Make the most of your energy™

Corporate Profile
Australia & New Zealand
Our mission

Schneider Electric offers integrated solutions that make energy safe, reliable, efficient, productive and green.
Leading the energy efficiency race

“Everywhere I go the world of energy is changing. Customers are asking for reliability, connectivity, efficiency and now renewable energy. People are taking care of their energy consumption. There’s a whole new way of living. It’s as big as the internet. With energy, it’s going to be the same kind of change. Schneider Electric is the only specialist in this area - we don’t make trains or washing machines. We are basing our company on the needs of our customers. We are the only company addressing the energy management challenge.”

Jean-Pascal Tricoire,
Chairman of the Management Board and CEO,
Schneider Electric, Paris, France.

“Energy management is re-shaping the vision that Schneider Electric has of its role. We want to be part of the solution for the environment, not part of the problem. In endeavouring to establish ourselves as the global specialist in energy management, we have developed a four-step process that we encourage building owners and facility managers to adopt and for the electrical industry to promote to its client-base.”

Stephen Coop,
Managing Director,
Schneider Electric Pacific Zone, Sydney, Australia.
Making energy safe, reliable, efficient, productive and green

Big in the Pacific and around the world

Schneider Electric has been present in Australia since the early 60’s when Square D’s range of switchgear was first available. Similarly, Schneider Electric has been present in New Zealand since the early 70’s when both Merlin Gerin and Telemecanique’s ranges of electrical products first became available through local agents.

Today, Schneider Electric’s commitment to Australia and New Zealand is a $1.3 billion investment, employing 3600 employees (Aust 3300 NZ 300) with factories in Adelaide, Benalla (VIC), Brisbane, Melbourne and Christchurch as well as research and development centres in Adelaide, Brisbane, Sydney and Christchurch.

On a global scale, Schneider Electric’s world presence is immense. Based in Rueil-Malmaison in France, it is a publicly listed company with revenue of over €19.6 billion, employing more than 110,000 people in more than 100 countries. There are 200 factories around the world and research and development centres in 25 countries.

When you engage with Schneider Electric, you are in fact tapping into a vast network belonging to the world’s leading specialist in energy management. The purpose of this corporate profile is to give you an insight into this resource, the many services provided, the customers helped and the peace of mind in dealing with a world player that has a strong commitment to this part of the world.
More than 170 years of history

19th century

Steel Industry

1836

Creation of Schneider at Le Creusot, France. The company was based on mining, industries and foundries.

20th century

Power and Control

1999

The company was renamed Schneider Electric, emphasising its expertise in electricity.

1996

Modicon, historic leader in Automation, becomes a Groupe Schneider brand.

1991

Square D, a major North-American supplier of electrical distribution and industrial control equipment was acquired.

1988

Telemecanique, a leading specialist in industrial control and automation joined the business.

1975

Working together with Groupe Schneider in the seventies, Merlin Gerin, a leader in electrical switching is formally brought into the group in 1986.

21st century

Energy Management

2010

One of the company’s largest acquisitions, Areva T&D, medium voltage and power automation and the SCADA Group; a group comprising industrial Scada, remote terminal units and accessories.

2008

Acquisition of Xantrex, makers of inverters for the solar industry.

2007

Acquisitions of Pelco, a hi tech manufacturer of security cameras and APC, a world leader in critical power and cooling services.

2006

Citect, a global provider of software for industrial automation, was acquired.

2005

Acquisition of Power Measurement Inc.

2003

Acquisition of T.A.C a global leader in building automation and Clipsal, Australia’s leading manufacturer of electrical accessories.

2001

PDL, household electrical accessory brand name in New Zealand, was acquired.

2000

Acquisition of Nu-Lec, an Australian manufacturer of medium voltage switchgear.
Schneider Electric’s New Zealand headquarters is located at Highbrook, East Tamaki, South of Auckland. Completed in August 2009, the building was designed and built from the outset to be an industry showcase of sustainable best practice.

The office and warehouse facility showcases an impressive range of leading edge features and the latest energy efficiency technologies while providing office staff with a healthy and comfortable environment.

Utilising Schneider Electric’s own building management system technology and lighting control system, its use of natural light, efficient lighting and integrated heating and cooling system is at least 50 percent more energy efficient than buildings of comparable size and design.

The facility is a living and breathing example of how environmental considerations and improved financial performance can go hand in hand.

In 2010 the office was awarded with a Property Council NZ Industry Award for Excellence in the Industrial Award category, the highest honour for an excellence award. The judging criteria evaluated architectural and engineering design, quality of construction materials and finish and even took into account return on investment, operation and maintenance factors as well as the ability to cope with future changes in technology.
In 2010, Schneider Electric announced an important decision to co-locate to a new head office in 78 Waterloo Road, Macquarie Park, Sydney.

Schneider Electric occupies 7900 square metres or five floors of the eight storey building.

To enforce the company’s commitment in “walking the talk” the building has a low carbon footprint and has been designed to achieve the 5 Star NABERS rating as well as a five star (Australian Excellence) Green Star rating.

The move consolidated a total of nine Sydney offices into the one site. More than 700 employees now call the state of the art building home. For customers, the main feature of the building is their ability to experience an impressive ground floor display that enables Schneider Electric staff and sales teams to demonstrate the company’s entire range of energy efficiency solutions.

Now under the convenience of one roof, customers can anticipate the benefits of even higher levels of customer service, business development and sharing of best practices.

As a global specialist in energy management, this new state of the art sustainable facility allows Schneider Electric to showcase what it does best in terms of energy efficiency and solutions.
Factories

Trade Coast Central & Recloser Factory, Brisbane, QLD

The first Schneider Electric site in Australia to consolidate all of the company’s operations in March 2009, TradeCoast Central is a world class facility that accommodates all of the Schneider Electric businesses and 500 staff under one roof. The combination of these businesses provides clients with the most comprehensive range of solutions available anywhere in the areas of critical power, energy management, electrical distribution, building and industrial automation.

On the same site, the Recloser factory specialises in the manufacture of medium voltage overhead or pole mounted switchgear and quality products for electricity network operators around the world. With over 20 years of experience in the field, the Recloser factory is proud of its strong customer-service focus including the flexibility to adapt products for operators’ needs and a commitment to fast delivery times. More than 500 employees are located at the Trade Coast Central office and manufacturing facility.

Rocklea, QLD

Formerly AREVA T&D, the Rocklea site is located in Queensland. Established in 1948 the facility designs, manufactures and supplies a complete range of electrical equipment, turnkey electrical systems, automation and information systems, and provides whole of life product services. In Australia, the site has a long history of providing engineering expertise, electrical equipment and services, transformers and switchgear. Approximately 100 engineers are based at the site.
Adelaide, SA

In August 2007, Schneider Electric through its Clipsal brand announced a major commitment to Australian manufacturing with its decision to relocate its Adelaide office and principal manufacturing site to a new facility at Gepps Cross, 9kms north of Adelaide. Completed in 2009, this state of the art facility occupies an impressive total floor area of almost 30,000sqm and is designed to maximise manufacturing and logistical efficiencies. All key brands within the group share the facility.

Christchurch, NZ

Schneider Electric occupies a 5400sqm plant in Christchurch and formerly the home of PDL Industries Ltd for over 70 years. The site employees more than 160 staff and manufactures electrical accessories for the residential, commercial, and industrial markets as well as medium voltage equipment for the utilities market. Products are manufactured predominantly for New Zealand and Australia, with export to Asia, South Africa, UK, and Europe. The Christchurch office and factory also houses the national customer care centre, distribution centre and sales regional offices over two locations.

Bayswater, VIC

Employing 125 staff and occupying 4800sq metres of floor space, the Bayswater Division manufactures Clipsal branded data cabinets, racks and enclosures, domestic meter boxes, electrical distribution boards and metal enclosures. Since 2010, the Bayswater plant also produces much of the Clipsal cable management solutions product offer (including poles, duct, floor boxes) as well as the Medilec medical electrical equipment range. Now with improved levels of flexibility and greater production capacity, the Bayswater operation is able to provide greater operating efficiency and lower production costs. This places the Clipsal brand in a better position to compete in an ultra competitive market.

Benalla, VIC

The Benalla manufacturing plant in Victoria is one of Australia’s market leaders in the manufacture of electrical distribution systems. These systems include: distribution transformers, kiosk substations and medium voltage switchgear for the commercial, industrial, energy, infrastructure and mining projects all over Australia. Today the site employs 200 staff including manufacturing, logistics, contracts and support staff and is fully committed to LEAN manufacturing principles. A dedicated continuous improvement programme in recent years has seen significant gains in productivity and efficiencies. In 2007, Schneider Electric Benalla embarked on a $2.5 million extension to the transformer tank and welding shop to meet the growing demand for its electrical distribution products.
A sustainable tomorrow starts with a clear vision today

By 2030, our world will look like this:

- Of the 8 billion inhabitants, 60% will live in cities and 2 billion will join the middle class
- Demand for electricity will be 70% higher than in 2007
- China and India alone will represent over 50% of incremental energy demand
- 1.3 billion people will not have access to electricity, mostly in Africa and India
- Electric vehicles will represent 60% of world share in passenger vehicle sales
- Renewable energies will have a 22% share in the global energy mix.

Schneider Electric can assist your business to:

- adhere with the pending Carbon Pollution Reduction Scheme (CPRS) by providing energy efficient solutions
- meet energy reporting criteria as stipulated by the National Greenhouse Energy Reporting System (NGERS)
- identify, evaluate and report on cost effective energy saving opportunities as required by the Energy Efficiency Opportunities Program (EEO)
- take advantage of funding and incentive programs such as the Green Building Fund and Green Loans
- participate in voluntary rating programs for both building design and operation, such as Green Star, National Australian Built Environment Rating System (NABERS) and the Leadership in Energy & Environmental Design (LEED)
- meet minimum energy efficiency requirements for buildings as set by the Building Code of Australia.
The Smart Grid

Transforming the way we use energy

The Smart Grid is turning our electricity grid into an intelligent and interactive network, incorporating many thousands of power sources ranging from wind farms to simple 1.5kW solar systems.

In the future, our smart grid may even enable two-way digital technology to provide control of appliances in consumers’ homes to save energy, reduce cost and increase reliability of power. Power can be shifted to where it is needed most and even stored for future use.

With the addition of smart meters, consumers can monitor their own power consumption in real time and adapt their electricity use with peak and non tariff power times.

Our smart grid solutions include:

- Smart Medium Voltage (MV)/Low Voltage (LV) Equipment
- Substation Automation
- Feeder Automation
- Enhanced Distribution Management Solutions
- Microgrid Control
- Volt/VAr Management
- Real-time Condition Monitoring
- Electric Vehicle Load Management.

Schneider Electric electric car recharging station
EcoStruxure

An integrated approach to achieving your energy goals

The seamless convergence of 5 key areas of our business. Making energy safe, reliable, efficient, productive and green.

Our response to this challenge is EcoStruxure™

EcoStruxure is not a product but rather an approach to creating intelligent energy management systems. These systems are simplified, save money, and most importantly, reduce waste by enabling a guaranteed compatibility between the management of power, white space, process and machines, building control, and security. EcoStruxure’s agile architecture brings optimised systems within reach of a wider audience because of its compatible product designs and open-platform software. It provides end-users with the critical tools needed to reduce their design time, CapEx and OpEx.

As consumers, businesses, and entire economies become increasingly reliant on technology, they insist that devices become more intuitive, more efficient, and more intelligent. With EcoStruxure, Schneider Electric encourages them to expect the same of their energy.

Each Business is connected by the bridge between our fields of expertise

> Guaranteed compatibility between our domains of expertise
> Energy monitoring everywhere, leading to 30% Energy Efficiency
> Enabled by the right connecting technologies:
  > IP as a common highway
  > Web services as a common language
Collaborating with customers online

The Schneider Electric Collaborative Portal is an extranet site designed to assist customers online. The site combines project collaboration with social networking media and offers full web meeting capability. And it's free.

Customers and stakeholders simply register on the Collaborative Portal to gain instant access to project details, latest updates and follow the status throughout the entire project implementation. They also gain access to a Schneider Electric Certified Energy Architect, someone who understands their energy needs and provides them with answers. The energy architect also coordinates a team of Schneider Electric experts to work on the project.

The site encourages communication between clients and the project team, including sharing of documents and exchanging of ideas. Launched in 2010, there are already 3500 customers already using the Collaborative Portal. Free from geographical barriers and accessible at any time, it is estimated that the portal saves up to 30% on project management time.

https://collaborate.schneider-electric.com/web/guest/home

Save up to 30%* of project management time

*customers estimate from Portal testing

Energy University

Through Energy University, Schneider Electric offers industry-leading education for professionals from all organisational levels and backgrounds.

The Web based, on-demand course content provides information to help professionals best manage the energy needs of their environments. Incorporating solutions that enable and sustain energy efficiency and conservation, Energy University provides a basis of understanding energy consumption, applications, ROI calculations, and solutions that support change.

As activity and enrolments since June 2009 indicate, not only is there a growing demand for energy, there is also a growing demand for energy education.

Visit: www.myenergyuniversity.com

Over 26,800 hits from more than 115 countries
5000 registrations from students to C-level
7000 course completions in 44 course offerings
Schneider Electric Services

Value throughout your system lifecycle

Schneider Electric Services offer you the benefits of true lifecycle support for your electrical distribution and automation systems. Our capabilities enable us to provide a wide range of services and solutions for your installations, from initial concept design through to end-of-life management and renewal programs.

When you partner with Schneider Electric you don’t just get world-class quality and cutting edge products and solutions designed, manufactured and delivered by us. You also get the benefit of our five star total service and support package.

Our highly trained services team work with you to understand your needs and offer individually tailored solutions, allowing you to focus on your core business. Schneider Electric has global and local project teams to manage your automation, energy management and electrical distribution projects.

With a full range of services encompassing strategic consulting, design and engineering, maintenance contracts, support and education, Schneider Electric is the right partner for your projects and engineering challenges.

From the smallest installation to large turn-key systems, Schneider Electric’s solutions are highly scalable, allowing you to procure only what you need now, and expand as and when your business grows. Our services team deliver solutions that meet your objectives and support key initiatives.

Our design services include:
- Business and technical consultancy
- System design
- Equipment specification and application
- Change management strategy and planning
- Project management
- Cost and budget control
- Business case and ROI assessment
- Scope and requirements definition

Our build services include:
- Project management
- Engineering services
- Installation services
- Factory and site acceptance testing
- Commissioning and start-up

Our operational services include:
- Technical Facility Management
- Predictive maintenance contracts
- Energy efficiency contracts
- System optimisation
- Managed services
- 24/7 support
- Training
- Managed spare parts
- Emergency call out

Our improvement services include:
- Financed Upgrades
- Security Risk Assessment
- Consultancy and expertise
- Monitor equipment condition
- Extended warranty and support
- Installation audits
- Asset management tools
- Continuous improvement
- Energy action consultancy
- Modernisation services

Our renewable services include:
- Retrofit and upgrade
- Equipment refurbishment replacement
- Responsible disposal of obsolete equipment
- Maximum recycling of materials (e.g. SF6 gas)
- Capital investment and feasibility studies
- Migration services for legacy systems
- End-of-life services
Unrivalled customer care and technical support

At Schneider Electric responding quickly to our customers’ needs is our highest priority, be they pre or post sales. Whether you have a query about your purchase order, need assistance on how to commission a product, or want someone to come to your site to diagnose a problem with your installation, simply call our Customer Service Centre on 1300 369 233.

When our Customer Service Centre staff need help to answer your technical questions, they refer to our Level 1 and Level 2 Technical Support Team. Consisting of a talented group of engineers, these technical support teams are experienced in automation architectures, product implementation and just about everything covered in the user manual. Customers can access these dedicated teams directly by calling 1300 369 233 and selecting the relevant option in the menu.

We are committed to helping you
“make the most of your energy”.
Integrated solutions that make energy safe, reliable, efficient, productive and green.
At Schneider Electric we are the global specialist in energy management. Put simply, we help people and organisations make the most of their energy. We foster a culture that drives innovation through collaboration, individual contribution and passion. This passion translates into everything that we stand for – our people, their careers, their personal development and, a pioneering approach to technology and solutions.

Our People

Our people are critical to our success. We encourage collaboration and promote involvement by making the most of rich diversity. Diversity underpins our history, culture and identity. That’s why the first commitment in Our Principles of Responsibility states that: “Schneider Electric employees can all express their cultural diversity and are managed without discrimination”.

We know that employees who feel respected are more motivated and effective. For this reason, we’ve taken measures to promote gender equality in the workplace, age diversity and minority hiring. We take actions at three levels: recruitment, job opportunities and career development.

As a company we are fortunate to have a leader – Jean-Pascal Tricoire - who values diversity and truly believes that gender balance is a tremendous asset and a powerful differentiator for companies so much so that diversity is high on our people agenda. Our goal is to make diversity strength, an advantage and a lever for developing creativity and competitiveness.

Schneider Electric has seen significant growth over recent years and we seek to continue this trend in the future. We search to hire people who are passionate about the environment, driven by a desire to impact the world and are energized by being part of the energy solution rather than part of the energy problem.

But being passionate is just one part of the equation at Schneider Electric. We recognise that people and teams also contribute. It is a combination of our people and one team, multiplied by your passion.

Our Culture

Schneider’s culture is one where your ideas are valued. We are down to earth, practical, collaborative and are passionate about the energy challenge. This passion can be seen in everything that we do and is defined by our company values. Our values define our culture, our customer approach and our business methods. They are the very same values we look for in new employees.

Passionate

We are passionate and positive about our business, customers and people. We strive to create a true sense of partnership with customers, making it easy for them to do business with us. We develop talent pools, coaching people to reach their full potential.

Open

We think “outside the box” and encourage others to do the same. We leverage the rich diversity of our company, promoting the sharing of expertise and learning. We show our willingness to collaborate and get things done.

Straightforward

We believe people value directness and simplicity. We behave in line with expressed commitments and show consistency between words and actions. We treat people with respect and fairness and give clear, motivating and constructive feedback.

Effective

We want to perform and get things done, not just talk about getting things done. We are pragmatic, not fancy. We manage and reach ambitious goals, taking appropriate risks. We respond with flexibility to shifting priorities and rapid change.
Westmead Children’s Hospital in Sydney, Australia, is the largest hospital for children in the southern hemisphere. Each year it treats over 25,000 inpatients and more than 500,000 outpatients. In addition to providing community medical care and emergency pediatric services, the hospital also serves as the State of New South Wales’ main liver transplant and burns unit, and houses the national poisons information center.

Opened in 1995, Westmead Children’s Hospital caters primarily to the needs of sick children. Its ambition is to create a comfortable “home away from home” environment both for children and parents who have access to onsite accommodation. Consequently, when the four-building complex was originally designed, the architects wanted to avoid an “institutional feel” yet retain all the features of a modern hospital. Schneider Electric Buildings experts worked closely with them right from the beginning to assess their special needs and offer practical advice. The result was a Building Management System that fulfilled all design criteria and cut operating costs.
Welcome to “The Rock”

When Wellington International Airport underwent a major expansion to both its runway and passenger terminal facilities, a new energy efficient international passenger terminal emerged, referred to by all as ‘The Rock’. The existing facility had already been enjoying the energy efficient and lighting control benefits of a C-Bus lighting control system, installed in the apron and terminal lighting areas in 1997. The new C-Bus installation was undertaken by systems integrators ECOsystems who were able to seamlessly integrate the existing C-Bus network into the new expanded airport platform. New benefits include added systems functionality and extended scheduled lighting control for The Rock’s new terminal facilities. DALI light fittings were also installed in appropriate areas to facilitate daylight harvesting and reduce light output levels at non-operational times. As an energy-saving solution, C-Bus has exceeded expectations and has greatly enhanced The Rock’s systems functionality.
Canberra Data centres partner with Schneider Electric for future growth

Recognising a need for secure, available data centre space in the nation’s capital, Canberra Data Centres (CDC), chose Hume, Canberra, as the site to set up their data centre hosting and services business.

CDC converted two existing buildings on the site into state-of-the-art data centres. Key to their requirements were futureproof, scalable architecture, critical to CDC’s go-to-market strategy. CDC also needed a plug and play data centre solution that could be rolled out easily in phases as new customers were secured.

The solution by Schneider Electric’s APC business stood out in terms of technology, pricing and support and the offering of a complete package - an end-to-end data centre solution. APC’s InfraStruXure® solution provides “on-demand” architecture for power, cooling and services into a rack optimised format. To work effectively as an integrated system, all three elements of power, rack and cooling are highly manageable and serviceable.

Concurrent maintenance can be carried out on any individual component, providing unique benefits to the customer.

APC InfraStruXure with zero down-time for the production environment is another important factor.

The InfraStruXure design allows the selection of standardised, modular components to create a customised solution.

CDC now boasts world-class ‘green’ data centre facilities that use up to 50 per cent less power than other data centre models, which means massive savings and a greatly reduced carbon footprint for its customers.

Schneider Electric also provided mains distribution switchgear and circuit breakers to meet the operating and enhancement requirements of the data centre’s networks ensuring safety of supply and continuity of service.
SA Water’s new head office in Victoria Square, Adelaide is a six star energy rated masterpiece of environmentally efficient design. Completed in 2008, it became the largest commercially developed building in Australia (rather than owner occupier) to be awarded a Six Star Green Star office design rating from the Green Building Council of Australia (GBCA). Clipsal played an important role in contributing to SA Water achieving the GBCA’s highest possible energy rating with its C-Bus Control and Management System.

The aim for SA Water House was to set the benchmark in environmentally sustainable design (ESD) to promote a healthy working environment, encourage improved business practices, help attract and retain staff and foster an environment for collaboration and innovation. The design provides greater opportunities for staff and customer interaction. The 10-level building, owned by the Catholic Church Endowment Society with a gross floor area of 35,000m2, had to integrate SA Water’s laboratories and offices into one facility.
Energy efficient lighting solutions led the clients to choose Australia’s leading automation technology, Clipsal C-Bus, for this impressive high-end residential job.

Located at Tennyson, South Australia, the residence features 120 sets of electric blinds, 60 electronic windows and seven retractable roofs, all controlled by Clipsal C-Bus technology.

Lighting automation has been established to create an energy efficient and convenient home, where the owners can open their garage door, turn on the hallway lights, airconditioning and open their blinds, all with one press of a button. Two Somfy Wind sensors are located on the beach facing corners of the home, and when extreme weather is detected, the sensors send a signal to C-Bus which will then retract all the roofs, as well as closing the windows.

The blinds and windows can also be controlled individually via C-Bus Wiser on the client’s computer or smart phone.

The home features a C-Bus Colour Touch Screen, as well as a number of Clipsal motion sensors, Clipsal Saturn DLTs and Saturn Wallplates.
Boddington Gold Mine (BGM) located 130km south east of Perth, is the largest gold and copper mine in Australia. Built on the footprint of the original Boddington Gold Mine, the expansion mines the hard gold/copper ore that lies beneath depleted oxide pits. The project value exceeded $2.4 billion and involved open cut mining from two large pits and is expected to produce an average 850,000 ounces of gold and 30,000 tonnes of copper a year for more than 20 years. Requiring a key provider to supply power distribution and motor control for the site, Boddington Gold awarded Schneider Electric three contracts worth over $60 million. Schneider Electric supplied three transportable 33kV sub stations, twelve transportable 1/3.3/.443kV substations, equipment for existing traditional substations and 36 distribution transformers from 1.5MVA to 25MVA. The project included design and manufacture of portable switch rooms, all cabling within the switchroom limits as well as distribution MV and LV switchgear, MV and LV variable speed drives, DC systems and installation of third-party free issued equipment. Benefiting from Schneider Electric’s global reach, Boddington Gold was able to access unique systems from all over the world including 11/3.3kV primary and motor control switchgear with integrated motor management systems.
State of the smart
One Shelley Street

The iconic building at One Shelley Street, Sydney, features a range of innovative design principles to help it achieve an industry benchmark 6 Star Green Star rating.

One aspect that makes this cutting-edge development a global showpiece for environmental sustainability is the complete energy management solution, designed by Schneider Electric to monitor consumption and generate real-time reports and troubleshooting alerts.

The Schneider Electric system was favoured because the cascading and discrimination capabilities between the switchgear, ensures that products are safer, more reliable and more efficient.

More than 150 of Schneider Electric’s PowerLogic PM700 Series power and energy meters were installed in the building to allow the tenants to effectively monitor and manage power supplies to critical systems such as generators, uninterruptible power supplies (UPS), and sensitive computer and plant equipment. These send real-time data back to ION Enterprise energy management system which implements a hierarchy of load-shedding that can be brought down to a micro level, minimising disruption to the entire building.

The system also helps with fault-finding and to determine reasons why the building may be consuming excess energy. This is vital as it helps the tenants to track their energy efficiency and helps them to verify the initiatives they have undertaken to maintain their 6 Star Green Star rating.
Milltech Martin Bright raises the bar

Australian special steels manufacturer Milltech Martin Bright installed one of the world’s most advanced heat treatment plants, producing high-tensile alloy bar products to the highest-quality standards attainable in the range below 110 Ømm.

The new $4 million continuous process plant’s bar handling control and tracking system required a sophisticated electronic control system for the power supply units. These were engineered by a partnership between Macquarie Engineers and Schneider Electric, to supply a cutting-edge harmonic mitigation active filter system to complement the plant’s power supply units, coils and quenching system.

The deadline to connect into the utility was a tight 10 weeks, Schneider Electric’s AccuSine® Power Connection system (PCS) was commissioned to provide optimum harmonic management and also to resolve the plant’s Power Factor Correction (PFC) issues.

The end result was a system that produces perfectly straight steel bars due to precise control during heating, quenching and tempering and rotation. The system also delivers up to six times more (or up to three tonnes) steel product an hour than the previous gas furnace batching process. Milltech Martin Bright’s Managing Director described the technology as the “cleverest thing” he had seen in his 50 years of steel industry experience.
Case Studies

Saving energy offshore

A gas production platform in the North Sea had developed production limitations due to the interaction of several large variable frequency drives (VFD) that control down hole pumps with the high impedance generators that provide power for the entire platform. Additional problems included flicker in the platform lighting system and mechanical resonance throughout the platform when the two largest VFD operated. The mechanical resonance was caused when the generators strained during heavy VFD loading.

Two AccuSine systems rated at 300 amperes of correction were installed after review of harmonic studies performed. The total harmonic current levels were reduced to between 5-7% from the 30% range. This lowered the total harmonic voltage distortion to less than 5% from 10-12% for each of the two installations. The displacement power factor was improved from .83 to .96 as well. Both corrections off loaded the generators enough to stop the flicker and improve production output of the down hole pumps about 2 hertz on each pump without mechanical resonance.

The increased production generated $6,000 additional income per day per hertz increase per pump. Including installation costs the AccuSine systems were paid for in 4-5 days. The platform’s operators were very impressed with the energy and cost savings.
Winds of change

Just 200kms north of Adelaide, the area of Hallett is home to some of the most rugged, windswept and sun drenched land in South Australia. It is also the home of one of Australia's larger wind farms, the AGL Hallett 1 Wind Farm, which provides enough renewable energy to support the electricity needs of approximately 54,000 Australian households per year.

The 45 Suzlon S88 2.1MW wind turbines each generate 690V, which is then transformed to 33kV through Schneider Electric substations. Each of these kiosk substations house the 690V switchgear, a 2.5 MVA transformer and 33kV switchgear.

Schneider Electric’s solutions were chosen by Suzlon Energy Australia (AGL's turnkey contractor) as they allow greater maintenance flexibility, reduced electrical losses and higher availability for a wind farm. The 33kV switchgear is a first for Schneider Electric being specifically designed for wind farm applications. These additional switches provide more functionality than has traditionally been available in wind farm applications.

In addition, Schneider Electric worked closely with the team to design, implement and commission the wind farm’s Citect SCADA system, offering a host of connectivity options allowing AGL staff to remotely monitor the wind farm from their operations centre in Victoria.

Energy efficiency pumping stations

Christchurch City Council in New Zealand recently committed to a programme to upgrade its water and wastewater pump stations in the Banks Peninsula region. The objective of the project was to reduce power consumption by optimising pump performance for 22 pump stations. With better control and monitoring technology, and access to real-time data, it is possible to run every pump at its best efficiency point (BEP).

The latest technology in circuit breakers is employed to accurately monitor the energy used by the pumps, log the data and send it to central operations crews. The performance of each pump can be closely monitored to provide an accurate deterioration profile, which can determine the optimum time for maintenance or replacement. Variable speed drives also precisely match the output of individual pumps to changing loads.

Communication between all the pump stations and the control centre occurs over a newly-erected IP radio network. This allows operations crews to remotely interrogate each intelligent device directly. Ultimately, all 365 of the council’s pump stations will be upgraded.
Investing in future green leaders

Schneider Electric invests heavily in graduate training and development through e-learning, in-house training, and the Schneider Electric University. This investment is a long term strategy, designed to pay dividends in the form of future green leaders and valued members of the Schneider Electric team.

Searching for future ‘green’ leaders

The Schneider Electric Graduate Programme was developed to attract talented technology-ready graduates who have the skills and potential that will enable the company to continue to provide innovative and market leading energy management technology and services. The programme attracts more than 200 graduates from electrical, mechanical and electrical/computer science engineering backgrounds. Candidates engage in an extensive application process, including a written application, interview and psychological assessment. The engineering graduates selected engage in a two-year structured programme that will enable them to develop competencies in technical, energy and end user solutions, sales, project execution and leadership. They will be assigned mentors throughout the programme and, on completion, will be offered the opportunity to work with Schneider Electric locally with the best employees offered short term assignments overseas.
Community commitment

Helping Queensland back on its feet

The floods that devastated Queensland in early 2011 affected more than 30,000 homes and businesses. Even Schneider Electric’s Brisbane office in Eagle Farm was flooded. Along with many hundreds of other companies, Schneider Electric was quick to respond with a $100,000 donation to the Queensland Government Premier’s Relief Appeal.

In addition, the company’s 3500 employees made a one-off donation through payroll deduction which was matched by the company.

The company was instrumental in bringing the leaders of the top electrical and lighting manufacturers in Australia together to assist the Queensland Government. This unified response was unprecedented and the benefits will ensure $1,000,000 goes towards restoring power to flood affected businesses and homeowners.

Bringing support to Christchurch and Japan

The devastating earthquake that hit Christchurch on Tuesday 22nd February was a terrible tragedy for New Zealand. The earthquake struck with a magnitude of 6.3. It took 182 lives and resulted in 1600 homes and 840 commercial buildings being declared as dangerous and unsafe to enter. All 131 Schneider Electric staff were safe and accounted for while the factory emerged with minor damage only. However, Schneider Electric quickly put together an emergency relief fund for staff to ensure all people were taken care of. The company also organised a donation programme for staff throughout the country to contribute to and match dollar for dollar.

On March 11, less than a month after the Christchurch earthquake, an extremely violent earthquake with a magnitude of 9.0, followed by a 800km/h tsunami, devastated the North Eastern region of Japan. More than 10,000 people were killed by the destruction while another 17,600 were declared missing. In response, Schneider Electric and its Foundation supported the emergency relief actions and launched an international solidarity campaign among its employees to collect donations and fund rebuilding projects, focusing on technical and professional schools. The Foundation announced an initial commitment of 200,000 euros and matching of employee contributions, euro for euro.

Bucks for Burns

In 2010, The Julian Burton Burns Trust and Schneider Electric, through its Clipsal brand, announced a three year national partnership to save children’s lives. For every Clipsal smoke alarm sold over the next three years, Clipsal will contribute 50 cents per sale to the Julian Burton Burns Trust. The partnership programme is called Bucks for Burns. Proceeds contribute to education in school Prevention Programs, provide direct care to burns patients and their families Care Services and assist in the purchase of research equipment in state hospitals burns units.

clipsal.com/burnstrust