



**Casting Industry –  
the career choice for  
makers, creators, and  
innovators**

## **Melting Moments – March 2023**

### **Presidents Report**

Welcome all to the first newsletter of 2023. We are looking forward to a big year with the conference being in Melbourne at the Marriot Hotel from October 26 to 28. Planning is well underway and if anybody is looking to present a paper or is willing to sponsor, please contact me and I will put you in contact with the appropriate people.

The AFI Website will be used to advise everybody on the progress of the conference, details on technical presentations will also be posted there as they become available. A link will allow you to register for the conference and book accommodation at the Hotel.

We hope to get a big attendance as I am sure many of you would like to take the opportunity to visit Melbourne during the Spring Racing Carnival.

Our Industry continues to be busy with most foundries quoting over 6 months lead time for orders. While this makes for a good order book, it leaves of open to customers going to other options when they need castings, may that be sourcing castings from overseas or substitution with machined or manufactured parts.

Foundry in a Box continues to be well received, we have got several demonstrations booked for secondary Colleges and Technical Schools. We have already had some success in getting staff into the industry through this initiative and are hopeful we will get many more.

Wolfgang Maier – AFI Victoria *President*

### **AFI National**

The start of 2023 is definitely a more positive start compared to 2022 now that the pandemic has been filed into history, albeit replaced with concerns over

the cost of living for a reasonably large proportion of the country.

From a foundry perspective, despite a number of companies ceasing trading, the order books for the 1st quarter are generally fairly strong, with many foundries continuing to quote 16 - 20+ weeks lead time for many products.

The electricity & gas pricing and supply for every State except WA has seen significant decreases in pricing for 2023 following Federal & State Government intervention through the implementation of a gas & coal price cap.

This measure was one of the many suggestions from the AFI and we are thankful of the decision. We will continue our contact with Chis Bowen, Ed Husic, Madeleine King and Assistant Minister for Energy & Climate Senator Jenny McAllister and the relevant Departments as members of the committees addressing changes in the medium to long term policies to decrease costs & CO2 from industry.

From an AFI National perspective we look forward to the 2023 conference being coordinated by AFI Victoria. The 2024 conference is planned to be hosted by CTNZ. Support from the majority of members attending these conferences will make the conferences worthwhile for both participants & sponsors.

Please remember we need to know the issues each member is facing to enable the State & National bodies to advocate on your behalf, to enable the AFI to represent the industry effectively.

I look forward to the opportunity to see you all in 2023 refreshed & ready for another big year of making, creating & innovating !!

Brett Lawrence – AFI National *President*

## Apprentices and Training

We have 3 Registered Training Organisations (RTOs) offering courses that are specific to our industry.

SkillsTech in Queensland have excellent facilities and accepts Casting and Moulding, and also Patternmaking apprentices from all over Australia. In recent news, SkillsTech have updated their scope of registration to include interstate delivery of MEM31719 - Certificate III in Engineering - Casting and Moulding Trade.

This may make funding approvals through the relevant state bodies in each area, for interstate apprentices achievable.

For those that choose not to enrol their apprentices with SkillsTech, we have GOTafe and AIE offering training in Victoria. AIE also have approvals to offer training in WA and SA.

The obvious gap in these offerings is in NSW and Tasmania. AIE have applied for a NSW Smart and Skilled contract. If successful this opens the door for AIE to offer training in NSW. AIE expect to hear in April if their application was successful.

The AFI, along with the RTO's, can work together to enhance training opportunities, but the biggest influence will come from a united voice with metal casting businesses in each State.

GOTafe are transitioning into the new MEM31719 Cert III - Casting and Moulding Trade & MEM31622 Cert III - Patternmaking Trade.

AIE currently offer MEM20215 Cert II in Engineering – Foundry which is fully funded, and MEM31719 Cert III – Casting and Moulding Trade. Funding for this course is pending a decision by the VSA. AIE are also preparing course content for MEM31622 Cert III – Patternmaking, with a plan to launch this in 2024.

There are higher level courses (Cert IV and Diploma level) relevant to our industry, that are either currently on offer or under development through SkillsTech and AIE. Details of these will be included in the next edition.

## Vale Kevin Morphet

The following eulogy was delivered by Stuart Ward at Kevin Morphet's funeral on 24/1/2023. In

speaking of his personal relationship with Kevin, Stuart has captured the essence of what made Kevin a universally respected man in our industry.

### *The True Gentleman – John Walter Wayland*

*The true gentleman is the man whose conduct proceeds from goodwill and an acute sense of propriety, and whose self-control is equal to all emergencies; who does not make the poor man conscious of his poverty, the obscure man of his obscurity, or any man of his inferiority or deformity; who is himself humbled if necessity compels him to humble another; who does not flatter wealth, cringe before power, or boast of his own possessions or achievements; who speaks with frankness but always with sincerity and sympathy; whose deed follows his word; who thinks of the rights and feeling of others, rather than his own; and who appears well in any company; a man with whom honour is sacred and virtue safe.*

I think we can all agree that Kevin sits firmly in the chair of a True Gentleman.

We have all experienced Kevin exercising each and every one of those characteristics in our day to day lives with him.

An honest man whose skills and experience were always at hand to assist without the FIGJAM attitude.

I've known Kevin since I moved to Australia in 2008. At that time, we worked for different organisations, and could loosely be considered as competitors, but there were times when we could work together to achieve common goals. We had the mutual respect for each other's business and that made for a great working relationship.

In October 2013 Kevin applied for the vacant role of NSW sales manager for Foseco and for me his selection for the job was a no brainer.

This is a man that has done the hard yards, he'd worked in all aspects of the Industry and in many regards was probably overqualified for the role, but he'd never admit to that ☺ !! His knowledge, experience, personality, and most importantly his gentleman's attitude made it such a pleasure to work with him.

I recall a time when we were in a meeting, discussing some very challenging topics. There were some raised voices, some disgruntled people bent out of shape, and there was Kevin, sat there, quietly listening, taking in every word that had been said without saying a word himself.

When everyone had finished, he said “is it my turn now?”

With the note of a calm and collected meditation instructor he went through everyone’s opinions and agreed with all their good points, made everyone in the room smile, feeling good about themselves and from those good points we drew up a plan that we all agreed to.

After that he went back to quietly listening, not once taking the glory. They were not his ideas, they were the teams, but without his leadership in that moment, we were focussing on what we disagreed on, not what we all had in common.

On a personal level Kevin offered me a sounding board, someone who I could speak to with my thoughts and ideas.

I knew that if I spoke to him, I would not be looked down upon if I was being a little naïve, too soft, too hard. And I knew that his response would be genuine, thoughtful, and helpful. I also knew that anything I told him was just between us, my trust in him was absolute.

A man that was recognised as a legend in our Industry, and very well deserved, but more importantly a legend in our hearts.

We today all mourn the loss of Kevin from our lives, but I think we should consider ourselves extremely fortunate that we got to spend part of our lives in the presence of a True Gentleman.

For that I will be forever grateful.



## **Training – Panel Discussion Wed 15/2**

AFI(Vic) began their 2023 program with an expert panel of 6 sharing their experiences and thoughts of training in the metal casting industry.

Each panellist brought a wealth of direct experience to the table.

Peter Michelini – Harvester Technical College, TTC Manager and Technology Teacher

Peter Canavan – AI Group, Centre for Education and Training, Senior Policy Officer

Cameron McLeod - Headstart, Inner SE Melbourne Cluster, Employer Engagement Co-ordinator

Sam Tyagi – CEO, Australian Institute of Engineering

Sean Boswell – Backwell IXL, General Manager

Paul Friswell – GOTafe, Trainer

The event was recorded and will be available on the AFI website in the coming weeks.

My take outs were as follows -

1. Connect with the Career Pathway Co-ordinators in the schools in the area of the casting businesses. No easy way to do this, except to work the phone.
2. Use social media to introduce metal casting to youth with a highlight on the high-tech nature of the business.
3. Be active in offering work experience at your metal casting business. Place the work experience person with someone that is positive about their work. Do the housekeeping to present your workplace in the best light possible, so that the work experience person is impressed with the environment and would want to come back. You only get one shot with each person. You need to put in the effort to make it work.
4. Build relationships with your local school. Backwell IXL and Beckwiths have both had good success by doing this.
5. Don't just look at school leavers. Target women, young adults (maybe tried uni and it didnt work out), migrants and refugees.
6. Get onto the intern program with your local uni. Stegbar in the Building Industry have been very successful with this. Some engineering courses require that students do 3 months of work experience before graduating. This can be a "try before you buy" program. You get to see how well a student might fit your organisation while they are with you for 3 months (at no cost). If they're a good fit, you employ them.

There wasn't anything particularly ground breaking in take outs but the discussion did reinforce much of what has been spoken and written about in recent

years. All metal casting businesses large or small should consider engaging in the activities listed.

## National Silicosis Prevention Strategy

Do you use silica products in your processes? Are you aware of respirable crystalline silica (RCS) and its link with the incurable disease silicosis? Did you know that the Workplace Exposure limit (WES) for RCS is now an 8 hour time weighted average of 0.05mg/m<sup>3</sup>? That medical authorities would rather this limit was 0.02mg/m<sup>3</sup>?

Do you know what level of RCS you have in each of your processes?

Robert and William Olds (Olds Engineering, Qld) do, because they engaged a certified Occupational Hygienist to quantify the levels of RCS in their business. The results came in at < 0.01mg/m<sup>3</sup> – well within the 0.05mg/m<sup>3</sup> limit.

Currently a National Action Plan (NAP) is being developed by Lung Health Australia as part of National Silicosis Prevention Strategy 2023-28. The NAP is largely focussed on the Engineered Stone industry but also covers any industry using silica and silica containing products.

What is your strategy to understand and control risk of silicosis in your work place?

## Lost Trades Fair - AFI Members and Foundry in a Box

With its home in the historic gold rush region of central Victoria the Lost Trades Fair in Bendigo is unique, captivating and one of the most inspiring and authentic events in the country. For ten years Lost Trades has celebrated craftsmanship, skilled manual work, ancient arts, heritage crafts, rare trades and the knowledge passed down through generations. Tools, traditions, techniques and trades secrets are shared and on show. Artisans from across Australia and overseas travel to Bendigo to share what they do, over this weekend of creativity.

This year, without the restrictions of Covid, pre sales tickets reached 11,500 by Friday 10<sup>th</sup> March, before the event started, and the organisers were

expecting over 30,000 to attend by the end of Sunday.

Huge thanks to Stuart McCorkelle who made us aware of this incredible event and arranged the stand once again. This year AFI Vic /Foundry in a Box was represented by National Vice President and Victorian Secretary, Alan Cooke on both days. Alan and the AFI shared the large space with Stuart McCorkelle - Heritage Patterns, Dave and Nicky Tatti - Outlaw Castings and Stephen Millar – Patternmaker all presenting their respective professions and showcasing their skills and wares to all who attended.

I travelled to the beautiful Bendigo Racecourse on Sunday 12<sup>th</sup> March and what a ripper day it was. The sky was a dazzling blue and the sun was shimmering, providing the perfect setting for and a constant stream of families, friends and interested parties, of all ages, who attended this event. With wood turning, metal forging and spinning displaying live demonstrations along with metal casting - both Copper based and Aluminium and even armour making (yes – body armour) to name a few. There was so much to see, do, learn, try and experience. The three sections of the stand remained super busy from the start to the end of both days with barely enough time for anyone to even have a bite to eat. It really is a remarkable event and definitely one I will be attending next year.

Well done to all. **Amber Maxwell**





## **Metalcaster Thrives by maximizing Administrative and Shop Floor efficiencies**

A foundry is a multi-department operation that relies on synergy from sales to shipping to invoicing. Many foundries have become relaxed with a legacy software system that allows money to slip through the cracks of both the shop floor and the front office. A common misstep from foundries is neglecting the shop floor, while misallocating resources in administrative departments. Foundries around the world are performing manual entries of labor tickets, struggling to compile required certificates, and executing manual Accounts Receivable/Accounts Payable tasks with a spreadsheet that lacks security and precision.

Torrance Casting is a family-owned sand foundry, based in La Crosse, Wisconsin, that employs 100 individuals and provides diverse process solutions for gray, ductile, Ni-hard iron castings – including low-volume orders and difficult-to-cast parts, in various casting sizes. Before implementing Guardian's Foundry ERP with MES solution in 2005, Torrance Casting's production processes were outdated and inefficient. Without an option for real-time data capture, Torrance staff members were required to manually capture data leading to inefficient use of staff resources. This, combined with siloed departments, led to a lack of visibility, resources, and data that inhibited their growth.

"Our old system wasn't working; there was too much manual work and data entry," expressed Lisa Smith, IT Administrator for Torrance Casting. "And on top of that, there was no real-time data capture."

Torrance understood that manual administrative tasks were causing them a loss in data, time, efficiencies, and visibility. Guardian Software

Systems partnered with Torrance Casting to consolidate administrative operations and bridge the information gap between the front office and the shop floor, allowing Torrance greater flexibility and higher visibility in all areas. With integration across all departments and boosted efficiency, Guardian helped take Torrance from disconnected to cohesive.

Torrance's move to cohesive began with connecting shop floor MES touchpoints that created a direct link into back-office tasks such as entering labor tickets, managing resources for scheduling efficiency, and acquiring certifications. Linking the shop floor to the back office was crucial for Torrance to eliminate department siloes of information and create more cohesion throughout the products lifecycle through the lens of different departments throughout the operation.

Any transition a business goes through is difficult, but the foundry industry's uniqueness amplifies that challenge. Torrance understood that their pre-Guardian, non-foundry solutions, were not working and that a solution designed for the foundry was critical for them to attain long-term goals. When Torrance entrusted Guardian as their foundry-specific ERP provider, Guardian led Torrance through an implementation plan to integrate the system while still carrying out their production responsibilities.

"While we knew we had to make a change, we also knew it would be a massive feat. We stayed determined and worked closely with Guardian throughout the implementation process," said Smith. "It was a huge initiative, but it was definitely worth it in the end."

Since its inception, Torrance and Guardian Software Systems have worked together on curating the software to the latest needs of the foundry. The partnership, as with all of Guardian's clients, allows Guardian an inside view into what foundries require from their software provider to help them become more efficient, lower operating costs, and be more competitive in the metalcasting market.

"Guardian gave us a resource to remove the manual aspect of our administrative tasks allowing us to reallocate assets into other departments, which, in turn maximized our resources and helped lower overall operating costs," said Smith.

Guardian integration across all of Torrance's departments has increased scalability in their production due to increased visibility. Live visibility into their production showed operational bottlenecks that could be detrimental to meeting demanding lead times and order requirements. This information, gained from live data collection through the Guardian MES, was crucial in altering operations to avoid bottlenecks on the shop floor and automate administrative tasks.

“Guardian has been a very responsive partner; there is a true relationship between our two companies,” said Smith. “Guardian responds to our requests for enhancements, training, or just a simple question because they are constantly improving the system to better assist clients. We couldn't ask for a better company.”

Dylan Piccolo, Guardian Software Systems



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## Around the Traps

- *Planning for the 2023 National Conference is in full swing. The Marriott Hotel Melbourne CBD venue has been locked in, talks with a Keynote Speaker well advanced, and theme and logo finalised. Be sure to lock in Thursday 26/10 to Saturday 28/10. Maybe take advantage of the Spring Racing Carnival while you're in town !!?*
- *Amber is back !! Though she never really left, but in a whirlwind of activity, Amber is truly back into the industry that will always be in her blood. Hayes Metals have done well.*
- *As announced on 13/12, IBSA has been awarded the Federal Govt contract to set up and manage the new Jobs and Skills Council. All new and updates to training qualifications will be managed through this body.*
- *The 2023 Victorian Training Awards celebrating the outstanding achievements of apprentices, students, teachers, employers and training providers in the VET sector are now open for nominations. Consider nominating yourself, your students, your organisation, or someone else you know who deserve recognition for their exceptional efforts in the VET sector.*
- *Due to a rationalisation of equipment and a change in customer base, Castech has two machines that are no longer required. Castech are seeking purchase offers for the following:
  1. WES CB-22 Coreshooter
  2. Bianchi Techno 2ST-A CNC Automatic bandsawData sheets available.  
Contact Brad Walsh  
Mobile: 0458 280 520  
Email: [brad@castech.net](mailto:brad@castech.net)*

- *Swinburne University are hosting a series of webinars on Industry 4.0.*
  1. *Thurs 23/3, 12noon – 1pm, Asset Tracking in Manufacturing.*
  2. *Tues 4/4, 12noon – 1pm, Artificial Intelligence and Machine Learning in Manufacturing.*

*Anyone interested in participating in these seminars please contact [agcooke52@gmail.com](mailto:agcooke52@gmail.com) for the link.*

## **NEXT AFI VIC Meetings**

**Wed 29/3** – Conference Planning meeting

**Wed 17/5** - Carbon Revolution site visit

### **\*\*\* STOP PRESS\*\*\***

Please don't forget this publication has now become the National Foundry newsletter. We publish on a quarterly basis and encourage all AFI members and states to forward articles, snippets, slaps or sledges to be included. Please forward your contributions to Alan Cooke [agcooke52@gmail.com](mailto:agcooke52@gmail.com) or Amber Maxwell at [Ambermaxwell@hayesmetals.com.au](mailto:Ambermaxwell@hayesmetals.com.au) by the first week of the next December, March, June and September.



## Australian Foundry Institute (Vic Branch) 2023 Program v4

Month	Date	Location	Topic	Presenter		AFI / ADCA Contact
Feb	Wed 15th	The Village Green Hotel	Training Panel – GOTafe / AIE / Headstart / AIG / Employer / Sunshine Tech			Amber M / Alan C
Mar	Wed 29th	Errols, Nth Melb	Conference Planning meeting			Alan C
Apr			No Activity		<i>School Hols 7/4 to 23/4</i>	
May	Wed 17 <sup>th</sup>	Geelong	TBA		<i>AMCIL Mfg Week 9/5 – 12/5 Trade Fit Expo 10/5 – 11/5</i>	Sean B
June	Wed 21st	The Village Green Hotel	Al / Zn Dross Presentation		<i>School Hols 24/6 to 9/7</i>	Graham W
Jul	Wed 19th	Braeside	Hosico site visit			Craig A
Aug	Wed 17th		WSV Code update?? Mental Health ??		<i>Careers and Employment Expo 17<sup>th</sup> – 19<sup>th</sup></i>	Alan C / Amber M / Sean B
Sep	Fri 1st	Sovereign Hill, Ballarat	Annual Technologists Picnic Meridian			Gary Bunn – MA
Sep	Wed 13th	Ballarat / Bendigo ??			<i>School Hols 23/9 to 8/10</i>	Adam / Quinn
Oct	Thur 26 <sup>th</sup> – Sat 28 <sup>th</sup>	Marriott Hotel	AFI National Conference		<i>Beckwiths Site Visit</i>	
Nov	Wed 15 <sup>th</sup>	The Village Green Hotel	Legends Night and AGM			
Dec	Wed 6 <sup>th</sup>	Errols, Nth Melb	Planning meeting			