It’s that time of year again when we begin preparing for the annual WEA Australian conference.

This time, in a change of order, the Australian conference follows the New Zealand conference which was successfully held in July at the picturesque location of Blenheim. This was my first opportunity to attend the NZ conference and I found it to be the usual high standard that we expect from our organisers (well done Trevor and David). It was great to hear many NZ suppliers are keen to service the Australian industry (so keep this in mind). It was also interesting to learn about the progression of the industry within the Marlborough district (and NZ in general). I would like to thank all members and attendees for their hospitality.
This moves us to the Australian conference which always provides an opportunity to mingle, re-engage and learn something new. I would not only encourage all members to attend, but ask them to encourage their peers as well. Please ensure you keep your diaries free for 7th & 8th September for the conference at Serafino in McLaren Vale. This year’s conference theme is "Innovation for Smarter Solutions". Innovative ideas and concepts that will provide Smarter solutions for improving methods of production, Increased efficiency, waste reduction and product quality.

Look forward to seeing you at the conference.

Cheers, Ben.
Ben McDonald – WEA President

Pre-Conference Event
A half day pre-conference workshop was held at Constellation Wines - Drylands winery located in the Blenheim area of Marlborough during the day prior to the conference and was followed by an informative conducted tour of the winery.

The workshop was associated with technology and processes developed by Australian company Ausvat and was conducted by Ausvat CEO & founder Peter Warren and Dr. Kerry Wilkinson – Associate Professor of Oenology at the University of Adelaide with the following being covered:

- **New Generation “Stakvat”** - Basically a 900 ltr volume S/S maturation vessel fitted with interchangeable HDPE wine maturation membranes for controlled and variable wine maturation

- **“Oakbak” Process** - Reclamation of oak staves from decommissioned barrels.

- **“Firvin” Process** – Far Infra Red heat treatment (toasting process) of reclaimed oak staves and how this oak is applied to wine

Although attendance numbers were disappointing those in attendance found the workshop content extremely informative and enlightening to the point where trials are being planned by a couple of New Zealand wine companies using the technology and products presented.
Following a light lunch and informal discussions about the workshop content a conducted tour of the Drylands winery operations took place that was also most informative.

**Conference**

Another informative two-day WEA New Zealand conference and exhibition took place in Blenheim in the Marlborough area of the South Island during Thursday 21st and Friday 22nd July with the venue being the Marlborough Convention Centre, the theme title for the conference was “**Winery Resource Management = Sustainability**” with presentations therefore focusing on the efficient usage and application of resources with special emphasis being placed on energy, water and refrigeration.

The conference commenced with a welcome to delegates by WEA President Ben McDonald and was followed by a most informative keynote address that was delivered by Mr. Gerald Hope – Chief Executive of the Marlborough Research Centre.

In his address Gerald explained how since the first settlers from East Polynesia set foot on the coast of Marlborough around 1320AD their impact on land and water resources began to alter the natural ecosystems, this was then followed by significant environmental impact occurring after the first European settlers arrived in the mid-1800s and began to colonise the Wairau Plains, Waihopai and Awatere Valley. That being the case and today with most of the good and accessible land now planted in grapes he raised the question of “is this sustainable?”

The address then looked back over the past 160 years which gave an insight into how man has imposed his will and used technology to accelerate land use changes.

The question was then asked that regardless of the economic return to the district from primary production, there can be no argument that land use has changed the landscape itself. But are those changes irreversible, carrying an environmental cost, or progressive adaptation that provides essential certainty of return for the land users themselves?

After posing the above questions the address then concluded with the observation that today the Wairau Valley with its broad alluvial gravels and layers of silt and clay is a special place recognised through a singularly famous sauvignon blanc grape variety and with that being the case grape growers and wine companies share responsibility for the future of sustainable production and the use of natural resources while keeping in balance with the demands and expectations of consumers and the communities of Marlborough.
At the conclusion of the keynote address the presentation of technical papers commenced of which there were fifteen presented over the two days of the conference covering a diverse range of subjects including power and water savings in the vineyard, sustainability through refrigeration energy efficiency & technology choice, titanium filtration alternatives, understanding wine storage tanks and the implication of seismic activity, asset improvement and optimization, compressed air and nitrogen generation efficiency, solar array and hot water generation alternatives, understanding the new safety in the workplace legislation, alternatives to oak barrel maturation and flavor potential of reclaimed oak. All sessions were well attended and received.

The final session of the conference on day one was allocated to an educational wine tasting workshop looking at the difference in styles of Sauvignon Blanc from the various wine producing areas of New Zealand, this workshop was made possible with the assistance of Wine Marlborough’s General Manager – Marcus Pickens and Wairau River Family Estate Wines – Winery Operations Manager – Nick Entwhistle.

The workshop was conducted by Nick Entwhistle and in turn 8 wines were presented being as follows:

1. Wairau River 2015 Marlborough (Wairau Valley)
2. Saint Clair 2015 Marlborough (Lower Wairau Valley)
3. Auntsfield 2015 Marlborough (Southern Valleys)
4. Seifried Estate Aotea 2015 Nelson
5. Trinity Hill 2015 Hawke’s Bay
6. Amisfield 2015 Central Otago
7. Yealands 2015 Marlborough (Awatere)
8. Jackson Estate Grey Ghost 2012 Marlborough (Alternative Style)

The tasting was extremely well attended and gave attendees a good insight into the varying styles and the geological aspects contributing to the style of each wine.
Exhibition

The exhibition side of the event also proved to be very popular with a broad range of exhibitors participating and in turn promoting their goods and services, it was also an excellent opportunity for conference delegates to be able to talk one on one with both the exhibitors and the conference speakers plus as with all WEA events they provide a great forum for networking.

Conference Dinner

The traditional conference dinner was held at the conference venue during the evening of the first day of the conference and in turn a good time was had by one and all. One of the features of the evening was the holding of a raffle in support of the New Zealand Child Cancer Foundation, the raffle consisted of an array of prizes which were generously donated by many of the conference exhibitors for which the WEA is most grateful, as with similar raffles held at the WEA’s Australian conferences they generate a great deal of fun and participation and really get the night going and we are pleased to be able to advise that the raffle raised a total of $3,326-30 for the foundation who do an amazing job in supporting children diagnosed with cancer and their families. The amount raised was double that raised at the 2014 NZ conference dinner and was in no small way due to the generosity of one of Rockwell’s team and the excellent way in which Craig La Hood - General Manager – NZ - Programmed Property Services and Sean Doherty - Food & Beverage Account Manager – NZ – Rockwell Automation M. C’d the event.
Post Conference Tour

Following the closure of conference proceedings, a post conference tour took place at the premises of Spring Creek Vintners in which 18 participants took part, the tour was in two parts with the first part being led by Spring Creek Vintners managing Director Ian Wiffin, in turn Ian gave a detailed run down on the operations at the site and the equipment installed. The second part was led by Dr. Matt Savage from Apex Environmental who gave a detailed explanation of the wastewater treatment facilities servicing the site which is the largest Membrane Bioreactor (MBR) wastewater treatment plant in use by a New Zealand Winery.

Both parts of the tour were well received and appreciated by all in attendance with a great deal of interest being shown and much discussion taking place throughout the tour.
**Venue & Date**
As already mentioned by Ben McDonald the 2016 National conference and exhibition will be held at the *Serafino Winery in the McLaren Vale area of South Australia during Wednesday 7th and Thursday 8th September.*

**Conference Theme**
The theme title for the 2016 National conference will be *‘Innovation for Smarter Solutions’*

The conference will therefore focus on innovative ideas and concepts that in turn will provide smarter solutions for improving methods of production, increased efficiency, waste reduction and product quality.

**Conference & Exhibition Program**
Conference registration will commence at 9.00am on the 7th following which conference delegates will have the opportunity to view the associated exhibition prior to the conference formally commencing at 10.30am.

**Welcome & keynote Address**
Delegates will be welcomed by WEA President Ben McDonald following which the keynote address will take place and will be given by Mr. John Ide – Winery Operations Manager for Yalumba Family Vignerons with the title of John’s address being “Innovation vs Invention – What’s the difference and does it matter?”

The address will look at how innovation and invention has shaped the wine industry in Australia from its very beginning, which will encompass a review of past and present technologies, their effect on both the quality and production efficiency aspects of winemaking, and what we can see for the future. It will then ask the question is there any difference between innovation and invention? and does this really matter to us anyway? Finally moving on to a discussion on how we can foster innovation and invention in our daily lives to look at problems and opportunities with a creative as well as logical approach and arrive at “out of the box” solutions to add value through the supply chain.

This address will be both insightful and thought provoking and is one not to be missed.
Conference Sessions
At the conclusion of the keynote address two days of technical presentations will commence with 16 technical papers being delivered covering a diverse range of subjects which can be clearly seen when looking at the following program, in addition to the technical sessions there will also be a special session at the end of day one featuring an educational wine tasting workshop exploring the variety Shiraz and what it has to offer with a tutored tasting of different Shiraz wines from different regions within Australia. The tasting will be hosted by Senior Oenologist Matt Holdstock form the Australian Wine Research Institute. The number of participants for this workshop will be limited so make sure you secure a place by placing your name on the participant list when arriving at the conference registration desk.

Conference Speaker Program

2016 WEA AUSTRALIAN CONFERENCE PROGRAM

WEDNESDAY, 7TH SEPTEMBER, 2016

9:00am Registration and view Exhibition - Tea/Coffee available

Conference Opening

10:30 AM – 1:00 PM

Chaired by Mr. Ben McDonald, (President of the WEA)

10:30 am  Welcome  
Mr. Ben McDonald, President Winery Engineering Association

10:45 am  Key Note Address – Innovation vs Invention – What’s the difference and does it matter?  
Mr. John Ide – Winery Operations Manager - Yalumba Family Vignerons

11:15 am  Using Spatial Information (GIS) for Greater Decision Making in the Winery & Vineyard  
Mr. Dave Gerner – GIS Specialist – Treasury Wine Estates

11:45 am  Innovation in Viticultural Machinery  
Mr. Sam Bowman – Director – Bowman Viticulture

12:15 pm  Innovations & Options for Grape Sorting  
Dr. Simon Nordestgaard – Senior Engineer – AWRI

12:45 pm  Wine Industry Technical Survey  
Dr. Simon Nordestgaard – Senior Engineer – AWRI

1:00 pm – 1:30pm
Annual General Meeting

Chair – Mr. Greg Schultz – Executive Account Manager – Rockwell Automation  
Annual General Meeting of members of the Winery Engineering Association.  
Non members are very welcome to attend but cannot vote  
Lunch will be available during this brief meeting and you will still have time to talk with exhibitors afterwards.

LUNCH

Display Area  
1:00 PM – 2:15 PM
2:15 PM – 3:45 PM
Chaired by Mr. Chris Travers – Director – Travhotech
WEA Committee Member

2.15pm  Waterless Sanitation and a New Look at Tank Cleaning Protocols
Mr. Alex Farren – Founder & CEO - Blue Morph

2.45pm  Titanium Filtration
Mr. Scott Russell – Director of Business & Finance – AMS (Advanced Metallurgical Solutions)

3.15 pm  Increase Premium Wine Yields While Lowering Cooling Energy Costs
Mr. Peter McBratney – General Manager Climate Wizard - Seeley International

Afternoon Break
Display Area  3:45 PM – 4:15 PM

4:15 PM – 5:15 PM
Chaired by Mr. Matt Holdstock – Oenologist - AWRI

4:15 pm  Educational Tasting Workshop
Shiraz – and its regional differences

Networking and Stress Relief

5:15 PM – 6:30 PM

•  Please note that the evening is free for informal networking and there are many restaurants and eating places in the McLaren Vale area including those at your motels. Further information is available at the registration desk with local brochures available.

Thursday, 8th September 2016

9:30 am  Visit Exhibition, Tea/Coffee available

10:00 AM – 12:00 NOON
Chaired by - Mr. Ross Wilkinson – Project Manager – Treasury Wine Estates
WEA Director/Deputy Secretary

10:00 am  Energise Your Winery: Solar Power Procurement Strategies for Australian Wineries Toward 2020
Mr. David Bueteufuer – Director of Sales & Business Development

10:30 am  Smart Solutions for Optimising Power Quality & Power Factor Correction
Mr. Ahmad Amiri – General Manager – High Technology Control

11:00 am  Innovative IoT Monitoring Systems for Predictive Fault Finding of Refrigeration Systems
Dr. Michael Bellstedt – Principal – Minus40

Mr. Adrian Dickison – Technical Director – Beca NZ

LUNCH
Display Area  12:00 – 1:30 PM
### Afternoon Break
**Display Area**  
3:00 PM – 3:30 PM

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<tr>
<th>Time</th>
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| 1:30 PM – 3:00 PM | **Chaired by Dr. Vince O’Brien – Business Development Manager – AWRI**  
WEA Committee Member | *Rapid Extraction Techniques for Red Wine Production*  
Dr. Simon Nordestgaard – Senior Engineer – AWRI  
*Using In-Line Sensors to Monitor Sugar Levels During Fermentation*  
Mr. Tadro Abbott – Project Engineer - AWRI  
*Closures – Our Changing Understanding*  
Dr. Eric Wilkes – Group Manager Commercial Services – AWRI |

### Conference Dinner
**6:30 pm**  
Pre-Dinner Drinks

**7:00 pm**  

*In the tradition of our conference dinners we have a BYO arrangement to encourage everyone to bring his or her own wines to share at the dinner. For those who have forgotten to bring something from their own winery/region, you may purchase wine at the dinner.*

### Exhibition
In the order of 30 companies from both Australia and overseas will be exhibiting at this year’s event covering a wide range of products and services therefore making it a great opportunity to discuss current and future requirements with a range of suppliers in one place. Generous time breaks for morning/afternoon tea and lunch have been scheduled into the conference program in order to allow delegates to view the exhibits and have discussions with suppliers plus there will also be the opportunity before and after conference proceedings each day. These periods are also a great opportunity for networking with industry colleagues.
Conference Dinner
During the evening of the 8th the conference dinner will be held in the courtyard room at the Serafino winery and apart from being able to enjoy some fine food and wine with colleagues and friends, there will be the opportunity to participate in the traditional WEA raffle and have the chance to win some great prizes whilst at the same time supporting the Royal Flying Doctor Service. Please note that in the tradition of our conference dinners we have a BYO arrangement to encourage everyone to bring his or her own wines.

Pre-Conference Event
We are pleased to be able to advise that the following workshop will take place at the Serafino winery during the afternoon of Tuesday 6th September being the day prior to the conference. Please register your attendance early to ensure a place at this enlightening and thought provoking event with the technology being applicable for wineries of all sizes.

2016 Australian Pre-Conference Workshop
The Future of Tank Cleaning
Ultra Violet Sanitisation of Winery Tanks

Date: Tuesday 6th September 2016 commencing at 1.30pm
Venue: Serafino Winery – Kangarilla Rd, McLaren Vale, South Australia

Cost: AUD $30
How to register your attendance: By e-mail: djc2@bigpond.com

Presenter:
Alex Farren – Founder & CEO BlueMorph LLC – Oakland - California – USA

Content
In this workshop Alex Farren Founder and CEO of Californian based company BlueMorph will present in detail the process and equipment that his company along with associate Tom Beard Engineering have developed in recent years to enable the UVC sanitisation of winery tanks of all sizes. This technology has gone through exhaustive field testing in the USA with incredible results being achieved when being directly compared with traditional tank cleaning methods. The use of this technology in the wine industry has the potential to save wineries of all sizes significant costs associated with current water, chemical and energy use plus reduced loading on existing wastewater treatment systems.
Workshop Program

The workshop will cover the following:

- Insight into the development of the process.
- Explanation of the field trials that have taken place in USA wineries and the analytical results of such trials carried by an independent certified authority.
- Development of the required equipment to apply the process.
- An actual demonstration of a BlueMorph unit being placed into a tank.
- UV tank sanitisation process in operation.
- Q & A session.

Duration

It is anticipated that the total workshop will run for approx 3 hours.

WineEng

2016

Put this in your diary!
September 2016
Serafino Winery
McLaren Vale, South Australia
- Pre-conference event
- Two-day conference
Just a reminder for those of you who have not renewed your WEA membership that renewal falls due each year on April 1st. *Membership renewals are now also handled separately from the conference registrations.* This change will ensure that your membership does not lapse and that in turn you are kept fully informed of all WEA events well in advance of them taking place. As a WEA member you will also have access to the members only section of our website therefore allowing you to access presentation materials from previous WEA conferences.

If you know of any colleagues who you believe would benefit by becoming a member of the WEA, application for membership can be made by either going to our website [www.wea.org.au](http://www.wea.org.au) or contacting Trevor Leighton on 0417 597 956 / trevorleighton@wea.org.au

The annual cost of being a member is currently only $65 which not only entitles members to receive the newsletter and other updates but also entitles them to reduced registration fees to our conferences which in itself can result in savings of around $45 / year.

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Meeting consumer demands throughout seasonal variability with an advanced automation and process control solution from Rockwell Automation.

Background
The Oxford Landing Estate Vineyard and Winery is named after a site where drovers once grazed and watered sheep. Today it’s home to a loyal flock of down-to-earth folk who take great pride in making quality wines, enjoyed the world over. With 650 acres under vine, Oxford Landing Estate is not small but by micro-managing 130 five-acre blocks as separate ecosystems, the grapes are given exactly what they need to achieve optimum flavour.

Techniques such as detailed pruning, canopy management and crop thinning provide the winery with ultimate control in expressing the individuality of each block. Oxford Landing prides itself on being nimble enough to harvest small batches of the fruit as soon as it ripens, so not an ounce of freshness is lost.

Set on the northern edge of the Barossa Valley the key to the success of the Oxford Landing Estate Winery is their ability to achieve a continuous production flow via a sophisticated automation and control system. In winemaking, this timing is particularly crucial since the grapes need to be processed within a critical window of time where the acid and sugar content are at a premium.

To achieve this, together with keeping up with increasing consumer demands, winemakers are turning to technology to streamline the process.

The Oxford Landing winery is an environmentally friendly plant incorporating the latest in winemaking technology.

Over a decade of service and support
Yalumba is Australia’s oldest family-owned winery, and one of the country’s largest wine exporters. Its Angaston winery was founded in 1849 in South Australia’s famous Barossa Valley. Over time however, the demand for Yalumba wines has grown to exceed the processing capacity of the heritage-listed Angaston facility. This led to the establishment of the Oxford Landing Estate Winery, which is now the primary producer of Oxford Landing Estate wines and Yalumba’s popular two litre cask wine varieties.

One of the main challenges with winemaking is that customers expect consistency, they get used to a particular label and expect it to taste the same, but every year the acid level is different, the sugar content is different as are the aromas and colour of the berries.

According to John Ide, winery operations manager, at Yalumba, “The aim for the Oxford Landing winery was an environmentally friendly plant incorporating the latest in winemaking technology, plus a new and
unique process stream methodology. The objective was to achieve greater management of the process and the product.”

The agility needed to meet the demands of frequently changing production demands was uniquely met by the process automation solutions from Rockwell Automation. This on top of the end to end efficiencies of the plant wide control inherent in Integrated Architecture truly made this solution a real win for Yalumba.

The Oxford Landing Estate Winery was commissioned in 2005 and has been able to meet market requirements and improve product quality for more than a decade now. The secret, says Ide, is the automated process streams that ensure the grapes are fermented under optimum conditions, given the high volume throughput. It is particularly critical at all times to control fermentation rate and minimise oxidation, both of which are highly dependent on temperature.

From the moment the skin is broken during harvesting, it’s important to move the product quickly through the crushing stage, chilled and into the controlled environments of the fermentation tanks.

Each process stream begins at one of three receive hopper/crusher bays, where loads of grapes are converted into ‘must’, a mix of juice, skin and seeds. The must is then pumped through one of three ‘must chillers’ to reduce the temperature to around 12 degrees Celsius for white and heat or cool to 25 degrees for red. To produce white wine, the juice is extracted from the skin and seeds and clarified prior to fermentation; conversely, red wine is fermented with the skins included in the fermentation vessel. For both styles of wine, the premium juice/wine or ‘free run’ is drained and kept separate from the second stream or ‘pressings’ of extracted product through subsequent processing and storage. After wines are fermented they are clarified and blended into the final product before filtration and bottling.
Virtualisation and visibility

The control and automation system plays an important role at Oxford Landing, the system performs sophisticated control of the numerous process streams, while at the same allowing the winemakers to exert their influence and apply their experience to achieve the desired result.

The primary user interface for the system is a virtualised server supported by two virtualised clients and six onsite clients, each running FactoryTalk® View SE. Winemakers and operators use this supervisory-level HMI to specify process streams, crushing speeds and fermentation schedules; plus, monitor the operational status of the entire plant.

The Angaston site allows maintenance operators to keep a close watch on trends using remote access via FactoryTalk ViewPoint or the virtual clients without having to come to site. This system is integrated with Yalumba’s proprietary ‘wine management system’ which is a non-commercial database of all vintages for the purpose batch tracking for label integrity.

FactoryTalk View SE is a key component of Oxford Landing’s automation system, providing a clear view across entire lines and production processes. This unified site-wide monitoring and control via the terminals and numerous plant-floor PanelView™ Plus human-machine interfaces (HMI). “Having everything on a common visualization platform was an attractive part of the package,” said Ide.

From a programming point of view, Integrated Architecture® provides a common development environment for all applications utilising the mobility and virtualisation of the FactoryTalk system. FactoryTalk allows data tags created in one application to be immediately available to all applications across the integrated architecture system.

The ability to share data tags considerably reduces the software development time. The whole network was connected in the workshop and programmed at the same time. There was one tag database available to both the SCADA and the PLC programmers. Any tag created was immediately available to everybody so there was no importing, exporting, connecting or waiting. From the onset, the system could be programmed concurrently so there was no time delay.

Flexing muscle

At the heart of the system, more than 10 Allen-Bradley® ControlLogix® programmable automation controllers (PAC) perform the hybrid functionality required of sequential, process and drives control. This includes overseeing a myriad of Allen-Bradley PowerFlex® drives that control screw feeders, crushers, pumps, presses, agitators, and so on; and also encompass enhanced PID control of temperature. “We have introduced a system for automatic dosing of yeasts for ferments which is also controlled by this system,” said Ide.

From the moment the skin is broken during harvesting, the product is moved quickly through the crushing stage, chilled and into the controlled environments of the fermentation tanks.
ControlLogix also controls the advanced refrigeration plant – perhaps the most critical function of all. “The refrigeration plant is our main tool for controlling temperature at all stages of the process,” said Ide, explaining that three ammonia compressors and a pumping system circulate liquid ammonia through the must chillers, ‘rack and return tanks’, and fermentation vessels as required.

The control system works out the required load and directs which should be the lead compressor and what the optimum settings are, based on how much cooling is needed for the required fermentation rates. “We have also just installed a PowerFlex 755 variable speed drive on the 450kW motor of our lead compressor increasing efficiency, flexibility and saving energy over the vintage period,” added Ide.

To link the automation system all together, the Oxford Landing plant utilises a site-wide Ethernet/IP network that connects the SCADA server and clients with each other and the ControlLogix PACs for a seamless flow of information through the plant. A ControlNet communications network provides high speed peer-to-peer communications, while device-level communications are provided by DeviceNet.

In addition, CompactLogix™ is used as the control system for equipment such as press and cross flow filters, which are networked back to the ControlLogix via Ethernet. FactoryTalk ViewPoint provides visibility remotely via a tablet, which delivers real time and historical trending. “As a result of the success we’ve had with FactoryTalk View SE integrating all areas of our plant in one platform, we’ve now rolled it out at our Yalumba site in Angaston,” said Ide.

Two shades of green
The Oxford Landing site is ‘green’ in more than one sense, with a number of strategies in place to ensure environmentally friendly practices. The refrigeration system is highly efficient, with the option of off-peak loading to reduce both electricity costs and power consumption through maximised compressor efficiency. In addition, the hot return ammonia gas heats the water used for washing tanks throughout the plant, plus Oxford Landing has its own complete wastewater recycling plant which is also interfaced with the FactoryTalk® View SE system for visualisation and control.

The plant and wastewater facility is running at best practice and recently won an Environmental award from the South Australian Wine Industry Association for implementing an innovative cross flow filtration system that minimises waste going to the plant while increasing yield.

At Oxford Landing, the ultimate goal has always been to achieve a continuous production flow through the plant. Ide believes that the Integrated Architecture from Rockwell Automation is key to ensuring that this objective is met and maintained. “FactoryTalk View allows us to see trends in real time, and we can backtrack to specific batches as required,” he says. “Troubleshooting is also easy. For example, we can delve right down into the drives remotely, changing programming and configuration and perform pretty much anything. That’s the advantage of a fully integrated system which has a consistent look and feel across the board.”

“In addition, we are currently utilising our newly installed FactoryTalk® EnergyMetrix system to control the maximum kVA demand and email alarms when we are nearing the limit. We are in the stages of using the integrated system to automatically shut down other non-critical motors to reduce demand when we are approaching the limit,” explained Ide.

Yalumba has shown that efficiency leads to quality and by using automation, efficiency can be increased and quality improved. It is the juxtaposition of high-volume processing technology and winemaking art that is making Yalumba successful, granting it the ability to deliver bottles of red and white that are finding favour, and flavour, the world over.
In Summary

Challenges
• To provide an automation and process control solution that ensures the winemaking capacity of the Oxford Landing winery throughout seasonal variability.

Solutions
Integrated Architecture Solution
• Allen-Bradley® ControlLogix® programmable automation controllers perform the functionality required for sequential, process and drives control as well as controlling the refrigeration temperature at all stages of the process
• PowerFlex® 700 drives control screw feeders, compressors, crushers, pumps, presses and agitators

Visibility and mobility
• FactoryTalk® View SE provides site wide monitoring via PanelView™ Plus HMIIs for robust and reliable functionality in a single software package
• Mobility is provided by FactoryTalk ViewPoint with information easily available via a web browser on a mobile device
• FactoryTalk® EnergyMetrix provides site wide monitoring of energy use Network architecture
• A site wide EtherNet/IP™ network together with some ControlNet™ is used as the backbone for communications while device level communications are provided by DeviceNet™

Results
Real time decision making
• FactoryTalk ViewPoint provides historical trending and real time data for improved decision making and monitoring Increased capacity and production flow

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