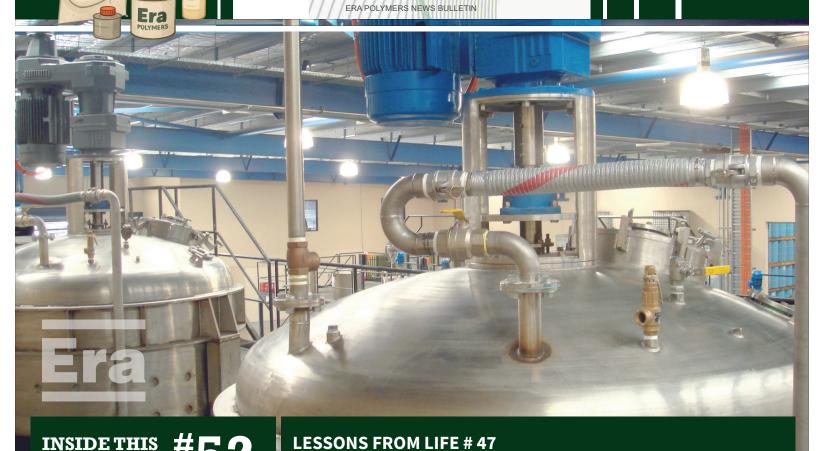
ISSNE

#52



IN THIS ISSUE

EDITION

Lessons From Life1-	3
Happy 75th George!	3
Annual Sales Meeting 2025 4-	5
Ken Duncan Gallery - Polycure	6
The Wide World of Polyurethane	7
Australia's Biggest Morning Tea	8
Landon Beauchamp Down Under	8
What's New, Who's New	9
Staff Milestones 1	0
Daniel, Taking Era Polymers to Japan 1	1
Nicholas Galego - Expands Role1	1
Klingstone - Showcase 1	2
What's Fab in the Lab - FOAMS 1	3
Urethane Coatings1	4
Polycure - Aquapro1	4
Era Polymers Word Search!1	5
What's Moving in Machinery1	6

Growing up in the 1950's in Neild Ave

Paddington, was a beautiful time.

Paddington and some of the surrounding suburbs were migrant suburbs, full of Greeks, Italians et. al., who had come to the Promised Land to be reborn.

The streets were alive with children playing (stuff that you don't see anymore)...

Sometimes the "playing" was more than that e.g. At the top of the street, was the Scottish Hospital. At the bottom of the hospital compound there was a mini forest...

It was there that the "playing" occurred on the weekend.

We were the Rushcutters Bay GANG... at the top was the Paddington GANG.

We'd meet in the middle, in the Hospital grounds... where WAR was declared.

It was bows and arrows, sticks and stones...

rough rumbles, rough tumbles... It really was full on!

Did we get hurt? Sometimes ...

CHICKEN SANDWICHES with STUFFING

But it was a time where children occasionally got hurt ...grazed knees, occasionally even, broken arms (remind you to show you MY scar!)...

Bruises galore... it was all a part of being naughty children !

It was life...it was a part of growing up.



Our mothers (and fathers) were too busy working...

To get the family established.

To pay the bills...

To improve the family's lot in life.

Helicopter parenting, and play dates, with ULTRA parent supervision, hadn't been invented... YET!

Summer was the best... we'd have breakfast ... then disappear.

Catch the trams and buses to Redleaf Pool, Watson's Bay... and even occasionally to Bondi Beach... and come home, just in time for dinner... exhausted and HUNGRY.



It was a time that you ate what was put in front of you... and LOTS of it.

NOW, mothers will tell you what their precious ones, like and dislike ...

NOW, there are food allergies, and choices, for children ...

We weren't so lucky... OR more importantly, didn't know any better... food ... ANY food that was put in front of you ...was there to be consumed...ALL OF IT!

It was also a time where we wanted to fit in ... we wanted to be Aussies ...

The "true blue, dinky di" versions.

They used to call us WOGS and DAGOS.

We didn't even know what they meant ... all we knew was that we weren't AUSSIES... and were treated accordingly.

Later in life I found out that WOGs, stood for Westernised Oriental Gentleman, I never knew why Greeks should be called thatand that, DAGO, was a corruption of Diego... a derogatory name for Spanish people...

BUT we were never Spanish.

Mrs Marshall grocery store across the road had a sign saying "Shop here before the Day Goes"

"Day Goes" was a corruption of DIEGO... but, again we weren't Spanish!

It was a time that the Greeks and Italians were taking over the grocery business... they'd put a small TV out the back, the children would do their homework, on a tiny table ... and the shop was open way, way longer after Bob Dyer's Pick a Box, on Channel Nine, finished...

The Aussies never stood a chance, against people who were prepared to work LONGER, for LESS.

So, as children, we wanted so much to conform... even when it came to our lunch. e.g. Out next door neighbours were the Vivelis family (we met on the boat, out from Greece, in 1954, and we are proud to say, our friendship still survives ...TODAY).

They too, were from Samos... They had 4 children Maria, Kiki, Sophia and Andrew ... we were three, Ella, Maria and yours trulv.

So Andrew and I would walk to Darlinghurst Primary School, together...about a 20 minute walk.

The problem was, that we were told to bring our lunch to school (back then the school gave us a small bottle of milk, every day) .. But lunch... we had to bring in.

So, at the beginning, we both explained to our parents, that we had to take SANDWICHES to school.

What is a sandwich, to mothers born and bred in small villages on Samos?!

So, they would make chicken with stuffing sandwiches... then the next day it was salami and mortadella sandwiches...

EACH one 2 inches thick!

They were definitely "wog-ey", they were definitely "dago-ey "

So Andrew and I, would compare our sandwiches... and conclude that:

"We can't be seen with these, at lunch time"

So, we'd eat them, on the way to school... after having a HUGE, "wog-ey" Greek breakfast!

And the teachers would then feel sorry for us, because our parents didn't have enough money to give us a "proper" lunch!!

One day, we compared sandwiches, and both concluded that we couldn't eat any more, after a HEAVY, heavy, breakfast ... and throwing them away, was NEVER an option.

So we took them to school ... and waited with trepidation, at lunch time ... of being called WOGS one more time.

The Aussie kids back then would have Heinz Spaghetti, or Vegemite, or Peanut Butter sandwiches ... each made with that famous principle;





"Wipe on Wipe off", by their mothers. i.e. there was NUTTIN on the bread ... and here we were, with our two inch thick "wog-ey" masterpieces.

So, as we opened up our lunch boxes with trepidation... and waited for the verbal onslaught.

One kid said;

"Uhhhh, what's that ?!"

Andrew and I explained what our mothers had made, and said:

"Yawanna swap?"

We swapped everything, that day.

I developed, THEN, a lifelong passion for Vegemite.





There was NO way that she would buy a jar ... back then, ALL Greeks believed, that it was made from boiled up old horses!

So everyday, we swapped 2 inch sandwiches for their versions of slivers of Vegemite and Heinz spaghetti.

The best part of the daily swap was that we were never again called WOGS and DAGOS...

It just shows you, the power of FOOD, to UNITE different cultures!



By the time we got to High School, we revelled in our culture, in our heritage... Being different, became a badge of Honour ...

Just because you're born, or bred, in "STRAYA "doesn't mean that you're " STRAYIAN"

Being different, is not something to be ashamed of.

George Dapamanuel, September 2025

HAPPY BIRTHDAY GEORGE!

Happy 75th Birthday to George Papamanuel!

On August the 7th, 2025, we celebrated an extraordinary milestone for an extraordinary man!

George:

- You've been a force in the chemical industry for an incredible 53 years.
- You have been and continue to be a devoted husband for 49 years,
- A proud father for 47 years;
- A beaming grandfather for 22 years...

But most importantly—you've been unapologetically **YOU** for **75 unforgettable years!**

Honest, intelligent, lovingly sarcastic, and wonderfully witty—you are a one-of-a-kind original, and we wouldn't have it any other way. Your presence lights up every room (and meeting), your wisdom shapes industries and lives, and your loyalty and love for your family and team are unmatched.

Here's to many more years of laughter, legacy, and wisdom. We salute you not just for what you've done, but for who you are.

Love and respect from ALL the Era Polymers and Samos Polymers staff worldwide!

TO INFINITY & BEYOND!!





Era Polymers Hosts Annual Sales MeetingAugust 2025

Representatives from across Australia and New Zealand came together at the **Era Polymers** Headquarters in Banksmeadow, NSW, for the Annual Sales Meeting this August. The gathering provided an invaluable opportunity for team members to share insights, review achievements, and strategise for the year ahead.

The event was led by
Alex Papamanuel, Sales
Director, and Grahame
Pond, National Sales
Manager ANZ, whose vision
and leadership continue to
drive the company's growth
and success across global
markets. With dynamic

discussions, collaborative workshops, and forward-thinking presentations, the meeting reinforced Era Polymers' commitment to excellence, innovation, and customer focus.

The 2025 Annual Sales Meeting was not only a productive forum for sharing strategies but also a celebration of teamwork and the collective drive that makes Era Polymers an industry leader.





ANNUAL SALES MEETING 2025

BANKSMEADOW NSW AUSTRALIA









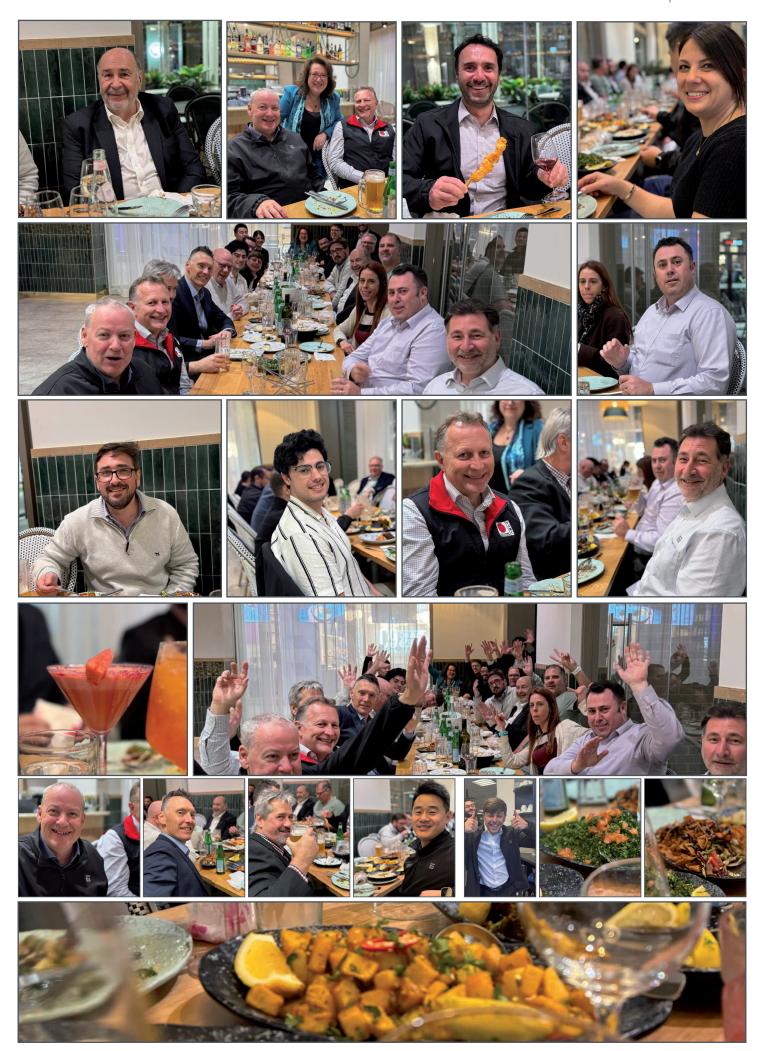












POLYCURE PROTECTS THE FLOORS OF THE KEN DUNCAN GALLERY









On the 6th of June 2025, members of the sales and marketing teams travelled north of Sydney to visit 414 The Entrance Road, Erina Heights – home to the renowned **Ken Duncan Gallery**.

The gallery, one of the largest privately-owned photographic galleries in Australia, is a purpose-built facility showcasing the artistry and vision of Ken Duncan. Recently, its much-loved timber floors were undergoing extensive resurfacing after years of heavy use and wear.

To restore and protect these floors, **Polycure's Aquapro Advance 2K in a matt sheen** was chosen. The product was selected not only for its outstanding **durability and aesthetic appeal**, but also because it is **Australian made** – reflecting the same values of quality and authenticity that underpin Ken Duncan's work.

We are proud to be the **manufacturer and supplier** of a product that now supports another great Australian institution, ensuring that the Ken Duncan Gallery continues to welcome visitors on beautifully finished floors for years to come.













To locate your nearest floor coating distributor please click on your preferred supply location.

Visit;

www.urethanecoatings. com.au/distributors/

www.polycure.com.au/ distributors

Tel: +612 9666 3888

THE WIDE WORLD OF POLYURETHANE POSSIBILITIES

At Era Polymers, we do not just make polyurethanes ... we make magic happen in moulds, spray guns, mixers and machines! Whether you're coating a chute, sealing a gasket, or building the dump truck of your dreams—we've got the solutions, the systems, and the smarts to get it done.

THE ERA POLYMERS PRODUCT RANGE:

Let's kick things off with our poly-phenomenal range:

- Cold Castable Polyurethanes Tough, flexible, and ready to pour! Great for impact-resistant parts that play hard and last long.
- **Sprayables & Equipment** Need to cover large surfaces fast? We've got the gear and the grip to coat like a pro.
- Dump trucks, Chutes & Launders

 Heavy-duty workhorses meet wear-resistant wizardry.
- Pipelining & Bends Smooth flow, no drama. Our solutions keep things moving... and grooving.
- **Cyclones & Flotation Cells** For when the going gets abrasive, our polyurethanes get tougher.
- Advanced Toubleshooting Problems & Solutions Hit a snag? We've probably seen it before—and solved it better!

LET'S LOOK AT THE APPLICATIONS:

From mega-machines to the tiniest seals, Era Polymers' products show up everywhere:

 Membranes, Adhesives, Coatings & Sealants – Stick it, seal it, protect it. We keep things tight, tidy, and totally dependable.

- Seals & Gaskets Because leaks are for amateurs.
- **Erakote Systems** The elite system for high-performance roll coverings. Like a suit of armour, but smoother.
- Polyurethane Foams Soft, strong, structural—pick your density, and we'll bring the bounce!
- Casting Machines for Top PURformance! Our machines don't mess around. Precision casting that's fast, clean, and repeatable.

You dream it. We make it.

Custom formulations? Check! Expert advice? You bet! Boundless polyurethane enthusiasm? Always!

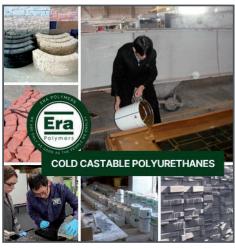
LET'S TALK!

Got a project? A challenge? Or just love talking about polymers as much as we do?

We're here to help, to create, and to solve.

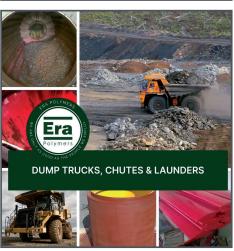
Era Polymers: Turning ideas into polyurethane perfection - since forever.

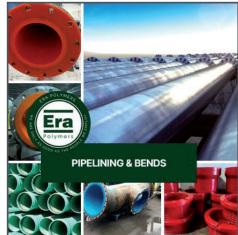
Head Office: www.erapol.com.au South Africa: www.erapol.co.za USA: www.erapolymersusa.com New Zealand: www.erapol.co.nz

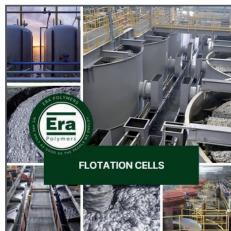












AUSTRALIA'S BIGGEST MORNING TEA EVENT



This year, Era Polymers proudly registered to take part in Australia's Biggest Morning Tea, joining thousands of Australians in raising much-needed funds for the Cancer Council. The event was spread over a few weeks as Samos Polymers and Applied Polymers also joined in for support.

The event brought together staff from across the company, who shared delicious food, laughter, and plenty of good cheer. More importantly, it was an opportunity for everyone to contribute to a cause close to many hearts - helping the Cancer Council continue its vital work in cancer research, prevention, and support services.

The morning was a resounding success, with money raised through donations and staff participation. It was a wonderful reminder of the strong community spirit at Era Polymers, where giving back is always embraced with enthusiasm and a sense of fun.

Together, the team showed that when we come together over a cup of tea (and maybe a slice of cake), we can make a real difference.

















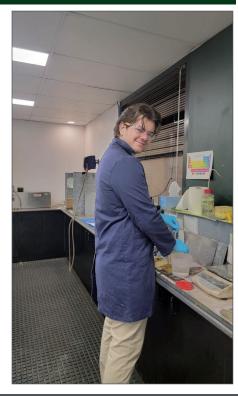
LANDON DOWN UNDER

Five months before arriving in Sydney, Landon Beauchamp contacted George Papamanuel, Managing Director of Era Polymers and was welcomed to join as the company's first business intern.

Arriving in late May, Landon worked with George, Tina, Francene, and Alex to design a learning plan that balanced personal goals with company objectives.

The internship covered several areas: human resources (reporting, candidate screening, and system documentation), sales and marketing (trade show preparation and project support), production planning (exposure to ISO 9001 and NATA standards), quality control (testing, reports, and customer issue analysis), and supply chain (supplier research, raw material logistics, and warehouse processes).

Through these experiences, Landon gained technical knowledge across business operations but emphasised that the greatest lesson was understanding how care, ethics, and culture — fostered in Era's family-like environment — drive long-term success.





Thanks

WHAT'S NEW AND WHO'S NEW

Congratulations!

CON & ELLIE VOUROUDIS GOT MARRIED ON THE 17th of May 2025





For those that have attended a recent Era Christmas Party, they might have met Con, our accountant, and his partner Ellie. Well, on 17th May 2025, they got married in Pyrmont, NSW, followed by a small reception at Doltone House by Sydney Harbour!

WELCOME TO ERA POLYMERS: JOE SCIBILIA I.T. MANAGER

Welcome to the Team, Joe!
We're excited to announce that Joe Scibilia has joined Era Polymers as our new IT Manager.
With Joe on board.

we know we've found a winner! Please join us in giving him a warm welcome as he brings his expertise and energy to the team.



SURFACE COATINGS ASSOCIATION OF AUSTRALIA - AN ERA POLYMERS WEBINAR

Era Polymers Presents at SCAA Webinar

On June 30, 2025, David Pu, Business Manager of Era's Membrane and Coatings division, presented a webinar to the Surface Coatings Association of Australia (SCAA).

His talk explored polyurethane chemistry, its wide-ranging industrial applications, and key global challenges, including the shift to bio-based raw materials and tighter regulations around MOCA and mercury. The session drew strong attendance and positive feedback, highlighting Era's ongoing role in advancing industry knowledge.

Celebrating Kim Charlesworth: A Remarkable Career, A Well-Earned Retirement



After 20 years of loyal and faithful service, Kim has decided that it is time to smell the roses... In fact before he smells the roses in his backyard, both he and his lovely wife, are off overseas on a cruise, to smell some distant roses in Europe!

In looking up when Kim joined us, I looked up his file on my desktop, and it goes back to... 28/02/2005!!

That's a long, long time ago.

And in that entry was his resume...THAT is a resume written in a bygone Era... way before you use AI, or professional writers, to write it for you.

That defines Kim, an old-fashioned gentleman, always looking after his family, the company, and his customers...always!

We're going to miss you Kim.

- George Papamanuel & the Era Polymers Family

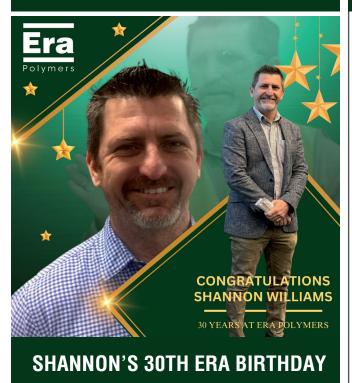
WELCOME TO ERA POLYMERS: RICHARD SINGLETON. TECHNICAL SALES - QLD





RICHARD SINGLETON: Mobile - 0412 323 546

CONGRATULATIONS





Our exclusive 30+ Club... has a new member... none other than our very own. Works Manager extraordinaire!

He's gifted, very gifted, He's intelligent, He's extremely hard working, He lives and breathes Era and Samos, He's always pushing himself, and his people, to be better, He's a superb husband, father, and son in law, He has a passion for speed when he hits the racing track

He is all that and more...He's **Shannon Williams!**

HAPPY ERA BIRTHDAY! SPECIAL MENTIONS (APRIL-SEPTEMBER*)

SAMUVEL MOHAN (SAMOS)
NARAIN REDDY (SAMOS)
DEBORAH LI (ERA HQ)
VINCENT WILLIAMS (SAMOS)
DAVID WEIR (ERA HQ)
PETER WILLIAM STUTH (SAMOS)21 YEARS
SCOTT PERKINS (SAMOS)
ROBERT McLEAN (ERA POLYMERS)17 YEARS
SHAUN ANDREW HAMILTON (SAMOS)16 YEARS
WENDY CHARLIE (ERA HQ)
MARK NOOME (SOUTH AFRICA)16 YEARS
JIMMY KOSTOUROS (ERA HQ)15 YEARS
ALEX MILADINSKI (SAMOS)14 YEARS
CALVIN NGOBENI (SOUTH AFRICA)14 YEARS
CASEY SUMMERELL(SAMOS)13 YEARS
LIND LIU (ERA HQ)13 YEARS
GERHARD CRONJE (SOUTH AFRICA)13 YEARS
VICTORIA ZAVRAS (ERA HQ)12 YEARS
CRAIG BISHOP (NEW ZEALAND)12 YEARS
DEARNE OSBORNE (SAMOS)11 YEARS
JOEL CORDOBA(SAMOS)11 YEARS
RAHUL DHIRUBHAI PATEL (SAMOS)11 YEARS
LIANA DE FRANCESCO (SAMOS)11 YEARS
BRENDON SUMMERELL (SAMOS)11 YEARS
DAVID PU (ERA HQ)11 YEARS
ANGELA CAI (ERA HQ) 10 YEARS
SIMON LAVIS (APPLIED POLYMERS) 10 YEARS
JUSTIN SUNDERLAND(SAMOS)9 YEARS
VINCENT ABELA (SAMOS)9 YEARS
LAWEE ONG ROT(SAMOS) 8 YEARS
SONJA VOLPES(SOUTH AFRICA) 8 YEARS
DINH THUY TRAN (SAMOS) 7 YEARS
SLADE NOLAN BOSTON (SAMOS)7 YEARS
MARTIN BRANDJES (SAMOS)
JOHN FUFALKO (SAMOS)
MATTHEW BET (ERA HQ)
CHRISTINE LAWRENCE (ERA HQ)
SHANEEL RAO (NEW ZEALAND)
JOLENE WARD (SOUTH AFRICA)
PAUL WAITE (USA)
*STAFF 5+ YEARS LISTED ABOVE

The strength of the team is each individual member. The strength of each member is the team.

DANIEL, TAKING ERA POLYMERS TO JAPAN



Daniel serves as the key technical liaison between customers, sales, production, and R&D teams.

Key responsibilities include:

Customer Support & Troubleshooting:

> Provides technical support to customers both remotely and on-site, assisting with product selection, optimizing processing conditions, resolving issues, and ensuring products meet customer expectations.

Product Development: Collaborates closely with customers and the R&D team to develop and customize polyurethane formulations for specific applications.

Training & Knowledge Sharing: Conducts technical training sessions for both customers and internal teams on topics such as product selection and material processing.

Having recently relocated to Japan, Daniel is now strategically positioned to support customers more effectively across the Asia-Pacific region. The primary focus is on driving business growth in Japan, Taiwan, South Korea, and Malaysia. This regional presence enables more frequent site visits and the development of stronger customer relationships.

ERA POLYMERS' NICHOLAS GALEGO EXPANDS ROLE ACROSS TECHNICAL SERVICE AND SALES

After two years in the Era Foam Lab, where he focused on lowering VOCs and GWPs through the expansion of the ECOFOAM and GREENLINK product lines, Nicholas Galego has now stepped into two new roles: Technical Service for the Elastomer Division and Sales Representative for the Sydney region.

The dual position offers him a unique blend of opportunities. On the sales side, it allows him to pursue his strong personal interest in developing and strengthening business-to-business

relationships. On the technical side, it enables him to apply his background in chemistry directly to customer needs.

Working in Technical Service gives Nicholas hands-on experience with the very products customers use, equipping him to deliver practical, confident recommendations for processing and applications.

The combination of sales and technical service has marked an exciting new chapter in Nicholas' career - one that is both challenging and deeply rewarding.



NICHOLAS GALEGO - TECHNICAL SALES

Nicholas Galego Technical Sales

Excellence in Polyurethane Chemistry



Era Polymers and M and D Golf Showcase Klingstone®

Era Polymers and M&D Golf Showcase Klingstone® at the **Australian Sports Turf Management Trade Exhibition**

Sydney, Australia - 23-26 June 2025 - M & D Golf, in collaboration with Era Polymers, proudly participated in the Australian Sports Turf Management Conference & Trade Exhibition, the Southern Hemisphere's leading event for turf professionals.

Held annually, the conference and exhibition bring together industry specialists for more than three days of education, innovation, and the latest advancements in turf technology. equipment, and research.

As part of this year's program, M & D Golf and Era Polymers showcased Klingstone, a cutting-edge binder solution designed to stabilise aggregate surfaces. Known for its durability and performance across golf courses, sports fields, and recreational facilities, Klingstone drew significant interest from turf managers and decision-makers seeking sustainable, low-maintenance solutions.

Era Polymers was represented at the exhibition by Alex Papamanuel (Sales Director – Era Polymers) and Grahame Pond (National Sales Manager Australia / New Zealand – Era Polymers),



alongside Landon Beauchamp, visiting Era Polymers from the United States as well as David Stone (M & D Golf). Together, they engaged with delegates, demonstrating the practical benefits of Klingstone and its ability to deliver long-term results in demanding turf environments.

"The Australian Sports Turf Management Trade Exhibition provides an exceptional platform to highlight innovative products like Klingstone," said Grahame. "We were delighted to connect with industry professionals and showcase how Klingstone can contribute to improved playing surfaces and greater operational efficiency."

M & D Golf and Era Polymers remain committed to supporting the turf management industry through innovation, collaboration, and the introduction of proven solutions for today's challenges.

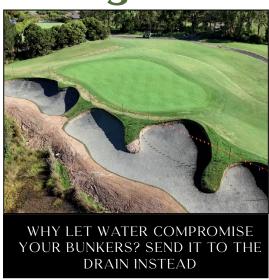




KLINGSTONE/M&D GOLF



Klingstone®

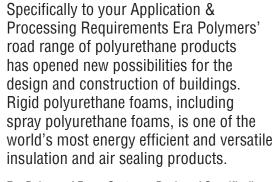


WHAT'S FAB IN THE LAB

THE FOAMS LABORATORY







Era Polymers' Foam Systems, Designed

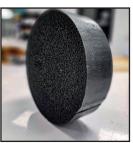


















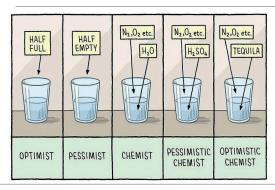
Era Polymers' Foam Systems, Designed Specifically to your Application & Processing Requirements Era Polymers' road range of polyurethane products has opened new possibilities for the design and construction of buildings. Rigid polyurethane foams, including spray polyurethane foams, is one of the world's most energy

efficient and versatile insulation and air sealing products.

Polyurethane foams are formed from the reaction of an Isocyanate (ISO) with a Polyol (POLY). These two components combine to produce an exothermic reaction which results in the formation of polyurethane foam. The secret is in the additives contained in the ISO and POLY, which combine together to produce a blown foam with specified properties. Polyurethane foams can be simply classified as Rigid, Flexible & Semi.

Rigid, Integral Skin Foam and Microcellular Foam. Rigid Foams have excellent thermal insulation properties and are widely used as insulaton materials in domestic and commercial appliances such as refrigerators and hot water systems.

Flexible & Semi Flexible Foams are extremely comfortable so are used extensively in the automotive, bedding and furniture seating industries. Integral Skin Foams are flexible or semi rigid foams comprising a cellular core with a tough integral skin that is hard wearing and abrasion resistant Microcellular Foam also known as Elastomeric Foam is a fine celled high density high performance flexible foam with excellent tensile and tear strengths.





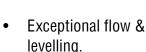


SUMMER IS COMING!

Every Success Begins with a Clean Slate.

WaterKote® 2K SATIN



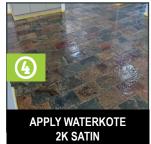


Full Cure 5 - 7 days after application.









waterborne polyurethane.

A GREAT CHOICE TO PROTECT YOUR FLOOR & KEEP IT LOOKING GOOD

WaterKote® 2K SATIN is a 2-component water-borne polyurethane topcoat providing the toughest protection not only for timber, parquetry and cork floors, but for SLATE TOO! all the while being non-hazardous, low-VOC and easy-to-use.

2 component

UV resistant.

Highly durable.

Non-hazardous

choice.

Using the highest grade polyurethane dispersion technology, WaterKote® 2K

has been developed to be applied easily to reduce application error and imperfections while giving excellent resistance to wear and chemicals.

Resulting in a clear finish which maintains the natural beauty of a timber floor while being extremely hardwearing and longlasting protection for all timber species.

To locate your nearest floor coating distributor please click on your preferred supply location.

Visit: www.urethanecoatings.com.au Telephone: +612 9666 3888

www.urethanecoatings.com.au

The Aquapro 8270 Advance 2K is back and better than ever!

We've made it even easier for you to get your hands on this incredible product. It's now available in a convenient kit form — the same high-performance flooring solution you trust, but now faster and easier to purchase!

Think Smart, Shop Smart, and Buy Australian - choose Aquapro 8270 Advance 2K for your next project and experience the difference in quality and efficiency.

AQUAPRO 8270 is a highperformance, two-pack water-based floor finish designed for commercial and high-traffic interiors. It offers outstanding abrasion and chemical resistance, along with excellent protection against black heel marks.

Key Benefits:

Easy to apply, Fast drying, Non-yellowing, Low VOC, Superior durability Available in; Matt, Satin, and Gloss Ideal For: Interior timber,

particleboard, and cork flooring.



QUALITY IS THE **BEST BUSINESS** PLAN. PERIOD.

- John Lasseter

YOU KNOW MORE THAN YOU THINK! - ERAPOL CROSSWORD

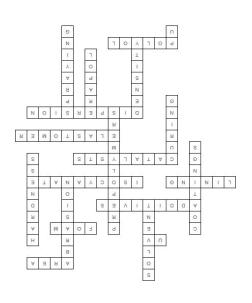
Across			1				
2	Measurement of exposed extent, often in surface coatings		3			2	
3	A test for weathering resistance involving ultraviolet exposure.		3				4
7	Lightweight cellular material used in insulation and cushions	5		6	7		
8	Chemicals added to improve properties such as UV resistance			8		++-	
9	Abrasion-resistant polyurethane often used in mining applications	8		-		6	-
10	The reactive group –NCO is found in this key raw material.	8		4		2 2	- 24
11	Compounds that speed up polyurethane reactions				- T	1 6 6	
12	Highly stretchable material that returns to its original shape.		10				
13	Stable mixtures of two or more immiscible substances	30 1 3		1	\$5 US	103 135 150	C 3 5
16	Building blocks that react with isocyanates to form		44	8 8	al a	78	
	polyurethane		11	8 8	36 36	8	8
Down							
1	Liquid carrier in solvent-based polyurethane coatings	<u> </u>	' H	12	7 7		
2	Mechanical property measuring resistance to wear and friction			88.88	90 10	8 9 8	
4	Property of a coating that resists scratching or indentation						
5	Thin protective or decorative layers applied to surfaces		13		14	15	
6	Polyurethane intermediates made by partial reaction of		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A 8		2 2 8	
	isocyanates and polyols						
11	Process of converting liquid polyurethane into a solid film		100 00			8	
13	Measurement of how much space a foam occupies per unit mass		2 3			8	
14	Brand name for a polyurethane elastomer range at Era		(4 3)		3 1	5 5	
	Polymers		06 30		3 4 3	2	
15	Process of applying polyurethane foam directly onto a		10 10 00 00 00	30 50	30 40	8 8	
	surface for insulation		16				
16	Abbreviation often used for polyurethane			10			

FILL-IN-THE-BLANKS

1.	The chemical group –NCO is the functional group of
2.	Polyurethane foams are classified as either rigid or
3.	A system contains two liquid components that must be mixed before reaction
4.	High-performance are used in mining and industrial rollers for abrasion resistanc
5.	One key property of flexible foams used in furniture is comfort.
6.	The process involves applying multiple layers to achieve better protection and
	aesthetics.
7.	Solvent-based coatings are gradually being replaced by water-borne systems.
8.	The density of a foam is usually expressed in per cubic meter (kg/m³).
9.	In elastomers, the modulus measures stiffness at low elongation.
10.	Polyurethane are used as adhesives, sealants, and binders in construction

RIDDLE ME THIS

- 1. What is the only letter of the alphabet that does not appear anywhere on the periodic table of elements?
- 2. What do chemists call a benzene ring with iron atoms replacing the carbon atoms?
- 3. I am hard to create and I can't be destroyed. I can only change form. What am I?



VNZNEKZ CKOZZNOKD:

3. Energy 1. J. 2. A Jerrous wheel! 3. Energy TO RIDDLES:

ANSWERS TO FILL-IN-THE-BLANKS: I. Isocyanales 2.
Flexible 3. Two-coming
6. Coaling 7. Polyuvethane
8. Kilograms 9. Young's 10. Sealants



WHAT'S MOVING IN MACHINERY



Gama has unveiled the new G PRO-35H and G PRO-50H, it's the latest generation of its high-performance hydraulic proportioning units for polyurethane foam, polyurea and hybrid systems. They are the successors to earlier GAMA hydraulic models G35H and G50H.

The new models deliver the same proven performance with several important upgrades, the most notable is a new cosmetic look and hydraulic oil cooling system composed of a fan and radiator, which improves efficiency and reduces the overall oil requirement from 63 litres to 27 litres, resulting in a lighter weight and smaller footprint machine.

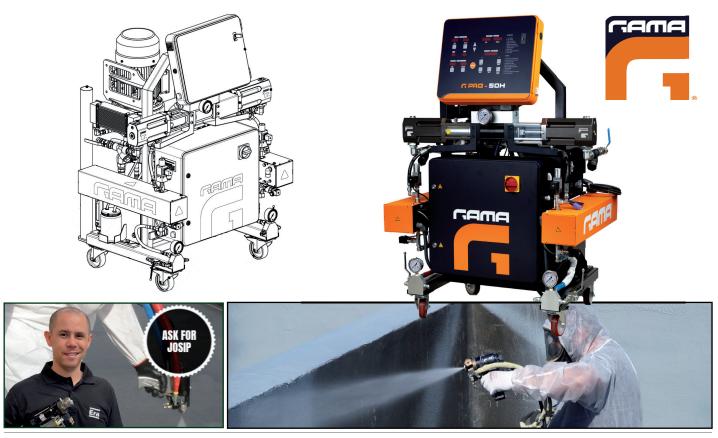
The unit also features a redesigned open-frame chassis, making it easier for technicians to

access internal components and perform routine maintenance, and also includes USB data logging for real-time monitoring of material usage, pressures, and temperatures, providing operators with valuable details for quality control and job documentation.

Despite these design updates, the machine retains the same output of its predecessor, delivering up to 15 kg/min at 110 bar (G PRO-35H) and 22 kg/min at 110 bar (G PRO-50H)

and supporting hose lengths of up to 93 m for foam and 78 m for polyurea.

The G PRO-35H is ideally suited for medium-sized projects, and the G PRO-50H for high production, both can be used for projects such as insulation, waterproofing and corrosion protection.



Sydney • Adelaide • Brisbane • Melbourne • New Zealand • Singapore • Malaysia • United Kingdom • USA • South Africa



Head Office Tel: (+61) 02 9666 3788

2-4 Green St, Banksmeadow NSW 2019 AUSTRALIA

www.erapol.com.au







