NZ BRANCH ACTIVITIES

LEGISLATION

Nominations for Membership to the Engineering Associates Registration Board (EARB)

Under the Engineering Associates Act 1961 (the Act), the IAME is eligible to nominate a member for appointment to the EAR Board.

The EAR Board's prime function is to consider the competence of engineering technologists and approve, or decline, their application for registration. It is also the role of the Board to investigate complaints and discipline where necessary, endeavour to increase the number of registered members, and encourage ongoing competence and qualification of engineering technologists.

If you are interested it would be appreciated if you could provide a response by 30 July 2010 by contacting Nick Hill at: iame@clear.net.co.nz or phone (04) 9717567.

NEW "A4" JOURNAL BINDERS NOW IN STOCK

These new binders are designed hold 6 of the new A4 sized IAME journals and are made from durable welded plastic.

A great way to keep your copies of The Automotive Engineer as a technical reference. The binder is navy blue with the institute logo and lettering in white.

Member price $10 plus postage of $4.50 (inc GST)

HAVE YOU GOT YOUR IAME SIGN YET?

Show your customers you are a true professional - order your 570mm x 450mm IAME NZ sign made from strong flexible Polypropylene in three colour on white backing. Great price at just $40 plus postage.

Also available are adhesive signs for outside glass application sized 355mm x 285mm at $5 each. If that's not enough, attach an IAME embroided label on your work ware at $4 each or 3 for $11 or 6 for $20.

Contact Nick Hill on:
Ph: (04) 971 7567 Fax: (04) 934 7567
Email: iame@clear.net.nz

GIVE WAY RULES LIKELY TO CHANGE

To further improve the safety of our roads, Transport Minister Stephen Joyce has indicated he will seek to change our give way rules for turning traffic. The current rules can be confusing and are out of step with the rest of the world. Research shows that a change in these rules could reduce intersection crashes by about 7 percent, a social cost saving of around $17 million a year. The minister will take the proposal to Cabinet later in the year.

Presidents Thoughts

There is one common theme I pick up from member conversations and it doesn't matter whether it's a visit to a dealership, a large workshop, or a sole charge country garage. The thirst for knowledge is never ending and the need for answers to perplexing questions and problems goes on un-abated.

Today's complex vehicles and motors pose many service and repair problems. You know the scenario. We have all been there and it is not always possible to plug in for a "fix" either. Technology continues to progress at a rapid rate, and consiquently a little later so do many of the solutions. These days it is often at the touch of a button across a wide range of makes and models.

However we know problems tend to lead the solution rate and as a rule this is not likely to change. So I say as members we are very lucky to have such a fantastic publication as THE AUTOMOTIVE ENGINEER to provide us with up to date and relevant technical information to assist us in our day to day work. The highlighting of different makes and models each issue certainly has wide appeal, as does "Dr Spanners Casebook" and the many and varied technical and diagnostic articles published. Personally I find the advertising section a valuable tool for opening doors as our global world shrinks.

It is fair to say our members enjoy a priceless advantage, because our knowledge increases with each publication. As we look to grow our membership, please offer our magazine to a non member and study the reaction, then encourage them to become a member. Let's face it, our membership fees are the most cost effective of any professional organisation in Australia and New Zealand, and to keep it this way our membership levels must be maintained.

So please "share the knowledge", welcome and encourage new members into a sound and vibrant organisation. Visit the IAME website, www.iame.com.au to download an Application Form.

***Colin Wisker,** President*

TECHNOLOGY

MULTIPLAZ 3500-- A WELDING MACHINE WITH A DIFFERENCE

Members have recently gathered at two venues, Feilding High School engineering workshop and Weltec in Wellington, to see Vladimir and Olga of Advanced Plasma Technology Ltd the New Zealand importers and distributors of the Multiplaz demonstrate the versatility, speed and simplicity of this new welding and cutting technology machine.

The Multiplaz technology has evolved from the Russian space programme and is based on a very portable 240v single phase machine drawing up to 9.5amps. This lightweight inverter power unit drives a hand piece filled with water for use as a plasma cutting torch. The operating arc is started with a push button which causes the arc to heat the nozzle which then heats an evaporator to cause the water to change into steam. The escaping steam under pressure compresses the arc flame which also increases the arc temperature to 8000degrees C. The resulting cuts are narrow in width and very “clean” with cutting capacity to up to 10mm in thickness. This was demonstrated like the proverbial “hot knife through butter” statement. Ideal for all metals and thicknesses from #22 gauge sheet metal to 10mm steel plate.

The cutting torch is easily swapped over to the welding torch simply by plugging into the power pack. The welding torch in most situations runs on a mixture of water and alcohol (meths). The heating aspects of the welding torch can be used just like an oxy-acetylene gas welding heat source, except there is no scale formation on the weld and slightly different torch and filler rod angles are needed. The heat quantity is controlled with a torch adjust knob and a selector on the power unit to suit the thickness and metal type of the welding job.

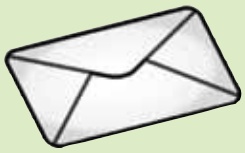
This welding torch also functions when positioned closer to the work as a controlled arc similar to a TIG welder which makes fusion welding of steel, cast iron, aluminium, and stainless steel a success every time. The concentrated jet of heat makes for little distortion but provides a smooth and well penetrated join. Direct welding of copper sheet by fusion welding is possible as well as the traditional methods of hard soldering with silfos-easy flo on non ferrous alloys.

As the demonstrator Vladimir, encouraged the IAME members to get hands on experiences and establish how easy the Multiplaz is to learn to use and to produce spectacular results of cutting, fusion welding, bronze welding, aluminium welding and cutting, plus sheet metal cutting a range of metals and scrap available.

Members saw significant advantages of a welding and cutting combo system that was physically light(9kgs) and portable, had multiple uses (heating, welding, arc, TIG, plasma cutter), easy supply of existing filler rods, and significantly no gas cylinders to move, store or refill. The other significant benefit was the short length of time this machine took to undertake tasks compared to older technology which together with the multi use factor was bound to increase efficiency and lower operation cost particularly in labour time. Once purchased ongoing operational costs are methylated spirits and some replaceable tips (available at prices comparable to existing plasma cutter electrodes).

The members were provided with a DVD on operating procedures and special meeting night purchase considerations. For further information go www.multiplaz.co.nz or phone 0508 PLASMA

For further details regarding membership of the IAME and an application form...
Simply fill in your name and address below and mail this slip to...



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SAFED NZ

Commercial fleet drivers will save fuel, improve safety, reduce maintenance costs and their environmental impact through a government-funded fuel-efficient driver training pilot programme launched this month.

Safe and Fuel Efficient Driving New Zealand (SAFED NZ) which was launched through a series of Ministry of Transport hosted seminars in March, is based on the highly successful United Kingdom programme. If statistics, local trials and attendee feedback are anything to go by will this programme will provide New Zealand's commercial truck and bus drivers with consistent and effective fuel-efficient driver training that impacts directly to the fleet owners bottom line. John Boocook, a world expert in driver training and a founder of the UK programme, is in New Zealand training eight Senior Instructors from across the country.

"Since completing the SAFED programme, UK commercial drivers have reported average fuel savings of around 10 percent. That makes a big difference to the bottom line of a commercial fleet operation" said John Boocook.

The benefits of the programme include:

- increased fuel savings and lower costs for fleet operators
- reduced reliance on imported fossil fuel
- improved road safety
- increased economic productivity
- improved workforce skills.

In a similar trial using a number of SAFED techniques, a Christchurch company made fuel savings of 17.8 percent and halved the number of safety related incidents over a three year period.

Mr Boocock said a fuel-efficient driving style is closely linked with improving road safety. "Adopting some simple fuel-efficient driving techniques gives drivers more time to identify hazards and reduce speeds."

The safety skills taught as part of the SAFED programme should contribute to reducing the number of accidents involving heavy vehicles, which is one of the aims in the recently released Safer Journeys road safety strategy 2010-2020. For further information visit www.transport.govt.nz/ourwork/climatechange/safednz/

Jetex Waterjet Cutting

In February Manawatu Wanganui members gathered at the Bulls premises of Jetex Waterjet Cutting Ltd where owners Glen McCormick and Wayne (Fred) Ward displayed a range of materials and objects that can be quickly cut to shape.

Items ranged from large steel gears to tiny 3mm thick model bikes in copper. Materials able to be cut included plastic, concrete, marble, stone, rubber, glass, copper, brass, titanium, wood, cork, corrugated colour steel and aluminium with a virtually taper freed cut and accuracy up to 0.1mm in material up to 50mm thick.

The computer controlled Omax waterjet machine can shape materials from a range of design templates including hand drawn working sketches, photocopy's, electronic drawings or old parts that can provide the key measurements which are translated into a computer generated 2D working drawings displayed on the computer screen.

The speed of cut, material, surface finish are then all operator set and the operating pathway to be taken by the cutting jet is then able to be analyzed and altered as necessary and product scale and multi unit production can be determined for efficient and economic use of material, keeping customer cost down and reducing material wastage.

Operating at up to 55,000 psi the Omax waterjet uses garnet abrasive to cold cut the metals or materials with a maximum cut width of 0.7mm. Work materials sit on a bed with water underneath to absorb the spent waterjet energy. The process is clean and does not alter the material surface finish, strength or temper as no heat is involved resulting in a satin like cut surface finish that needs no further machining.

All members appreciated the opportunity to view the product samples and demonstrations but most importantly the potential a waterjet cutting service can provide not only to engineering but to all industries, be it for one off replacement parts, manufacturing, repairs, or new parts. Additional info available on www.jetexltd.co.nz

BRANCH NEWS

New IAME National Examiner

At February's New Zealand Council meeting in Wellington, Mr Grant Quin was elected IAME National Examiner taking over from Errol Manderson who has stepped down from the role after 5years.

Grant brings to the role a wealth of experience as an A grade technician and 22 years in the RNZAF prior to management roles with MITO and Metro Training Services and more recently as a part time tutor at Whitireia Polytechnic. Grant's can be contacted at quiny@xtra.co.nz or 021 0239 9981

Errol's departure from the role also coincides with his retirement as a tutor at UCOL for over 40 years. We wish Errol all the best as he devotes his time ahead to the breeding of cattle on his property outside Palmerston North.

COMING EVENTS

Manawatu Wanganui Branch

In the pipe-line we have visits to: Manawatu Hydraulics, a Caterpillar Museum, etc. Keep the visit contacts rolling in so that we can provide members with interesting, knowledgeable events.

Canterbury Branch

An inside to tyre fitting, balancing, repairs, run flat tyres and wheel alignment at the new Firestone Laffey's Tyre Services Ltd premises at 5 Shirley Rd, Christchurch on Tuesday May 18th 2010 starting at 7.30pm.

Contact Pat O'Connell on 03 3853991 or Owen Brewster on 03 9814638 (by 14th May 2010).

Wellington

Wellington branch has evenings on Multimeters, Common Rail Diesels and Hybrids planned for the balance of the year, dates and venues will be advised in the next issue or contact Mark Frampton on 027 2886 631

Waikato

An evening on Suspension Technology in June 2010. Dates and venue to be confirmed to members by email and post For more information contact Mike Tuck on 027 2862 075

Holden Cruze Recall

Holden New Zealand announced in March that they intended to re-check 485 sold examples of the Holden Cruze sedan. A fuel hose fault was suspected. The company said it was aware of three New Zealand instances of a reported fuel leak due to this condition.

Only the 2010 model year editions of the petrol Cruze remained implicated in the recall. Holden had sold 918 petrol versions since the car's launch last July and a further 776 diesel versions, which were not affected. Customers with further questions regarding this issue should contact their dealer or the Holden Recall and Rework Assistance Centre on 0800 465 336.

INTERESTING INFO

New BMW's 5 Series for NZ

BMW NZ sees its wider range of 5 Series engines rejuvenating this model in the NZ market. New Zealand will get most of the available engines, from the 300kW/600Nm, 4.4-litre V8 down to the 135kW/380Nm, 2.0-litre 528i, with the first cars arriving in June and the 520d in September. The only models missing from the line-up will be the 523i and 530d.

The body is longer with lower, leaner lines and its cabin layout is now more driver-focused. The car gets surround cameras, self-parking, a head-up display, active cruise, lane change and departure warning and much more in its extensive spec list. For more information visit www.bmw.co.nz