

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

# THE LINK

## COPPER ALLOY MESH

Worldwide consumption of total marine products has reached nearly 200 million tonnes annually. Aquaculture will definitely need to play a larger part in feeding the world's population. What role will copper alloy meshes likely play in this scenario? See article on [Page 9](#)



## HUGE EVENT PROJECT

TFH Hire founder Owen Thomas, says the Commonwealth Games have created a new legacy for his family owned company. It has presented new opportunities and a number of challenges which had to be solved.

Read about the extent of temporary fencing TFH supplied during the games period on [Page 7](#).

## REDUCING INSTALLATION COSTS

Are there better ways to hang chain-link fabric on a very large project with long runs? We examine how fencing companies are tackling installation efficiencies in the USA. Details on [Page 5](#).



## DID YOU SEE THEM?

Darwin Company Framelock Barriers solves a crowd separation problem at the Commonwealth Games and remains largely under the radar, unseen by the millions watching the event on television broadcast. Read where the mystery panels were installed on [Page 5](#)

## MELBOURNE CONFERENCE

Planning has already commenced for the AWIA conference in Melbourne on the **18<sup>th</sup> September 2018**. An array of presentations will be arranged focussing on topics impinging on issues facing small and medium sized businesses. More in President's report [Page 3](#)



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## **VICTORIAN REPORT Tennis Court Fence Post Design**

Design recommendations for posts for club and commercial tennis courts was again discussed at the last Victorian fencing meeting.

Attaching shade cloth, and other promotional advertising banners has become more prevalent since the Australian standard AS1725 for Commercial tennis courts was released in 2010.

The decision was confirmed not to post on the website, drawings earlier commissioned from a structural engineer, due to the potential risk of these drawings not being appropriate for all sites.

Other factors such as soil and prevailing wind conditions can affect any final design and need to be considered.

The meeting resolved to form a working group to prepare suitable information to assist councils, clubs and other stakeholders in planning commercial and club tennis court fencing.

### **Tennis Australia's Design Guides**

Tennis Australia is also in the process of updating its National Tennis Facility Planning and Development guide which will become an on-line resource in the near future. Michael Blomer, Tennis Queensland's representative working on this updated document has advised it will include a recommendation that stakeholders seek an engineer's advice and design input for all new tennis court fencing.

Michael stressed the engineer's designs for fencing to all new or upgraded courts should allow for the possibility of wind-breaks / sight-screens to be attached to these fences in the future, even in the cases where the installation of these screens may not be part of the initial scope of works.

From his experience, often subsequent users of these facilities will be unaware if the fencing has been designed to support such screening or not, only to find out when the fences become damaged they were never designed to support them. Michael also indicated that existing fencing should be assessed by an engineer for the ability to support such screening before it is installed to avoid the fencing being damaged in high wind events.

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## **SOUTH AUSTRALIAN REPORT**

In March 2018 a meeting of the SA Sliding gate work group was held in Adelaide to discuss industry definitions intended to be listed in the proposed National Code of Practice for the Design, Manufacture and Installation of Metal Sliding Gates.

Representatives from Downee, Fencecraft, Secura Fence and Fabrication, Shean Steel and Fencing World worked on refining the already tabled industry common usage terms. Identifying and clarifying commonly used terms in gate automation will form the next step in the compilation of this code.



## **WESTERN AUSTRALIA REPORT**

Director/Secretary Richard Newbigin is looking forward to visiting WA members in Perth at the end of May.

With a tight schedule of 11 meetings in three days, there will be little time for him to hit the surf and fight off the white pointers at Scarborough Beach.

Richard will report on his visit in the next newsletter.



## **NEW ZEALAND REPORT**

In February, Richard Newbigin visited Christchurch and met with South Fence Machinery, Southern Mesh, Ullrich Machinery, Smartweld NZ and Arrow Nails.

This trip followed on from visits to members in Auckland and the Wellington region around the same time last year. Some members were very badly affected by the earthquakes in and around Christchurch, and the city itself still remains quite devastated in sections.

The machine building equipment at South Fence was most impressive, and we are pleased that they have joined the Association following Richard's visit. Ullrich and Smartweld are also pushing on with some interesting new products and we hope to be able to highlight those in future editions of the newsletter.

**NOTE FROM PRESIDENT**

Hello to all our Members and thank you to all who attended our Conference at Homebush on the 10<sup>th</sup> of May, especially the new members. What a fantastic day it was with a great list of speakers who challenged us to think about areas we could improve and who offered sound advice on the market and where we are headed.



There was some worrying advice about cyber security that had members cancelling social media accounts, changing their passwords and their birth dates! Some ended up years younger with a few keystrokes!

Mei Leong from Liberty OneSteel gave another great presentation on global, China and local economics and driving forces. It is always such a good source of information for members.

As always a huge thank you to all our sponsors for making a day like this possible. Also to Richard Newbigin and Brian Mullarvey for all their work on the association and Richard's tireless work pulling the conference together. These are really great events and I encourage all members to come along and get involved in the future.

Big shout out to Graham Braithwaite our treasurer who is convalescing at the moment. Wishing you a speedy recovery Graham.

See you all in Melbourne 16 - 18 September for the ASI Conference, our AGM / Conference and the always brilliant dinner that will follow.

I hope the rest of 2018 is good to all our businesses.

*Charles Johnstone*

**NEW MEMBERS**

We would like to welcome the following new members:



ITF Hire is a NSW based Hire company located at Girraween, Sydney.

Amongst the services it provides to the building construction industry are the installation of "A" class hoardings

and temporary fence hire. The company also has a division providing liquid waste servicing.

According to ITF's Director Louis Younis they have a service orientated structure which "goes out of its way to deliver for its clients, creating unique service solutions".



More information: [www.itfhire.com](http://www.itfhire.com)



Badger Wire was established in 1943 by the Badger family and is still a wholly owned and operated Australian company.

Their Auburn, Sydney manufacturing plant produces aluminium, copper, brass and nonferrous alloyed wire. It is Australia's last remaining aluminium wire manufacturer and their specialty is manufacturing small custom lots and production runs.

According to M.D. Andrew Corish they are "able to offer flexible bespoke services in redrawing, custom tempers, spooling, rewinding and coiling processes due to the shop being fitted with a number of specialty custom services".



Website: [www.badgerwire.com.au](http://www.badgerwire.com.au)



**STAFF APPOINTMENT**

ProTube announces the appointment of Joe Calabretta as their Victorian sales and technical representative.

Joe has an electrical / mechanical background and wide experience gained from many years exposure in repairing and maintaining a range of manufacturing and processing equipment. A recent appointment as a Sales and Technical support specialist for an overseas equipment supplier has specifically exposed him to a wide range of metal working equipment.

From early on Joe has had an interest repairing and rebuilding classic cars which gave him initial grounding in problem solving and repairing equipment.

Joe is very excited joining ProTube and having this opportunity to assist and support wire industry colleagues with the help of the experts from ProTUBE's extensive network of top range equipment manufacturers.



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[www.protube.com.au](http://www.protube.com.au)

**Late notification received of two more new members - Bluedog Fences and South Fence Machinery - more information regarding these new members next issue**



### REPORT FROM AWIA DIRECTOR

It has been a busy few months since our January newsletter, with visits to several members in Christchurch (plus some potential new members there),

a Committee meeting in Adelaide, with Brian continuing his meetings with local members there to develop the gate code of practice, and a couple of trips to Sydney for committee meetings with Standards Australia.

The Association has welcomed several new members over the past three months, and you will note their details in both this, and our next, newsletter. It is encouraging that there is movement in membership numbers and indicates a vibrancy in both the wire industry generally and the Association in particular.

#### Revision of AS4687 Temporary Fencing & Hoardings

It's now nearing completion and should be passed on to the public comment stage during August with eventual release of the new Standard scheduled for May 2019. It is a long process and will be immediately followed by the drafting of a new Standard for anti-intruder, high security fencing, a somewhat larger and more complex project.

I am heading off to the UK shortly where I will meet with the Institute of Spring Technology for talks about further ways we can collaborate with them especially regarding access to their training courses and software design programs. This visit is part of our brief to expand the recognition of the Association both locally and overseas.

Our May Conference in Sydney attracted several new members and I hope they felt they received a warm welcome. Thanks to all members who attended both the conference and the dinner. Our next conference is on 18 September in Melbourne and will be held in conjunction with the ASI Convention. Please put the date in your calendars.

[richard@wireassociation.com.au](mailto:richard@wireassociation.com.au)



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### ZOMBIE COMPANIES FORCED TO CLOSE

Over producing and unprofitable businesses in China's shipbuilding, mining, steel and cement industries are being forced to close or downsize.

Zombie companies are economically unviable businesses often in industries that have severe overcapacity and have been kept alive long after they should have died, thanks to money poured in by Local governments and banks.

Pulling the plug on such enterprises has been a priority since 2016 when Premier Li Keqiang released a report indicating it was no longer in China's interest to subsidize poor performers.

#### Magnitude of cut back

The nation has plans to cut between 100 million metric tonnes and 150 million tonnes of steel capacity and 500 million tonnes of coal capacity over a 5 year period. The slashed production will mean that 500,000 employees in the steel industry and 1.3 million employees in the coal industry will lose their jobs according to the Ministry of Human Resources and Social security.

With so many jobs ending, the way displaced workers are redistributed and retrained is expected to be a major challenge for the government in the years ahead.

In a less dramatic way but equally painful for those involved, the Australian government faces the challenge of retraining and creating employment for those workers affected by the demise of the car manufacturing industry.

*Source Du Juan / Guo Xizhong China Daily*

### SOUTH AUSTRALIA COMMITTEE MEETING

The National committee met on 14<sup>th</sup> March 2018 in Glenelg at the Adelaide Scuba centre. President Charles expressed his thanks to Mr Lance Vater of Vater Corporation for making the venue available to the Association.



The committee reviewed the current State of Play report presented by Director / Secretary Richard Newbigin as well as approving the annual budget for 2019.

It was confirmed that the Association would hold a one day conference in Melbourne following the ASI convention which will be held at the Park Hyatt Hotel.

## Hanging Chain-Link in the USA



With the high costs of labour, fencing companies are always on the lookout for ways to improve their installation efficiencies especially on larger fencing projects. US companies claim to have been able to double their output with half the crew by using chain-link dispensing equipment such as L&C Enterprises' "Installink Fence Dispenser" and EZG Manufacturing's "Fence Hog".



These units easily attach to a Bobcat, and hold 30 metre rolls of chain-link fabric. It comes equipped with a hydraulic unit to control a side kickout and stretching arm which ensures the fabric remains level. The arm is used in tensioning the fabric to an end post. A crow's nest allows access to the top of the fencing roll making clipping easier.

More information: [www.1centerprises-usa.com/chain-link-fence](http://www.1centerprises-usa.com/chain-link-fence)

## FRAMELOCK BARRIERS™ ring closing ceremony at Commonwealth Games

Framelock's lightweight modular hi-tensile aluminium crowd control barriers were recently installed at the Games' closing ceremony on the arena at Carrara stadium on the Gold Coast. You may not have seen them on the TV presentation of the closing ceremony as the units were powder coated a special satin black to ensure they were unobtrusive during the broadcast.

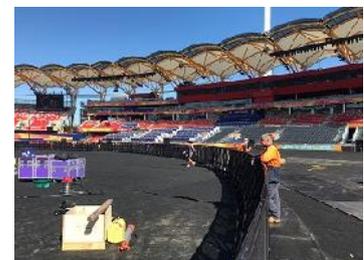
The barrier panels were installed to form a continuous 64 meter diameter circle providing separation between the performance structure and the athletes gathered on the central arena. 200 of the 1.20 meter high barriers were manufactured at Framelock's Darwin and New Zealand facilities.

Colin West Director of Framelock Barriers said his company was extremely excited to have been awarded this contract from the overseas event producers Jack Morton World Wide who stage events all over the world.



Framelock Barriers' flat pack design and being easy to erect assisted with meeting the tight installation time constraints associated with the event.

More information contact Colin West:  
[cw@framelockbarriers.com.au](mailto:cw@framelockbarriers.com.au)





## Labour Market Implications of the Industrial Revolution 4.0

The Industrial Revolution 4.0 is expected to drastically transform not only Australian manufacturing processes but the industrial relations framework of the business models that underpin them. Australian workforces will be reskilled, retooled, relocated and restructured, requiring business owners to exercise foresight into how existing industrial relations models will need to adapt to the technological changes on the horizon.

Coined in 2011, the term Industrial Revolution 4.0 describes the next evolutionary step in manufacturing, enabled through the rise in computing power and device connectivity. To briefly recap, the Industrial Revolution 1.0 started through the ability to harness steam power. Then, the Industrial Revolution 2.0 arose on the back of a production line such as the Model T Ford assembly plant. Towards the end of the 1960s/early 1970s automation began to emerge in manufacturing which brought on the Industrial Revolution 3.0.

The Industrial Revolution 4.0 will give rise to unprecedented manufacturing methodologies and processes characterised by technological advances, increased data connectivity, increased data acquisition and new pathways for creative thought.

In this three part series, Partner of FCB Workplace Law, Matthew Robinson, examines the Industrial Revolution 4.0 through the lens of Australian Employment law and Industrial Relations impacts on the Manufacturing Industry.

Download Part One at: <http://www.fcbgroup.com.au/news/industrial-revolution-4-0-part-one-macro-labour-market-implications/>

For any questions, please contact FCB Group on **+612 9922 5188** or at [mnr@fcbgroup.com.au](mailto:mnr@fcbgroup.com.au)

## For small firms it can be better to co-operate rather than compete



This challenging claim has been made as a finding in the Business of Tomorrow Report commissioned by the Westpac Bank and conducted by Deloitte Access Economics.

According to the report there is a sea change blowing through Australian business and it's about collaboration. The report found that through complex supply chains many businesses rely on other businesses – more than half the small businesses receive most of their income from other businesses.

### MINDSET SHIFT SINCE FINANCIAL CRISIS

Alastair Welsh, GM Commercial Banking at Westpac says “there has been a shift of mindset since the financial crisis as business owners look to where they can generate growth...Historically, business owners have been prepared to back themselves on their own, they are now more actively looking to collaborate with other businesses.

This could mean working in joint ventures or working in other partnerships. People realize they have certain expertise and skills and there are other people who specialise in different skills in particular areas and we are seeing a strong desire for people to collaborate and work together to drive top line growth”.

An example where some in the fencing industry already have embraced this changing mindset is where larger fencing companies who once manufactured all their industrial gates in-house have outsourced the manufacture of gates by smaller companies specializing in gate making.

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## Temporary Fencing Clamps Testing

Following the publishing of the article on the testing of temporary fencing clamps in the January 2018 issue of Wire Link, the Temporary Fencing Association (TFAA) is now seeking more details regarding strength required by clamps to hold and maintain fence panels in place even under adverse conditions such as strong wind gusts.

The testing of 15 different clamps supplied by fitting manufacturers, suppliers and hire companies was carried out on our behalf at the Vater Corporation testing facilities in Adelaide. As would have been expected, in many cases the metal thickness of the clamp was a significant factor in its strength. What was also evident was that the fittings designed with pressed deformation tested better than those having flat face surfaces even though they were of similar metal thickness.



An example of how additional strength was obtained by having pressed deformations in the design of the clamp was highlighted in the test results of the five 4040 clamps. The force applied to these clamps to achieve a fail rate varied from 350 kgs to 700 kgs. The fitting without pressed deformations required much less force before it failed than the clamp having well-formed deformations. The metal thickness of all 4040 clamps only varied from 3.8mm to 4.1mm.

The next step in this project will be to ascertain what minimum forces clamps need to be able to withstand related to the wind speeds set out in Temporary Fencing Standard AS4687.

This information will assist those specifying the strength of fittings required in particular circumstances as well as purchasers and suppliers of temporary fencing clamps in general.



## TFH HIRE SERVICES - OFFICIAL SUPPLIER AND SPONSOR OF THE GOLD COAST COMMONWEALTH GAMES



TFH Hire Services were the Commonwealth Games' Official Suppliers of Security Fencing and an Official Sponsor. TFH supplied and installed over 22,000 meters of perimeter and security fencing and over 2600 bulk bags weighing 1.9 tonne for hostile vehicle mitigation to support the delivery of Games overlay.

TFH Hire Services founder, **Owen Thomas** said the company was proud to be a sponsor of GC2018. "Over the years, TFH Hire has been involved in many exciting and unique events although we recognise GC2018 as the most prestigious to date". With their Head Office based in Logan for more than 20 years TFH now has 40 branches nationally employing over 500 people.

Owen said "this event has created a new legacy for our family company, presented new opportunities and challenges in which we have succeeded. The security panel we created for the games is the first of its kind with the main focus and purpose on event goers and athlete safety."

As a market leader in the supply of temporary hire products to the events industry he said "TFH Hire Services were very proud to be the Official Security Fencing Supplier of the Gold Coast 2018 Commonwealth Games."



**Photo Left:** Temporary fence panels ready to be installed

**Photo Centre Left:** TFH founder Owen Thomas with wife Mary and Games mascot "Borobi"

**Photo centre Right** Kurt Feanley competing in marathon

**Photo Right:** CCB's outside Carrara stadium

### FAKE DATA SCANDAL

Kobe Steel, Japan's third largest steel maker has purportedly made an admission of falsifying inspection data on an estimated 20,000 tonnes of metal shipped to 200 customers in the year up to August 2017.

Supposedly the steel maker has sold metal which did not match the quality standard it had promised clients for use in products ranging from cars to aircraft.

According to newspaper reports "the inspection data on products, including those on strength and duration of the materials were rewritten by workers who were "under pressure" to meet a deadline when the actual data failed to meet customers specifications".

It is a salutary warning to Australasian wire and fencing product manufacturers to be on their guard should they ever deal with product sourced from unclear origins and with minimal quality assurance. **Source Xinhua-AFP & Financial Times 11<sup>th</sup> October 2017**

### ANTI INTRUDER FENCING STANDARD



During May 2018 Standards Australia indicated that expressions of interest from interested stakeholder organizations will be sought shortly to serve on an Australian Standards technical committee charged with the task of drafting the new standard "High Security Anti-Intruder Fences in Welded Wire mesh and Open steel Panels".

The committee will be constituted prior to a meeting at Standards to finalize the scope of the project. The proposal for the creation of a standard was compiled by John Morris on behalf of the AWIA. John is currently assembling a working group to work on the drafting of this document. Parties with an interest in high security fencing can contact him to learn how they can have an input in the development of this standard.

More info  
[jmorris@profence.com.au](mailto:jmorris@profence.com.au)



### NON CONDUCTIVE TEMPORARY FENCING

**Oxford Plastic** has now available a safe alternative to metal barriers for use on high voltage work-sites.

**The EnduraFence** is made of non-conductive plastic and is suitable for use in substations, along railways and areas where workers could be exposed to electrical current.

- Made of tough blow-moulded plastic
- Easy to transport, deploy and uninstall.
- Can be installed by just one person.
- Durable and recyclable for multiple jobs and worksites
- Built-in strength ensures panel won't bend out of shape.
- Moulded to stack neatly on a pallet with built-in grooves
- Anti-climb design with narrow apertures.

**The EnduraFence** has been designed to separate workers and public from risk of injury on hazardous construction areas, deep excavation and street works sites. It is ideal for when metal fencing cannot be used.

Can be used in conjunction with current anchor blocks and links directly to metal temporary fencing.



For more information contact:  
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## COPPER ALLOY CHAIN-LINK AQUA MESH

### Did you know?

- A growing population needs to eat; protein is an important dietary requirement, and fish are a valuable source of protein. 75% of world's fisheries are fully exploited or worse.
- In the last twenty years the consumption of total marine products has doubled to nearly 200 million tonnes
- Aquaculture will need to account for half of global demand by 2030.
- As the demand for seafood has skyrocketed the only way to meet future demand will be through aquaculture.



**Photo Left:**

Brass chain-link fabric being manufactured on a Shin-ei Tee 5 bed double spiral machine in Japan (Courtesy Shin-ei Tec Co)



**Photo Right:**

Copper alloy mesh pen ready for lowering into the water in Greece (Courtesy Nireus)

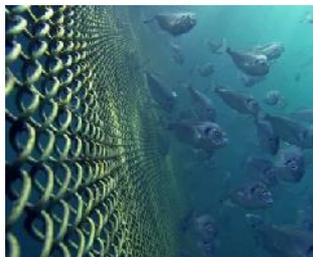
**Photo Below:**

Shows mesh panels being joined together with copper alloy wire. Brass is strong but malleable. (Courtesy Nireus)



**Photo Centre:**

Parasites find it hard to attach to smooth alloy surface



**Photo Below:**

Rope nets can be torn by predators and encourage biofouling. Diver repairing tear (Courtesy of Oceanografica.com)



However some sectors of the industry are facing increased pressure on some of its current practices and will be expected to ensure sustainable management of the aquatic environments. The use of copper alloy mesh materials in net pen containment has proven to be a promising practice in reducing costs and reducing the reliance on chemicals in the fish raising cycle in a number of countries around the world including Japan and a number of European countries.

### What sets the copper alloy netting apart?

- Its antimicrobial properties destroy bacteria, viruses, fungi, algae and other microbes.
- It doesn't attract attachment of algae like conventional nylon nets. Algae build up on conventional nets requires mechanical or chemical cleaning
- Does not restrict the water flow in fish cages
- Less likely to tear allowing fish to escape
- Reduced likelihood of predators from gaining access to the pens. Fish farmers in Cahora Barra Lake in Mozambique even claim that their copper wire nets have prevented attacks from local crocodiles.

Aquaculture has a long history in Japan, beginning in 1927 and it now accounts for almost half of Japan's coastal fishery production. Likewise, the use of copper alloys in fish pens. The Japanese company, Shin-ei Tec supplied 7.0 meter wide brass wire chain-link fabric for making pens as far back as 1972. According to Mr Shuji Nakamura at Shin-ei, they have manufactured chain-link as wide as 15.0 metres however, the average width seems to be around 10 -12 metres.

In Australia expansion of the industry is under a microscope due to concerns with the pollution of the close inshore bays and inlets. Some industry experts see the longer term future of the industry tied more to open sea aquaculture.

No doubt with the future expansion of this industry it is conceivable that there will be more opportunities for the use of copper alloy wire mesh as the industry grows. **Already in New Zealand one of our members, Mesh Industries Group, provides copper alloy chain-link fabric for the aquaculture industry. More information will be provided in a later newsletter.**

## PIPE & TUBE NOTCHING - Can improve appearance of gate frames

Common Industry practice when preparing internal pipe frame ends for welding tubular gates has been to squash the pipe ends prior to welding. The purpose of this practice is to achieve a positive contact between the outer gate frame and the internal pipe supports.

Besides squashing the pipe ends to achieve a positive contact there is another method available, generally referred to as “notching”.

This method not only provides a snug fit to the outer frame, it can enhance the visual appearance of the gate.



Pipe and tube notching can be achieved by using a variety of methods and equipment.

Firstly, there are basic machines which are attached to power tools then there are multi holed powerful coping machines capable of producing 90 degree notches in pipe ends in diameters up to 50 NB using hardened die sets.

Belt sander notchers are another type of equipment available to carry out this task. Belt sanders utilize an abrasive belt system mounted on contact rollers which act as a matrix which determines the diameter of the notching.

There are different sized mandrels for each sized pipe; some equipment is capable of notching up to 65NB pipe.



Lastly, there is Press Notching Tooling to suit a variety of pipe sizes and notching combinations, which allows for both sides of the pipe to be notched in one action. This type of notching equipment is easy to use and it eliminates the need to turn the pipe 180 degrees to notch the opposite side and therefore avoids misalignment. Otter Fencing in Victoria imported this press notching tooling some years ago from the USA.

According to GM Glenn Otter, “their equipment has not only reduced gate welding times, it has also improved the strength and appearance of the gate frame”



### Update on Temporary Fencing Standard - AS 4687-2007

Revision of AS 4687-2007 Temporary Fencing & Hoardings is continuing with meetings of the CE008 Technical Committee held on 7 March and 11 May 2018, interspersed with a number of working group meetings. The project has expanded in scope, as the TC focuses on changes and additions required to the original Standard.

The proposed new Standard should be available for **public comment towards the end of July 2018**, with publication slated for May 2019.

Any members requiring further information can contact Richard Newbigin or Brian Mullarvey. Please note however that discussions held within the Technical Committee are confidential in nature.

Contact: [richard@wireassociation.com.au](mailto:richard@wireassociation.com.au)



### CHINA REPORT



Our China correspondent recently visited Hebei province and we were expecting an update on the reported closure of some of the polluting steel and galvanising plants situated near Beijing.

Unfortunately, he has now gone missing and is rumoured to be currently holidaying in Hawaii. He has not texted a late report on the eruption of the Kilauea volcano in Hawaii's Big Island so we will have to wait till next issue to hear about fall out of the Chinese government's actions to reduce pollution near heavily populated cities.

### Hoardings in shopping centres. The history of and the path forward.



For as long as there have been retail shopping centres, there has been a need to barrier retail shops under construction.

A hoarding's primary purpose is public protection. In past years, several collapses have resulted in injury, in most cases with a trip to the hospital. Sadly, every collapse and injury was avoidable.

Poor construction methods, non-structural grade materials, plaster finishes used as structural anchoring points and zero engineering have been the cause.

Hoardings constructed using existing shopping centre finishes for structural connection remain the prominent method of installation; Engineers nationwide have confirmed this is a dangerous practice. The selection of Hoardings has often been based on price, not safety.

Australia Standard AS 4687:2007 Temporary Fencing and Hoardings, this standard does not adequately cover shopping centre hoardings. Driven by past events (collapses), industry is now seeking to change with the AS 4687 standard under review.

Greater emphasis on general requirements, design, site analysis, and testing, are being considered. Shopping Centre owners Lend Lease and Westfield have been early adopters of systems such as TITAN's Engineer Certified counterweighted hoarding systems which provide safe systems and methods.

### PROFILE



In the mid 1990's Chris Ford who had been working for a number of years in the fencing industry, became a part owner of the Fencing & Gate Centre in Minchinbury in NSW.

At this time the business centred on roll forming, supplying metal colour bond panels to the fencing industry.

After a short time, Chris bought out his other partners and began expanding into other facets of fencing manufacturing. A powder coating facility was installed and the manufacturing of tubular fencing was undertaken.

Chris wanted to be able to promote his fencing products direct to the market and opened his first shop in Queensland in 2012 in the Brisbane suburb of Underwood. Other centres followed including Bathurst, Moruya, and Silverdale in NSW and in 2015 a Canberra branch was established at Queanbeyan.

A chain-link fabric machine was purchased in 2016 and the company commenced distributing a range of chain-link under the "Ozzylink" brand name.

The company continues to expand its footprint with the recent opening of its enlarged manufacturing and showroom facility at Underwood.

Chris has gathered around him a highly efficient and dynamic team of employees who share his vision for the company. He says he wants the company to be seen "as one of the industry leaders in use of technology and maintenance of quality standards."

Contact:

[www.fencingandgate.com.au](http://www.fencingandgate.com.au)

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## USA Pittsburgh Steel Plant Re-opens

U.S. Steel said it will restart a long-idled plant and call about 500 employees back to work as it anticipates higher domestic demand for steel because of new import tariffs announced by President Donald Trump. One of two blast furnaces and the steelmaking facilities at Granite City Works in Illinois will be

restarted. U.S. Steel said the plant has been idle since late 2015 and the restart process could take up to four months.

Asked about the proposed tariffs, Chief Executive Rich Fitzgerald said, "You know, trade agreements over the years have not really been a problem, going back through multiple administrations. I think, really, if they started enforcing the existing trade laws that would go a long way to doing it for all of our steel industry, so we're hopeful. We'll see what happens."

"There is no doubt that if we get a more level playing field, the opportunity to produce more steel is very real," Pittsburgh Mayor Bill Peduto said.

"Manufacturing is still very much a part of our economy, especially regionally," Peduto said. "And with advanced manufacturing, we can not only produce the steel but produce it in a way that the user is looking for much more efficiently and effectively than some of our trade partners."

**Source WTAE Pittsburgh PA News, Weather & Sports**

## Small businesses urged to check bank loan contract terms

The **Unfair contract terms and small business loans** report has been released by the Australian Securities and Investments Commission (ASIC).

The big four banks have committed to a series of changes to make sure small business loans of up to \$3 million entered into or renewed from 12 November 2016 are protected from unfair contract terms.

The unfair contract terms removed, or limited in use, from small business contracts by the big four banks are:

- unilateral variation: the ability to vary anything in the contract without agreement
- financial indicator covenants: used to trigger a default and debt recovery even if loan repayments made
- material adverse change events: the power to terminate the loan for an unspecified negative change in the circumstances
- entire agreement clauses: prevent bank being held responsible for conduct, statements or representations made to the borrower outside the writer contract
- broad indemnification clauses: borrower to cover losses and costs incurred due to fraud, negligence or wilful misconduct of the bank employees, agents or a receiver appointed by the bank.

The ASBFEO, Kate Carnell, will also continue to apply pressure on the rest of Australia's financial institutions, to make sure they too meet the unfair contract terms legislation.

## Fusion-Bonded Wire – When is it applicable?

Fusion-bonded Chain link fabric is woven from special coated wire supplied by Bekaert, a world leader in wire coating technology. The zinc coated steel wire is bonded with a high adhesion PVC coating to produce a product which has been developed specifically for chain-link fencing installed in sporting enclosures and for environments exposed to high temperatures or highly corrosive atmospheres.

Being highly resistant to impact abuse, it is ideally suited for the following applications

- Commercial and Club tennis court fencing
- Cricket nets
- Baseball nets
- Any sporting enclosure with consistent ball impacts
- General domestic and industrial fencing where superior impact resistance and corrosion resistance is required.



Fusion-bonded chain-link fabric is available from a number of leading chain-link manufacturers. For further information contact Protective Fencing or visit [www.profence.com.au](http://www.profence.com.au)

### CHANGE OF OWNERSHIP AUSTRALIAN MESH

A change in the ownership of Australian Mesh has been announced. The new owners are Thermakraft Australia Pty Ltd.

Australian Mesh locally manufactures Ausmesh300 Safety Roof Mesh at their two facilities at Dandenong in Victoria and Yatala near Brisbane.

New owners, Thermakraft Australia Pty Ltd, have synergies with Australian Mesh in that they both supply product to the roofing and construction industry. Thermakraft have a manufacturing plant in Auckland which supplies fire retardant self-supporting roof underlay.

Since joining the AWIA in the mid nineties Australian mesh have been an active industry member. GM Sue Dobson was the prime mover behind the development of an Australian standard for roof safety mesh.

In 2014 Sue gained the support of other industry stakeholders to submit the proposal on behalf of the AWIA to Standards Australia to create a new standard. Heading the working group and acting as the key drafter Sue saw the new standard published in 2015 as AS/NZS 4389.

It has been announced that the management team will remain in place continuing to provide the same personal service to the roofing industry as before.



### DUSSELDORF 2018 A glimpse into the future

Approx. 1300 National and international exhibitors from 53 countries showed their latest technologies, product components, state-of-the-art machinery at the Messe fairgrounds in Dusseldorf in Germany during April 2018. This show takes place every two years and again this year was well attended by a number of our own wire and fencing colleagues.

The Exhibition not only showcases static machinery displays and product offerings it also includes working equipment. Amongst the working equipment was an EVG reinforcing mesh welder. This EVG-ATT quick change machine however was only able to operate for more than 5 minutes at a time due to the huge amount of mesh sheets produced which needed to be moved.

Bliss and Reels' Juergen Arndt hosted a 13 person tour of manufacturing plants in Holland and Belgium at the conclusion of the exhibition. The group saw some of the latest technological advanced cutting and bending equipment at Schilt Engineering plants. According to Juergen there was a high level of confidence amongst the machinery manufacturers at the Wire Exhibition as most had substantial order books as many wire companies were considering updating equipment to take advantage of the latest technologies.

Andrew Lee from the Lee Bros Fencing Group also attended Dusseldorf. Andrew was particularly impressed with the materials handling equipment on displayed at the show. Andrew indicated that although many of our fencing companies have updated their primary processing equipment, we have not however, paid the same attention in investing in improvements in materials handling, both fetching, setups and clearance during the manufacturing processes.

More information:

Juergen@blissandreels.com.au    andrew@leegroup.com.au

### Where can you find information on corrosion behaviour of zinc and zinc / aluminium alloy coatings on steel wire?

The answer: In the **Australian Standard AS2423 - Coated steel wire Fencing Products**

Appendix C in the standard – "Guidance on Corrosion Protection" provides guidance on the effects of climatic and environmental conditions on wire fencing products. It also provides indicative service lives for a range of coatings.

Copies of this standard can be obtained from SAI Global phone 13 12 42.



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### MACHINERY REPORT

Italian steel processing equipment manufacturer Oscam has developed a hoop / spiral machine which can work steel from coil up to 16 mm and from bar up to 20 mm in diameter.

Located in Turin, Oscam have a long history in steel processing equipment reaching back to 1938 when they were the first in the world to create and patent an automatic bending machine.

Oscam's Model 88 spiral / hoop machine is a double speed machine equipped with an exclusive hydraulic release device for the production of special shapes.



Particularly suitable to process long spirals and micropales. The 88 can execute spirals and hoops with a minimal diameter of 140 mm up to 600 mm with its standard tools and with the fitting of a special tool, diameters up to 1500 mm.

More Information about the 88 Spiral machine  
[www.protube.com.au](http://www.protube.com.au)



If you quote the **AWIA ABN (95 602 035 937)** when you make any Qantas bookings (flights, cars or hotels) you will also be earning points for the **AWIA**. **These points can then be used for travel approved by National Committee**

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## VALE JOHN HOOPER

It is with regret that we note the passing of a 'spring legend', John Albert Hooper, who passed away on 28 February, 2018 at the grand age of 93. Hoops had a broad career in the spring industry starting at Whitelaws, before their takeover by Salters Springs in the 1950's. Salters sent John to India, where he played an integral role in setting up the Salters operations there, whilst passing on his spring making skills to the local workforce.

Returning to Australia, John joined Apex Springs as sales manager, before starting his own spring making business, Specialised Springs in Bayswater, Victoria. The business became highly successful, employing over 100 staff and producing high volumes of springs, clips and wire forms for the automotive industry and other major manufacturing companies.

He was diligent about keeping his machinery up to date, and, after putting the company on a steady footing, he would purchase a new machine every twelve months. He was a hands on businessman who kept his machines and factory in pristine order.

In 1986, Hoops sold Specialised Springs to Aust-Group Springs (now National Industries) and retired to the Sunshine Coast. He had taken a liking to the area after the Spring Makers Association of Australia, the pre-cursor to the AWIA, held their annual conference in Noosa in the early 1980's.

Hoops is survived by his daughter, Patricia, and partner, Judy.



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**MACHINERY REPORT**  
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The straightening rotor is driven by a three phase gear motor; the rotor speed is freely adjustable and has the advantage that the straightening machines can always be run in the upper performance range.

With options like the adjustable spinner, spray device for lubrication, chamfering unit, webserver for data exchange between office and machine or extension logistics like short length tray, the WAFIOS Straightening and Cutting-off Machines can be adjusted to specific requirements.



**More information contact:**  
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**CONFERENCE, SYDNEY  
MAY 2018**

A full program of top notch business presentations preceded the presentation of significant awards to two members for service both to the Association and industry.



Directory / Secretary Richard Newbiggin presenting Malcolm Michael with his Achievement Award.

Malcolm Michael was awarded a Certificate of Appreciation for his work on behalf of the AWIA over the past 20 years of membership including a significant stint as Director / Secretary.



President Charles Johnstone presenting Ray Otter with his Life Membership Award

Ray Otter receiving Life Membership of the AWIA for his enormous contribution to the fencing industry and assistance and continuing support of the AFIA. Congratulations to these two very worthy members.

Our conference program was highly informative with presentations on the Personal Property Securities Register, cyber security, global and local economic and steel industry update, pricing strategies and margin improvement, security licensing in NSW and a review of the industrial relations landscape should there be a change in government at the next Federal election.

A new member benefit was also unveiled which offers customised credit opinions on your new and existing customers not only to mitigate risk in trading with new customers, but also to enable review of existing credit limits to expand sales to existing customers.

The day was capped off with a networking dinner which, as you can see, was tremendously successful.



Dinner was held at “Ribs & Rumps” at Sydney’s Olympic Park. Over 20 members attended.

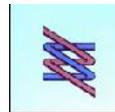


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Castle International  
Concept Wire Industries  
Doogood Powder Coating  
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Icoa Australia  
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Stainless Steel Wire and Mesh  
Superior Industries NZ  
Ullrich Machinery Company  
Wiredex Wire Products  
Wiretainers Pty Ltd  
Wire Displays NZ

## DATES FOR THE DIARY IN 2018

**June 6th-8th - International Spring Industry Exhibition**  
Guangzhou China

**June 11<sup>th</sup>- 13<sup>th</sup> - Wire & Cable 2018** - Guangzhou Shi China  
<http://www.wire-cable-china.com>

**August 27th - 29th - Wire & Cable Show**, Kuala Lumpur

**Sept 16<sup>th</sup>-18<sup>th</sup> - ASI / AWIA conference** - Park Hyatt  
Melbourne

**Sept 26<sup>th</sup>- 29<sup>th</sup> Wire China** -Shanghai China  
<http://www.wirechina.net/?list-458.html>

**October 1<sup>st</sup>- 3rd - SMI Metal Engineering Expo** – Pittsburgh, Pennsylvania USA  
<http://www.metalingengineeringexpo.org/>

**October 11<sup>th</sup>-12<sup>th</sup> Institute of Spring Technology Technical Conference** - Manchester UK  
<http://www.ist.org.uk/ist-conference-2018/>

**October 17th - Fencex Perimeter Security and Access Control Exhibition**  
Stoneleigh UK

**November 27<sup>th</sup>- 29<sup>th</sup> - Wire India** – Mumbai, India  
<http://www.wire-india.com/>



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## TRAINING AWARD

The Training Award is open for entries for 2018. The final application date is July 31, 2018.

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.

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](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.

[richard@wireassociation.com.au](mailto:richard@wireassociation.com.au)

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