CAPABILITY STATEMENT

TC
Thompson Controls

www.tcau.com

ABOUT US

Thompson Controls serves as one of Australia's most respected independent specialists in industrial instrumentation & control projects. With over 40+ years of industry experience, we pride ourselves in providing quality assurance throughout all that we do.

We offer contracting services to an extensive array of industry sectors. These include electrical, instrumentation, process control engineering, mechanical, design, installation, and project management.

The extent of our services range from consultation through to total management of turnkey projects, concept/detailed design, construction, commissioning and long-term maintenance contracts.

Thompson Controls project success resides in the hands of our proficient and dedicated teams who have successfully completed contracts Australia wide, and internationally including the Asia Pacific region.

OUR MAIN SERVICE PROFILE INCLUDES:

- Design & Engineering
- Procurement, Budgeting & Estimations,
  Project Management & Construction
- Field Installation
- Switchboard, Control Design & Manufacturing
- Testing, Calibration, Commissioning & Maintenance

DESIGN AND ENGINEERING

Thompson Controls design and engineering teams will produce an integrated package that enables you to operate your system simply and maximise future productivity. All teams are strategically selected based on the skill sets required for each project. This ensures all tasks will be completed to a proficient standard and the assurance of quality guaranteed.

The services offered range from concepts to system design and documentation, through to commissioning and training. We will also provide all relevant documentation and drawings required for construction and will record all modifications to existing plants.

Our design and engineering teams are highly trained and are continuously upgrading their expertise in relevant technological areas. These areas include electrical systems, software, PLCs, microprocessor-based logistics and instrumentation systems.

Representing a sophisticated resource of capabilities, we are able to meet the demanding requirements of all modern manufacturing and production facilities.

SYSTEMS ENGINEERING

Collaborating with some of the most accomplished Systems Integrators, Thompson Controls provides the foremost technological outcomes. They range from concept, design, detail design, solution architecture and programming of PLC's SCADA, IoT, MES, ERP through to integration of several sophisticated technologies.

We are involved with FAT and SAT to ensure the technology functionality of these complex systems provide the clients' desired revenue generating, productivity capacity and cost-effective operating initiatives.

Our engineers and designers work collaboratively with our SI partners to ensure a cost effective and high quality project outcome is achieved and use the best technology aligned with the client's specifications to offer knowledge of alternative solutions.

The teamwork ranges from systems design, configuring, testing and implementation and commissioning. This is amongst the world's best practice where complex innovative progressive systems and processes engineering is required.

PROCUREMENT, BUDGETING, ESTIMATIONS,

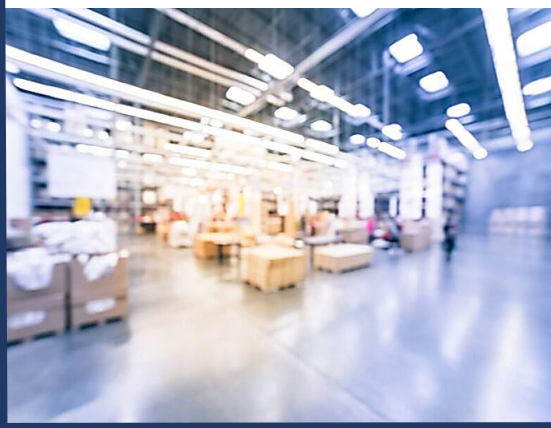
PROJECT MANAGEMENT AND CONSTRUCTION

Thompson Controls extensive knowledge of industrial and control instrumentation allows us to package an optimum solution from a countless array of sources available.

Materials selected are based on client specifications and their project requirements. Working as an independent, Thompson Controls product association is flexible. If clients require equipment that is specified to particular brands (due to standardisation or proven performance), we are able to work within these parameters. Our purchasing power offers client's considerable savings and the ability to accurately provide appropriate solutions.

Our procurement group issues quotations, evaluates bids and handles purchasing. All expenditure is monitored throughout the project process along with the logistics of deliveries made to project sites. Costs associated with the supply of purchasing and delivery of materials/equipment is fully documented. This information is then utilised by our project team to prepare cost estimates and to monitor cash flow commitments for the future.

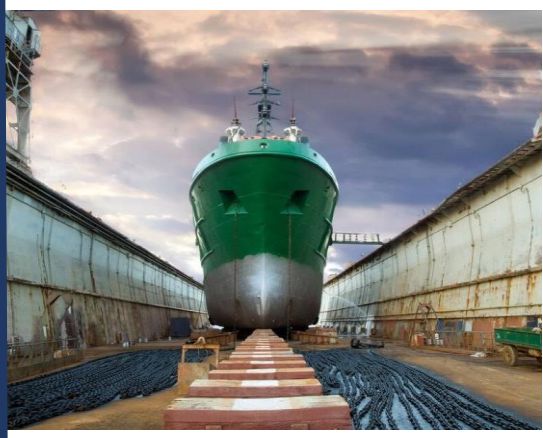
FIELD INSTALLATION



Thompson Controls field installation teams consists of a formation of highly experienced site managers, project engineers and supervisors, all of which coordinate their work proficiently.

Our employees have specialised training in an extensive array of skills sets. This enables our workers to produce a range of installations starting from basic controls, extending to the most complex programmable logic/computer based systems.

Throughout all projects we maintain a high standard of workmanship, ensuring everything is produced and implemented to a superior standard.



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SWITCHBOARD, CONTROLS, DESIGN AND MANAFACTURING

Thompson Controls provide fully functioning manufacturing facilities for the production of switchboard, modular units, control panels and other specialised manufactured units.

Our products are produced to client specifications or made to our own design and manufactured onsite within our fully equipped workshops. All products are made to the highest standards with quality assurance guaranteed.

We ensure close attention is placed on the functionality and design of all products, and have a particular focus on its ergonomic function(s). Upon completion, our systems are closely inspected, tested, packed and shipped to their required location.

Thompson Controls prides its self on adhering to all relevant standards, being an approved supplier to electrical authorities, other government systems and private enterprise.

TESTING, CALIBRATION, COMMISSIONING AND MAINTENANCE

Thompson Controls provides extensive testing and calibration facilities. These are provided to ensure all projects are brought to the commissioning stage effectively and efficiently.

Our facilities offer certified equipment able to handle all standard process measurements, electrical variables, and digital instrumentation.

The team customises a quality program to each project and strictly follows the procedures given by clients for testing, calibration and documentation. This ensures all outcomes desired are met and produced to the highest standards.

THOMPSON CONTROLS LEADERSHIP

Thompson Controls prides itself in having a dedicated team of over 80 experienced trade staff, highly skilled engineers, project managers and other professionals. Our teams include a mixture of supervisors, electricians, apprentices and trade assistants with most having been with us for over 15 years.

At Thompson Controls we recognise employees to be our most valuable asset. We are committed to the future development of all our staff and provide internal/external training and development programs for all personnel.

We provide teams consisting of loyal, high performing and proficient employees that are invested in providing quality assurance throughout all Thompson Controls projects.

SENIOR MANAGEMENT

GLENN BOTHA
CEO

COLIN THAIN
Executive General Manager

CHRIS YOUNG
Estimation Manager

MARK THOMPSON
Construction Manager

PROJECT MANAGEMENT

FRANK KELLEHER
Senior Project Manager

MICHAEL D'ALESSIO
Project Manager

ROSS NAPOLEONI
Project Manager

GARY SUMMER
Safety Environmental Manager

QUALITY ASSURANCE

Quality assurance extends far beyond compliance with customer requirements. We take pride in our work and are committed to continuous improvement.

Thompson Controls holds certifications from Lloyd's Register ISO accreditation to 9001:2015 for our Company Quality System. We are working with a consultant to upgrade our Information Security Management System (ISMS) to ISO 27001 standard.

ENVIRONMENTAL MANAGEMENT AND WH&S

Thompson Controls is committed to providing a risk-free work environment for all personnel and ensures all Workplace Health and Safety policies are implemented to the highest standard.

Thompson Controls is dedicated to eliminating all potential risk, stating it is also the responsibility of all personnel to assist in the maintenance of a safe work environment. We believe there is no compromise for safety and strive to ensure WHS is prevalent in all work surroundings. We hold certifications to Lloyd's Register ISO accreditation AS:4801 WHS, AS:14001 Environmental, *NSW Government Work Health and Safety Guidelines 5th Edition, 2014* and guarantee accordance with all relevant WHS Acts and Regulations.

PROJECT SHOWCASE

Warriewood Waste Water Treatment Plant

Plant SCADA & Electrical Upgrade

Sep 2011- Feb 2014

Value: $4.3M

John Holland engaged **Thompson Controls** as their electrical subcontractor for the Warriewood Waste Water Treatment Plant Upgrade and Amplification.
The project included augmentation of the existing 11KV supply, installation of new process areas, and the upgrade of the existing control system to current standards. Working on a brown field site within the constraints of an existing operating plant, we had to cut over electrical equipment ensuring continuity of process control.

THE WARRIEWOOD PROJECT INCLUDED:

- Managing the installation of new 11KV switch room and transformers
- New LV switch room
- Supply and installation of new Main Switch Board, new process control MCCs and PLC control panels
- Retro fit of existing MCCs & PLCs to current standards
- Supply and installation of new process control MCCs & PLC control panels
- Hazardous Area electrical installation to Australian Standards

THOMPSON CONTROLS PROJECT MANAGED STAKEHOLDERS & SUBCONTRACTORS ON SITE TO DELIVER THE FOLLOWING:

- HV subcontractor for installation works
- Co-ordinate with the local energy authority for the disconnection and reconnection of the 11KV supply
- Schneider Electric for supply of free issue 11KV transformer.
- SRS for assembly of Form 3 LV switchboards
- Serck Controls for PLC control software
- Holmes communications for fibre optic installation
- Energy Correction for earthing and lightning protection

INNOVATIONS

We disposed of potentially hazardous HV switchgear by contacting a WA organisation that reconditions and resells 11KV transformers and switchgear.
During the works it was identified that the existing LV switch room did not comply with Australian Standards.
This potentially expensive non-conformance was rectified at no cost during the works through co-ordination with the HV operators and relocating a chain link fence.

CHALLENGES

Working on a brown field site where continuity of process control to ensure compliance with EPA licensing conditions are always challenging.
Over years of neglect and incomplete work, there were a significant number of LV cables that had been cut off under the floor structure, and on cable trays that were not disconnected from the source of supply.
These exposed conductors were often in inaccessible areas where electricians had to work.
This resulted in modification of the isolation procedures for this project, a reassessment of working practices throughout the company and eventually additional works to remove the dangerous redundant conductors.

PROJECT SHOWCASE

West Camden Water Recycling Plant

New Digester & Upgrade

Nov 2012-Dec 2014

Value: $2.5M

John Holland engaged **Thompson Controls** as a subcontractor at the Camden Water Recycling Plant Bio-solids Treatment Upgrade and Amplification (WCBTUAA) project.
The WCBTUAA project upgraded the bio-solids digestion capacity from a plant inflow of 14 ML/day to 23 ML/day by anaerobic digestion with pre-treatment by acid phase digestion to cater for future population growth to year 2031. This was the first trial of an acid phase digester in Australia and was a prestige project for Sydney water.
John Holland construction works involved the pouring of a new anaerobic digester tank, two acid phase digester tanks, and installation of pumps, fans, heat exchangers, water heaters, and waste gas burners.
Thompson Controls completed the design, supply, installation and commissioning as follows:

WEST CAMDEN PROJECT INCLUDED:

- Construction of a new switch room
- Supply and installation of a new single sided Form 3LVswitchboard
- New PLC control panels
- Electrical installation of three phase motors
- Profibus control of fixed speed and variable speed motors
- Supply and installation of instrumentation
- Installation of a hazardous areas ventilation system
- Installation of lights and power
- Modification of the existing fire security gas power disconnection system
- Installation of new fibre optics & pneumatic control valves

INNOVATION

Part of the works included reticulation of pipes and cables through existing galleries.
This was a very difficult exercise due to the number and complexity of the existing systems.
Thompson Controls worked with John Holland to use a 3D model of the existing and new plan plant to plan the detailed cable routes and access in advance and prevent the ”I was here first” scenario.

PROJECT SHOWCASE

St Marys Sewerage Treatment Plant

Plant SCADA & Electrical Upgrade

Feb 2014-Ongoing

Value: $12M

Sydney Water engaged **Thompson Controls** – as part of the SMART Team, as a contractor at the St Marys Sewerage Treatment Plant.

St Marys STP is the largest of SWC Inland STPs, treating 37 mega litres per day and serving 160,000 people in St Marys and the surrounding areas extending to Dunheved, Mt. Druit, St Clair, Kingswood, Cambridge Park, Orchard Hill and Erskine Park.
The objective of the SCADA Renewal Upgrade Project was to install and program a new plant wide SCADA System. This included new Siemens S7 PLCs to replace the ageing Square 'D' PLCs, the renewal and or replacement of all electrical starters and wiring at St Marys ST0011 in order to raise the existing level of automation to the required higher level of automation and improve the reliability of the plant.

ST MARY'S PROJECT INCLUDED:

- Construction of a new switch room
- Supply and installation of multiple new single and double sided Form 3 LV switchboard
- New PLC control panels
- Electrical installation of three phase motors
- Profibus control of fixed speed and variable speed motors
- Supply and installation of instrumentation
- Installation of lights and power
- Modification of the existing security, fire detection, power distribution system
- Installation of new fibre optics network

CONTACT US

DETAILS

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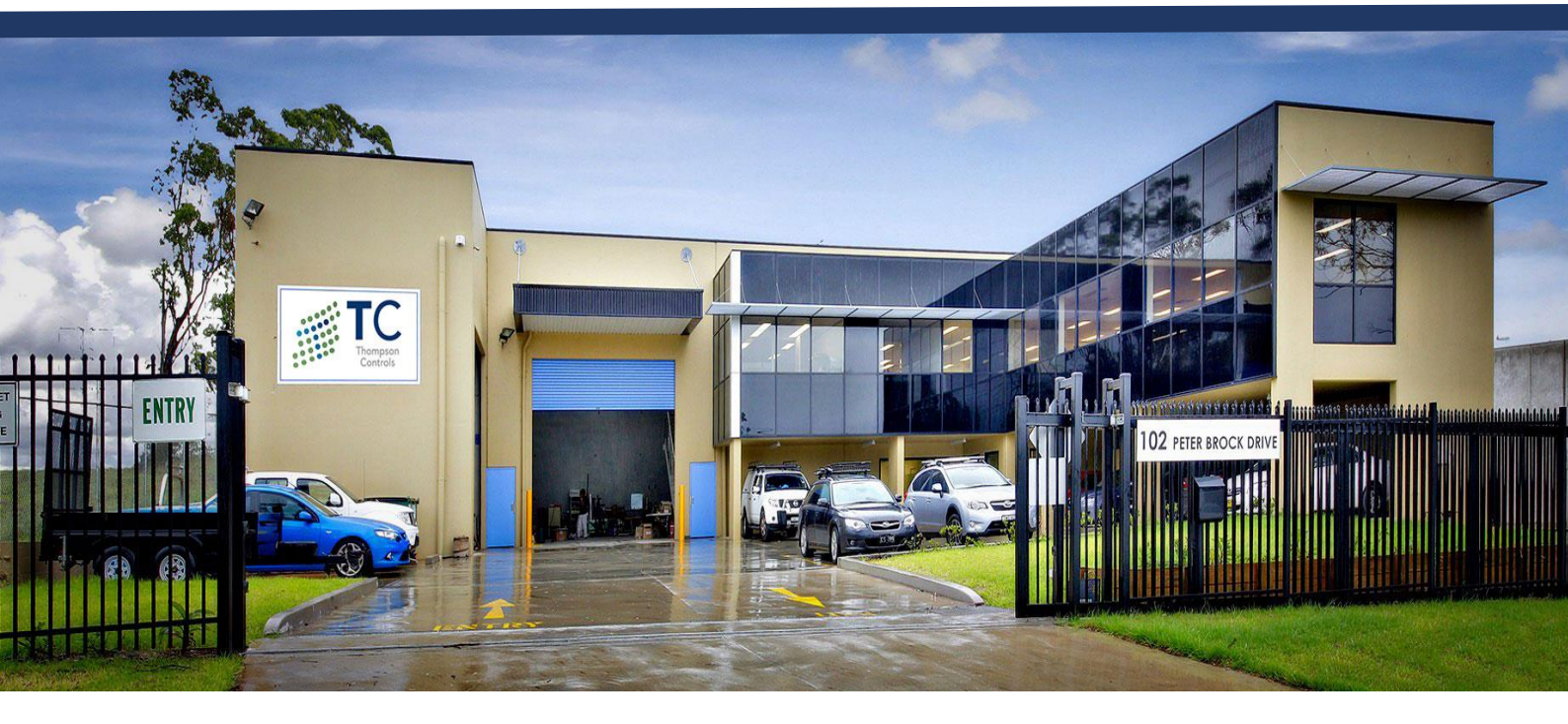
KEY CONTACTS

Glenn Botha:	CEO
Collin Thain:	Executive General Manager
Keith Akers:	CFO
Mark Thompson:	Construction Manager
Chris Young:	Estimation Manager