



# THE Herald

ERA POLYMERS NEWS BULLETIN



INSIDE THIS EDITION #30

## IN THIS ISSUE

LESSONS FROM LIFE.....	1-2
ENA, DIO, TRIA DECADES.....	1 & 8
GLOBAL REACH.....	3
ERACOAT 2K RAPID GREY.....	3
ERA COLD CASTABLES.....	3
VORTEX MIXERS.....	4
COLD WALL EFFECT?.....	5
APTANE AT LNG18.....	6
ANZAC DAY.....	7
ERA POLYMERS EXHIBITIONS.....	7
ERA POLYMERS TIMELINE.....	8
THE WAY WE WERE.....	9
MILESTONES.....	9
PIPELINE PILLOWS & TRENCH BREAKERS.....	10
MEET THE ERA TEAM.....	11
THE LIGHTER SIDE.....	12

## LESSONS FROM LIFE ▼ # 30 - GOLD

If you manage to get two Greeks in a room, you will soon have an argument ..They will argue about anything and everything , trying to convince their opponent ,that THEIR view of the Meaning of Life ,is the ONLY view .

Take for example, helping your children, when it's time for them to get married, and start their long journey through life.

ONE view, says;  
"How can you help your children, when you don't know what sort of children you have produced "

To which MY mind says  
"Boy, if you haven't figured out your children, by the time they get married, you never will"

(Continued Page 2)

## ERA POLYMERS: FEATURE STORY

## EASY AS ENA, DIO, TRIA DECADES!

EASY? NO. Thirty years ago, did George & Tina Papamanuel enter a boardroom complete with mini bar fridge? Was there a firm handshake after signing a perfectly drawn up agreement by the lawyers to cement the incorporation of a proprietary limited company?

Heck NO. However, there was a small kitchen in 11A Beach Street Blakehurst where a loving husband and wife kissed and looked deeply into each other's eyes and said "Let's do this". That Saturday night in 1986, the 12th of April to be exact, Era Polymers was born... alive, kicking and ready to cast.

(Continued Page 8)



Excellence in Polyurethane Chemistry



(Continued from Page 1)

So, that point of view, means that they will give their child a Royal Doulton dinner set, for a wedding gift. OR, if they are really generous, you get a Louis XIV, bedroom suite, all gold painted and FUSSY.

My father and mother, (AND, Tina's parents ) had the ALTERNATE point of view.. i.e. you help them when they need helping...

IF , you live to a ripe old age... then the kids will be in their 50's when they inherit what you will eventually give them....

And chances are, IF, they really became the children that you hoped they would become ... then they wouldn't need your money anyway.

So, in Greece, more often than not, the first view prevailed.

Over there ,before they discovered socialism... you wanted, indeed, NEEDED, your children to look after you, when you got old, REALLY old...like, over 60!

So, what they used to do, was to convert whatever money they managed to accumulate into GOLD..real gold ....COINS.

So, since they didn't trust the banks, the gold coins would be buried. Buried somewhere in the myriad of small farm plots .

The problem with that, was, sometimes, they forgot where they planted it .

My father told me, that once upon a time, my Pappou ( Grandfather) George, found a mother load of gold coins that somebody else had buried..



The mother load was OLD Byzantium coins ... which had to be hundreds of years old, right.

Dad ended up with TWO..One he gave to my eldest sister Ella, the other to Maria...

Maria promptly had a hole drilled through hers, so that she could put a chain through it ... Onya Maria!

Thea (Auntie) Lefki.. was Pappou's favourite and youngest daughter ... so she ended up with about 9 ... one fine day, she had them on her dressing table in MacPherson St. Waverley ... somebody jumped through the window, and stole the lot... so somebody in Sydney has cousin Maria's and Ephie's inheritance .

Dad, must have felt guilty, about me missing out, so when he made a will... he, amongst other plots, gave me one specific one .

" What's special about that one, dad"  
"Well, this is where your Pappou buried what was left of the mother load"

"Huh"

"Well, my mother, your (grandmother)

**"So, since they didn't trust the banks, the gold coins would be buried. Buried somewhere in the myriad of small farm plots"**

YiaYia Maria, was a proper hypochondriac...She suffered every imaginable illness, and some, that weren't even invented, at that time".

So, a lot of the coins went to the doctors to treat what she thought she had.

(I'm proud to say, that I've inherited my grandmothers hypochondria ... BUT, I'm not allowing this illness to whittle away my children's and grandchildren's inheritance ... I've reduced my cure all.. To a daily LARGE dose of vitamins!)

My YiaYia, must have spent some decent amount of this loot in getting a GOOD, really GOOD glass eye ... I've two photos hanging on the wall, leading up to my sanctuary in our house, and every night, I say hello to both sets of grandparents ... and I ask my YiaYia Maria... "Now YiaYia, WHICH eye is it again?" ... YES, It's THAT good!).

Anyway, dad left me the plot of land that

my Pappou, buried what was left ,after YiaYia finished her treatments... and Pappou being Pappou, forgot where he buried it.

Dad said, that when he had the time, he would go and dig, and dig, and dig .. And never found it.

So, he made me promise to find my inheritance... Mind you, this conversation, we had 40 years ago, right. I'm too old to go digging now. Alex and Shannon, could, but our visits to Samos are too short and too infrequent .

So, I've had this dream, that ONE day, I'll buy a metal detector, and go gold hunting.

The problem is that, that land, like all abandoned plots on Samos, is going back to nature, the pine trees, the cypress trees are taking over ... the island is GREENING, all over again.

My chances of success decline every year.

Maybe I'll leave the problem to my grandchildren.. And see what point of view they take, when it comes time, to helping THEIR children.



# GLOBAL REACH LOCAL VALUES MAKING DOING BUSINESS WITH ERA POLYMERS EVEN EASIER

**Era Polymers** is dedicated to offering a global reach with local values and the principle of:

**“Business is people doing Business, with people.”**

As **Era Polymers** continues to grow globally they want to make sure that working with Era is a smooth and efficient process in an increasingly complex business environment.

We are pleased to announce that we have established the following legal entities which will make working with **Era Polymers even easier**.

## **Era Polymers Limited** A new legal entity registered in the UK.

## **Era Polymers Sdn. Bhd.** A new legal entity registered in Malaysia

## **Era Polymers Pte Ltd** A new legal entity registered in Singapore

By having established **Era Polymers** legal entities in these countries we are able to reduce document handling, delivery lead times and able to invoice goods in local currencies with the relevant local taxes.

## **Making working with Era Polymers even easier!**

## ERAPOL COLD CASTABLES

Era Polymers range of Cold Castable Polyurethane systems are available in either TDI or MDI with varying hardnesses.

The variety of characteristics suit many applications including casting complex shapes and the reproduction of intricate patterns. They are designed for processing and curing at room temperature but can also be cured at elevated temperatures for faster demould and improved physical properties.

These two component products can be either hand mixed or dispensed through a plural component machine.

### Applications Include:

- CONCRETE MOULDS & STAMPS
- SEALS
- SHOCK AND SOUND DAMPENING PADS
- WASHERS
- GASKETS
- GENERAL MOULDS
- ELECTRICAL INSULATION & ENCAPSULATION
- SPECIAL EFFECTS



**“It’s so good – we use it ourselves”**

Era Polymers QLD decided to FLOOR IT! with **Eracoat 2K Rapid Grey** - all 75m<sup>2</sup> of it using 30L with a final DFT around 400 microns.

1. Original epoxy flooring was yellowing and delaminating from concrete base in places.
2. Epoxy coating ground off with concrete grinder and floor vacuumed to remove concrete dust.
3. Bug holes filled with a high strength epoxy filler.
4. Thin primer coat roll applied thinned with 10% thinners
5. 1st top coat of 100% solids system roll applied within 18 hour recoat maximum window.
6. 2nd top coat of 100% solids system roll applied within 18 hour recoat maximum window.
7. Coating foot trafficable after 2 hours and robust enough for fork lift movements and pallet stacking after 6 hours so very fast return to service.
8. Cured coating was easy to clean (dusty marks from fork lift wheels) with water (mop/bucket).

Photos courtesy of Leigh, Kim & Dominic Era QLD



*Bug holes filled*



*1st Top Coat*



*2nd Top Coat*

For more information contact:  
**Era Polymers - Coatings**  
George Zavras on T: +612 9666 3788

## DO YOU HAND MIX DIFFICULT-TO-BLEND MATERIALS?



## VORTEX MIXERS

### ► The Vortex Mixer could be the answer you are looking for!

The **Vortex** range of mixers are designed to mix materials in seconds they use dual axis centrifugal mixing which produces a tremendous shear force. Not only does this cause no air entrapment, no blades are required, so no time consuming clean-up of equipment.

### A win-win, evenly mixed material in seconds and no cleaning up!

The dual-axis centrifugal mixer produces the axial flow patterns that are predominant in liquid mixing while overcoming the viscosity limitations of a traditional single-shaft mixer.

Added benefits include reduced clean-up requirements, as all shafts are eliminated and the container remains the only contact part. Without shafts, it's possible to produce very small batches; standard units are capable of mixing batches as small as 50g and as large as 2.5kg. Batch limits can be extended with container adapters.

In addition, the shallow vortex eliminates additional air entrainment during mixing. As vortex depth is not a limiting factor, the dual-axis centrifugal mixer can mix at high energy levels, which results in shorter batch times.

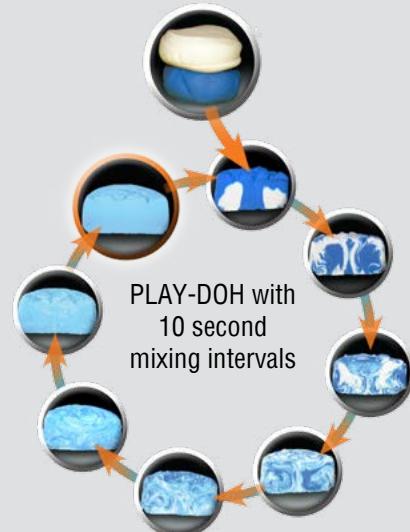
Era Polymers recommends the Vortex range of mixers as they are used for fast and efficient formulation qualification, pilot development, and small batch production. Using this process, pre-polymer resins, curatives, powdered additives, polyurethanes, silicones, epoxy systems, and other materials can be effectively mixed in a fraction of the time required by conventional mixing methods and without the usual air entrainment.

Suitable materials for the **Vortex** mixers include:

- Epoxies
- Filled Polymers
- Inks
- **Polyurethanes**
- Silicones
- Waxes



Blend materials quickly,  
EVENLY & efficiently,  
with no time  
consuming clean up



To watch a demonstration video of the Vortex in action visit: <http://www.statemix.com/vortex-mixer.html>

**Era Polymers** are the exclusive agents for the **Vortex Range of Mixers** in Australia & New Zealand. **Vortex** are produced by StateMix in Canada.

For more information or a demonstration on **Vortex Mixers** contact: **Era Polymers** Machine Specialist, Hugh Fraser on Tel: +61 (0) 2 9666 3788

# OH NO! NOT THE COLD WALL EFFECT! WHY IS THIS HAPPENING??

This edition's special troubleshooting installment:

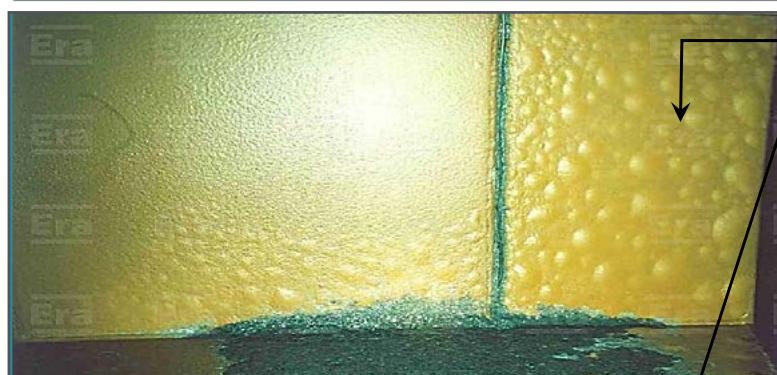
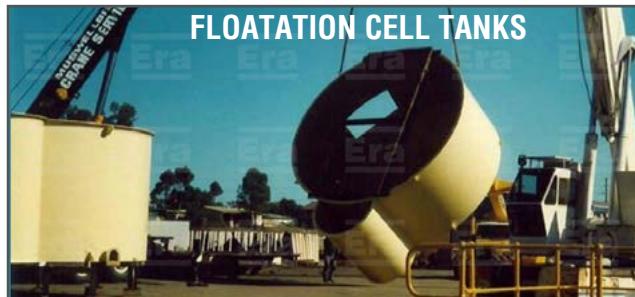
## WHAT IS COLD WALL EFFECT?

1. BLISTERS –Which are caused by a vapour drive through a coating or lining causing water vapour to condense on a cold metal surface.
2. The VAPOUR DRIVE needs at least a  $6.6^{\circ}\text{C}$  differential, between the inside liquid temperature, and the outside cold steel temperature. The greater differential, the faster the drive. During routine monthly inspection of the rotors and stators in flotation cells, it was reported that a wall had blisters in the polyurethane lining.

- All blisters were filled with water under pressure and no air was found inside any bubble
- There was no sign of corrosion on the steel when a blister full of water was cut open.
- Blisters only appeared on surfaces that were exposed to the exterior wall
- 3. If soluble salts are present on the surface, the faster the vapour drive. **Also occurs in Cast Urethane inside pipes**

## 4. HOW DO YOU ELIMINATE?

- (i) Eliminate the cold metal surface by insulating the tank or pipe
- (ii) The thicker the lining the slower the rate of blister formation



Cold Wall Blisters





# APTANE® INAUGRAL EXHIBIT AT:



On the 18th International Conference and Exhibition on Liquified Natural Gas was held at the Perth Convention Exhibition Centre over a period of four days in April 2016.

In attendance were our Alex Papamanuel, John Eve, Marcel Tondo and Rob McLean. Esteemed guests of the event included Australian Federal Government Representative, including The Hon. Colin Barnett, the Western Australian Premier.

**APTANE® products meet the stringent performance criteria specified in cryogenic applications**

**Leaders in cryogenic and pipeline insulation**

APPLIED Polymers has been supplying high performance polyurethane insulation materials globally, for application in the pipeline and cryogenic applications, for more than 20 years.

The APTANE® range of products have been specified for use in cryogenic applications such as pipelines, pipe supports, valve boxes, flanges and joints. World class testing laboratories and production sites ensures that APTANE® products always meet the highly stringent performance criteria specified in cryogenic applications.

In supplying products to more than 70 countries Era Polymers/Applied Polymers is able to deliver cost competitive systems to every country.

Applied Polymers is a leader in cryogenic and pipeline insulation.



Applied Polymers have been supplying high performance polyurethane insulation materials for applications in the LNG Industry for over 20 years. Aptane® a well recognised range of high performance rigid polyurethane foam systems continue to be developed, manufactured and supplied globally by Applied Polymers.

The Aptane® range of products continue to be specified for use in cryogenic applications such as pipelines, pipe supports, valve boxes, flanges and joints. This range of products meets the stringent specification criteria required in cryogenic applications and are able to deliver cost competitive systems globally.

**Applied Polymers – Leaders in Cryogenic & Pipeline Insulation**

## APTANE® PROJECTS



### PROJECT

Bahrain Gas
Bontang LNG Expansion, Indonesia
LNG Rejuvenation Project, Brunei
Donggi Senoro, Indonesia
ESSO/BHP Bass Strait Oil, Australia
Fluor Shanghai MDI Plant Construction, China
Gorgon LNG, Australia
Ichthys LNG Project, Australia
MLNG Project, Malaysia
LNG Trains 2, 3 & 4, Nigeria
North West Shelf LPG, Australia
Oman LNG
Pluto LNG, Australia
PNG LNG, Papua New Guinea
Qatar Gas
Ras Gas 2 & 3, Qatar
Tangguh LNG, Indonesia
Santos Gladstone LNG, Australia
Karratha Gas Plant - KLE, Australia
Skangas LNG Terminal, Finland
Petronas FLNG, Malaysia
Petronas FLNG2, Malaysia
Singapore SLNG, Singapore



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

**Applied Polymers**  
a Division of Era Polymers Pty Ltd

181-187 Ordish Rd  
Dandenong South, VIC 3175  
AUSTRALIA  
Tel +61 3 9584 3966  
Fax +61 3 9583 9979

# ANZAC DAY - APRIL 25

**Anzac Day goes beyond the anniversary of the landing on Gallipoli in 1915. It is the day on which we remember all Australians who served and died in war and on operational service. The spirit of Anzac, with its qualities of courage, mateship, and sacrifice, continues to have meaning and relevance for our sense of national identity.**

## What does ANZAC stand for?

ANZAC stands for Australian and New Zealand Army Corps. The soldiers in those forces quickly became known as Anzacs, and the pride they took in that name endures to this day.

## Why is this day special to Australians?

When war broke out in 1914 Australia had been a federated nation for only 13 years, and its government was eager to establish a reputation among the nations of the world. When Britain declared war in August 1914 Australia was automatically placed on the side of the Commonwealth.

In 1915 Australian and New Zealand soldiers formed part of the expedition that set out to capture the Gallipoli peninsula in order to open the Dardanelles to the allied navies. The ultimate objective was to capture Constantinople (now Istanbul), the capital of the Ottoman Empire, an ally of Germany.

Although the Gallipoli campaign failed in its military objectives, the actions of Australian and New Zealand forces during the campaign left a powerful legacy. What became known as the "Anzac legend" became an important part of the identity of both nations, shaping the ways in which they viewed both their past and their future.



Once again Era Polymers will be exhibiting at the PMA in Las Vegas USA & UTECH ASIA, PU CHINA 2016, both leading international events for the polyurethanes industry.

Come and ask us about our:

### Erapol L-Series:

Our popular and effective range of TDI prepolymers, which have a lower-free TDI level compared to conventional grades. The products in some cases also give increased pot-lives and improved physical properties compared to their standard counterparts.

**Erakote Series:** Our range of prepolymers used for rotational-cast roller manufacturing. The range now includes Full and Quasi prepolymer

versions, as well as Ether and Ester backbones. We also have a special grade which shows improved performance in High Temperatures and some acid environments.

### Eracure Curatives:

There are numerous curatives available to offer specific advantages, such as abrasion resistance. There are also some options for curing TDI prepolymers, as an alternative to MOCA.

In addition to these specific product ranges, we will also be promoting our extensive range of Polyurethane Systems including; High Performance Elastomers, Polyurethane and Polyurea Spray Systems, Cold Castable Systems and more.

## 2016 EXHIBITIONS

**PMA  
Polyurethane  
Manufacturing Association  
2016 Annual Meeting**

7th – 10th May 2016,  
Las Vegas, USA



### UTECH ASIA PU CHINA 2016

2nd – 4th August 2016  
Shanghai World Expo  
Exhibition & Convention  
Centre



# ENA, DIO, TRIA...DECADES LATER

(Continued from Page 1)

George & Tina, blessed and immensely pleased with their two children, Alex and Nicole, applied the same parenting principles to Era Polymers. And it was good. Tough, hard at times, for sure ,but...it is a matter of great pride to see your child grow up, embrace a good value system, seek high aspirations and achieve more than you thought possible. .

Think about it, thirty years ago it was inconceivable, a telephone that takes photographs, a navigation system in the car...and a computer that fits in your pocket!

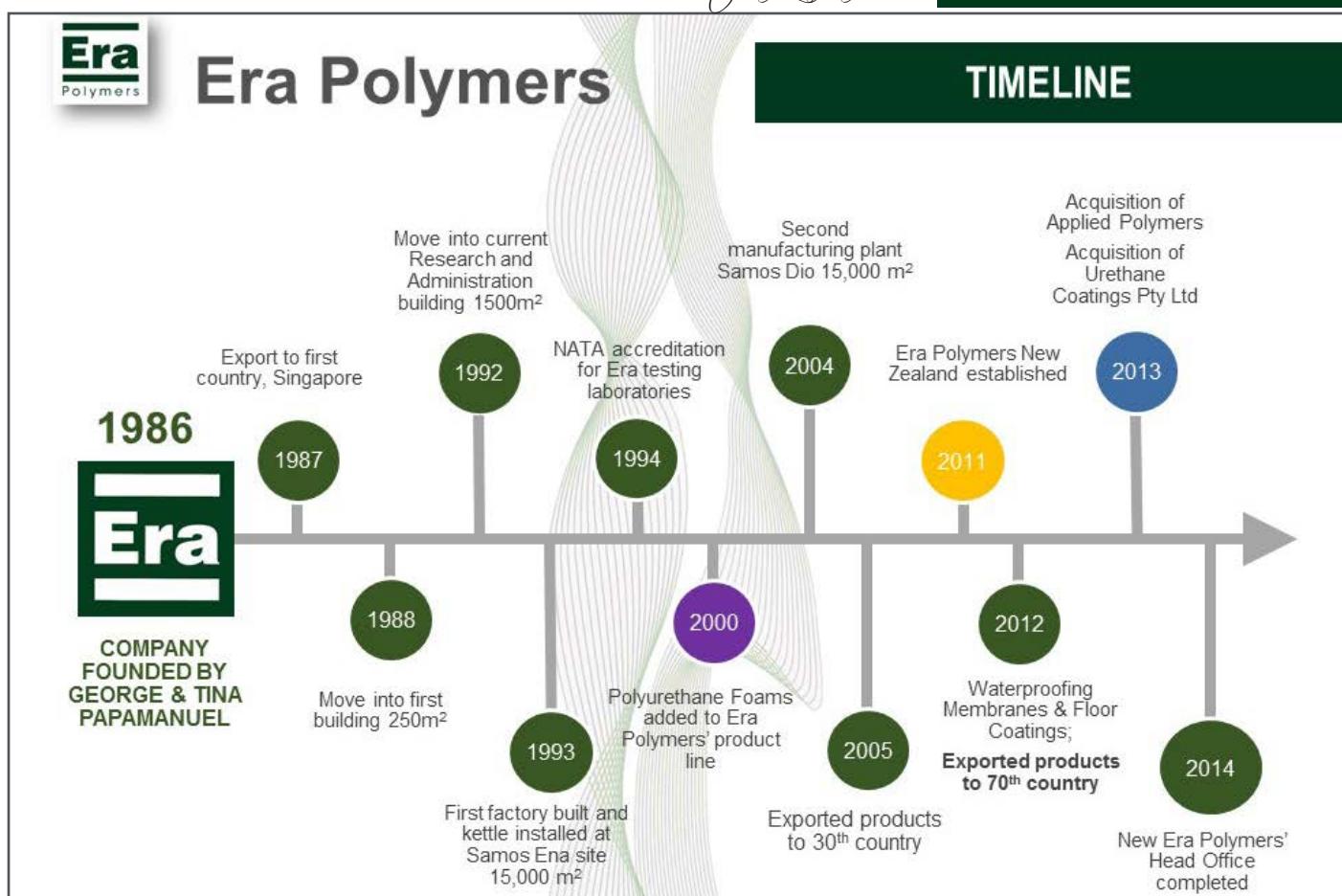
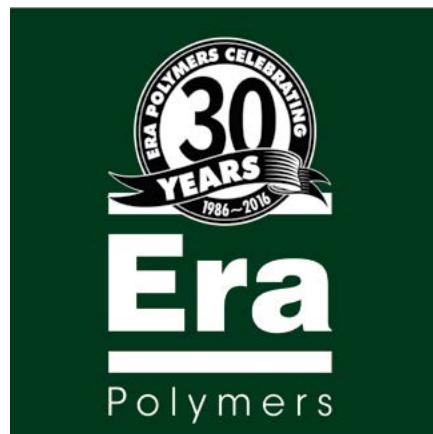
## How ever did they manage!!?? And manage they did and still do.

If there's one thing that stands out loud and clear when working with and for George and Tina it's their CONNECTION with staff AND their families. Era Polymers remains a healthy enterprise as George & Tina started from core human values, such as Trust, Integrity and Teamwork, and they balance the needs of all their stakeholders – employees, customers, suppliers and the community at large.

They do not do this merely because it is right and fair. They do it because it is better business as it gives them the profound and enduring competitive advantage of a fast, flexible work culture, where employees act like they own the business, learn on the job and care deeply about their charters and vision statements.

(Next Issue: The Growing Years)

*Victoria Zayras*



# THE WAY WE WERE.....

*Ladies and Gentlemen,*

On the 12th April we celebrated our 30th birthday. It was on THAT day in 1986, that we opened for business, from our house, in 11A Beach St Blakehurst. It took us until the 24<sup>th</sup> to get our first order.

We sold to 4 companies, that month:

- 1 Readings Elastomers  
2 Elastomers Queensland  
3 Engineering Rubbers  
4 ACPL

**Did we have computers, back then.....Nah!**  
Everything was done manually.

**Did we have any employees back then.....Nah!**

We had 1½ people yours truly with Tina working part time in a boutique to put some food on the table.

**NO salaries** ...we couldn't afford to pay ourselves any money.

**Did we know what a Sales Ledger, and an Invoice was ... Nah and nah!** I went to the local Newspaper shop, and bought a small book, and drew up what I “thought” a sales ledger, SHOULD look like .

**Did we have any idea, how to run business..... Nah!**

We were swimming in the deep end of the pool and couldn't afford to "drown"...

**Did we think that we would “make it”.....Nah!  
All we had was a ..... dream.**

The next month we “killed it”... We sold nearly \$60,000 worth.

The month after, June, we signed back to \$18,000 worth, and fear set in again....

And, NOTHING focusses the mind, than fear of failure.

30 116116 11

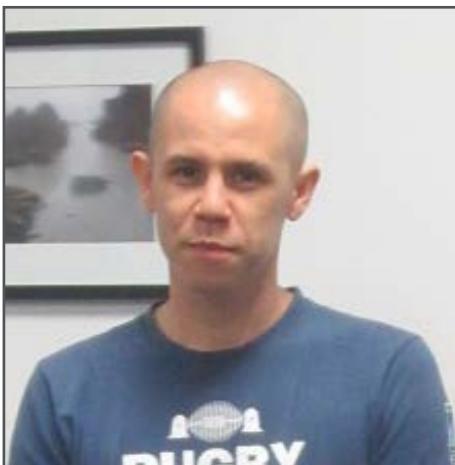
*30 years later, the dream continues.*

APRIL | DATE

# ERA STAFF MILESTONE ANNIVERSARIES



**Marica - 20 Yrs**



# Josip - 15Yrs



## **Dominic- 10 Yrs**



# Pipeline Pillows & Trench Breakers



**PU Foam Pipe Pillows & Trench Breakers are Economical & Fast to Install**

Choose Era Polymers **Ecofoam PPF280** & **Ecofoam RST320** for pipelining



Once the trench is dug for a pipeline, the next step is installing pipe pillows (**Ecofoam PPF280**) for the pipeline to rest on prior to being laid, followed by

the installation of the trench breakers (**Ecofoam RST320**) and finally the pipeline is completed by back filling the trench.



## Era Polymers Ecofoam PPF280

**Ecofoam PPF280** is designed for pipe pillows. These can be made off site and installed once the trench has been dug ready for the pipe to sit on comfortably.

## Era Polymers Ecofoam RST320

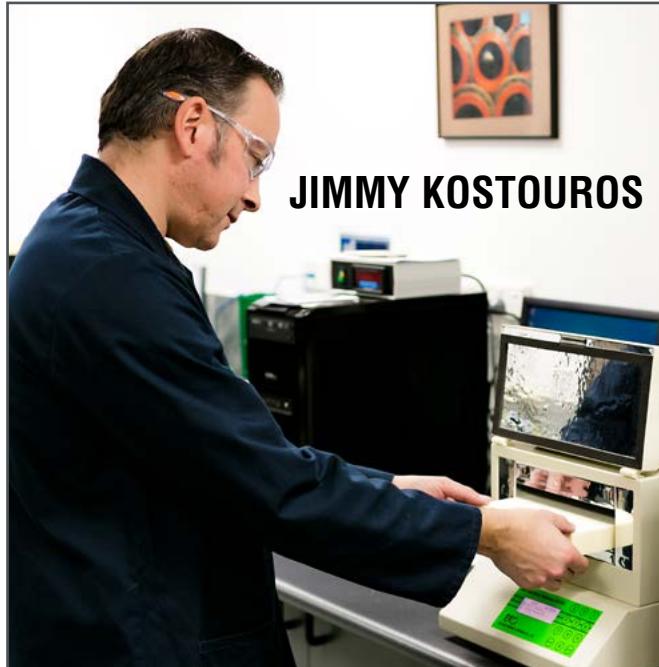
**Ecofoam RST320** is a two-component HFC blown (zero ODP) polyurethane spray foam with a nominal  $32 \text{ kg/m}^3$  density.

Specifically developed for the production of trench breakers it is slower than a standard spray foam, with a lower exothermic temperature and contains a fire retardant.



For more information call Rob McLean on 0403 451 223 (Intl. +61403 451 223) or Landline: **+612 9666 3788**

# MEET THE ERA TEAM



**JIMMY KOSTOUROS**

## Physical Testing & Analytical Chemist

If you regularly read our Newsletters, or my epistles, you will know, and understand ,that we are a family business, built on family values.

Our strength, is our people... people who become part of the Era Family .... It's our people who makes us such a successful company .

### One such person is Jimmy.

In his last life he tested water... he now has a much more interesting and rewarding life, testing all manner of polyurethanes.

He does it with one hand, whilst the other hand is helping someone / anyone out of THEIR problem(s).

Jimmy is one of those guys, who everybody loved immediately he joined.

He's kind. He's gentle . He's very thoughtful. He feels for people .. Dare I say, that he has a HIGH emotional intelligence.

He takes All the Birthday photographs. He cooks up a storm at our BBQ's... But never manages to find the time to eat.

THAT is the bane of Tina's life she is always saying :

" EAT Jimmy, eat "

And when she, in frustration, eventually says ;  
" EAT, JAMES, eat" ... He definitely knows that he is in trouble. In his spare time, he grows Chickens, and Turkeys , and Gold Fish, and Turtles, and Guinea Pigs, and, and, and..

If ever there is a Second Flood... Jimmy will be well prepared .... he has TWO of everything !

**"IT'S OUR PEOPLE WHO MAKE US SUCH A SUCCESSFUL COMPANY."** G. Papamanuel



Jimmy, is definitely one of our **S.T.A.R.S.**

## Welcome Tom (Thomas) Butt

Tom joined Era in November 2015 and started as a Uni student completing his summer internship.

While Tom was studying at the University of New South Wales (our local uni), apart from making the Deans Honours list 3 years in a row, we were delighted that he won the **Samos Polymers Prize in Advanced Polymers: Best performance in Second Year Industrial Chemistry** – well done Tom!!.

Since 2008, both Era Polymers and Samos Polymers donate a cash prize to the University of New South Wales, to be awarded to outstanding students.

After Tom completed his internship, we promptly offered Tom a full-time position.

Tom now works closely with Hugh (from our equipment division) and runs our lab machines (Polytec EMC DG133, a 3-component casting machine and Gama spray equipment) and to fill in any spare time, he works in the elastomer lab.





# THE LIGHTER SIDE

I just met you,  
and this is crazy.



$6.0221415 \times 10^{23}$   
but here's my number,  
so call me maybe.

CHEMISTRY JOKES ARE  
SODIUM FUNNY!



I SLAPPED MY  
NEON THAT ONE!

UNSTOPPABLE

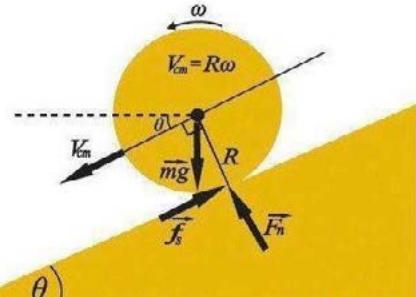


The term "polymer" derives from the ancient Greek word πολύς (polus, meaning "many, much") and μέρος (meros, meaning "parts"), and refers to a molecule whose structure is composed of multiple repeating units, from which originates a characteristic of high relative molecular mass and attendant properties.

Q: What's the heaviest part of a fish?  
A: The scales (tish-boom!).

Patient: Doctor, I think I'm suffering from Deja vu  
Doctor: Didn't I see you yesterday?

that's how i roll



## ELASTOMERIC SPRAY SYSTEMS

The following chart details Era Polymers full range of Elastomeric Spray Systems:

Product	Hardness	Chemical Backbone	Parts	Mix Ratio (by Volume)	Gel Time	Abrasion Loss (mm²)
<b>Medium Performance MDI – Hybrid (Polyurethane/Polyurea)</b>						
Eraspray ESM700	70 Shore A	MDI / PPG	2	1:1	< 30 sec	180
Eraspray ESM800	80 Shore A	MDI / PPG	2	1:1	< 30 sec	170
Eraspray ESM900	90 Shore A	MDI / PPG	2	1:1	< 30 sec	120
Eraspray ESM955	95 Shore A	MDI / PPG	2	1:1	< 30 sec	190
Eraspray ESM900PW *	90 Shore A	MDI / PPG	2	1:1	< 30 sec	120
<b>High Performance MDI – Hybrid (Polyurethane/Polyurea)</b>						
Eraspray ESP880	88 Shore A	MDI / PTMEG	2	1:1	< 30 sec	49
Eraspray ESP950	95 Shore A	MDI / PTMEG	2	1:1	< 30 sec	90 – 100
<b>High Performance TDI – Polyurethane</b>						
Eraspray ES81A-HB	80 Shore A	TDI / PTMEG	3	100/60/1 (w)	60 mins	70
Eraspray ES321	80 Shore A	TDI / PTMEG	2	3:1	< 30 sec	65
<b>High Performance MDI – Polyurea</b>						
Eraspray ST *	50 Shore D	MDI /Amine	2	1:1	< 5 sec	165
Eraspray ESM610D	60 Shore D	MDI /Amine	2	1:1	< 30 sec	150
<b>Aliphatic Coating – Polyurea</b>						
Eraspray AL950	95 Shore A	Aliphatic / PTMEG	2	1:1	< 30 sec	157

\*AS/NZS 4020 potable water approved

### Standard Compliance

- UV STABILITY WEATHERING TEST – DIN EN 1297
- WATER VAPOUR PERMEABILITY – ASTM E96-95
- DURABILITY OF MEMBRANES – AS/NZS 4858: 2004 TABLE A1
- TEST FOR PRODUCTS IN CONTACT WITH DRINKING WATER – AS/NZS 4020



**THE Herald**  
ERA POLYMERS NEWS BULLETIN

Editors: Marketing Department  
Nicola French | Victoria Zavras

Strategic Alliances

**Stepan** S.



Head Office Tel: (+61) 02 9666 3788

2-4 Green St  
Banksmeadow NSW 2019  
AUSTRALIA

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