worked with clients across Australia to deliver complex engineering projects and efficiently manage their asset base. He has held senior operational and strategic roles in both the public and private sector with a record of leading high performing teams to deliver operational excellence, business growth, and exemplary client outcomes. Andrew is passionate about leading multidisciplinary teams solving problems for our partners and creating new technologies to transition to a green economy.



Jason Denholm - General Manager of Technology

Jason has led the delivery of large and complex projects across a wide range of industries including energy, water, transport and mining. Jason's vast technical knowledge coupled with his project management skills have allowed him to consistently deliver robust and cost-effective solutions. Jason serves as the general manager for the Powerhouse system deployments, providing strategic direction and oversight throughout the duration of the project lifecycle, and plays a key role in system sizing, AI algorithm modelling during project initiation and innovation initiatives.



David Judge - AEIS Group Manager

David is Synertec's AEIS Group Manager. He has over 15 years of experience in Control Systems and Engineering, across a range of platforms. He has led and delivered significant infrastructure projects and worked in a range of industries including rail, WWT, oil & gas, food & beverage, and mining. He is self-motivated, passionate and prides himself on producing high quality commercial and project outcomes for his clients.



Our People - Leadership Team

Josh Jeffrey - Group Manager Process & Mechanical.

Josh leads Synertec's Process, Mechanical and Design Teams. A versatile and highly experienced Project Manager with an background in Chemical Engineering. He is an experienced Project Manager with a demonstrated history of leading teams of engineers and professionals to deliver high-quality outcomes. He has worked and delivered projects in the industrial, pharmaceutical, food and beverage, research, and Defence sectors.



Kylie Brailsford - Group Manager Project Execution

Kylie has over 25 years of experience in the life sciences, water, and energy industries managing and validating a variety of projects, specialising in automation projects and including all phases from project initialisation through to construction and handover. Kylie's systematic approach allows her to manage projects from both the broad and detailed lenses providing project management and validation approaches that are both practical and compliant. Kylie has worked directly for a large manufacturing organisation as well as with consultancies in Australia, Singapore, and Ireland.



Lee Morony - Head of Business Development

Lee has extensive experience in engineering and commercial activity over more than 15 years working in Australian industry. He has worked on complex, large-scale projects across a wide range of industries including defence, gas, wastewater, desalination, manufacturing, and power distribution. As Synertec's Head of Business Development, Lee leads major bids and proposals, and supports Synertec's client requirements throughout the business lifecycle.



Ashleigh Mulcahy - Head of Strategy & Transformation

Ashleigh's has a detailed understanding of financials, project management, audit and documentation. She has held key roles on many of Synertec's systems engineering projects, including the Melbourne Underground Rail Loop. As Head of Strategy & Transformation, Ashleigh manages Synertec's strategic planning process overseeing a team responsible for project controls at a portfolio level. Ashleigh is responsible for the implementation of Synertec's performance management system, which provides regular dashboard reports to chart performance.



Dayo Peters - Power & Gas Lead

Dayo, serving as the industry portfolio lead for Power and Gas at Synertec, specialises in control systems design, configuration, and implementation across various sectors. His leadership role involves guiding a team of dedicated engineers, ensuring the highest standards of project delivery. His extensive experience has enabled him to effectively manage project delivery, cost, quality, and risks for clients on multiple sites, including supporting blue-chip industry giant clients. Dayo is adept at delivering projects with minimal downtime and ensuring on-time completion.

