



- **PROJECT MANAGEMENT**
- **PLC PROGRAMMING**
- SCADA/HMI DESIGN
- **SELECTRICAL ENGINEERING**
- **SYSTEM DESIGN**
- **SAFETY SYSTEMS**
- **O MACHINE AUTOMATION**
- **PRODUCT TRACKING**
- o IT INTERFACE
- **o INDUSTRIAL COMMUNICATIONS**



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**Integrated Automation Solutions** 



Tait Controls is a leading New Zealand industrial automation company that has software engineering capabilities ranging from small standalone controllers through to fully integrated and complex industrial systems. We specialise in plant integration - the bringing together of individual subsystems into one system and ensuring that the subsystems function together as a whole. With our database engineering abilities we can provide recipe / batch information from the office down to individual components on the factory floor, enabling full control of product coding, labeling, etc. We can provide full product tracking from production through to packing and palletising of the final product, and then send that pallet information back to the office database.

We have decades of experience in several major industries, such as dairy, fertiliser, forestry and meat processing. Our team has been involved in many projects ranging from small upgrades and improvements, to large turn-key installations, such as the complete re-automation of a fertiliser plant, from manufacturing to dispatch.

We pride ourselves on still having some of the same customers today that we started out with over 25 years ago. Tait Controls has seen these industries grow and has helped them meet their challenges and needs as technology has changed throughout that time.

#### **PROJECT MANAGEMENT & CONSULTANCY**

Tait Controls offers a comprehensive project management process that ensures we meet or exceed our customers' expectations. We can advise and assist clients on all aspects of a project, from planning to implementation to achieve a successful outcome - on time and on budget.

#### **DOCUMENTATION & TRAINING**

Tait Controls can offer full documentation of software and designs. PLC documentation can range from a mechanical functional description to a Grafcet functional description.

Tait Controls can provide full operator and maintenance personnel training as required



## **SYSTEM INTEGRATION & PROGRAMMING**

Tait Control engineers have decades of experience with a large variety of PLC and HMI systems such as:

- Rockwell / Allen-Bradley
- Omron
- **3** Siemens Step 7
- Schneider Modicon
- Wonderware Intouch
- Intellution iFix and FIX32
- **o** Citech
- Realflex

and much more...

We can provide PLC / HMI systems written to our in-house standard or to the customer's standard.

#### **SAFETY SYSTEMS**

Tait Controls can design, build or upgrade your system to the required safety standard. We can provide solutions from small, standalone controllers, to large, fully integrated controllers such as Rockwell GuardLogix.

Tait Controls designed safety systems offer full diagnostics via HMI screens, enabling operators to quickly resolve problems resulting in less plant downtime.

#### 24 / 7 SUPPORT

Tait Controls offers tailored support agreements with guaranteed 24/7 response. Tait Controls can offer remote support and rapid response to plant breakdown.





#### **ELECTRICAL DESIGN**

Tait Controls offers electrical design and service including:

- **S**ystem architecture design
- CAD draughting
- Hardware specification
- Hardware purchasing
- **5** Full documentation

#### **CUSTOM SOLUTIONS**

Tait Controls can provide customised interfaces for any device on the plant floor, such as inkjet coders, weigh scales or barcode scanners enabling the PLC to communicate with these devices. This means the coders, etc are then capable of being fed data from the plants recipe management system to control what is being coded. We can display full device diagnostics and information on the operators control screens..

## **INDUSTRIAL COMMUNICATIONS**

Tait Controls have worked with a large variety of industrial communications protocols, including EtherNet/IP, ControlNet, DeviceNet, Modbus+, Modbus RTU, Profibus, Remote IO, Data Highway Plus, RS232, RS422/485, Ethernet TCP/IP and more.

# SIMULATION, TESTING & COMMISSIONING

Tait Controls can simulate and test the PLC functionality in-house before site installation. When on-site we work closely with site personnel to ensure 100% client satisfaction with the final installation.





## **MACHINE BUILD**

Tait Controls can work with equipment manufacturers to provide assistance with development, manufacturing and installation of their machines. We can work with all sizes and type of machines.



# PRODUCT IDENTIFICATION

A key area of Tait Controls capabilities is providing product tracking and production monitoring through technologies such as RFID, vision, barcoding, label printing, inkjet coding, weighers, metal detector, x-ray, etc.

With decades of experience in this area, our team can interface from the PLC to any printer, check-weigher, etc, over a wide range of industrial communication protocols.

Tait Controls provides the application layer that connects the IT and the plant floor automation together with the product tracking requirements. This is achieved through either vendor specific PLC hardware or distributed intelligence and industrial communications networks connecting third party vendor products in a seamless architecture.



## **DATABASE ENGINEERING**

Tait Controls provides integration between plant floor and IT management databases. Tait Controls has been a key engineer in several installations where recipe information is sent from a database to the production PLC. The product is tracked through to palletising and the pallet details sent from the PLC back up to the database.