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Industry Insights

The Australasian Institute of Surface Finishing

President's message





To All AISF Members and Industry Stakeholders,

We know it has been a difficult COVID year for all, and with rules and regulations constantly changing, it has been a major distraction for businesses. The AISF has done its best to get on with business, and despite the difficulties a lot has been accomplished.

With Christmas fast approaching, it is a great time to reflect on what we have accomplished and plan ahead for another year of growth for the Surface Finishing industry.

During our recent AGM and subsequent Board meeting, Bill Wyllie announced that he was "hanging up his hat" as they say, and nominated me for the role of President of the AISF. I am very honored to have been given the responsibility of this role and I am looking forward to a new year with improved freedom of movement around the country and hopefully the world.

2021 was a very busy year for the AISF with various government departments recognising the AISF as the leading representative of the surface finishing industry. We consulted with Safe work Australia, Standards Australia, various Environmental Protection Authorities and government taskforces. We have submitted a proposal for a revision of the AS4506, and in the next few weeks our proposal for the revision of AS3715 will also be submitted. We look forward to receiving feedback from Standards Australia on these fundamental Australian Standards guiding the Powder Coating industry. It is my hope that with the implementation of these revised standards that we are able to create a robust and inclusive accreditation program for all powder coating members covering many substrates, informing and improving our training programs, elevating the industry as a whole.

During 2022, the revision process will begin on the review of AS1231, and we look forward to the input and comment from anodising members for their assistance with the growing and expanding the services for anodisers across the country.

We have recently reviewed the Working Safely with Cyanide training material and successfully ran our very first session online with Tim Elley presenting the session. 2022 will see us able to provide more online training in this manner.

I am keen to see the feedback and resolutions from the submissions and work conducted so far with Safe Work Australia around managing exposure limits of many chemicals commonly used all of our industries.

I hope everyone has a safe and enjoyable holiday and an exciting return in 2022.

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Annual General Meeting UPDATE

The Australasian Institute of Surface Finishing (AISF) once again held our Annual General Meeting (AGM) online via Zoom. 2020/2021 have been very big years for the AISF. During this period, we have:

- Sold our property in Collingwood, Victoria. Which prior to its sale, became a massive financial burden on the institute.
- Advocated on behalf of our members with Safe Work Australia on the review of many chemicals used daily in our industry.
- Introduced face-to-face training to Sydney with our "Principles of Professional Powder Coating"
- Introduced online training to our training delivery sessions with the EPA VIC "Understanding EPA Victoria new legislation"
- Lodged the proposal with Standards Australia for the revision of AS 4506 Metal Finishing Thermoset Powder Coatings
- Withdrew our support of the European Qualicoat Audit/ Accreditation system.
- Commenced development of an all inclusive, Australian Audit & Accreditation system.

All members were invited by mail and email and we welcomed the nomination of 2 new directors to the Board;, Jason Sparsis and Simon Skocajic. Information on our new Board members is detailed in the following page.

Members are able to access the miniutes of the AGM along with the 2020/2021 Year in Review on the Members Portal of the AISF website. If you have any issues accessing these documents, please contact our Secretariat Natalie Miles.

Following out AGM, we held our meeting of Directors and voted in our new Executive Committee. Sadly Bill Wyllie decided to resign from his post as President of the AISF, however this opened the opportunity for "new blood" within our Management Committee.

Mitch Connelly was nominated and accepted the role of President of the institute, with Bill Wyllie offering him guidance while transitioning into this role as the Vice President. Peter Mallios was nominated and taken up the role of Secretary and Chris Sweetnam is continuing in his position of the Treasurer.

Following the meetings, we recieved the resignation of Simon Vos from the position of Director of the AISF. Simon was our representative of our Anodising members. This position remains vacant, and we are accepting nominees from members of the AISF to fill this role.

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a: Suite 1, Building 1, Level 1, 20 Bridge Street, Pymble NSW 2073 t+61 2 9160 4744 e: admin@aisf.org.au w: www.aisf.org.au We would also like to introduce our two new members to the Board of Directors:

Jason Sparsis



Jason Sparsis is the Northern States Sales Manager for Dulux Powder Coatings, where he has held this role since 2015. Jason has been involved with the Powder Coatings industry since he began his career in Sales with H.B Fuller Powder Coatings in the mid 1990's.

With 25+ years' experience in the Coatings Industry, Jason has held positions with Chemetall Australasia, Coating Supplies and PPG Industrial Coatings, which have all contributed to a rounded knowledge of the technologies and market. Jason has a passion for training and quality, and is excited to contribute to the continued success and growth of the Powder Coatings Industry in Australia.

Outside of work, Jason has been a coach for the Roselands Sports Basketball programme for athletes with an Intellectual Disability since 2004, and is a keen supporter of both the Parramatta Eels and Manchester United.

Simon Skocajic



Simon Skocajic is the Country Sales Manager ANZ for Interpon Powder Coatings (Akzo Nobel). Simon started out his career in the chemical distribution Industry with Redox in 2009, distributing chemical commodity raw materials to Victoria's coatings major coating manufacturers. In 2013, Simon moved to Interpon Powder Coatings, working as Victorian State Sales Manager servicing the architectural, automotive and General Trade Coater markets. After a move back into chemical distribution in 2019 with Brenntag, distributing specialty raw materials to coatings manufacturers, Simon has returned to the powder coating industry with Interpon.

Simon looks forward to joining the AISF committee to help grow the presence and awareness of the powder coating industry as an environmentally sustainable coating alternative and helping support AISF programs and initiatives to further assist its members with knowledge, information & support to enable to industry to continue growing.

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Working Safely with Cyanides is ONLINE



Due to the continued interruptions to training due to COVID. The AISF is now offering our Working Safely with Cyanides training online via Zoom. This month we held our 1st Working Safely with Cyanide Zoom session, and although we had a few minor technical difficulties, this session was a success.

The AISF are working towards having our other Training programs available online early in 2022.



Understanding the new EPA Victoria Legislative changes Online Training

In this online learning course you will learn what new obligations are applicable to Victorian Businesses under the new EPA Victoria legislation.

WHO SHOULD ATTEND

All businesses with a presence in Victoria or who have an interest in how the Environmental legislation is evolving.

AISF members: Free

COSTS

Non- Members: \$100 (plus GST) per attendee - please note the EPA Victoria will be subsidising training for Victorian businesses by 50%

Contact us today if you would like more information on becoming an AISF member

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Setting the right foundations in Abrasive Blasting

by John Bellato, Managing Director



Did you know that 98% of all coating failures has nothing to do with the coating?

Most of the failures can be traced back to inefficient or inadequate surface preparation. If the base is not correct then nothing you do afterwards will stop the rust from penetrating, which in turn will cause the coating to fail.

Surface preparation by abrasive blasting of the parts is a dry process and parts can be coated straight away without any need for drying and to achieve the correct surface profile under powder primers.

Some notable advantages of abrasive blasting are: -

- Removal of rust, mil scale and corrosion are easy attainable
- Abrasive blasting can knock off the sharp edges promoting even coating over part
- Substrate profile can be controlled by using correct media size and type
- Mould flashing can be smoothed or removed
- Laser cutting edge oxide problem eliminated
- Dust is controlled with dust collectors
- High quantity of parts blasted per hour depending on size and equipment
- Low cost per part process
- Dust waste can generally be disposed off in general waste stream
- High level of automation can be used depending on application.

There are many different variations of blasting, but the vast majority fall under two categories.

Airblast and Airless Blasting





Airblast machines such as blast pots use compressed air to propel the media through the hose and exit the blast nozzle at up 750 KPH. A typical number 6 nozzle would propel 550 KG of media per hour.

Airless Blasting machine propel the media using electric motors where the media enters the center of the turbine and is effectively flicked out by the rotation.

A 7.5kW turbine typically propels 6,000 kg per hour. Airless machine has a higher capital cost but have higher production output.

Although the capital equipment setup cost can be significant the return on investment can be quite short due to the inexpensive cost of preparing parts and the recycling of the chosen blast media.

In summary there are a great number of different solutions depending each companies' requirement. If possible, get your supplier to run some parts for you which will give you a lot of good information so you can put together a business case.

Know your Metal Plating Costs

By Tim Elley, Director of AISF

As metal prices continue to soar, with some recently trading at record highs, it is vitally important to understand the impact this has on your metal plating costs. Copper and tin prices are now trading at historical highs, whilst many of the precious metals such as gold and silver are still selling at elevated price levels.

When gold plated tapware can call for a 2micron gold thickness, some electronic specifications requiring 75microns of tin or similar thickness for silver, gravure copper requiring 1,000micron copper deposits, then the cost of metal deposited is a significant proportion of the overall plating costs.

The formula to calculate your deposited metal costs is - surface area (in square centimeters) x deposit thickness (in centimeters) x density of metal deposited x cost of metal deposited. The following table gives the density for common electroplated metals: -

Metal	Gold	Silver	Copper	Tin	Nickel	Zinc
Density (g/cm3)	19.28	10.5	8.92	7.28	8.9	7.14

*Source – The Canning Handbook, 23rd Edition

For example, the copper busbar in this photo has dimensions of 30cm long x 10cm wide. The customer specification requires a silver deposit of 75microns.

With 10,000 microns per centimeter the calculation would be:

 $30 \times 10 \times 0.0075 \times 10.5 = 23.625g$. As both sides of the busbar are plated then $23.625 \times 2 = 47.25g$ of silver metal is required to meet the specification. The current price of silver is \$1,100/kg or \$1.10/g.

Therefore $47.25g \times \$1.10/g = \51.975 is the metal cost to silver plate the busbar.

Example 2 – a gravure roller measuring 150cm x 15cm diameter requires a copper deposit of 890 microns. Surface area is calculated as π x diameter x length, so 3.14 x 150 x 15 = 7,065 cm2. With a thickness of 890 microns, copper density of 8.92 and current price of \$20.00/kg the calculation is then: -7,065 x 0.089 x 8.92 = 5,609gms or 5.609kgs.

 $5.609 \times \$20.00 = \$112.18 \text{ metal deposited cost.}$





With volatile metal pricing it is therefore extremely important to constantly review metal pricing costs and the effects these are having in maintaining targeted profit margins.

Powder Coating Market Share.



September 2021

Purpose: FOR NOTING

The paper is provided for noting as to the performance of the Powder Coating Market in Australia. It may be regarded as an approximate of the current economic conditions. It may be reproduced for the AISF Newsletter on request.

Summary

Market as at 30th September 2021 (Q3 2021). The Powder Coating market continued its surge in Q3, rising by 7.5% on the same quarter last year. This is a build on consecutive quarters of growth with the rolling 12months of powder coating volumes rising 10.6% to this time last year to 9,899T. This is assumed to be a historical high, at least in this century. The growth is driven by dwelling building and renovation markets as well as on-shore sourcing. Good for the Australian manufacturing index



State performance saw an expected rebound in Victoria/Tasmania, from a comparatively poorer Q3 in 2020. Queensland and WA continue their recovery as economic conditions improve. NSW was clearly impacted by their Covid restrictions and a comparatively historical high Q3 2020.

	Q	TR	MAT		
	Volume (L)	% YOY change	Volume (ML)	% YOY change	
NSW/ACT	627,299	-5.8%	2,440,918	-1.5%	
VIC/TAS	968,880	19.3%	3,496,377	16.8%	
QLD/NT	693,850	7.4%	2,574,448	15.3%	
SA	129,390	-6.4%	520,570	4.0%	
WA	224,618	13.4%	867,584	16.4%	
Powders	2,644,037	7.5%	9,899,897	10.6%	

By Tony Leard Dulux Powder Coatings

Source: