



## DET NSW (COAG) RPL Skills Express – Industry Partnership Project up and running

PIMA wishes to thank those companies who volunteered to assist in this pilot project.

### What the Program aims to Achieve

The aim of the program is aimed at assisting industry to find required skills by identifying and recognising existing skills held by people for which they do not have recognition.

The program aims to obtain skills more quickly by identifying skills already existing. To do this, people have their skills assessed by a registered Training Organisation, and are then advised of any national competencies they possess. They may also be assisted with some gap training to complete competencies where they fall short.

RPL can therefore be considered as another form of training. This project is designed to complement workforce development skills.

### Program Description of the DET NSW COAG RPL Program

An effective RPL process allows participants to gain credit for recognised competencies gained previously through informal or non-formal learning and experience in the workplace. It must therefore be conducted to suit its particular industry or context and may involve assessment via:

- an evidence portfolio
- observation
- demonstration
- records
- outcomes from past learning
- work samples
- testimonials from supervisors

Participating companies will be contacted by PIMA during May to organize the implementation of the project. If your company is not participating in the project but you feel that you would like to be included please contact PIMA as soon as possible as we may be able to add you to the list.

The funding for this project is being provided jointly by both the Federal and NSW Governments.

### Important Diary Dates for 2008

PIMA Charity Golf Day	Friday	02/05/08
Supervisors Level 1 Seminar	Thursday	15/05/08
Plastics Pioneers Lunch	Thursday	29/05/08
TAFE Student Graduation Night	Tuesday	03/06/08
Introduction to Plastics Seminar	Thursday	12/06/08
PIMA Dinner Seminar	Wednesday	25/06/08
Plastics Pioneers Lunch	Thursday	28/08/08
Ausplas 2008	October 7 - 10	
Plastics Pioneers Lunch	Thursday	27/11/08

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## AUSPLAS 2008 UPDATE

Organisers of this year's Ausplas, scheduled to take place in Melbourne from 7 - 10 October, report sharply increased interest from new exhibitors from overseas - especially China and Taiwan.

"About 35% of the bookings so far have come from our agents overseas with three pavilions already confirmed from Taiwan, four separate large blocks sold to agents from China and an area to be presented as 'Expo Austria' bringing new players from that country.

We recently formed a joint venture with the Asian subsidiary of the organisers of the K Fairs, Messe Düsseldorf, in the medical field and this connection has been valuable in enlisting new exhibitors from overseas" said Wayne Carroll, sales manager for organisers, Exhibition Management Pty Ltd. "All the indications are that we will be at capacity in a 9,000 square meter show - the same as in 2005".

There are many new names, including China's largest masterbatch manufacturer, a lot of ancillary equipment suppliers and even extruders from Korea" he added.

### **Injection Moulding will feature.**

Ausplas has attracted strong support from a number of "traditional" suppliers and agents and some who have not shown for some time.

Tasman Machinery advises they will be showing an all electric Sumitomo SE75DU in combination with a high speed take-out robot from Yushin with a target cycle time of 4.3 seconds. Their display will highlight the advantages Sumitomo's all-electric machines offer to users.

Comtec IPE advises that their stand will feature cost effective manufacturing solutions using innovative machines technologies with the centre-piece an ARBURG ALLROUNDER.

Applied Machinery reports that amongst other equipment on show they will exhibit a Chende 250 ton injection moulder with an Alfa parts take-out robot and a Chen Hsong Minijet 20 ton injection moulder.

CTS Plastics Machinery will have a large range of equipment on show. This includes TELFORD SMITH, SHINI, HAIDA, GALA, UNITEK, FILTON, C.A.PICARD, ROTO PLASTIC and the German-engineered ZERMA range.

Haitan Direct confirm they will have at least 3 injection moulding machines on display including a standard 'HTFW' machine featuring the latest Keba 1070 controller. Also one of the latest servo / hydraulic machines and part of the 'J5 series'. The servo Hydraulic machines are recognised as being more responsive than standard machines and can use up to 70% less power.

You'll also see one of the new Haitian 'Zhafir' all electric machines.

Another newcomer from a different field is Nissei ASB with one of the largest exhibit areas booked to date. Further details will be available soon.

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## Technical Conference Snapshot

Ausplas 2008 will be supported by a number of conference activities, both technical and commercial.

SPE will be running a program with a similar format to the highly successful one run at Ausplas 05. Four themes have been chosen. The first theme, 'Innovation in Plastics', will showcase the ground breaking R&D which is being carried out at Australian research organizations and show how this can be connected to industry.

The second, 'Plastics and Sustainability' will address the important topics of recycling, bioplastics and environmental impact.

'Improving Competitiveness' will examine trade issues, export opportunities and productivity improvement.

'New Technology in Plastics and Processing' will introduce the latest trends in materials and equipment.

**For more information regarding  
Ausplas 2008 visit [www.ausplas.com](http://www.ausplas.com)  
or email [info@exhibitionmanagement.com](mailto:info@exhibitionmanagement.com).**



## Movers and Shakers

### PETER HARPER RETIREMENT

Dr Peter Harper has retired from his teaching position in the Polymers section at Lidcombe College of TAFE after 12 years of service.

Peter has worked in the plastic's industry for most of his working life and his vast knowledge and experience has been a tremendous asset to TAFE throughout his time at the college.

Peter will undoubtedly be missed by students and staff and everyone from Lidcombe College wishes him all the best on his retirement.

## Pandrol Australia Pty Ltd. Announce the Creation of a New Moulding Division

Pandrol, a NSW manufacturer of rail fasteners is setting up a new facility to mould rail-fastening components in the Sydney area.

The Pandrol Plastics Div will start with five injection moulding machines and about 20 people in the third quarter 2008.

Pandrol management says that there is enough new track work in Australia to support not only their new facility but also to maintain business with their existing suppliers.

## Hybrid Technology for Plastic Injection Molding Machines

by Todd Simmon

All World Machinery Supply (Harvard, IL)

As many plastic injection machine manufacturers move towards modern all electric designs, there remains one very important part of the machine that continues to use circa 1970's technology. This important part of the process is called a "core pull/set" system. Approximately 30% of all molds will use a core pull/set in the mold to achieve the desired cavity details. As the industry has accepted the new "all electric" movement, the core pull system is sometimes an afterthought. Most core pull systems use a traditional hydraulic pumping unit that is either dedicated to the machine or sometimes is portable for use on any machine in the shop where the need for a core pull exists. These units usually require cooling water and a heat exchanger to keep the hydraulic fluid at an acceptable temperature. The core pull unit only operates for 2-4 seconds per cycle, during the idle time the electric motor continues to operate at full RPM even though the pump may be vented or of a pressure compensated design. The motor always operates at full speed keeping the mass (pump and motor) rotating. This requires energy, which can sometimes equate to as much as 40% of full load current. Besides wasting valuable energy, there is also a significant amount of noise associated with this design.

All World Machinery Supply (Harvard, Illinois) is the North American partner for Daikin Hydraulics and is well versed in the new "hybrid hydraulic" technology. The basis of the technology is that the motor is inverter controlled and only rotates to meet the system demand. During an idle situation the motor will automatically slow down to below 400 RPM and maintain the desired pressure. Once a demand is sensed (on board pressure transducer) the motor spins to full RPM in .1second. This is accomplished using Daikin's patented motor design.

These systems were originally designed for the Machine Tool Industry more than 7 years ago. Many Asian manufacturers of CNC machinery are using this technology today with great success. As the product line evolved, larger units were designed for use in industrial hydraulic applications. One such application which has proven to be a perfect fit is "core pull/set" systems on Plastic Injection machines.

Using Hybrid Technology, the systems do not require cooling water, will save a measurable amount of energy, operate at 60-70dba noise level and are priced comparable to traditional hydraulic systems. Several plastic injection machine manufacturers have accepted this technology and offer the Daikin Hybrid systems for core/pull set applications to their customers today. Daikin Hybrid systems can deliver up to 22 gpm and are rated at 3,000 psi maximum.

### Todd Simmon

All World Machinery Supply

1301 West Diggins

Harvard, IL 60033

Email: [tsimmon@allworldmachinery.com](mailto:tsimmon@allworldmachinery.com)

Phone: (815) 943-9111

Fax: (815) 943-5370

Web: [www.allworldmachinery.com](http://www.allworldmachinery.com)



### PIMA

PO BOX 324,

Lidcombe, NSW, 2141

Ph: (02) 9387 6610

Fax: (02) 9387 6924

Email: [pima@pima.asn.au](mailto:pima@pima.asn.au)

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## Industry Training Advice in NSW

Industry Training Advisory Bodies (ITABs) are autonomous, Industry-based bodies that are able to speak on behalf of their designated industry sectors on training and related matters at a state level.

The broad aim of the ITABs is to assist industry to achieve, and maintain, a workforce with the right levels and mix of skills to meet business goals.

They are funded by the NSW Government and contracted by the NSW Department of Education and Training to support critical operational areas of the NSW vocational education and training (VET) system.

The ITABs provide the principal independent voice on skill needs, training and workforce development issues for their respective industries in NSW by:

- Maintaining current and comprehensive industry knowledge
- Providing advice to government on strategic policy, program development and research
- Working to maximise the benefits to industry from the vocational education and training (VET) system and promoting industry participation in structured training

## Benefits to Industry

The ITABs undertake a range of activities to identify their industries' needs for skills and workforce development. These activities draw on a range of formal consultation mechanisms such as focus groups, surveys, individual site visits and web Forums.

The aim is to bring together the views of key state stakeholders including employers, unions, peak bodies, regulators and government agencies to ensure all advice is current and reflects an accurate and accepted industry position.

The ITABs provide a conduit for industry's workforce skills needs to be communicated directly to the NSW government to ensure quality outcomes regarding Vocational Education and Training (VET) needs and reforms.

The ITABs may also:

- Provide expert advice on options for making the training system work for individual enterprises
- Keep NSW industry informed about workforce capabilities and continuous improvement developments in the VET system
- Provide a range of services to achieve the best results from the training system - conducting industry conferences, organising industry networks, assisting enterprises develop training programs or learning and assessment resources, competency mapping, training needs analysis and skills recognition in the workplace.

In addition to providing direct benefit to industry these activities maximise the ITABs' understanding of current workforce development issues.

## Advice to the NSW Department of Education & Training

The NSW ITABs provide independent, representative advice to the NSW Department of Education and Training (DET) on the workforce development needs and priorities of the industry sectors.

This advice assists the Department in its strategic planning and policy implementation for future workforce skills needs and includes:

- Identifying industry demand for particular skills and qualifications and reviewing and refining apprenticeship and traineeship pathways in NSW to reflect the needs of NSW industry
- Consulting with industry and advising on the appropriateness of vocational pathways in schools
- Representing the specific needs of NSW industry in the continuous improvement process and implementation of the 70+ national Training Packages that underpin vocational education and training in NSW
- Conducting industry skill development research, projects and other initiatives
- Providing industry expertise in relation to compliance audits of training organisations and the accreditation and review of courses.

## Services to other Government agencies

With their knowledge and experience ITABs are uniquely placed to provide advice to other government departments and agencies, and to assist in developing and implementing targeted practical initiatives which address specific issues and needs.

Workforce skill requirements can be affected by complex sets of factors including local and global economies, environmental conditions, natural and man-made disasters, legislation, social pressures and consumer trends and population and workforce demographics. ITABs can contribute to an understanding of the interactions and impact on industry's strategies for workforce recruitment, development and retention and succession planning.

## Support to RTOs

ITABs provide a range of strategic advice and consultancy services to Registered Training Organisations (RTOs) with the aim of maximising the relevance and quality of skills outcomes in the workplace.

A comprehensive knowledge of industry's needs enables the ITABs to assist RTOs in:

- The selection and delivery of national qualifications for enterprises and individuals in NSW
- Brokering a partnership with an enterprise
- Tailoring a program to an organisation's specific needs
- Developing learning and assessment strategies
- Developing learner resources and assessment tools
- Meeting industry and regulatory requirements including the AQTF 2007.

Additional services to RTOs may include professional development activities, networks, validation of assessment processes, and advice on course development and accreditation for skills which are not covered by national Training Packages.

## Moulding Your Career - Introduction to Plastics And Moulding Your Career – Supervisors Training Level 1

PIMA and Lidcombe TAFE have, in 2007, run two Moulding Your Career – Introduction to Plastics seminars, with a combined attendance of 25 participants. This course has given the participants an introduction into the world of plastics and shown them how plastic components are designed, manufactured and tested.

We have also run two MYC – Supervisors Training Level 1 seminars with a combined attendance of 38 participants. This course helps supervisors understand their responsibilities in today's industrial climate and deals with OH&S, leadership, workplace personalities, harassment and discrimination, communication and managing time, people and production.

PIMA has developed both courses to help employees in the plastics workforce carry out their roles more efficiently and with more knowledge and understanding.

The next Supervisors Training Level 1 seminar will be held on Thursday 15<sup>th</sup> May 2008 and the next Introduction to Plastics seminar will be held on Thursday 12<sup>th</sup> June 2008.



### PIMA Charity Golf Day 2008

The PIMA Charity Golf Day will again be held at Carnarvon Golf Club on Friday 2nd May 2008. It is an Ambrose event so all levels of golfing ability are catered for. PIMA is proud that over the last four years we have raised \$91,000 for charity, so come along.



### New Trophy added

PIMA is proud to announce that in addition to The Ken York Memorial Trophy for the overall winners a new trophy has been added. The winning mixed team will receive The Alec Pennicook Memorial Trophy

## OH&S

### Employees feel unsafe at work

A survey of more than 1500 employees has found one-third believe the equipment they use for their work is detrimental to their health.

The survey, which was conducted by the leading career networking site *LinkMe.com.au*, also found more than 40% feel their workplace doesn't care about their health and safety concerns.

In other findings:

- 42% continue to use unsafe equipment because they feel they have no other choice;
- 31% say the nature of their work is always going to be detrimental to their health;
- 28% believe nothing will change even if they make a complaint;
- 16% are concerned that complaining might threaten their job security.

The survey also revealed more than a quarter of the population would compromise their wellbeing at work in return for getting more money.

### Guard your machinery or pay human cost

WorkSafe WA Commissioner Nina Lyhne warns employers they must get the message that having machinery guarding safety was an absolute priority. "Occupational safety and health legislation has required the guarding of moving parts of machinery for

a very long time now, and we should not have to remind employers of their obligations in this area," she said.

"Guarding is one of the easiest and most obvious means of minimising the risk of injury to machinery operators, and the cost of installing guarding is far less than the cost in human and economic terms of a serious injury to a worker."

Her comments came after Perth Magistrates Court fined a rock candy manufacturer \$20,000 after a worker's finger was severely injured in an unguarded machine.

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THE PLAIN-ENGLISH GUIDE TO WORKPLACE HEALTH & SAFETY

### Bullying more harmful than sexual harassment

New international research claims workplace bullying, such as belittling comments, persistent criticism of work and withholding resources, appears to inflict more harm on employees than sexual harassment.

Canadian researchers Sandy Herscovis and Julian Barling presented their findings at a major international conference on work, stress and health in Washington. "As sexual harassment becomes less acceptable in society, organisations may be more attuned to helping victims, who may therefore find it easier to cope," said Ms Herscovis, the lead author.

"In contrast, non-violent forms of workplace aggression such as incivility and bullying are not illegal, leaving victims to fend for themselves." The authors reviewed 110

studies conducted over 21 years that compared the consequences of employees' experience of sexual harassment and workplace aggression. They focused on the effect on job, co-worker and supervisor satisfaction, workers' stress, anger and anxiety levels, as well as workers' mental and physical health. Job turnover and emotional ties to the job were also compared.

The authors distinguished among different forms of workplace aggression:

- Incivility included rudeness and discourteous verbal and non-verbal behaviors.
- Bullying included persistently criticising employees' work; yelling; repeatedly reminding employees of mistakes; spreading gossip or lies; ignoring or excluding workers; and insulting employees' habits, attitudes or private life.
- Interpersonal conflict included behaviors that involved hostility, verbal aggression and angry exchanges.

The researchers found both bullying and sexual harassment can create negative work environments and unhealthy consequences for employees, but workplace aggression has more severe consequences. Employees who experienced bullying, incivility or interpersonal conflict were more likely to quit their jobs, have lower well-being, be less satisfied with their jobs and have less satisfying relations with their bosses than employees who were sexually harassed, the researchers found.

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Furthermore, bullied employees reported more job stress, less job commitment and higher levels of anger and anxiety. No differences were found between employees experiencing either type of mistreatment on how satisfied they were with their coworkers or with their work. "Bullying is often more subtle, and may include behaviors that do not appear obvious to others," Ms Hershcovis said. "For instance, how does an employee report to their boss that they have been excluded from lunch or that they are being ignored by a coworker. The insidious nature of these behaviors makes them difficult to deal with and sanction."

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## SPE-ANZ

### Innovation in Polymers through Nanotechnology



The NSW branch of the Australia-New Zealand Section of the Society of Plastics Engineers organised a technical seminar on the topic of "Innovation in Polymers through Nanotechnology" on Thursday 13<sup>th</sup> March at the Western Sydney Business Centre in Parramatta with support by the NSW Department of State and Regional Development.

The event coordinator of SPE, Han Michel, welcomed the attendees, speakers and guests. On request of DSRD, Dr Derek Vandyke of the NSW Office for Science & Medical Research made a short presentation about the upcoming inquiry by the NSW Parliament on OH&S issues and potential other risks related to the use of nanoparticles.

The technical presentations commenced with a broad overview of the potential for nanotechnology in the plastics industry by Dr Stuart Bateman of CSIRO/Melbourne. Of particular interest was a short DVD presentation demonstrating the use of nanotechnology in stopping the burning of plastics in an application in the aerospace industry developed for Boeing which is one of the industry partners of CSIRO. This overview was followed by a presentation by Dr Paul McCormack, CEO of Advanced Nanotechnology of Perth/WA. An in-depth presentation showed the effectiveness of nanomaterials for UV protection in plastics. Professor Mark Hoffman of the University of NSW presented the work being done in collaboration with Iplex Pipelines using nanoparticles in PVC compounds for the production of PVC pipes. A fourth presentation showed the practical use of nanoparticles in a variety of applications in polymers, textiles and skin care given by George Pasti of Micronisers/Victoria. Marion Nanosystems of Melbourne (also a sponsor) showcased its range of nanomaterials with practical examples.

The seminar was held in cooperation with the Australian Nano Business Forum of which the CEO, Ms Tina Rankovic, thanked the speakers by presenting a much-appreciated bottle of wine. Over 50 stakeholders in the plastics and polymers industry attended the function. The evening was concluded by a networking session during which the participants enjoyed a buffet of finger foods and a glass of wine.

The next event of SPE in NSW is a workshop on Thermoforming on Thursday 19<sup>th</sup> June with Mark Strachan of Global Thermoforming Technologies/USA.

#### PIMA

PO BOX 324, Lidcombe. NSW.  
2141

Ph: (02) 9387 6610

Fax: (02) 9387 6924