

# FREEFLOW

## THE DYNAMICS OF A GLOBAL ACRYLICS BUSINESS

### No.4

**WELCOME**  
TO THE FOURTH EDITION OF  
FREEFLOW, OUR HALF-YEARLY  
PUBLICATION AIMED AT THE  
METHACRYLATE MONOMERS  
INDUSTRY IN EUROPE.



**Peter Snodgrass**  
Sales Director, Europe

With autumn fast approaching, it's difficult to believe that we are already working on our fourth issue of FreeFlow. Lucite International (LI) is committed to supporting its customers and partners in the Methacrylate sector. Our aim is to share our thoughts, address issues and, through FreeFlow and by being pro-active in the market place, make all that we can of the exciting opportunities in our industry.

Despite a toughening market here in Europe, there's certainly no shortage of positive signs for opportunity throughout our sector. In this issue of FreeFlow we feature two customer profiles; UK-based Stirling Lloyd and Hitech Industries FZE in Dubai. Both of these companies work with our MMA to create specialist coatings systems for their customers. Both pride absolute consistency, reliability and quality of customer service and product performance highly. Both are enjoying impressive growth and success based on their unique business strategies that are being delivered with passion and belief in what they do. And looking to the developing economies of the East is certainly contributing to a common critical success factor!

At LI we are also keen to look East. As we finalise FreeFlow 4, our brand new Alpha-based technology plant in Singapore is being commissioned and we expect to move to full-scale production shortly after. This has been a remarkable journey for our Company and we are very proud to report a completely clean safety record with 4.3 million incident free man-hours being achieved during the construction phase. We will bring you more news of Alpha 1 on our corporate website and in the next issue of FreeFlow.

Finally in this issue, we introduce more of our LI team in Europe so that you have a better understanding of who we are and how we can help, and we share with you our status report of how we are preparing for REACH. Our REACH Manager, Fiona Smith, is on hand and available to help with any queries you might have. As always, we are keen to ensure FreeFlow adds value. Please let me know if there are any specific issues you would like us to address in our next issue by emailing me direct on: [peter.snodgrass@lucite.com](mailto:peter.snodgrass@lucite.com)

# ALPHA 1

WITH THE CONSTRUCTION PHASE OF LUCITE INTERNATIONAL'S (LI) BRAND NEW ALPHA 1 TECHNOLOGY FACILITY NOW COMPLETE, THE TEAM IN SINGAPORE'S ATTENTIONS TURN TO COMMISSIONING AND START-UP.

- The Alpha 1 operation has been handed over to Lucite International Singapore Limited (LISPL) from main contractor, Foster Wheeler
- All the necessary operating permits have been obtained from the Singapore authorities
- More than 4.3 million man-hours have been completed on site without a classified injury and management of SHE remains our number one priority
- The LISPL team are now engaged in chemical commissioning and preparing for start-up of the new unit.

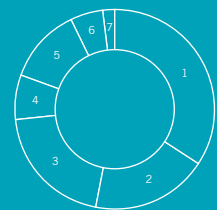


# TAKING A CLOSER LOOK AT THE MMA AND MAA MARKETS

AS PART OF LUCITE INTERNATIONAL'S (LI) ON-GOING COMMITMENT TO ITS CUSTOMERS IN THE MMA MERCHANT MARKET WE SHARE WITH YOU OUR CURRENT VIEW OF THE MARKET. LOCAL KNOWLEDGE COMBINED WITH OUR GLOBAL OPERATIONS THAT ARE BACKED BY WORLD-CLASS SYSTEMS HELP TO ENSURE THE ACCURACY OF THIS INFORMATION, WHICH WE PUBLISH QUARTERLY BOTH ON LINE AT [WWW.LUCITEINTERNATIONAL.COM/FREEFLOWMARKET](http://WWW.LUCITEINTERNATIONAL.COM/FREEFLOWMARKET) AND HERE IN FREEFLOW. MALCOLM KIDD, LI'S COMMERCIAL DIRECTOR FOR MONOMERS IN EUROPE COMMENTS:



Image: Malcolm Kidd is LI's Commercial Director for Monomers in the EAME region. To access his regular three monthly review of the MMA market, please visit: [www.luciteinternational.com/freeflowmarket](http://www.luciteinternational.com/freeflowmarket)



DOWNSTREAM MMA USE  
IN A MATURE MARKET

Key application areas:

1	35%	Acrylic sheet for glazing, fabrication, signs, lighting and sanitary ware
2	19%	Moulding/extrusion compounds automotive, medical and optical
3	20%	Surface coatings, acrylic latexes, lacquers and enamels
4	7%	Emulsion polymers, adhesives and polishes
5	12%	Impact modifiers and processing aids for rigid PVC window and other profiles
6	5%	Mineral filled sheet, Corian (DuPont trade mark)
7	2%	Other polyesters and transesterification

**SIGNIFICANT CHANGE  
IN THE LAST SIX MONTHS**

Much has changed in the MMA industry since the last issue of FreeFlow in April this year. Manufacturing costs have escalated rapidly, production capacity has been closed down - temporarily and permanently, and the demand picture in Europe has adjusted to a new level. All of this has given the methacrylates market in Europe (and globally) a very different feel from that of only a few months ago.

**2008 DEMAND OUTLOOK  
IS STILL POSITIVE**

European economic activity has been affected by the slower US economy and the credit crunch, but is still proving to be quite resilient. It is now apparent that Europe underwent a period of de-stocking from the supply chain that took place from mid Q1 to mid Q2. That has now largely been completed and the underlying demand picture is much clearer. While it is true to say that European MMA demand will not grow at the same rate in 2008 as it did in 2007, demand remains healthy and, for the moment, stable (see chart opposite).

Global MMA demand is still driven by the Asian region. Demand for pMMA for LCDs, MS (methyl styrene) and tABS (transparent ABS) continues to be very strong. Changes to coatings formulations due to new VOC legislation is also contributing a significant and sustained level of demand growth

worldwide. In Europe, all sectors have been impacted to some extent by the downturn in the construction industry (primarily housing new builds), but many methacrylate-consuming companies are continuing to invest and are bringing new efficient capacity to the market in 2008 and 2009, which will allow those players to remain competitive in today's global market.

**PRODUCTION SIDE HAS A MIXED REPORT**

MMA production in Europe has operated well in the first half of 2008, but there have been some significant events more recently that have reduced the overall amount of MMA in circulation in Europe. The two Russian producers ceased operation in Q2 and some Asian producers have reduced operating rates due to soaring prices and availability of feedstocks. This has had a noticeable tightening effect on the MMA supply/demand balance in Europe. In addition, the differing regional movements in raw material prices and MMA prices around the world and the US Dollar strengthening against the Euro means that there is significantly less incentive for US and Asian producers to export into the European region.

In the second half of 2008, there will be a heavy overhaul programme in Asia and a number of major planned overhauls taking place in Europe, including a four week outage at Lucite International's (LI) Cassel works site in the UK in Q4. These events will further reduce available MMA during this period.

**NEW BUILD PROJECTS PROCEEDING**

Delays continue to be reported on some new build MMA projects, as the difficult EPC market and soaring construction costs make project completion increasingly challenging. However, at the time of writing this article, pre-commissioning of LI's Alpha plant in Singapore has been completed and first chemicals have been added.

**FEEDSTOCK AND ENERGY COSTS  
ARE A MAJOR CONCERN**

For the whole of 2008, but particularly through Q2, increases in the costs of raw material and energy have been relentless and in many cases have reached unprecedented levels. Many have not yet peaked and there remains significant volatility and uncertainty in the markets. The net result has been a serious compression in margins for MMA. This is the picture facing MMA producers worldwide, irrespective of technology base.

Through the first half of 2008, MMA prices were increasing in Asia and the US whilst in Europe they were falling. That trend has been reversed in Europe in Q3 but the MMA industry must still strive to return acceptable margins so that in the short term the required volume can be produced and, in the longer term, that investments will be made in the new capacity required to satisfy the world's continuing healthy growth in MMA demand.

## METHACRYLIC ACID (MAA) SEES STRONG DEMAND CONTINUE

Demand for MAA in Europe continues to be robust. Despite a slump in housing starts in some parts of Europe, the ongoing activity in new commercial build and infrastructure projects is sustaining a very healthy demand for MAA through the use of concrete additives. Demand for MAA via this route is also very strong in Asia and the Middle East where construction continues unabated.

Although figures show the automotive sector to be down in the more traditional geographic areas, demand for automotive coatings in developing countries has increased and hence the level of MAA

demand into this segment has been sustained. The demand for MAA for latexes and speciality resins for coatings for industrial applications has also been very strong, due in no small way to the level of investment in chemical and process plants.

All in all 2008 looks to be a good year for MAA demand, and this is forecast to continue. However, MAA faces the same challenges as MMA with regard to feedstock costs and depressed margins, and improving this position will continue to be the number one focus for the business.

# HIGH PERFORMANCE

Image: [1] Stirling Lloyd's specialist coatings, protective systems and waterproofing membranes are used to add safety, strength and performance characteristics to a variety of construction and civil engineering projects, such as bridges and highway road networks across the globe.

LINKING CONTINENTS, ENHANCING THE SAFETY OF OUR ROADS AND HELPING LONDON PREPARE FOR THE OLYMPICS ARE JUST A FEW EXAMPLES OF THE CHALLENGING ASPECTS OF THE WORK THAT GOES ON AT LUCITE INTERNATIONAL'S (LI) VALUED CUSTOMER, STIRLING LLOYD POLYCHEM (SL). THEIRS IS A BUSINESS THAT TOUCHES SOME OF THE WORLD'S MOST ICONIC STRUCTURES; PROVIDING STRENGTH AND PROTECTION, ENABLING THEM TO WORK HARDER FOR LONGER AND PROVIDING THAT CRUCIAL INGREDIENT FOR LONG-TERM PERFORMANCE THAT IS SO OFTEN TAKEN FOR GRANTED. WE DISCOVER MORE.

**FF: Describe your business and how you use MMA?**

SL was established in 1970 and is now a leading manufacturer of high performance specialist coatings, waterproofing membranes and protective systems for the global construction, civil engineering and highway industries. The Company is experienced in the use of modern resin technology and has made a number of major advances in the use of MMA. Several market-leading systems, based on monomers and polymers from LI, have been developed for areas such as structural waterproofing and tanking, bridge deck waterproofing, car park refurbishment and decorative surfacing.

**FF: Can you tell us about some of the most interesting uses of your products?**

With a worldwide reputation for quality products, SL has been involved in many global projects. These include work on some of its' most iconic structures; linking continents with the Bosphorus Bridge in the humidity of Istanbul, waterproofing the Oresund Crossing in the depths of a Scandinavian winter and protecting national symbols such as Hong Kong's Tsing Ma Bridge and the sacred water facilities in Makkah. We were also first to successfully waterproof an immersed tube tunnel externally, and are currently involved on the Charles Bridge in Prague, which dates back to 1357.

**FF: What makes SL stand out from its competitors?**

SL prides itself on providing cost effective, long-term solutions to its customers'

problems, which we achieve through first class products and customer service. We are determined not to get involved in quick fix, short-term remedies and have built an enviable reputation and a high level of repeat business based on quality products and professional technical advice. This has led to mutually beneficial, long-term relationships with both specifying engineers and main contractors, which we will continue to build and enhance as we move into new markets and introduce new products.

**FF: What are your key challenges and what do you need from LI as a key supplier?**

Following on from the success of our market-leading Eliminator® bridge deck waterproofing system, we have successfully developed a diversified product portfolio for a wide range of markets. Our challenge is now to sustain this growth despite a slowing domestic market and new competition from the world's emerging economies. However, we see this as an opportunity as the growth in China and other expanding economies offers us great potential for increased sales. We must have the right products at the right price to meet demand. Having a key supplier who can offer a range of monomers, in increasing volumes, competitively priced is a pre-requisite for us to achieve our growth ambitions.

**FF: You have a long working relationship with LI, what do they bring to your business?**

Our passion for quality can only be met with the help of the right suppliers. By understanding our needs and having the

same positive attitude to quality and customer service, LI has become our supplier of choice. We rely on product consistency, security of supply and rapid turn around and LI have proved themselves in these areas over the years. We have also benefited from LI's technical and commercial advice and from them acting as a sounding board for our ideas. Providing what we want, when we want it, combined with fair and professional contract negotiations, indicates that this is a relationship that is set to develop further.

**FF: What are your thoughts about the future?**

We believe there are still considerable growth opportunities. Our plan is to increase the market penetration of our existing products into both current and new markets, which we will supplement by the introduction of high quality products for specialist markets. Currently, we are working on a series of new products and their market potential genuinely excites us.

**FF: Any other exciting news, products, activities on the horizon?**

We have recently launched a range of highway maintenance products - under the Safetrack® brand, that not only offer first time, permanent re-instatement but also far superior service life and enhanced safety for both applicator and road user. Representing significant performance improvement while helping to reduce congestion and offering cost effective repairs, we expect this range to really shake up the highway maintenance market in the next few months.



# TEAM EUROPE



## Lucite International People

NAME:  
**JENNIFER LONG**  
JOB:  
DISTRIBUTION ADMINISTRATOR  
JOINED:  
**1984**

TYPICAL DAY:  
"Each day is varied and challenging as my role interfaces with many different people. I am the prime contact for our hauliers, who deliver Cassel manufactured products to our customers all over the world. It is absolutely vital that I work closely with them and our Sales Order Processors to ensure we act swiftly to meet our customers' precise delivery requirements."

NAME:  
**HELEN DANIEL**  
JOB:  
SALES ADMINISTRATOR  
JOINED:  
**1986**

TYPICAL DAY:  
"I work with the Sales Professionals, Sales Director and internal supply chain to provide administrative support across the entire function and have to say that each day is very different. From compiling business figures to submitting forecasts and sales data reports, the breadth of work together with a keen focus on accuracy means that it's a challenging role."

NAME:  
**DAVID DOWNIE**  
JOB:  
CHEMICALS & POLYMERS  
SALES MANAGER - UK, IRELAND  
AND NORDIC  
JOINED:  
**2002**

TYPICAL DAY:  
"The simple answer is, I don't have one! Every day is completely different. However, the best part of my job is spent working directly with our customers. When I am in the office, most of my time is spent preparing for, and following-up on customer meetings. My customers are at the heart of everything I do."

NAME:  
**VALERIE PRIMAUX**  
JOB:  
SALES MANAGER – FRANCE,  
IBERIA AND NORTH AFRICA  
JOINED:  
**1999**

TYPICAL DAY:  
"Travelling, speaking another language and dealing with people from a different culture means that my job never feels routine. I enjoy meeting customers to talk about the day-to-day business and sharing thoughts on market dynamics. And I always prefer quarterly reviews and price negotiations to be done face-to-face."

## Lucite International Market Place

**Territory:**  
The North and South European team covers: UK, Ireland, Denmark, Sweden, Finland, Norway, France, Spain, Portugal, Tunisia, Algeria and Morocco. This territory has a combined population of around 285 million people.

**Products/industries:**  
MMA and SpMAs are sold for the manufacture of acrylic sheet, coatings, industrial resins, fertilisers and many more products that require the performance characteristics of acrylic. Resins are used mainly for profile extrusions, paints, inks, castings, embedments and adhesives. More specialist applications include bone cement, teeth and denture materials.

**Growth:**  
LI's long and established presence means it has been able to help new industries to establish and grow in this part of the world over a number of years. The trend for businesses to relocate to Spain and other parts of Southern Europe as a lower cost production base has led to significant growth and LI has introduced innovative new supply chain solutions to support the competitive environment.

**Strength:**  
A long-term presence in the market place and having well established distributor relationships with Univar in France and UK, plus Quimidroga in Spain and Portugal means that LI can offer reliable and secure supply to its customers. And our multicultural sales team, which focuses on providing exceptional customer service is increasingly the supplier of choice in these territories. The new company start-ups in Spain and Southern Europe represent a significant factor behind the growing Methacrylate demand in Europe.

# EASTERN PROMISE HITECH INDUSTRIES IN DUBAI

TAKE A LOOK AT DUBAI BASED HITECH INDUSTRIES FZE'S NEW WEBSITE AND IT'S IMMEDIATELY CLEAR THAT THIS IS A COMPANY WITH A BIG VISION AND THE DRIVE AND AMBITION TO SUCCEED. HEADING THE WEB PAGE ON CORPORATE STRATEGY ARE THE WORDS; 'SUCCESS FOLLOWS THOSE WHO DARE TO DREAM, VISUALIZE, PLAN AND ACT TO ACHIEVE THEIR GOALS' AND, LOOKING AT THE COMPANY'S IMPRESSIVE LIST OF MULTINATIONAL CUSTOMERS, ITS GLOBAL REPUTATION FOR QUALITY PRODUCTS AND SERVICE, AND TRACK RECORD OF CONSISTENT GROWTH, THE BOLD STATEMENT RINGS TRUE. IN THIS ISSUE OF FREEFLOW, WE TALK TO HITECH'S PRESIDENT, PIYUSH SEMWAL ABOUT HIS ORGANISATION, THE LINK WITH LUCITE INTERNATIONAL (LI) AND THE COMPANY'S PLANS FOR THE FUTURE.

**FF: DESCRIBE YOUR BUSINESS AND TELL US HOW YOU USE MMA?**

Hitech is part of a multinational group and one of the key players in the resin industry in the Middle East. Based in Jebel Ali since 1991, it has formed strong partnerships with the Paints, Adhesives and Fiberglass Reinforced Plastics (FRP) industries, providing them with resin products to meet their precise needs.

Our products can be broadly classified into three areas. First, solvent based systems for the coatings industry, which cover both generic and specialty products. Second are water-based emulsions where we have a close relationship with a key producer of polymeric emulsions in Europe. Thirdly, composites resins where we have a license agreement to produce pipe resins. Partnerships with both of these companies have been in place for over two years now and are growing very positively.

We pride ourselves in our comprehensive product portfolio, which is continually evolving to meet the changing needs of a very dynamic marketplace. And we're very pleased to have developed strong relationships with our supply partners who help us to deliver on our commitment to customers. We use MMA for our specialty alkyd systems. It goes into our solvent acrylics and is also being used in water-based emulsions for manufacturing pure acrylics here in Jebel Ali.

**FF: PARTNERSHIPS ARE OBVIOUSLY VERY IMPORTANT TO HITECH - CAN YOU TELL US MORE?**

At Hitech, we firmly believe that the best ideas and greatest success stories are achieved through collaboration with experienced partners. Our aim is to continue to grow and prosper by entering new

territories and markets and by introducing new technologies either directly or through strong supply chain partners. We work with LI through a local chemical trading agent called Linkers, so there's an example of a strong partnership that ensures we get great quality product when we need it at the right price. We're also excited about our work with our European partner, where we've created some new pure acrylic products which we are about to launch into the marketplace.

**FF: HOW DOES HITECH DIFFERENTIATE ITSELF AND STAND OUT FROM ITS COMPETITORS?**

As we said earlier, our strategy is based on maintaining and developing a comprehensive product portfolio aimed at meeting the generic and speciality requirements of the Coatings and FRP industries, which covers a wide range of applications. This means that we are continually evolving solutions for our current and future potential customers across a number of market sectors. So, breadth and diversity is key to our point of differentiation in a region that tends to focus on single industries and therefore single product sectors.

**FF: THERE'S A GENERAL VIEW THAT THE MARKET IS TOUGH AT THE MOMENT, WHAT ARE YOUR MAIN CHALLENGES AND WHAT DO YOU NEED FROM LI AS A KEY SUPPLIER?**

The biggest challenge so far as we're concerned in the Middle East has been the wide fluctuation in the price and availability of raw materials. What we look for in any supplier is consistency in terms of product quality, availability and, most importantly, pricing. And that is precisely what we expect and receive from LI.

**FF: HOW LONG HAVE YOU BEEN WORKING WITH LI AND WHAT DO THEY BRING TO YOUR BUSINESS?**

We've been associated for about seven years now and, in addition to the consistency of quality, reliability of supply and price we've just talked about, what LI brings to the table is a true commitment to partnership. They treat us with respect, help us to identify accurate trends and industry intelligence, which is very important in such a volatile market, and they are there for advice if we call upon them.

**FF: WHAT ARE YOUR THOUGHTS ABOUT HITECH'S FUTURE AND IS THERE ANY EXCITING NEWS ON THE HORIZON?**

Hitech has grown organically over the last 16 years and now has a position of real strength in our industry. We are now setting our sights on a second operation in the United Arab Emirates at Ras Al Khaimah, which will be commissioned by mid 2009. This new operation will add significant new capacity in the first phase of the project. In addition, we are looking closely at other areas within the Gulf Cooperation Council, such as Saudi Arabia, Bahrain and Qatar to locate a third plant. These exciting projects are all part of our action plan to fulfil the huge potential that we believe Hitech has out here in the Middle East.

For further information about the Hitech Industries FZE and its products and services, please visit: [www.hitechresins.com](http://www.hitechresins.com). Our thanks go to Mr Piyush Semwal at Hitech for his help in putting this article together and to LI's Sales Manager in the region, John Beck.

# LUCITE INTERNATIONAL'S PROGRESS THROUGH REACH PRE-REGISTRATION



Fiona Smith, REACH Manager

REACH milestones are rapidly approaching and the mid-way point through the pre-registration window provides a timely opportunity for us to take stock of our position. Lucite International (LI) has adopted a phased approach to the pre-registration process in order to ensure each product range is suitably supported.

## 1. METHACRYLATE MONOMERS

We have pre-registered all monomers to support both EU manufacture and import from our non-EU production sites. Anticipated registration deadlines have been selected to cover monomers in polymers imported directly or in polymers manufactured by non-EU Downstream Users of LI.

## 2. EU MANUFACTURED POLYMERS AND RESINS

We are continuing to work with our suppliers of materials other than our manufactured monomers to ensure both continuity of supply and to negate any impact of REACH on the product portfolio.

## 3. IMPORTED POLYMERS AND RESINS

Grade compositions have been assessed to determine registration requirements for monomers and chemically bound substances and identify additive substances above the volume threshold. Pre-registrations will cover volumes imported by LI as well as those declared by Downstream Users.

## 4. ACRYLIC SHEET

Sheet is an article under REACH and as such is exempt from registration. As with other products, we are working with suppliers to ensure that raw materials will be fully supported to negate any impact on our product portfolio

## NEXT STEPS TO REGISTRATION

Pre-registration is only the first step on the road to REACH compliance. After 30 November 2008, focus will move to data sharing and compilation of chemical safety assessments and registration dossiers. In preparation we have been taking a lead role within our Methacrylate Industry trade group. This process includes the identification of use and exposure scenarios with key Downstream Users associations.

We have continued to develop further assessments of REACH on each of our product categories. These cover manufacture of monomers, polymers and acrylic sheet both inside and outside of the EU and aim to provide some background of the legislative requirements and preparations necessary for each case. These assessments, along with our previous REACH booklets and current information on REACH preparations at LI are available on our REACH blog at: [www.reach-and-you.info](http://www.reach-and-you.info)

## WE VALUE YOUR OPINION

We would very much like to know what you think of FREEFLOW. If you have a particular area of interest or would like to see a particular issue covered next time, please do let us know by emailing comments to: [peter.snodgrass@lucite.com](mailto:peter.snodgrass@lucite.com)

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