



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

Melting Moments – September 2021

Presidents Report

Another quarter rolls around and we now find ourselves settled into Spring. The sun is shining, and we continue to hear businesses - in our industry - remain exceptionally busy with growth predicted as more and more industry looks to support sovereign capability and local business. The same challenges continue for many of us in Metro Melbourne as we AGAIN work through lockdown 6,000,000 or whatever number we are at now !!!! Keep at it - we have come so far and “Never, Never, Never Give Up”. – Winston Churchill.

Our July meeting - originally planned to be held in beautiful Geelong - once again required us to pivot and we were delighted to host two presentations, albeit online and in early August. Lyn George shared the journey AUSTENG undertook to diversify their business as a result of the loss of some major customers. In part, embracing both change and renewable energy led to growth and expansion of their remarkable, progressive and cutting-edge engineering business.

Graham Wilson - Moss Products and Secretary of ADCA then presented a comprehensive summary of how our industry can prepare and rise to the challenge of a low C Emission metal casting future.

July was a busy month with the launch of the ALL NEW AFI Website . In between lockdowns and various availability challenges our videographer managed to visit several Victorian foundries and metal casters and shot some

exceptional footage of our industry and our members at work.

We were also extremely pleased to receive footage and still photographs from many of our interstate associated members which have also been uploaded. If you haven't already taken the time to visit, please check it out – our industry is most definitely something we should all be proud of.

<https://www.australianfoundryinstitute.com.au/>

Our September meeting was well publicised and is always a well-attended event on our calendar - the Presentation of AFI Victorian Legend. For now, this has been postponed until November. Please keep Wednesday 17th November free in your calendar. We are planning to host this event at the Village Green Hotel , Mulgrave COVID restriction pending. We are confident we will **rock** the night away with as many of our members, family, friends and industry associates as possible, and celebrate this very special member and legend. This year's Legend has once been a solid contributor to the industry and a devoted, and extremely active and long-term member of the committee, - another truly worthy recipient. Can you guess who it might be??????

Amber Maxwell – AFI Victoria President

AFI National

Have you checked out the updated AFI website yet ??

Have you seen the industry video within the website ??

We've had lots of positive feedback to date. We want this update to drive a significant increase in the social license to operate for the metal casting industry. Contrary to the common perception, the metal casting industry is not the dirty polluting industry from the beginning of the industrial revolution. We're an industry that embraces technology, has strong circular economy credentials and is essential for Australia's future prosperity.

Yes, we're a higher energy user. However, the rapid advance of renewable energy generation and storage, together with the prospect of relatively cheap energy on the global scale, places the Australian metal casting industry in a very strong position for future growth.

To prepare for this (near) future we need to attract young, capable people to fill metal casting roles at all levels – operators, trades, engineers, technicians. There is a lot happening behind the scenes to achieve this. These people will become our metal casting business managers. Our businesses will thrive in the small to medium volume market, with not only superior products but also offer a service that ensures customer loyalty will be built and sustained.

Metal casting – the career destination choice for makers, creators and innovators. Talk it up !!

Alan Cooke – AFI National President.

AFI Victoria

Sadly, due to the ongoing lockdowns impacting on Melbourne the planned events have had to be rescheduled or held online.

The Swinburne Institute of Technology – Foundry of the Future visit was cancelled and will be rescheduled once the lockdown restrictions are lifted.

Thankfully our friends in the West had a presentation planned by our very own **Jim**

West on “Clean Steel Making” we were able to join online

With the Legends night moved to November 17th the September meeting was revised to be an ONLINE presentation. Ryan Whittaker, Director of Complet-Ed provided details on the service that his company provides. When your business decides that they have a training need, Ryan and his team can assess what State and Federal Govt grants are available and which RTO can deliver your training needs. The really interesting thing is that this can often be cost neutral to the business.

If you were unable to attend this meeting please never fear, we have posted the link to this presentation and all our webinars on the website. Head to the News and Events tab then open the Webinar section and you will see a link to this Webinars section at the top of the list you will see “Workplace Training - Navigating the Labyrinth”. Ryan Whittaker

We now have some visibility for the Roadmap out of Lockdown in Victoria. We will endeavour to keep you updated on the planning for the remaining months of 2021 and hope to see you at least one event before the year is out.

See current meeting program attached.

Apprentices and Training

Alan Cooke represents the AFI in the Industry Advisory Groups (IAG) meetings. Alan has been busy attending meetings relating to end of the Victorian Skills Commission and the beginning of the Victorian Skills Authority (VSA) The VSA will have a greater focus on TAFE training (and less on private RTO's). The Office of TAFE Coordination and Delivery will be a key point of contact for training relating to manufacturing industry. The OTCD is required to work towards financial sustainability of the TAFE network. Decisions on funding distribution from DET will be informed by the yet to be developed Victorian Skills Plan.

It will be essential that metal casting skill sets be included on the Skills Plan, to ensure that we continue to attract the funding that our RTO (GOTafe) receives now but also to expand this to Cert IV and beyond training.

Each of the industries represented in the IAG-Manufacturing group that Alan meets with, has similar issues. Collectively they have agreed to work as a group to attract both Federal and State funding to develop and promote careers in Australian manufacturing.

The view is to work towards increasing the pool of school leavers entering manufacturing roles as a first priority, rather than each industry competing for employees from the current small pool entering manufacturing.

Many of the industry reps in the IAG-Manufacturing group are paid employees of their industry groups. Peter Canavan of the AIG is one of these. Alan advises working with this group will be the best chance of success for the metal casting industry.

Amber circulated an article from one of our Northern foundries demonstrating some great work being carried out at White Industries. The following article was featured in a recent edition of Ai Group – Centre for Education and Training newsletter.

Education & Training at Work



COMPANY INITIATIVES

White Industries' investment in young people pays off

Craig White, CEO of Dalby-based manufacturer White Industries, writes about the major benefits to the company of its engagement with, and investment in the Trades Future Program at the Dalby State High School as well as the young people going through the program.

Please click on the following link to view the full article – [Find out More](#)

Foundry In A Box Update (FiaB) – John Zach

As mentioned in the June edition of “Melting Moments”, opportunities were identified for improvement, hence, the introduction of smaller purpose designed cast aluminium moulding boxes and cast-iron melting/pouring crucibles

have enhanced the procedure. Acquisition of suitable items for patterns and further “Youth Testing” of the concept, has been difficult, due to present covid regulations .



Around the Traps...

IXL Metal Casting in Geelong are currently in the process of recruiting for the position of Foundry Manager.

See position description on pages 6 to 9.

For those interested please contact Sean Boswell

General Manager IXL Metal Casting

Sean.Boswell@ixl.com.au

Code of compliance

Members are reminded to provide any feedback for the Updated Code of Compliance for Foundries via email to Alan Cooke agcooke52@gmail.com

Vale

It is with great sadness that we advise the passing of Bernard Maher.



Bernard was a good friend and colleague to many of us foundry men and women throughout his working life in WA and Victoria, and he will be sadly missed
Chris Grant (AFI WA President) has kindly provided a lovely tribute to Bernard – please see pages 10 & 11.

WA AFI Technical Meetings – from Chris Grant

The AFIWA were honored to have Jim West talk to us about making clean steel in our August Technical Meeting, Jim's presentation was full of some great insights into the key aspects of the topic, and it was wonderful to hear some of the stories associated with his experiences and knowledge of steel making as it applied to historical events, such as the battle between Germany and Russia at the end of WW2.

AFI WA Technical Program

Date	Topic	Speaker
29/09/2021	Thermal analysis of iron and steel with regards to casting quality and preparation free sampling.	Charles Hurst - Electronite
11/10/2021	Sustainable business - Rebuilding worn components (Combined MA Meeting)	Eddy Derwort - Bradken
24/11/2021	AGM and Foundry 4.0	Stuart Ward - Foseco

AFI 2021 National Conference

The AFI 2021 National Conference Committee have been monitoring the current COVID-19 restrictions across Australia, and after much consideration we regret to announce that the October 2021 conference has been postponed until May 2022.

The Australian Foundry Institute 56th Annual National Conference will now be held at Rydges South Bank Brisbane from Thursday 12 to Saturday 14 May 2022.

<http://www.aficonference.org/>

*******STOP PRESS*******

Reliance Worldwide Corporation (RWC) announced the acquisition of LCL Pty Ltd, 20 July 2021. LCL's facility is immediately adjacent to RWC's brass forging operation. LCL's activities are centered around recycling copper material and the manufacture of lead-free brass for use in the delivery of potable water. The co-location of the brass forging plant and the brass production facility at Moorabbin will enable RWC to optimize materials handling and manufacturing efficiencies and secure the control of a critical part of the manufacturing supply chain.



Australian Foundry Institute (Vic Branch) 2021 Program v11

Month	Date	Location	Topic	Presenter	AFI / ADCA Contact
Feb	Wed 17th	Zoom	Industry Training		Alan C/ John Z Murray B and GoTafe
Mar	Fri 5th	Brisbane	National Council meeting		
Mar	Wed 17th	Village Green	Legends Night		AFI
Apr	Wed 21 st	Notting Hill	Site visit – AMAERO Metal Additive Mfg		Gary S
May	Fri 7 th	Brisbane	National Council Meeting		AFI National
May	Wed 19 th	Rowville	Stegbar site visit		Alan C
June	Wed 16 th	Village Green ONLINE	Apprentice / Traineeships	Craig Hilton, AIG Roger Lumley	Alan C
Jul	Wed 4/8	Geelong ONLINE	Getting to Zero – Impact on metal casters Diversifying your Business	Graham Wilson Lyn George	David S / Alan C
Aug	Wed 18th	Hawthorn	Factory of the Future Swinburne Tech	POSTPONED	Quinn P
Sep	Fri 3rd	Sovereign Hill, Ballarat	Annual Technologists Picnic	POSTPONED to 5/11	Gary Bunn - MA
Sep	Wed 15 th	Village Green ONLINE	Legends Night Workforce Training – funding and administration made easy	POSTPONED to 17/11 Ryan Whittaker	Alan C
Oct	28 th – 30 th	Brisbane	National Conference	POSTPONED to May 2022	AFI (Qld)
Nov	Wed 17 th	Village Green	Legends Night plus AGM		Alan C
Dec	Wed 8 th		Planning meeting		

IXL Group Position Description



Position Title Metal Castings Foundry Manager

Reports to General Manger IXLMC

Classification/Grade TBA

Direct Reports Technical Manager
Production Team Leader
Production Supervisor

Key Relationships Foundry Team and Workforce
Industry Partners and Suppliers
Internal Stakeholders

Location 1-15 Wood Street, South Geelong

Position Purpose

The primary purpose of the Metal Castings Foundry Manager role is to contribute to the effective management of the day to day Foundry operations inclusive of people, safety, production planning, manufacturing processes and performance. The successful incumbent will ensure the efficient planning, future development and organising of all metal casting activities in line with agreed budget and target performance standards.

Champion Company Values of Safety, Honesty & Integrity, Respect, Teamwork, Innovation, Excellence

Key Result Areas

Specific to Role		Measures
EHS	<ul style="list-style-type: none"> To provide leadership in the day to day management of the workforce with respect to training, work skills, attitude and safe work practices. Ensure foundry specific environmental aspects are registered and controlled Manage the improvements associated with Electricity usage targets 	<ul style="list-style-type: none"> All injury frequency rate target 5S inspection score improvement Operator compliance to policy & procedure Aspect register updates documented No environmental incidents Site wide COS\$ / kWh usage
Strategic Growth	<ul style="list-style-type: none"> To manage the ongoing development of new opportunities and continuous growth as per the budget and strategic plan. This will include recommendations for plant and equipment upgrades that are supported by sound financial cases. Recommended upgrades/improvements presented to and signed off by the GM and board 	<ul style="list-style-type: none"> Growth in line with agreed plans Deliver the improvements as indicated in any financial case.
Productivity	<ul style="list-style-type: none"> Ensure Metal Casting production standards are achieved on an ongoing basis at budgeted cost levels. 	<ul style="list-style-type: none"> \$ cost / casting Manhours / tonne versus standard

IXL Group Position Description

	<ul style="list-style-type: none"> Establish standard production times for individual parts Continual job assessment with respect continuous improvement and cost down. Assessment of the number of jobs (and \$ benefit) that have reduced in cost during the year In conjunction with the Maintenance Supervisor, responsible for plant maintenance and upkeep and to ensure the preventative maintenance program occurs. 	<ul style="list-style-type: none"> Sand used / tonne of castings sold In house rejects reduction target Maintain costs below budget and plant availability as per budget.
Quality and Service	<ul style="list-style-type: none"> Ensure customer “fit for purpose” quality standards are achieved at all times. Aim to provide customers with a level of service that ensures ongoing good relations and minimizes complaints. Customer complaint register kept up to date with respect any non- conformance Documented proactive communication with clients in the advent of possible late supply (complaint registered if unsatisfactory outcome is not reached). 	<ul style="list-style-type: none"> Service targets of 100% for key customers Outstanding orders report Customer complaints registered
People Development	<ul style="list-style-type: none"> Determine and develop required staff skills mix to ensure ongoing viability – specific emphasis to be given to : <ul style="list-style-type: none"> Moulding skills <ul style="list-style-type: none"> Train and develop Senior Moulder with the view to his being in a position to take a more senior role within the next 4 years. Methodising skills <ul style="list-style-type: none"> This will be a key component of Senior Moulder development. Potential successor to the role Other younger staff members are developed to eventually be able to succeed more senior team members 	<ul style="list-style-type: none"> Training and development completed to plan
New Products/Estimating	<ul style="list-style-type: none"> Responsible for preparing estimated costs for new products in conjunction with Operations Co-ordinator. Developing production techniques for all new parts that maximise productivity and profitability 	<ul style="list-style-type: none"> Estimates provided in time frames agreed and to detail required. Success rate versus standards established for all new parts.
Networking	<ul style="list-style-type: none"> Networking with other foundry men to update own knowledge and support the training and development of others. 	<ul style="list-style-type: none"> Documented evidence of new techniques, methods, systems introduced as a result of external contacts.
Business Development	<p>In conjunction with the Business and Development Manager WA -</p> <ul style="list-style-type: none"> Maintain Existing customer base Develop new opportunities to expand sales to new customers 	<ul style="list-style-type: none"> Maximise profitability Growth in sales by agreed amount

IXL Group Position Description



Specific to Organisation	
Teamwork	<ul style="list-style-type: none"> • Supports all leadership team decisions and ensure that all commitments are followed through • Maintains a positive leadership attitude and builds rapport with fellow peers • Values and respects the views and beliefs of customers and team members • Displays willingness to assist others, shares knowledge openly, co-operates and supports others • Conducts and participates in regular performance reviews as per IXL's process • Communicates in clear and professional manner at all times, demonstrating empathy where required • Is always receptive and open to feedback • Attends seminars/training courses relevant to teamwork and leadership as required • Networks with other managers • Ensure employees are appropriately trained and up to date with changes and processes to be able to perform tasks to required standards
Continuous Improvement	<ul style="list-style-type: none"> • Understands and supports continuous quality improvement within IXL Group and ensures that all employees within their area of responsibility are aware of IXL's systems • Actively participates in audits where required • Exercises initiative in making improvement to work process • Regularly discusses improvement opportunities with teams • Understands and supports the policies and procedures of IXL • Is compliant with applicable legislation to IXL
OHS	<ul style="list-style-type: none"> • Understands their role in the organisation toward implementation and participation in OHS issues • Ensures that all employees in their area of responsibility are fully aware of IXL's safety plans and expectations and that they actively encourage employees to participate and contribute to OH&S training where required • Ensures that safe working practices are undertaken at all times • Demonstrates a duty of care • Demonstrates actions taken to identify hazards, assessing risks and reporting incidents
Culture of IXL	<ul style="list-style-type: none"> • Champions IXL's Values • Promotes and encourages personal growth and effective communication • Leads, embraces and adapts to changes • Demonstrates ability to reflect on performance and practices that impact on the organisation • Always searches for better ways and strives for best practice

Selection Criteria

Skills - Essential	<ul style="list-style-type: none"> • Well developed interpersonal and people management skills • Strong working knowledge of Foundry Operations • Good understanding of Metallurgical practices • Good working knowledge of Moulding/Methoding • Good Working knowledge of pattern making • Strong working knowledge of OHS practices • Excellent communications skills, both verbal and written
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IXL Group Position Description



Skills - Desirable	<ul style="list-style-type: none"> • QA System and Practise to ISO9001 • Environmental systems and Practise to ISO14001 • 5s System integration
Qualifications and Experience	<ul style="list-style-type: none"> • 5+ years' experience in a Manufacturing Management role • Relevant tertiary or diploma qualifications in Engineering and/or Manufacturing discipline

IXL Group Culture

The IXL Group is committed to our businesses and our people for over 160 years. We invest in our people and our company is aligned to the values of Safety Honesty & Integrity, Respect, Teamwork, Innovation and Excellence.

Value	Expected Conduct
Safety	We work safely, promote wellness and protect each other
Honesty & Integrity	Be honest in all your dealings both internally and outside IXL. If you make a mistake, or you feel something is not right about a situation, speak up, you will not be blamed for honest mistakes. We will abide by all relevant laws and regulations in the territories in which we operate.
Respect	Treat fellow staff, customers, suppliers and the community with respect, courtesy and fairness. Consider their feelings, interests, rights, safety and welfare. Harassment, bullying or discrimination has no place at IXL and will not be tolerated.
Teamwork	We work together to achieve our goals and value the input of all our employees.
Innovation	We aim to be innovative in all our endeavours from the way we go to market to how our internal processes work. We will be adventurous, creative and challenge the way we do things.
Excellence	We aim to be excellent in every action and activity. Continuous improvement is part of the way we operate, I Excel is in our DNA.

IXL GROUP OCCUPATIONAL HEALTH AND SAFETY RESPONSIBILITIES

Responsibilities and Accountabilities

All IXL employees share responsibility for occupational health and safety, with specific responsibilities and accountabilities allocated to positions within the organisational structure.

Any employee who fails to meet his/her obligations concerning health and safety may, depending on the circumstances, face disciplinary action, up to and including dismissal. Employees have a responsibility to comply with all relevant IXL Group OH&S Systems Policies, Procedures and Programs.

*IXL Group is an Equal Employment Opportunity Employer
All employees must have the right to work in Australia*

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Bernard Maher RIP

Bernard Maher passed away recently as a result of complications associated with a severe fall he had earlier in the year, Bernard was a good friend and colleague to many of us foundry men and women throughout his working life in WA and Victoria, and he will be sadly missed.

A number of the WA foundry representatives past and present, met with his son Philip and paid their respects to Bernard at the Balmoral Hotel in Victoria Park in late July.

Bernard started work way back in 1961 at Jessop-Saville in Sheffield as a trainee metallurgist and in 1965 he took up a position as Metallurgical Chemist with the British Steel Corporation, where Bernard progressed into the Shift manager position looking after melting, ingot pouring and laboratory operations, it was in 1973 that Bernard decided to emigrate to Australia.

He then worked in Peco mines NT for a year in their smelter operations as a metallurgist responsible for the laboratory, and then for Mt Isa Mines for 4 years as their metallurgical chemist, and in the end found work in Mt Isa too isolated, he then moved to Vickers Ruwolt in 1978 working under Jim West as their Laboratory Superintendent and obtained NATA certification in chemical testing for their laboratory, I spoke with Jim the other day about Bernard and he asked me to recall a story that related to a Yorkshire tie he used to wear whenever the Aussies were beating England at test cricket, Jim met a fiery fast bowler by the name of Fred Truman and he gave Jim an English County tie which Jim used to wear every time the Aussies got the better of Bernard's beloved poms team.

From 1985-86 Bernard worked at Prahran Platers in their electro plating shop and was responsible for increasing their profitability, he then took a position with Steele and Lincoln with Doug Maxwell as a Production Manager until 1989, he was responsible for an improvement in their profitability and NATA certification of their laboratory too. A young Amber Maxwell recently shared her memories of Bernard and his family visiting her home with their 4 kids in the 80's, the Maxwell family send their condolences to Bernard's family.

From mid-1989 to late 1990 Bernard worked as a Production Engineer in the Aluminium casting plant at Nissan motors in Dandenong, at this time Jim Artso, one of Bernard's friends recalls a time when Bernard said that he was moving over to a position in WA but he couldn't tell Jim, Jim said I will tell you who it is this afternoon, Jim did as promised and told Bernard where he was going, Bernard couldn't believe it when he told him.

When Bernard came to WA he started as a Melting production manager at Boral Castings, this was where I met him for the first time in early 1991, Bernard helped Boral to improve their melt production output, he then worked for Ledgers Foundry as their Metallurgist, working closely with their team including Ken Scanlon, this was followed with Bernard taking up a role with Foseco and Barney Runham, with the untimely death of Barney Bernard took up the Foseco WA technical representative position, this was a time when many of the WA foundry community got to know Bernard well.

Bernard was always looking to help the WA foundries to improve and work through their problems, he was never backward at expressing his opinion on things, you always knew when Bernard was in the room, if it wasn't for his large stature you could hear his strong Yorkshire accent that never changed throughout his life. Unfortunately late in Bernard's time at Foseco his eyesight started to deteriorate and he had to retire.

Bernard had a dry sense of humour, a no nonsense attitude who was never backwards at expressing his opinion on a given foundry, process or person he knew, in his time in retirement I would seek his opinion on things I was working on and have lengthy discussions on football and cricket, he was always interested in what was happening in the foundry industry and was a special person who I am sure many of us will miss dearly.

Clearly Bernard had a positive impact on a lot of people in his life and I for one will always remember him with fondness and admiration.

Recent Technical Presentation – Jim West – Making Clean Steel

The AFIWA were honoured to have Jim West talk to us about making clean steel in our August Technical Meeting, Jim's presentation was full of some great insights into the key aspects of the topic and it was wonderful to hear some of the stories associated with his experiences and knowledge of steel making as it applied to historical events, such as the battle between Germany and Russia at the end of WW2.

A copy of Jim's presentation and his paper will be made available on the WA age of the AFI web site shortly. If you would like his paper sending direct to you please drop me a line on presidentafiwa@gmail.com

WA Programme Changes

To avoid clashing with the Victoria technical program, WA has decided to move the dates of our remaining technical meetings and AGM, all of these presentations will be provided over Microsoft teams, other than the in-person combined meeting with Materials Australia in October:

Date	Topic	Speaker
29/09/2021	Thermal analysis of iron and steel with regards to casting quality and preparation free sampling.	Charles Hurst - Electronite
11/10/2021	Sustainable business - Rebuilding worn components (Combined MA Meeting)	Eddy Derwort - Bradken
24/11/2021	AGM and Foundry 4.0	Stuart Ward - Foseco

Regards,

Chris Grant

AFIWA President