OUR AUTOMATION & ELECTRICAL CAPABILITIES



BACKGROUND

The Windsor Energy Controls Group has over 40 years of experience in the automation and electrical design of Energy Plants. In addition to designing new plants, and upgrading existing plants, we support clients around New Zealand and across the world with their automation challenges.

Windsor Energy's comprehensive industrial controls service can design, construct, install, and commission industrial electrical and automation solutions for all applications.

Energy Plant Control Systems

Windsor Energy has the ability to offer a full system design and implementation service, with proven experience in electrical and automation design for energy plants. Our multi-platform approach enables us to provide solutions which integrate with existing site standards.

Industrial Control Systems

In addition to our core boiler and heat plant abilities, Windsor has experience in designing of industrial control systems for the manufacturing, dairy, water treatment, food processing, and forestry industries.

Boiler Control System Design

With proven experience in both local and distributed boiler control systems, Windsor has the ability to offer a full system documentation and design service utilising Elecdes and AutoCAD for electrical design, and Grafcet, SAMA, ISA or client specific standards as required for automation design.

PLC & DCS Programming

Windsor has a long experience working with the IEC61131-3 programming languages, across a variety of vendor platforms. We are Rockwell Recognised System Integrators and Schneider Electric Alliance Integration Partners and have completed numerous projects based on Siemens SIMATIC controllers as well as other vendors.

Electrical Design

Our Electrical team specialises in the design, procuring, installation and commissioning of industrial plants. Design outputs include electrical schematics, I/O lists, cable schedules, instrument location general arrangements and motor lists.

Windsor Energy

SCADA & HMI System Integration

The SCADA and HMI create a very important window into the automation system as they provide operational information and assistance with the diagnosis of mechanical/electrical faults. Our SCADA system program allows users to capture and customise data trends from the operational plant, to provide a clear understanding of the plants performance. We commonly work with a wide variety of visualisation tools and have developed our own proven internal standards or can meet customer requirements as needed.

Remote Monitoring

With the use of modern remote monitoring systems, Windsor is able to carry out technical upgrades and system tuning remotely, a feature that was greatly developed and utilized during the Covid-19 global pandemic.

PID Loop Tuning

Windsor offer a tuning service to reduce process variability and increase efficiency. In some cases this can be done remotely.





Burner Management Systems

With the new solid state burner management systems from Siemens and Lamtec, Windsor is also able to integrate burner-flame safeguard control, electronic cam-less control and valve tightness control into a single control unit that delivers performance, compactness and value. These solid state control systems can be networked with site-wide control systems allowing remote monitoring of burner performance and fault diagnostics. Windsor can provide engineering services for the design and implementation of Safety Instrumented Systems including full burner management systems in accordance with local regulations and international safety standards (e.g. IEC/AS 61508, IEC/AS 61511 and NFPA) for various and multiple fuels.

Professional Bodies

Windsor maintains an active membership of Engineering New Zealand for our engineers and encourages Chartered Professional registration.



Schneider Belectric

Automation

Rockwell

Why Windsor Energy?

Windsor Energy provides EPC contracting and servicing solutions for industrial thermal heat projects. These projects utilise fuel in the form of waste derived fuels, biomass, gas or liquid fuels. In addition Windsor offers the sales and service of burners, packaged boilers, fired heaters, combustion systems and ancillary equipment, for steam, hot water and thermal oil heating plants.

Windsor Energys' Service business is one of the largest fully accredited service and packaged boiler companies in New Zealand. With an extensive service network in key industrial centres throughout New Zealand. Windsor provides 24-7 emergency and service support to the local market.

Contact Us

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