



# INSIDE THIS #44

**Excellence in Polyurethane Chemistry** 

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# LESSONS FROM LIFE # 31 TIE A YELLOW RIBBON...

I had breakfast today with one of my nephews, Alex.

We do it irregularly, not often enough. But when we do, we bond, we share our dreams, our frustrations, how we cope with stress, tell lots of stories, the whole 10 yards!

More often than not, I do a lot of the talking, that's a fault that I have, that I have never been able to correct ... Alex paid me the ultimate compliment ... he said my story telling was as good as my dad ... who was also named, would you believe, Alex ... It's a Greek thing!



(Continued page 2)

# TRAVEL TALES: A SHORE SALE

BY LINE STEFANO TAPPARI

When we get asked about High Performance Elastomers, we immediately refer to the Erapol EMD750D, two-component system based on MDI-PTMEG product! The Erapol EMD750D series is ideally suited to BOTH machine and hand casting processes.

Stefano Tappari (Era Polymers - Italy) reports:



(Continued page 11)

Excellence in Polyurethane Chemistry

My dad was a quintessentially excellent story teller. It helped that he was super intelligent, had a photographic memory... and remembered, EVERYTHING.

I grew up, as did his oldest grandchildren, listening to dad's stories.

So Alex recounted a story that his PAPPOU (grandfather) Alex told him.

It went something like this ...

Dad and his best friend and a whole bunch of Greeks were in Albania in the Second World War, trying to stop the Italians invading.

So one night, the platoon pitched tents in the middle of the night, somewhere by the side of a mountain, to settle down for the night ... the tents were open to the elements, and it was FREEZING. (Dad used to tell me that IF you were lucky to have lice, you survived the winter by scratching the lice, all night long... the ones that fell into a deep slumber and didn't scratch ... died from the cold!!)

So the Italians started firing ... shells were whistling past ... his best friend was alarmed and scared ... woke my father up, and said:

"Aleko we have to move, the Italians are trying to kill us, we just HAVE TO, move"

"And where should we move to, it might be a worse place that we move to" replied my father.

In the morning, my dad's best friend, woke up a nervous wreck, my dad had a good night's sleep.

THAT was dad...

NOTHING stressed him...whatever life threw up, he coped, he adjusted, he moved on, and could always smile at adversity.

I'm a bit like that, not as good as dad, but getting there  $\,\dots\,$ 

If I get stressed, which is about every day, ... I need some quiet time, BY MYSLEF...

The, BY MYSELF TIME, allows me to reset ... to reboot ... then I'm off again, fully re charged ... impatient to conquer the world ...

And commenting, ad nauseum, on the tragedy, on the sometimes stupidity, and, on the unjustness of this Wide and

Wonderful World... another fault that I have.

But this story is about a YELLOW RIBBON, dad...

No it's not, it's about story telling!

So, my dad, and many of his generation, grew up in an ERA with no TV, no books, one newspaper per day, shared amongst the men at the local cafenio ...

BUT they did have a communal radio, to connect with the outside world.

So, they were all story tellers ... much like, in Antiquity, HOMER told stories, about Helen Of Troy, that sort of stuff, wandering around Greece ... He was probably the first minstrel, STORY teller, going from island to island, town to town.

So there's a long history of it, with the Hellenes.

"..they did have a communal radio, to connect with the outside world"

Tina's mum, is 89 years of age .. she lives by herself... she's perfectly happy and healthy.. and very often, we bring her to our place, for a long weekend,.. to get away from the loneliness and monotony, of being by herself.

SO, she like all her generation, are story tellers... and I delight in her telling stories ... many times I have heard them over and over (another fault that I HAVE ...i.e. repeating stories ...)

ALEX, our son, is my best critic, of my story telling ... he keeps track of all of them ... and, GOD FORBID, IF, I tell the same story to Francene's father, George, more than once ... I get a very strong frown ...

BUT, telling it, more than once, allows you to add more "pepper and salt" to it, every time you tell it ... each story, told OFTEN, becomes more interesting, as its told ,and re told ...anyway, that my view.

SO, I NEVER tell Tina's mum that she's told me the same story, MULTIPLE TIMES.

When I prompt her to tell stories...

Her mind goes back to most tragic time in her life... the CIVIL WAR in Greece ... around 1943-1949.

She tells lots of horror stories about the German/ Italian occupation of Samos ... BUT her defining stories, revolve around the Civil War (just like my dad, Greek fighting Greek, in the Civil War, is what defined, HIS life).

So, Tina's ancestral village VOURLIOTES, like many Greek villages of the time... was divided.

It was friend versus friend, families versus families, ROYALIST / Democrats, versus Communists, or;



"I think that I want to be a Communist"

It was brutal it tore apart, the very soul ,of Greece.

Two of Tina's paternal uncle's were killed by the communists, because they didn't want to be communists any more ... they wanted to go back to the village, and not hang out with the communists and the jackals, in the mountains of Samos.

It's something that haunted Tina's dad all his life ... i.e. losing his brothers that way. SO, on one of YIAYIA's (Tina's mum) storytelling, over breakfast, recounting the tragedy of the Civil War, I asked her;

"Mum did you ever join the Communist Youth League, in Vourliotes, during that time?"

"I did".

I was shocked . "How, why"?!

"Because if, you joined, they gave you a bright YELLOW RIBBON, to tie around your neck ... and we walked through the village, all the girls, together... it was nice, the yellow ribbon was pretty".

Through all the darkness, the injustice, the inhumanity, the tragedy of war, a

bright yellow ribbon, brought joy to a young girl.

I'm reorganizing our library at home, and I found a book, that I haven't read, these past 10 years. I've read it twice and cried both times ... and knowing as you get older, the tears flow more feely, I'm, sure that I will cry again, when I re read it.



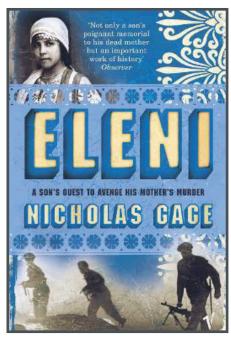
It's a book by NICHOLAS GAGE, called;

#### **ELENI**

A book by somebody, finding out how, why, his mother died, in that, Civil War. Stories

that need to be told and re told, define us;

#### **Lest We Forget**



George Payamannel, June 2022

## **ANZAC DAY** 2022

ANZAC Day is a time to acknowledge those who have died in service for our nations. To reflect on how that service and sacrifice has contributed to what and who we are as nations today — that is, to understand its impact and learn from it.

We will remember them. Lest We Forget



Vadim and his family have been our agents in the Ukraine, for many, many years. He is a very kind, gentle, and thoughtful person. From time to time we even have philosophical discussions together, about the True Meaning

His home city of Chernigov has copped a hammering... he and his family, and many others, are living in underground bunkers ... hopefully, out of harm's way.

And with all the unfolding tragedy in his country... he still send this!

Class!

of Life.





Hi Vadim

Very concerned about what's going on. George told me you are ok and he saw a pic of you with the Era hat.

Stay safe !!! Wish this will end soon.

Stefano Tappari | Era Polymers European Business Development Manager Despite his predicament and dire situation, Vadmin had this to say replying to Stefano...

Hi Stefano,

Actually yes. Very very hard and dangerous times for Ukrainians now.

Today 24th March, is one mounth as Russia has been attacked Ukraine.

All Ukrainian economy mostly stopped.

We all (my family) left our city six days ago on the cars.

There are we have warehouse with PU elastomer, but we cant remove it to other safe place, becouse all bridges has been destroyed around Chernihiv city (office/ warehouse there)

Too sad, to see the cities in fire, bombed every day, I dont have words to discribe all tragic life.

Millions Ukrainian (women, children) have been left their homes ... More than 10 millions people are moving from place to place, searching the safe area ...

We are in contact with most our ERAPOL users.

Wendy, hi!

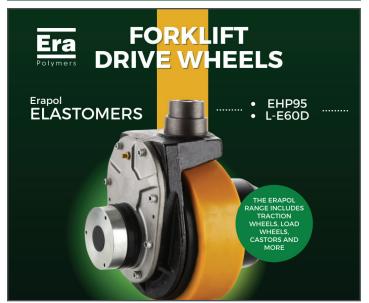
What is the pricing of E95A from EU, in drums? Have you got 1600-2000 kg?

Yes, he's still working away!

"It is not enough to win a war; it is more important to organize the peace." Aristotle

## **ERAPOL ELASTOMERS**

FOR CASTER & FORKLIFT WHEELS, SCREENS, CYCLONES, ROLLS, GEARS



## • EHP95

Erapol EHP95 is a liquid isocyanate terminated prepolymer based on PTMEG polyether polyol. When cured with MOCA it produces a 95 Shore A elastomer. The polyurethane elastomers exhibits superior mechanical properties. Polymers made from Erapol EHP95 exhibit outstanding abrasion, impact and chemical resistance, along with high load bearing capacity.

## • L-E60D

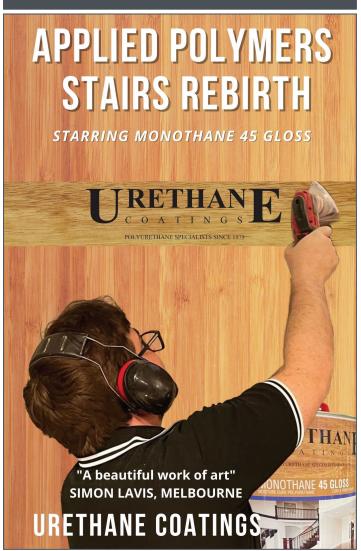
Erapol L-E60D is a highperformance liquid isocyanate terminated prepolymer based on PTMEG polyether polyol. Polymers made from Erapol L-E60D exhibit high impact strength coupled with excellent abrasion, hydrolysis resistance and chemical resistance as well as high load bearing capacity. Additionally, Erapol L-E60D is a lower free TDI version of Erapol ET60D.





## STEPPING UP - THE REVAMPING DIARIES

An exciting story by Urethane Coatings



It's really happening. The staircase leading up to where all the magic happens in the Era Polymers building for Applied Polymers in Dandenong South is getting a make over!

MONOTHANE 45 GLOSS is a transparent, single pack, moisture cure polyurethane that provides a hard wearing Gloss finish which maintains the natural character of timber.

**Uses: MONOTHANE 45 GLOSS** is used for coating all timber species, cork, particle board and





concrete. **Monothane 45 Gloss** can be applied over Timberseal, Silverseal, Monothane or Duothane Fast A / Duothane Part A and Duothane Part B.

Monothane 45 Gloss is compatible with and/or may be mixed with, MONOTHANE HS 50 GLOSS, MONOTHANE SILVER GLOSS, MONOTHANE SEMIGLOSS, MONOTHANE SATIN, MONOTHANE MATT and MONOTHANE SILVER SATIN.

**Coverage:** 10m<sup>2</sup> per Litre www.urethanecoatings.com.au





WATCH THIS SPACE FOR THE FINISHED WORK OF ART

## **LOW ENTRY COSTS? FOR ERASPRAY ES81A?**

#### YES! ERAPRAY 81A HB FOR A SIMPLE SPRAY SYSTEM

Eraspray ES81A HB is a premium grade, high performance solvented polyurethane spray elastomer system with excellent abrasion resistance.

In addition to Excellent Abrasion Resistance, Eraspray ES81A HB offers Corrosion Protection and can be applied with Standard Airless Spray Equipment; so there is no need to buy specialist equipment.

Supplied in pre-weighed kits Eraspray ES81A HB is packaged in such a way that all 3 components can be mixed together in the PART A pail, making the application process as easy as possible for the contractor.



















"The secret of change is to focus all your energy not on fighting the old but on building the new."

~Socrates, father of Western philosophy

### **ERA POLYMERS: HAND-BUILT BY GEORGE - 50 YEARS IN PU INDUSTRY**

1972. It was an eventful year (well, some of you we're even born yet!). William McMahon was the Prime Minister till Gough Whitlam took over later that year, the television show No. 96 made its debut and the Seagulls beat the Bunnies at the Football Grand Final (sorry 'bout that Tony Hatzikiriakos). It was a special year. Well, February 14, 1972 to be exact. Why? It was on that day, 50 (that's FIFTY) years ago that George Papamanuel started work as a polyurethane development chemist fresh out of University...and he hasn't stop working. We, at Era Polymers, seriously want to know the secret behind his unfathomable energy - (it's why we read Lessons From Life in EVERY Era Polymers newsletter).

Congratulations to the man that is nothing but an inspiration for all of us. Keep inspiring us and enjoy this awesome milestone!

Here's a snippet of an email he sent us recently:

Dear Staff,

On February 14th 1972... I started my long, long journey, in the wide, and wonderful world, of polyurethanes. It was my first job.

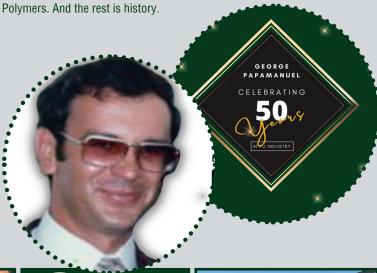
The job was in Bankstown, Sydney. That very nervous Monday morning, I had caught a bus from Randwick ,to Central Railway Station then a train, and finishing off with another bus ride.

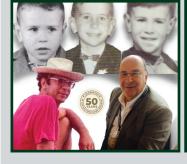
And I was there at 8.30 am SHARP.

After 4 years, became the Chief Chemist  $\dots$  then ended up with a dual role, as also, Automotive Projects Manager.

By 29 I developed a wanderlust ,and wanted to see the world. So, I joined UNIROYAL Inc... as a "Urethane Elastomer Sales Manager" responsible for Australasia and South East Asia.

Then a BELL walked into my life, and I walked out the door. Then with a gentle prodding, over a couple of months, the "Boss Of The Boss", convinced us, to start Era











THREE jobs in 50 years ... NOT bad , eh ! So how did those 50 years go , George ? WELL, with apologies to Paul Anka , and Leonard Cohen ...

My friends, I'll say it clear.
I'll state my case, of which I'm certain
I've lived a life that's full.
My friends, I'll say it clear.
I'll state my case, of which I'm certain
I've lived a life that's full.
I travelled each and every highway.
But more, much more than this,
I did it **OUR** way.

REGRETS, I've had a few.
But then again, too few to mention.
I did what I had to do.

And saw it through without exemption. I planned each charted course (six down, one to go) Each careful step along the byway. But more, much more than this. I did it **OUR** way.

Yes, there were times, I'm sure you knew. When I bit off more than I could chew. BUT, through it all, when there was doubt I ate it up, and spit it out. And did it **OUR** way.

I've loved, laughed and cried.
I've had my fill, my share of losing
And now as tears subside
I find it all so amusing.
To think I did all that.

And may I say, NOT, in a shy way. Oh no, NOT me. I did it **OUR** way.

For what is a man, what has he got If not himself ,then he has not To say all things he truly feels And NOT the words of one who kneels The record shows, I took the blows. BUT, I did it **OUR** way".



### **NOT ALL HEROES WEAR CAPES! HAPPY 30 YEARS AT ERA TONY!**



**TONY HATZIKIRIAKOS -**INTERNATIONAL SALES MANAGER







CELEBRATING Tony Hatzikiriakos: 30 YEARS WITH ERA POLYMERS - A MESSAGE FROM OUR MANAGING DIRECTOR George Papamanuel

Our company in April will celebrate its 36th year. Not bad for a company that operates in the Wide and Wonderful world of Polyurethane Chemistry. In that time we have grown quite nicely...to be a decent sized global player.

IF, there is ONE reason why, and how, we have done is...its' because of the people, and the CALIBER of people that we employ.

Thirty Years ago, we advertised for a polyurethane chemist...our second (Terry was the first and Lyndell was the third...and they are all still here!).

The second one was, TONY HATZIKIRIAKOS...

On the 13th of March he celebrates his THIRTIETH BIRTHDAY...yes, 30 YEARS...

Not bad for a 36 year old company.

Tony came straight from the University of New South Wales... just like a lot of us, and this was his FIRST job, and still is, his only job. Somewhere along this journey he married Penny, and they had two beautiful boys, Louis and Nicholas.

He is super, super proud of his boys, as he should be ...

And along that journey... I've watched him grow, as a husband, as a father, and as an extremely valuable, talented, and committed employee.

If you want to paint a picture of a perfect Era employee...you would paint a picture of Tony.

He lives and breathes this company, its business, its employees, and its customers. He's had a few jobs / responsibilities within our company, along this journey.

Currently he is our INTERNATIONAL SALES MANAGER.

(And like a lot of us, over these last two Covid Years, he has been like a caged lion...by not being able to travel)

But, Tony being Tony, will hit the "road" soon.

He is committed, he is driven... he needs to see his customers, globally, and his customers need to see him.

Thank you Tony... we couldn't have done, what we have done, these past 30 years.

And as I also sometimes say;

"Life is a Long Journey, and we have only just begun, the first 30 years"

Ladies and Gentlemen,

March 31, we had another ending, of another Era. Rob Stein retired.

When it comes to all things polyurethane, Rob has been there and done that. Once upon a time, he was even on the other side of the fence, and was a competitor of ours...

Some competitors, you just don't like,...they have no class, and go out of their way to show it. Others, like Rob, are all class.

In 2015, he came on board as our Production Manager in our Melbourne operation... Applied Polymers. Did the job well, very well.

A couple of years ago, he hinted that it was time to put his feet up, and smell some roses.

I kept on saying "Nah, I can buy you a bunch from Woolies, every day... you can smell those

Other times, he hinted that he wanted to retire to BALI...I think that he and his wife, Andrea, have been to Bali, 40+ times!

Then late last year, the hints got louder... he was ready to sell his BIG, house, and downsize to a smaller house in Melbourne.

I didn't have the heart to tell him;

#### "NOBODY retires in...Melbourne !!".

Melbourne's a nice place ... But to retire there

It's like Andy, in Connecticut, wanting to EVENTUALLY, (THAT is a LONG way away) retire in Connecticut...

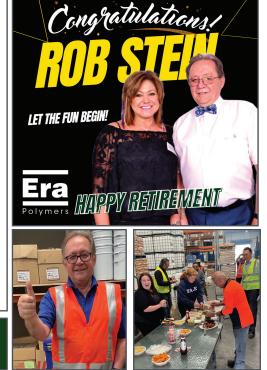
Nah!

Americans up NORTH, retire down SOUTH.

US, being upside down, at the bottom of the world, retire, NORTH ... into Queensland.

So, Queensland it is!

The greatest pleasure of life is love."— Euripides



## LET'S DO THE ROUNDS - Era Polymers LOCATIONS





AUSTRALIA BANKSMEADOW. SYDNEY

#### ERA POLYMERS

**Administrative Centre** 

#### **ERA POLYMERS**

**Research & Administration Centre** 

Era Polymers is an Australian owned and operated company specialising in the field of polyurethane chemistry. Being owned and operated by Industrial Chemists, we have built an enviable reputation for outstanding product quality and customer service. For over 35 years, Era Polymers has been at the forefront of developing and manufacturing polyurethane systems to meet the application needs of our global customer network.





UNITED STATES OF AMERICA STANLEY, NORTH CAROLINA

### ERA POLYMERS CORPORATION Laboratories & Administrative Centre

#### SAMOS POLYMERS

**Manufacturing Facility** 

**Era Polymers Corporation USA, Samos Polymers Exi,** manufactures urethane prepolymers supplying the USA, Canadian, Mexican, South American and European marketsnetwork.





AUSTRALIA ST MARYS, SYDNEY

**SAMOS POLYMERS - ENA** 

#### **SAMOS POLYMERS - DIO**

Located in Sydney are two world class manufacturing sites – Samos Ena and Samos Dio.

At these sites, **Era Polymers** manufactures polyurethane systems for elastomers, foams spray systems, membranes and coatings.





NEW ZEALAND AUCKLAND

## ERA POLYMERS N.Z LIMITED Manufacturing & Administrative Facility

**Era Polymers NZ Limited** manufactures and distributes polyurethane elastomer and foam systems to the New Zealand market from a production site centrally located in Auckland.



AUSTRALIA
DANDENONG SOUTH, MELBOURNE

#### **APPLIED POLYMERS**

The **Applied Polymers** production site is responsible for the development of high performance insulation systems, in particular for the LNG (Liquefied Natural Gas) Industry, as well as specialised polyurethane elastomer systems.





SOUTH AFRICA FOUNDERS VIEW SOUTH, EDENVALE

## ERA POLYMERS AFRICA Manufacturing & Administrative Facility

**Era Polymers Africa**, a state-of-the-art production facility in Johannesburg, develops and manufactures polyurethane elastomer, foam and spray systems for supply to South Africa and the African continent.



Specifically developed for

# Pipeline Trench Breakers Ecofoam RST320

- 2 Component HFC blown (zero ODP) PU Spray Foam
- Nominal 32 kg/m³ density
- Lower Exothermic Temperature
- · Contains Fire Retardant
- Excellent Adhesion
- · Cost Effective
- Fast Installation



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## PMA - 2022 Annual Meeting & Supplier Showcase and PTS

POLYURETHANE MANUFACTURERS ASSOCIATION

#### WHEN THE EXPERTS GET TOGETHER

The 2022 PMA Annual General Membership Meeting kicked off on the 23rd of April 2022 - a great turn out after the events of the last couple of years. The venue was packed with visitors and experts networking, sharing information and imparting knowledge!

Nearly 80 attendees packed the room for one of PMA's most intensive, educational events: the biennial Processing Techniques Seminar (PTS). This dayand-a-half meeting featured 15 hour-long sessions by renown polyurethane professionals. One such professional our Era Polymers Corporation resident expert, Mr Paul Waite who spoke about Process Troubleshooting. Great work Paul!

In attendance was our fearless leader, Mr George Papamanuel and our Sales Director Alex Papamanuel - the latter enjoyig the famous Golf Day portion of the event.



## **Era Polymers**

2022 PMA Annual Meeting. Supplier Showcase and **Processing Techniques Seminar** April 23-26, 2022

AT&T Conference Center at the University of Austin, Texas Austin, Texas











#### **PAUL WAITE** Era Polymers - USA

#### WHAT A CATCH! LURING 'EM IN - LITERALLY!









So, how many fish have you caught?

An outdoor BBQ grill was SO in order for lunch.



#### **Applications - RIGID: High Density Foam Systems**

- MEDICAL EQUIPMENT / CABINETS
- **IMITATION WOOD**
- PIPE SUPPORTS
- **FISHING LURES**
- STRUCTURAL PARTS

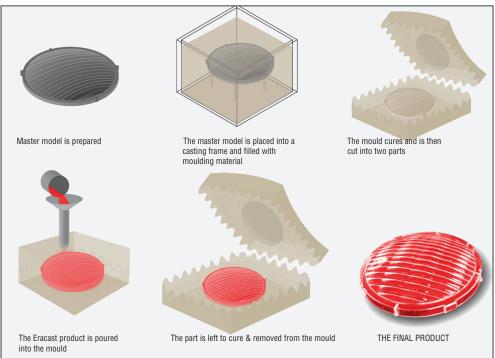
For more information contact Era Polymers on Tel: 02 9666 3788



## **CASTING CALL: ERACAST RT45A**

#### TDI POLYETHER MOULDING MATERIAL













**Applications and uses include:** flexible moulds, concrete moulds and stamp pads, cast in place linings, sound dampening applications and casters.



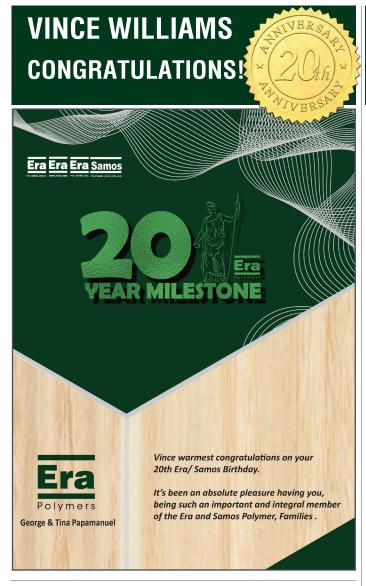


**Eracast RT45A** is a medium performance cold castable polyurethane elastomer. The product is free from MOCA (methylene-bis-orthochloroaniline) and flammable solvents, which produces an economical elastomer with good toughness and high elongation and good chemical resistance.

It offers advantages in that it can be readily processed and cured at room or elevated temperatures. The convenient mix ratio and low viscosity allow easy processing.

**Eracast RT45A** products can be processed by hand or machine dispensing equipment.

For more information contact **Era Polymers** on Tel: 02 9666 3788 or email erapol@erapol.com.au



## **DID YOU KNOW?** Polymer Cash is a thing!

In 1988, the world's first polymer banknote was issued - the now famous \$10 Bicentennial Note - and today, polymer banknote technology is being used in more than 50 countries on more than 150 denominations

The banknotes are totally waterproof, hard to counterfeit and relatively cleaner because they are resistant to moisture and dirt.

Australian dollar notes are made of a polymer, which has a waxy feel. while the banknotes of the U.S. and several other countries are made of cotton fiber paper.

Polymer banknotes tend to last two to three times longer than paper notes. The feature could reduce replacement costs — for reference, the U.S. \$10 bill is replaced every four and a half years.

Australia is continuously innovating with its banknotes. The current Its new A\$5 banknote boasts a rolling color effect and, when moved a certain way, you'll even see the image of an eastern spinebill (a native bird) moving its wings and changing colors.

In 2015, the Reserve Bank of Australia said it would add a tactile feature to the notes to help the visually challenged know the value.

Australia was the first country to introduce polymer banknotes in 1988, which have been adopted by other countries such as Canada and Vietnam.

The U.K. began to introduce polymer banknotes in 2016.





#### A SHORE SALE (cont'd from pg 1)

"During one of my recent visits to Sweden, one product that continuously surprises new and existing customers is the Erapol EMD750D.

Mainly because, normally high hardness materials have a very fast reactivity, while EMD750D has around 11 minutes pot-life!

Such long reactivity allows to fill large or complex moulds which usually are difficult if not impossible to fill with a high hardness material.

Our customers explained that high temperature resistant hot cast elastomers have always been a struggle. Not any more. In last few years we have developed solutions able to stand 140-150°C continuous working temperature. It doesn't stop there... watch this space as we release other solutions currently under development."



AUD 10 dollar paper note pre-1988 AUD 10 dollar polymer note- current



World's first polymer currency - AUD 10 dollar polymer note. Released in 1988 to coincide with Australian Bicentennial celebrations



# THE LIGHTER SIDE

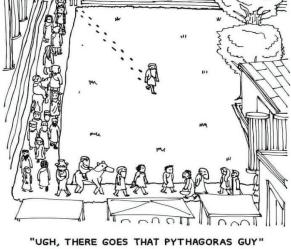




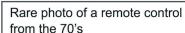














## WHAT'S MOVING IN MACHINER

**LATEST** 

### YES, WE HAVE THAT...DG150



















The DG 150 from Polytec EMC is available as a 2 or 3-component casting machine. It can process three component MDI systems - MDI prepolymer in one tank, polyol curative in another tank, and BDO chain extender in the 3rd tank.

It can also process TDI systems, where you can have one or two prepolymers and a curative tank. The TDI curative can be either moca or Eracure 110 (a liquid curative based on Ethacure 300).

For all your machinery needs or more information about this product, please call our Machinery Department:

> Contact: Josip Salopek Tel: (02) 9666 3788

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**EQUIPMENT AGENCIES** 









OTHER AGENCIES





