



THE LINK

Showcasing the successes, innovation and developments in the Fencing, Gate and Wire Industries



Liberty Steel Whyalla update

Liberty Primary Steel to construct Australia's largest Steel plant at Whyalla South Australia injecting more than \$600 million into its operations **Page 5**



Use of star pickets in temporary fencing

Read about the potential risks of using star pickets to stabilize temporary fencing panels. Learn steps that should be made to minimise the risk of damage to underground services. **Page 11**



Solar Power to help AWIA members?

Will Solar power save you money? Read about the experience of two AWIA manufacturing members who have taken the leap into installing solar power systems. **Page 7**



White picket fences are back

Using removable traditional white picket metal fencing has solved the curators' problem of gaining easy access to the pitch and other stadium operations at Adelaide Cricket oval. **Page 10**



Fair Work Commission Decision

How will the Fair Work Commission's recent decision on casual employment affect you. Changes already foreshadowed are for eligibility of some casuals to request permanent or part time tenure. **Page 9**



Fusion bonded wire

Read about specification of fusion bonded chain-link fencing as a solution for sporting fencing where there is a requirement of high resistance to impact, corrosion and in high humidity areas. **Page 15**

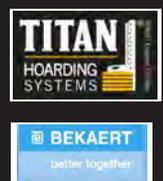
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 Victorian Temporary Fencing



NOTES FROM THE PRESIDENT

Whilst I don't usually set a list of New Year's resolutions, there is one I have definitely set for 2019. I have just returned from 10 days in Japan, much of it in Tokyo. The Rugby World Cup will be held there this year and the Olympics will follow in 2020. I was amazed at the common respect and timeliness of their whole country. Their public transport system is incredible. It has to be one of the cleanest places in the world, unbelievably safe, and I just wanted to share a snippet with you. I was waiting to wash my hands, and when the man in front of me had washed

and dried his hands he took the antiseptic spray bottle that was sitting next to the sink and sprayed the entire area and wiped it down so when I stepped up to the sink it was spotless.

I took this as the done thing, so when I had finished I did the same to leave the area clean for the next person.

The Japanese don't just do this to keep the place clean; they do it as a sign of respect for each other. They are on time to show respect and they say thank you very much endlessly (not just thanks, but thank you very much).

On my return home, I realised that we could benefit greatly from the Japanese habits of treating people and our environment with more respect. I am hoping to apply a little more of this thinking to do things better in 2019. As always I hope this is a great year for you and your business. See you at one of our functions or a conference this year.

Thank you very much for being a member of the association - Arigato Gozaimas - ありがとうございます

Charles Johnstone



AWIA DIRECTOR REPORT

2018 was certainly a busy year for the AWIA.

Brian and I have made several trips to Sydney and Brisbane, as well as visiting members and others involved with the wire, fencing and gate industries in Perth, Adelaide and Christchurch.

Our mid-year conference in Sydney was a great success with a tremendous variety of speakers, and a plant tour and mini-conference in September in Melbourne was also well attended. Members were given a number of opportunities to network with each other in a more social setting as well. The year finished with a Christmas dinner in Melbourne which again gave members the chance to have a drink and a meal, and share a few laughs, with old friends and also several new ones. Our temporary fencing members were especially well represented, and I thank everyone who has attended a function this year for their support. It is important to us that members come along, and we try to keep the costs down, and the timing tight, to encourage participation.

At the AGM in September, members saw a modest surplus for the financial year. The current year is trending on budget for a further small surplus, though we have changes coming to The Link, some of which you will see in this publication, and an update to the AWIA website, which may require some extra spending.

Work continues on revising the Temporary Fencing & Hoardings Standard, AS 4687, with important additions covering temporary pool fencing and crowd control barriers. Progress since July has been slow and it will probably be April 2019 before the revision is available for public comment.

Once this Standard is completed, the relevant technical committee CE-008, will be reformed to begin work on a new Standard for high security, anti-intruder fencing.

Other projects include a technical specification for sliding gates, and building relationships with other relevant associations.

Richard Newbigin

STATE REPORTS

VICTORIA REPORT



AWIA is planning to hold a one day mini-conference in Melbourne on Thursday 16th May 2019. The conference has been scheduled during National Manufacturing week 14th – 17th May at the Melbourne Convention & Exhibition Centre.

National Manufacturing Week 2019's workshop program will explore the impact of new technologies, innovative design, and business management on the manufacturing industry.

The topics at the AWIA mini-conference will focus on examining how changes in technologies and regulations will impact on your business.

WESTERN AUSTRALIA REPORT



News in from WA is that long time member and supporter of the Association, JSB Fencing, has been placed into voluntary administration by its directors. While security fencing was the company's focus, JSB had expanded into earth moving and machinery hire both on the West and East coasts, and had recently added two chain mesh machines to its operating equipment.

The company's plant and machinery has now been auctioned off.

QUEENSLAND REPORT



AFIA Secretary Brian Mullarvey has scheduled a visit to Brisbane in May / June 2019 to conduct focus group meetings to garner input on the draft Code of Practice for sliding gates. It is intended to meet with sliding gate manufacturers and automation specialists to hear their comments on the current draft and to expand the sections relating to gate automation.

More information: brian@wireassociation.com.au

CHINA REPORT



For those visiting Beijing in winter between the months of November and February, there's good news on the Chinese government's battle to reduce air pollution.

The South China Morning Post reports air pollution in Beijing and Hebei province was down 12% in 2018. The emissions of small, hazardous particles known as PM2.5 fell to 51 micrograms per cubic metre over the whole of last year. However, there is still some way to go. The average emissions are still significantly higher than China's official air quality standard of 35 mcg.

Air pollution kills 1 million people and is costing the Chinese economy 267 billion yuan (Aud \$55 billion) a year according to the report.

From our China Correspondent



NEW SOUTH WALES REPORT



It is planned to meet with representatives of the Security Licensing and Enforcement Directorate (SLED) of the NSW Police Force to further clarify their administration of the NSW Security Industry Act 1997.

NSW has security licensing requirements related to the sale and installation of security equipment. It appears certain types of chain-link security fencing falls into this category. SLED takes into consideration a number of factors when determining whether a product is a security fence.

The Association plans to provide more information on this matter to members soon.

SOUTH AUSTRALIA REPORT



Vater Hardware in South Australia have been partners with the Temporary Fencing Association in an investigation into whether some fence clamps currently being used in temporary fencing systems are robust enough to maintain a temporary fence's integrity when exposed to unbalancing forces such as high wind situations.

The preliminary results have indicated metal material thickness and pressed deformations are factors in affecting fitting performance. In the near future it is intended to circulate an information flyer to temporary fencing companies on the results of the survey.

NEW ZEALAND REPORT



Director/Secretary Richard Newbigin's planned visit to Auckland has unfortunately been postponed from February. Although a replacement trip has not yet been scheduled, it is hoped that he will be able to catch up with several New Zealand members in either March or April instead. With discussions being held with the Institute of Spring Technology (IST) on training, testing and spring software, there will be plenty to talk about to our Kiwi springmakers.

APPOINTMENTS



Adam McJannett
GM at Marsh Springs
Queensland



Adam started his career as an electrician in coal mining with a view to moving into engineering.

After some years in technical fields he moved into manufacturing on the production side, a much greater scope of roles and possibilities attracted him to this field. During his manufacturing formative years Adam says he was fortunate enough to be trained in TPM, Six Sigma and some Lean. As he grew into more complex roles he completed an MBA to supplement his technical and manufacturing knowledge.

Adam moved into the position of GM with Marsh Springs in April 2018 after Greg Marsh decided to wind back his involvement in the business after 50+ years. The business has grown to be the biggest spring maker in Australia with 85 staff and several hundred spring making machines. He says they are now focussed on adopting technology into their operation to improve efficiency and quality so that they can service their customers in the best way possible.

Adam says “the spring industry is increasingly competitive with importers and lower price offerings nipping at our heels constantly; by maintaining impeccable service and quality our customers can rely on us and our products. We do however need to be responsive to industry changes and follow what our customers are asking for.”

Adam can be contacted: amcjannett@marshsprings.com.au

Staff appointment at Vater Hardware



Recently Vater Hardware announced the appointment of **Alex Williams, Key Account Manager**, to assist with delivering ongoing outstanding service to Vater Hardware’s South Australian customers.

Alex brings 11 years of building knowledge to the company as a qualified carpenter and team leader, having worked in various fields of the construction industry. This experience will allow Alex to provide expert practical advice that comes from a solid construction foundation.

Moving into a role “off the tools” Alex is confident that Vater Hardware, a market leader in the sliding door and fence fitting industry can progress his career and improve both himself and the company.

Alex’s previous skill set and ability to problem solve, as well as his understanding of a tradesman’s point of view, will suit him in this role.

We wish Alex all the best.

Contact: awilliams@vaterhardware.com.au

NEWS ON THE WIRE ...

MAY 2019 CONFERENCE

AWIA will again hold a mini-conference to coincide with National Manufacturing Week, (NMW). The venue is the new Melbourne Exhibition and Conference Centre in the centre of Melbourne and will be held between 14 and 17 May.

We plan to hold our conference in either the same venue or nearby on 16 May with time allowed for delegates to visit NMW. A networking dinner will round out the day.

Details of speakers will be available over the coming months and will be relayed to members as they are confirmed. At last year’s conference we had a lineup of seven speakers covering a very broad range of topics.

If there are any topics you would especially like to have covered at this conference, please **contact Richard Newbigin** at richard@wireassociation.com.au.

Holding a one day conference we try to limit the time spent away from your business, and fees are kept to a minimum to make the day affordable for everyone. We encourage all members to come along; the more delegates we have, the more valuable the day is for everyone.

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Transformation at Liberty Steel Whyalla

Liberty has announced significant steps towards the transformation of its iconic Liberty Primary Steel operations at Whyalla, signing contracts worth more than A\$600m, representing a significant portion of the overall transformation cost.

In a major move forward, two contracts have been signed for the design of equipment and construction with contracting partners:

- Danieli, for a new, world-leading, state-of-the-art rail and structural heavy section mill
- CISDI Engineering Co, for a Pulverised Coal Injection (PCI) Plant

GFG Alliance Executive Chairman Sanjeev Gupta said these components would play a key role in securing Whyalla's long-term future. "This transformation will vastly improve the operational, financial and environmental performance of the operations, paving the way for Whyalla to become an enticing, global hub for innovative industry," Mr Gupta said.

City of Whyalla Mayor, Clare McLaughlin, said this was yet another fantastic announcement for the community. "Most importantly for Whyalla, this project will create thousands of additional construction jobs and several hundred ongoing, with GFG committing to prioritising local skills," Ms McLaughlin said.

Following the announcement on progressing the Whyalla Transformation Program, Mr Gupta shared plans for a visionary 'Next-Gen' mega steel plant for Whyalla, signing an engineering contract with CISDI for the ambitious project.

"Our cutting-edge transformation plans for the existing steel plant are just the beginning of what GFG Alliance has in store for the region," Mr Gupta said.

"Utilising almost perfect local conditions – our own infrastructure including a deep-sea port; rich local resources; and unrivalled community passion – we now plan to build a new steel plant, one of the world's largest, right here in Whyalla."

"'Liberty Next-Gen Steel' will be the largest in the Western world, capable of producing 10 million tonnes per year, with the ability and infrastructure to double capacity in time."

The project will be based on state-of-the-art technologies and best-in-class environmental measures. It will focus on production of semi-finished steel – slabs, blooms and billets – exported to downstream operations in key strategic and growing markets around the world.

As the major supplier of steel billet to Liberty Steel's wire business, Liberty's investment in the transformation of Liberty Primary Steel operations at Whyalla will support the wire business in continuing to meet customer requirements in Australia and to support the further development of export potential.



Spacing between support rails is important

A handy hint on installation of sporting fencing from 2MH Consulting



2MH CONSULTING ARE THE OFFICIAL FACILITY ADVISORY SERVICE FOR TENNIS VICTORIA & NETBALL VICTORIA



The Australian Standard AS1725.2-2010 provides guidance for the minimum requirements for chainlink fabric Commercial and Club tennis courts. The standard states a preferred height of 3600 mm for commercial tennis courts.

Mick Hassett, Director/ Senior Project Manager of 2MH Consulting, thinks

that nominating 3.6m high fencing is misleading because the top of the top rail needs to be a fair bit higher than that to accommodate the 3.6m chainmesh tightly and snugly between the bottom and top rails.

Mick says "if the top of the top rail is set at 3.6m above the court surface and using the 3.6m mesh, the excess mesh can hang below the bottom rail and it is not a KK finish". He also adds that the under-hang traps all the debris that falls into the court area so the clubs cannot use their motorised blowers to blow out the debris easily.

Figure 3.1 in the AS1725.2-2010 standard clearly depicts the position of the chain-link fabric in relation to the support rails; unfortunately this sort of detail is not often seen on working drawings supplied to installers.

For more information Contact mick@2mhconsulting.com.au

Australian Fencing Standards are available from SAI Global Limited E: sales@saiglobal.com



Example of correctly tied chain-link fabric



Sagged chain-link on Club court accentuated by support rails too close.



Support rails correctly spaced to allow mesh to be tautly fixed

Australian Manufacturing Index – Metal Products



The Australian Industry (Ai) Group manufacturing report for November 2018 shows production in the metal products sector in Australia has slowed to its lowest result in just over a year. Each month Ai Group releases performance statistics for the manufacturing, services and construction sectors.

Metal products sector

Ai Group classifies metal products into a group including basic ferrous, non-ferrous, fabricated iron and steel, structural metals, metal containers, sheet metal and other metal products (ANZSIC codes 21 and 22).

The metal products sector produced \$3.9bn in real value-added output in the second quarter of 2018 (15% of manufacturing real value-added output) and employed 135,000 people in August 2018 (15% of manufacturing employment). The metals sector's index eased by 0.3 points to be largely stable at 50.9 points in November (trend). This sector has been slowing since the start of 2018 and this is the lowest result in just over a year.

Some respondents in the metals sector noted a slowdown in new orders and increasing import competition that is curbing activity.

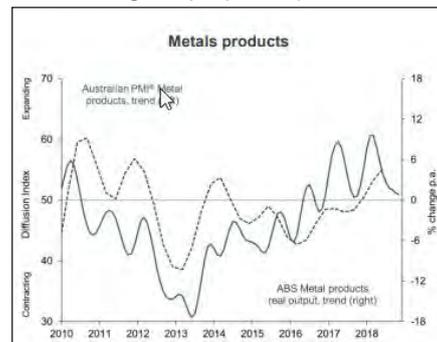
Manufacturing in general

Ai Group's Australian Performance of Manufacturing Index (Australian PMI®) fell 7.0 points to 51.3 points in November, indicating slower growth in the manufacturing sector (seasonally adjusted). This is the lowest result since October 2017. Results above 50 points indicate expansion with higher results indicating a stronger expansion.

Manufacturers reported expanding, albeit slowing conditions in November led by the non-metallic minerals sector and the large food & beverages sector. Manufacturing conditions were stronger in Victoria and South Australia but fell into contraction in New South Wales and Queensland.

The Australian PMI® has now indicated twenty-six months of uninterrupted recovery and expansion (results above 50 points), which is the longest run of recovery or expansion in this data series since 2005.

For further information: Tony Melville – anthony.melville@aigroup.com.au or 1300 55 66 77



Members Only

Do you have a new customer, or potential customer, you are not yet sure about? Are they able to pay your accounts, and how much credit can you afford to extend to them? Do you have a new customer, who seems to be travelling well, but you still have them on a low credit limit, and it's restricting your business growth?

The AWIA can help. A partnership has been established with worldwide credit managers, Coface, and credit opinions on your critical customers can be had for a low one-off fee. Not only will this service help to limit your exposure to bad debts, it can also be used to grow your business by increasing your level of trade with credit worthy customers.

For more information, or to give it a try, **contact Richard Newbiggin** (richard@wireassociation.com.au). Only one member has so far used this new service, but he was very happy with the result.



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How has solar power helped AWIA members?

If your business installs a solar power system will you save money on your energy costs?

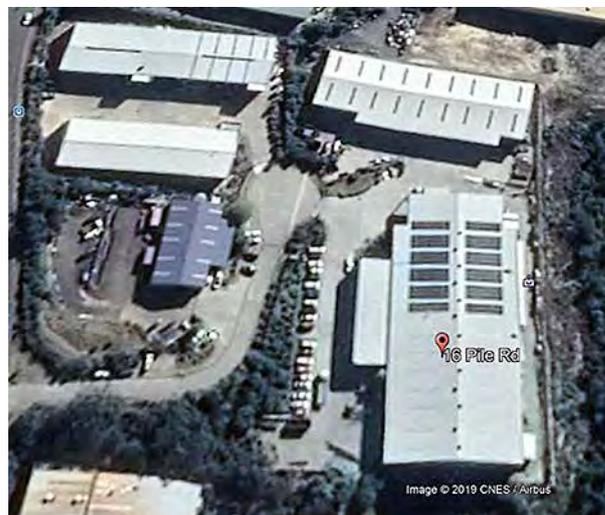
It's a question many members have been asking AWIA recently, so we decided to interview two of our members about their experiences using solar power and find out what questions you should be asking before your business decides to make the switch.



Solar panels on roof at Concept Wire Melbourne



Workmen fixing solar panels on roof of industrial facility



Protective Group 100KW Solar System in Somersby NSW

Craig Gibbens, Protective Group

Protective Fencing is a leading Australian manufacturer and supplier to the fencing and wire mesh markets throughout Australia and the Asia Pacific region. Recently, they installed a 100KW Solar system at Protective Group which has reduced their energy bills by well over 30%.

Craig Gibbens, Managing Director at Protective group was very happy with the installation and results. "This saving more than covers the loan repayments, and I will have paid out the loan within a few years. The government only offered a substantial rebate on systems up to 100kw at the time," he said.

"It's important to get several quotes, as prices vary greatly from various solar companies. It's also important to check the quality of panels and inverters used, as they also vary greatly," he said.

Marcus Bartlett, Concept Wire Industries

Concept Wire Industries stocks one of the largest ranges of wire in Australia. Their range includes HDLC (hard drawn low carbon), galvanised, baling, high tensile, stainless steel, spring and annealed tie wire.

Marcus Bartlett, Managing Director of Concept Wires, was looking at ways to save money, reduce costs – and even make money - when he started enquiring about the installation of a solar powered system on the large roof area of their warehouse.

"Because we have a large surface area on our roof it made sense to install a significant number of panels to maximise potential income/savings," he said. "However, after installation, we soon found out that the expectation of making money, by selling power back to the grid, was not going to happen. The buy-back rates provided by the electrical retailers meant the payback would have been around 30 years or more".

Marcus did mention that he was able to sell electricity back to the grid on weekends and public holidays, which provided a 'little sweetener' on the deal. However, where they made the most savings was by reducing the power they took from the grid. "In essence, if you are paying 30 cents a kilowatt hour (kWh), then every kWh of power you generate you are saving 30 cents. We were originally given a payback period of about six years, but as it worked out, we actually paid off the system in five years," he said.

"We used a reputable Australian company, with Australian made panels, who erred on the side of caution rather than promise outlandish payback results. When considering a solar powered system, ask for confirmation of how they calculated their figures for results (energy generated/savings), and make sure you are happy with the 'predictions' they make. Using an Australian company also helps when you have issues and need answers quickly".

"We have been very happy with the results, with savings ongoing hopefully for the guaranteed 25 year life of the panels and more. The only downsides are the service charges that don't disappear from your bills. In one year over Christmas we actually generated more electricity than we used but still had a \$700 bill due to the service and connection fees," he said.

Melbourne Conference – September 2018

Mid-September saw us again look to join forces with the Australian Steel Institute (ASI) to hold our second conference of the year. Unlike the past couple of years, where we have shared venues with the ASI and attended some of their events, this year we essentially ran a separate event, though one coincident with the ASI Convention, allowing interested members the opportunity to attend both events.

Our day started early with a plant tour of Bosch Australia Manufacturing Solutions (see separate report elsewhere in this edition). Following the tour, delegates headed back to the Melbourne CBD for lunch and the afternoon presentations and AGM. In addition to a presentation about current best practice for keeping electronic data secure, delegates were given an update on industrial relations by our IR partners, FCB Group, specifically in the area of casual employees and the risks faced by employers who failed to structure their contracts with casuals appropriately. An update on new legislation covering domestic violence leave and casual conversion clause additions to 85 modern awards from 1st October 2018 was also covered.

The rest of the afternoon session was given over to the Annual General Meeting and a forum discussion about electronic payment systems and the range of costs associated with them. Our President, Charles Johnstone, led this discussion following his company's recent review of electronic payment options.

Delegates finally had an opportunity to relax in the comfort of Harry's Bar at the Stamford Plaza Hotel before heading off for dinner at the Executive Suite at the Melbourne Cricket Ground for some hard-earned sustenance.

The conference was very well attended with delegates coming from as far away as Perth and Auckland, plus a collection from South Australia, Queensland, NSW and Victoria, many of whom came from the regional areas of their States. It was really pleasing to see such widespread support by members for this event, and we encourage those who came along to spread the word to their colleagues to make the next AWIA conference even bigger and better.



Rohan Russell (Liberty), Charles Johnstone (Automatic Wire), Marcus Bartlett (Concept Wire Industries)



Andrew Lee (Lee Bros), Lance Vater (Vater Corporation), James Gibbens (Protective Group)



Trevor Buwalda (Protective Group), Charles Johnstone (Automatic Wire), Matthew Boniface (Frauenfelder Gates), Darren Edmunds (Bekaert Singapore)



Glenn Otter (Otter Fencing), Rohan Russell (Liberty), Graham Braithwaite (Olympic Fencing), Samantha Swain (Protective Group)



Members attending Conference dinner at MCG Melbourne



Bosch Factory Visit - Industry 4.0



Members from around Australia and New Zealand jumped on board to attend our plant tour of the Bosch Australia Manufacturing Solutions (BAMS) facility in Clayton, Victoria in September.

BAMS is at the forefront in design and implementation of complex manufacturing systems especially utilising Industry 4.0 connectivity between machines, and this division of Bosch Australia has been set up to assist small and medium sized enterprises to access increased automation, special purpose equipment, technology and lean manufacturing processes.



Group visiting the BAMS in Clayton and Bosch's Erwin Jansen demonstrating the flexibility of a robotic arm used in their manufacturing process.

Worldwide, the Bosch Group is highly respected for its engineering innovation, and this broad expertise enables BAMS to provide local manufacturers access to the most up to date equipment and solutions to their engineering requirements. Of especial interest was the ability to retrofit sensors to existing plant to improve functionality rather than having to completely re-invest in new machinery. Some sensors may even be of interest to our fencing members to monitor wind loads and out of plumbs on existing fences. BAMS has teamed up with the Advanced Manufacturing Growth Centre (AMGC) to undertake 15 Industry 4.0 implementation projects with SMEs in Victoria. These projects will involve utilizing new technology and collecting and manipulating data to make improvements to production processes. The projects will fall into a \$10,000 to \$50,000 cost range with funding of 50% to be provided by the participating processes, and the balance from AMGC. The resultant case studies should encourage other manufacturers to consider implementation of Industry 4.0 practices. Members wishing to have access to this program or the resultant case studies, or to join a future plant tour of BAMS, should contact **Richard Newbigin** at richard@wireassociation.com.au.

Fair Work Commission Casual Employment Decision



As a result of the recent Fair Work Commission Casual Employment Decision, changes will occur to 85 Modern Awards providing eligible casual employees an opportunity to request to convert to permanent full-time or part-time employment.

These changes have been in effect from **1 October 2018**.

The remaining 30 Modern Awards with existing casual conversion clauses will continue to operate unchanged with no additional obligations imposed on employers.

The implication of this is that if you currently utilise an Enterprise Agreement, or you are covered by one of the 30 Modern Awards with an existing casual conversion clause, this change will have no impact on you. For all other businesses the change will have a direct impact and you must act to meet the obligations contained with the new casual conversion clause.

What will occur?

Employers are required to provide all **existing casual employees** with a copy of the new Modern Award provision by no later than **1 January 2019**, however, all **new casual employees** are required to be issued with a copy of this clause **within the first 12 months** of their employment.

We recommend employers keep a record of how and when each employee is notified of the conversion clause (for example, via email) so that they have evidence of compliance with the notification obligation.

Who is eligible?

Not all casual employees will be eligible to convert to full-time or part-time employment.

Firstly, a casual employee must be engaged on a 'regular' basis. 'Regular' casual employees would normally have worked a pattern of hours over the last twelve months which, without any major adjustments, look similar to a full-time or part-time employee otherwise engaged under the Modern Award. A casual employee will need at least 12 months service and a regular work pattern to be eligible to make this request.

In addition, any request to convert to permanent employment must be put in writing by the employee with the requested alteration matching their current pattern of work. For example, if an employee works 15 hours per week on a casual basis and has done so for 12 months, they would be eligible to request to convert their employment to permanent part-time.

Dealing with a request

Once in receipt of a request, an employer is required to consider the request and can only refuse it on 'reasonable business grounds'. 'Reasonable business grounds' need to be based on facts which are known and/or reasonably foreseeable. This can include:

- it would require a significant adjustment to hours of work;
- it is known or reasonably foreseeable that the regular casual employee's position will cease to exist within the next 12 months;
- it is known or reasonably foreseeable that the hours of work which the regular casual employee is required to perform will be significantly reduced in the next 12 months; or
- it is known or reasonably foreseeable that there will be a significant change in the days and/or times at which the employee's hours of work are required to be performed in the next 12 months which cannot be accommodated within the days and/or hours during which the employee is available to work.

Where an employer refuses a request to convert the employment to full-time or part-time, they must provide a written response to the employee within 21 days outlining the reasons for the decision being made.

We recommend records are kept for any requests for conversion, including any responses or correspondence given during the process. If a casual employee does convert to permanent employment, employers should implement a new part-time or full-time employment contract for the employee to recognise the new employment relationship.

**For more information contact FCB Group on 02 9922 5188
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Sanwa can be contacted:

email: swade@sanwa.com.au
 website: www.sanwa.com.au
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White picket cricket fences are back



When the Management for the Adelaide Oval stadium decided to enclose their No 2 Oval, the tender called for a traditionally looking white picket fence, appropriately spaced for cricket games, for safety and the security of patrons. Additionally the fence had to be easily removable if necessary for stadium operations and events.

The sleeving of the footings was to allow the fence to be removable, allowing the Adelaide Oval curators to pull down the fence when needed to transport and change over the main ovals centre wicket/pitches.

Blue Dog Australia won the tender specifying their Headingly® Steel Picket Fencing. The panels and components were produced at Blue Dog's National Manufacturing facility at Tamworth NSW. Blue Dog Fences' Director, Scott Roworth was able to assure the Oval Authority the product had been well tested as it had already been installed in over 50 ovals around Australia and could meet the requirement of being removable as it was constructed with inground sleeves.

The project took 6 weeks to complete, the procurement and manufacturing of panels took 5 weeks and the onsite installation was completed in just one week. The project was time critical as a Midnight Oil concert had been scheduled utilizing the main oval. Following the concert the changeover of the pitch for the first 20/20 Big Bash game for the season had also been arranged. According to Scott, "having our local Adelaide team at Regency Park project manage the installation greatly assisted in ensuring the critical time frame was accomplished."

More Information www.bluedogfences.com.au Ph 1800 887 887 E: sales@bluedogfences.com.au



Future Development at IST



The Institute of Spring Technology (IST) has a rich history of research into spring materials, design and manufacture dating back to the 1940s. In consultation with its members, IST has found a new focus for its R&D in two main areas; reliable spring design using current materials and techniques, and future materials that could be used in the spring industry.

IST plans to expand its knowledge of currently available materials and techniques that are widely used, so members can increase their capacity to design optimised springs with confidence that they will perform within necessary parameters.

One of IST's most recent projects looks at the benefits of nitriding in the spring industry. Although nitriding is known to increase the fatigue performance of springs, at present it is not possible to design springs and know their performance with confidence. The only confidence in the use of a nitrided spring comes from testing, limited to a specific spring, rather than comprehensive

laboratory data that can be used on all spring designs. This project will generate data that will allow manufacturers to design springs they know will work and that will be optimised for weight, life, relaxation resistance etc. without the need for a series of expensive and time-consuming tests.

IST will also be looking at increasing the number of standard materials included in its design software, starting with duplex stainless steels this year and hopefully moving on to more exotic materials such as nickel, cobalt and titanium based alloys - increasing the demand for these lesser used but highly beneficial materials. This inclusion will remove much of the assumption and testing from the design of an optimised spring, streamline the design process and increase the confidence of spring manufacturers and their customers that their spring will be able to work as desired for its entire life. All research reports will be published exclusively to IST members and the performance data will be incorporated into the IST's spring design software, Spring Calculator Professional.

There is also a need to capitalise on the major advances in metallurgical research that have occurred over the last number of years. Classes of materials such as metallic glasses and high entropy alloys have shown great potential as they come through the early stages of their development. High tensile strengths and yield strengths paired with good corrosion resistance and densities close to that of steel will give these alloys the potential to be future spring materials and IST plans on being in the vanguard. Wire manufacturers should be able to increase their portfolio of materials, using current manufacturing techniques, while giving the customers exactly what they need.

IST understands the importance of introducing new advances to the industry in a non-disruptive way. Minimising investment costs while providing manufacturers and their customers with improved options is the goal. In 2016/17 IST headed a research partnership named SPLICE looking at manufacturing springs from fibre reinforced rod using current coiling methodology for this reason.

IST spring testing facilities at Sheffield, UK



The 5Ps of safe work - use of star pickets to stabilise temporary fencing

Digging or penetrating into the ground has the potential to impact underground services like electric cables and plumbing, regardless of the type or depth of activity.

A common, seemingly low risk activity is the installation of star pickets into the ground to stabilise temporary fencing when a cloth is used over the fencing to provide security for the site. An unfortunate side effect of using cloth is that it can act like a sail during windy conditions and pull the star pickets and the fence out of the ground.

Regardless of whether you feel the installation of a star picket into the ground is low risk due to likely shallow depth of installation, this activity has the potential to damage underground services and potentially result in injuries to people.

The Dial Before You Dig service is a free service to use and obtain information about the indicative location of underground services (assets) in and around your work area. The information around alignment and depth provided by this service is indicative. As well, over time, ground contours change and therefore the depth of cover to an underground asset at the time of installation may differ to the actual depth at the time of your activity. Applying the 5Ps of Safe Work will assist in preventing damages:

5 Ps of Safe Work

Plan - Plan ahead by lodging your Dial Before You Dig (DBYD) enquiry at least two business days before starting any excavation to ensure you have the correct information and safety measures in place.

Prepare - Prepare by reviewing the utility plans and contacting the utility if you need assistance. Look for onsite asset and infrastructure clues such as pit lids, marker posts and meters. Engage a DBYD Certified Locator which includes undertaking electronic location prior to potholing.

Pothole - To establish the exact location of all underground infrastructure(s), pothole if permitted using the Asset

Owner's stated method as specified on the Asset Owner's plan and / or information pack.

Protect - If potholing has occurred, protect the infrastructure by using various methods such as communicating to all working on site, erecting barriers and / or marking the location of the exposed infrastructure.

Proceed - You should only proceed with your excavation work after you have planned, prepared, potholed (unless prohibited) and have protective measures in place.

Using Dial Before You Dig and applying the 5Ps can aid in the prevention of incidents like the images below (thanks to ATCO Australia), showing the damage to a gas pipeline from a star picket.

Visit the Dial Before You Dig website for further information www.1100.com.au



Photo showing damage to gas pipeline from a star picket (ATCO Australia)



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Company profile - Concept Wire Industries

Since 2001, Concept Wire Industries has grown into one of Australia's largest manufacturers and suppliers of wire and wire products, with volumes exceeding 3,000 tonnes per annum. Their range of wires includes hard drawn low carbon, galvanised, baling, high tensile, stainless steel, spring and annealed tie.

All wire from Concept Wire Industries is available in a variety of forms from small, rewind coils, to full size, one tonne stems. They also provide a variety of cut lengths and formed products. They manufacture and supply the majority of their product range using Australian-made wire.

From smaller diameter wires for the printing or apiary industries, through the full range of baling wires for the recycling industry, up to the larger diameters used in the automotive and engineering fields, Concept Wire's stock of quality wires, modern production equipment and technical expertise ensures they provide a suitable solution for a variety of needs.

Concept Wire Industries also provide handy product tools

for their customers:

The 'Calculators' section on the Concept Wire website includes



an online Part Number Calculator to assist in creating orders ahead of time. Customers can specify wire dimensions and select from a list of available wire types to see the product part number.

They also provide a Wire Weight Calculator (also known as the Kenco Calculator) as a companion to the Part Number Calculator. The Kenco Calculator simplifies the process of working out how many pieces of wire you can get for a specific weight. The calculator can also assist in determining the weight of orders for freight purposes.

In addition, a table of wire gauges and dimensions covering the more commonly known standards is available on the website. Customers can cross-reference a wire dimension against both its gauge and which standard it corresponds to.

For more details: www.conceptwire.com.au

Company profile - R. E. - wire working and mesh production



R.E. Walters is one of Australia's oldest manufacturers of quality wire and metal fabricated products.

From humble beginnings back in 1899, Richard E Walters became a stall holder at the original Eastern Market, corner of Bourke and Exhibition Streets Melbourne, specializing in bird cages and lamp shades. As the business grew, it relocated from the Market to Little Collins Street, and finally to Richmond.

Over the years, R.E. Walters changed ownership to the Young family, and in the early 1960's, to the Porter family. Throughout this next period refrigeration, shelving and baskets were to become some of the main products being made, and the company introduced its first plastic coating line.

In 1985 the company had another change of ownership to the O'Malley family. Still in the family today, R.E. Walters has seen many changes over the last 25 years. A partial acquisition of Andrews Wire in 1990 saw R.E. Walters relocate to larger premises in Footscray and again in 1994 to their current 6000 square metre site in Sunshine.

Their first CNC wire forming machine was purchased in 1996, with many to follow including CNC mesh machines and robotics. With the acquisition of Shinex Wire in 2001, and a partial acquisition of Astor Wire in 2007, R.E. Walters has grown to become a leading Australian manufacturer.



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Company Profile – Whites and Frauenfelder Gates



Australian family-owned and operated, Whites is a family business with its roots strongly embedded in steel, wire and fencing products since 1972. Today, Whites Rural takes up the mantle as Whites' specialist rural arm signifying a deeper, long-term commitment to the needs of rural Australia.

This growth took a leap forward when Whites joined forces with Frauenfelder in 2014. The partnership brought together over 100 years of rural fencing experience, combining Whites' national sales and distribution network, with Frauenfelder's manufacturing expertise.

Their vision is to bring greater value to Australian farmers and fencing contractors through innovative, high quality products, and friendly, professional service.

Frauenfelder is the only regional manufacturer of farm fencing wire in regional Australia with 30 employees working full-time.

Contact information: www.frauenfelder.com.au



Manufacture of rural mesh at Frauenfelder Gates' Albury factory

M-Lokk - wire mesh fencing

Chain wire fencing is used in a variety of applications, from domestic to commercial. However, it's in the commercial environment, specifically in the fish farming industry, where secure and strong chain wire fencing is needed.



To cater to this need, UMC Mesh Industries Group (NZ) has developed a patented knuckled edge finish for chain-link called M-Lokk. M-Lokk was developed primarily for the aquaculture industry (fish farming) where there is a demand for a more secure and stronger chain-link mesh. It can also be applied to industries such as mining, sporting and security.

Specifications:

- Manufactured in rolls up to 12 metres wide and weigh up to 1,500kg
- Can be produced in several different types of wire like copper, galvanized or plastic-coated material
- Testing has shown that the M-Lokk Knuckle offers more than 3 times the strength over conventional knuckles

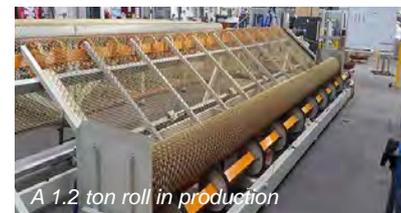
The patented selvedge edge allows for cable, rope or other products to be integrated into the mesh edge. The ability to have a support wire built into the mesh - and not attached externally or with additional fastenings - means faster assembly times and a stronger and safer product.

For aquaculture applications, the copper wire used in M-Lokk is sourced from Japan and is 100 per cent recyclable. The major benefits in using copper include the lack of cleaning due to its inhibition of biofouling and its strength, which virtually eliminates losses from predator attack.

W: www.meshindustries.com



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Machinery Report – ProTUBE



Eurolls - Preventative maintenance vs Corrective maintenance with SMART CASSETTE 4.0

EUROLLS adopts Digital Integration, Industry 4.0 and

various other Automation Systems to enhance and simplify its manufacturing process to the benefit of the final end users. This continuous investment in Research and Development provides EUROLLS with increased flexibility, higher quality standards and significantly improves its manufacturing efficiencies.

During the recent Exhibition show in Düsseldorf, Germany, EUROLLS introduced several new developments.



Exhibited was its latest innovation, the prototype "SMART CASSETTE 4.0". This new "SMART CASSETTE", launched in partnership with Udine University, features an enhanced heart with digital sensors that are able to monitor and analyse effective production performances. EUROLLS "SMART CASSETTE 4.0" is remotely accessible by tablet and/or smartphone and sends users a notification when it detects anomalous values in the production process (i.e. temperatures, vibrations, wire dimensions etc.). The system is fully compatible with a 4.0 data logging system to maximize the benefits in terms of production information.

Thanks to this new technology, it will also be possible to track the real working time of each cassette, providing users with the actual working life of their rolls (in tonnage), which is one of the most frequently asked questions by customers. This newest modern innovation was designed to give customers a Preventative Maintenance solution, as traditionally, the Cold Rolling Cassettes, to date, used merely a Corrective Maintenance approach.

This development is perfectly integrated with EUROLLS Rolling Machinery, with HMI, that are enhanced to receive the data coming from the cassettes for the proper total system management. Last but not least, in an environment where customers are becoming more and more cost conscious, EUROLLS is able to offer this latest technological advance at an attractive price.

The prototype is being tested currently and shows promising results.

For further information: 08 8363 1311 or info@protube.com.au

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08 8363 1311

Automating Pipe and Tube processing

Profifeed Technologies in Dandenong South, Victoria, have developed a range of automatic saw and measuring stop systems suitable for transforming your saws into simple to use, high-speed, high-productivity workstations.



Their ProfiStop range are easy to use measuring stop solutions for your saws with advanced productivity functions to speed up production as well as streamline the management of all cutting jobs. It is designed to give your cutting production the benefits of Industry 4.0 automation while remaining an intuitive and simple to use product.

According to Sales Manager Micah Rees "we supercharge your cutting productivity by hundreds of percent as well as streamline all your production management from order to finished parts"

Whilst their range includes products such as the "ProfiFeed® Cutting Line" suitable for high volume pipe and tube cutting, it also includes systems which would benefit smaller post and gate manufacturers.

Such a product is the ProfiStop Basic®, a simple to use heavy-duty measuring stop for your saws. It is designed to be a no frills, simple product but with heavy-duty capacity and full automated measuring stop productivity for your production.

While cutting edge manufacturers are exploring the benefits of 4.0 automation many smaller manufacturing enterprises are still trying to improve their productivity using equipment and systems installed 20 to 40 years ago. It could be time to relook at your processing systems to be able to leap into the 21st century.

More Information www.profi-stop.com



Training Award



The Training Award is still available this year.

The final application date is June 30, 2019.

All member companies may submit applications to reward one or more of their staff whom they believe are deserving of recognition for their hard work or inventiveness in the wire industry.

The aim of this award is to keep good people in the wire business by providing them with the means to add to their knowledge of the industry. It's all about education and support for your employees to improve their worth to your business and to the industry as a whole.

So, if you have someone within your ranks whom you would like to recognise for their achievements or dedication, please put their names forward, and we shall guide you through the application process. The Training Award Criteria is available in the News section of the AWIA website.

http://www.wireassociation.com.au/sites/wireassociation.com.au/files/AwardCriteria_2017v4.pdf

Please remember that the Award is available to all staff - internal, external and factory floor, and is a cash grant of \$2500.

Please contact: richard@wireassociation.com.au

Aluminium Cantilever Gates



Cantilever gates have traditionally been categorized as industrial installations due to the size and weight of the gates which are manufactured from steel. So an aluminium option is the obvious next step in the progression of these types of gates.

The TonkaTrak has been developed by Edgesmith Ltd (NZ), with the objective of being able to offer a product which is attractive to both the commercial and residential market. The advantages over the traditional steel cantilever gates are numerous. Aluminium cantilever gates are much lighter than the steel version, which in turn drastically reduces the installation time and therefore cost, due to the concrete pad which requires a much smaller footprint.

The monorail extrusion has been designed in such a way that simplifies the fabrication process considerably, whether you are welding either a 50mm or 100mm square frame to the monorail.

There is also the advantage of having an integrated racking channel built into the monorail, eliminating the need to install racking on site. The carriages (also aluminium) are fitted with self-lubricating nylon wheels which fit snugly into the monorail.

Edgesmith have found that gate sag is not such a problem with this type of cantilever system, but wind loading could be! So choosing your design carefully to ensure your architecturally designed gate doesn't become a sail is important. Whatever infill you choose to install, ensure that there is sufficient airflow.

TonkaTrak

Aluminium Cantilever Gate System

CREATE YOUR OWN

ALUMINIUM CANTILEVER GATE

Together with the monorail (with integrated racking, ready for automation) and snug fitting carriages, you are now able to make and install your lightweight aluminium cantilever gates with ease.

For further details contact Edgesmith (NZ) at +64 9 427 4980 or e-mail crew@edgesmith.global

WWW.EDGESMITH.GLOBAL

Consider specifying fusion bonded wire



Fusion bonded wire fencing is generally used in areas where high resistance to impact, corrosion, and humidity are important. It is a form of fencing that is built to last.

Bekaert is a steel wire transformation and coatings business which produces a version of bonded wire fencing using vinyl coated chain links. Coated using a polyolefin coating, the galvanized wire is first heated, then coated, causing the wire and the plastic to bond together, creating a better protective coating to prevent moisture from penetrating to the steel core of the wire.

'Bekaert PVC fusion-bonded wire' is a commercially produced colour coated wire for the residential, commercial and industrial chain link fence industry and is compliant with Australian Standard 2423. Galvanized steel core wire is coated with polyolefin elastomer to create a colour coated wire product. This formulation is also designed to handle any out-gassing from the zinc coating as a result of heating the wire during the coating process. This effectively eliminates any adhesion problems.

'Bekaert PVC fusion-bonded wire' is flexible, chip resistant, offers outstanding adhesion, greater UV stability and abrasion resistance. It is also not permeable to moisture. The coating is decorative, protective and doesn't require an overly thick extruded coating which aids "see thru" visibility for security applications and provides less wind resistance.

Bekaert are sponsors of the AWIA

Contact Darren Edmunds

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If you are intending travelling interstate or overseas this year, it could be worthwhile combining your travel with a visit to one of the trade exhibitions below to discover innovations which could improve efficiencies and productivity in your business.

2019

March 13-16 Fencetech

Indiana Convention Centre Indianapolis
 Indiana, USA
www.americanfenceassociation.com/fencetech

April 3-5 Cable & Wire Expo

Hyderabad, India
<http://www.wire.messe.in>

May 13-16 Interwire Trade Exposition

Georgia World Congress Centre, Atlanta,
 USA
www.interwire19.com

May 14-17 National Manufacturing Week

Melbourne Convention & Exhibition
 Centre, Melbourne, Victoria
www.nationalmanufacturingweek.com.au

May 15 Member Dinner

Melbourne

May 16 AWIA 1 Day Conference

Melbourne

May 22-23 Hire19

Melbourne
<http://www.hire19.com.au/>

June 4-5 Wire & Cable Expo 2019

Tianjin, China
<http://www.wirecable-expo.com>

June 11-13 Wire & Cable 2019

Guangzhou Shi, China
<http://www.wire-cable-china.com>

June 18-20 Wire Russia 2019

Moscow, Russia
<http://www.wire-russia.com>

July 24-26 ASIAL Security Exhibition & Conference

International Convention Centre Darling
 Harbour, Sydney
<https://securityexpo.com.au>

August 14-16 Wire & Cable Vietnam

Saigon Exhibition & Convention Centre
 Ho Chi Minh, Vietnam

September 17-19 Wire & Cable Trade Fair for South East Asia

Bangkok, Thailand
www.wire-southeastasia.com

October 1-3 SMI Metal Engineering Expo

Pittsburgh, Pennsylvania, USA
<http://www.metalingengineeringexpo.org/>

October 15 AWIA 1 Day Conference & AGM

Location not set

November 19-24 World Engineering Convention

Melbourne Convention & Exhibition
 Centre, Melbourne
www.wec2019.org.au

December 5 AWIA Christmas Dinner

Melbourne

December 12-14 India Fence Expo 2019

Chennai Trade Centre, Chennai (Madras)
 India
www.fenceexpo.com

2020

Jan 14-16 International Exhibition for Perimeter Protection Fencing & Building Security

Messezentrum Exhibition Centre
 Nuremberg, Germany

March 30-3 April International Wire & Cable Trade Fair

Fairground Dusseldorf, Germany

September 23-26 All China - International Wire & Cable Industry Trade Fair

Shanghai New International Expo Centre
 Shanghai, China

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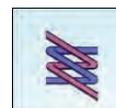
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