Automation • Design • Power Systems • Machinery • Materials • Environment • Workshop • Management \$39+GST

Including:

**VISION 2014: Perspectives from industry leaders Engineering industry Suppliers Directory** 

# How to get through more beer without bottlenecks

**Vodafone**Power to you





When your business keeps hundreds of restaurants, bars, liquor stores and supermarkets supplied with beer, it's easy for wrong or damaged orders to turn up. Vodafone helped DB Breweries turn a complex and error-prone re-delivery process into something that goes down as smoothly as a refreshing DB Export beer on a hot summers day.

### Say "Cheers" to significant savings.

Looking to trim costs and boost productivity, DB Breweries asked Vodafone to overhaul its voice and data communications. The solution was a system that enhanced the service DB Breweries provides to its customers:

### A mobile app to replace credit notes.

Working with Smudge Apps, Vodafone helped create a smartphone app that sends credit note data direct to the Accounts system, so the customer's account can be swiftly updated. Paperwork and mistakes are minimised.

### Getting rid of costly, unnecessary infrastructure.

Equipping staff with only the tools they needed meant eliminating hundreds of desk phones and fixed lines.

DB Breweries was able to simplify infrastructure and the ongoing expense it represents.

### Creating a smarter data network.

In partnership with Kordia OnKor, Vodafone implemented a data network that enables DB Breweries to manage network traffic according to business need.

### Bulk TXT messaging to keep everyone connected.

Vodafone provided DB Breweries with MultiTXT, an easy-to-use system that provides bulk TXT messaging from Outlook or the Web for internal communications.

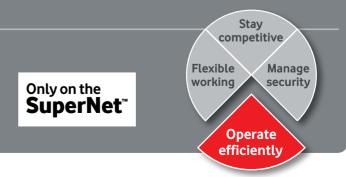
To see how other Kiwi businesses are already making use of this new technology to do business better, check out vodafone.co.nz/mobility

#### **Outcomes**

- Total savings from implementing Vodafone's company-wide solution have been significant. It's money that goes straight to DB's bottom line.
- The new credit note app for DB Breweries' mobile sales force have slashed time, minimised errors, improved customer satisfaction – and delivered payback within one month.
- All staff are now equipped with the tools they need for their roles, eliminating layers of outdated IT and telephony infrastructure. For example, the company reduced its desk phone numbers by 75%.
- Productivity is enhanced with a new WAN that provides increased visibility of usage and allows the company to manage traffic more effectively.

### DB is one of many Kiwi businesses turning mobility into possibility.

With Vodafone you too can be cutting costs, working on the go and removing duplication. Access your information anywhere in order to work the way you want and become more productive. Connect to servers when you're out of the office. And use cloud-based apps like Xero or DropBox to work more efficiently, knowing that your data is always safe.



# THE UPSIDE OF MAINTENANCE: \$500,000 SAVED



### **USE PLANNED MAINTENANCE TO REDUCE ENERGY COSTS**

Some production processes are tricky. With finely balanced systems, it's pretty obvious that any changes need to be high value, and not jeopardise day-to-day operations.

Specialised energy systems auditors can identify efficiency opportunities, and offer solutions that will reduce energy costs for your business. They also give you the confidence that efficiency improvements can be put in place without affecting production.

Take Nelson Pine, for example. After a fan systems audit, the company upgraded its fan motor controls fitting in with planned maintenance schedules. This resulted in a 33% reduction in energy use, which equates to a cost saving of around \$500,000

annually with payback in one and a half years. It also helped Nelson Pine reinforce its brand reputation for sustainably produced wood products.

Process Engineer James Cameron at Nelson Pine says, "The expert help we received gave us the confidence that we could deliver savings, without disrupting production".

For pumping and fan systems efficiency, talk to an EECA BUSINESS™ programme partner – they can help you with expert advice and unlock any funding that may be available to you.





NATIONAL MAINTENANCE

# CONFERENCE CONFERENCE

Kingsgate Hotel, Hamilton 12th - 13th NOVEMBER

2 Day Conference \$680 + gst Bring a mate and it's \$440 + gst each!

Exhibition space from: \$800 + gst

Register Online Today: www.mesnz.org.nz/nmec Email: info@adminoncall.co.nz Phone: Leanne Powley (09) 296 1333

### TAKING KNOWLEDGE BACK TO THE WORKPLACE!

Information, Inspiration & Interactive Displays

Official Media Sponsor





Get in early to reserve your place And maximize your exposure...

Free public trade expo, Tuesday 11th November 2014

Need finance for capital equipment?

## Kiwi Asset Finance

IMITED



### 0800 523 111

www.kiwiassetfinance.co.nz | loans@kafl.co.nz

### TALK TO US ABOUT ASSET FINANCE

### 100% New Zealand owned-experienced asset lenders.

When you put a proposal to us we'll give you an honest appraisal and a quick decision.

Our objective is to assist your business success with the funding of your capital equipment requirements.





4 CONTENTS

### **Engineering News**

Editor: Romy Udanga

0275 595 771

romy@hayleymedia.com

Sales Manager: Keith Falloon

0800 503 305

kfalloon@hayleymedia.com

### Design & Web:

Jamie Laurie 09 484 1303 jamie@hayleymedia.com

Prepress & Print: PMP Maxum

### Circulation/Subscriptions:

Lisa Harris: 027 565 7779 subs@hayleymedia.com

Rates: \$95 incl GST and postage for 10 issues, plus digital editions to five email addresses, plus Annual.

Overseas rates available on request.

Cheques payable to: HAYLEYMEDIA Ltd

Post to: Freepost SUBSCRIPTIONS,

HAYLEYMEDIA Ltd, PO Box 33146

Takapuna, Auckland 0740



Publisher: Andy Hobbs

021 992 127

ahobbs@hayleymedia.com

Level 2, 9 Anzac St, Takapuna, Auckland 0622

PO Box 33146, Takapuna,

Auckland 0740

09 486 0077, (Fax) 09 486 0078

Visit: www.hayleymedia.com

New Zealand Engineering News New Zealand FOODtechnology

Machinerysales

Original material published in this magazine is copyright, but may be reproduced providing permission is obtained from the editor and acknowledgment given to *New Zealand Engineering News*. Opinions expressed are those of the authors and may not necessarily be those of HAYLEYMEDIA Ltd. We welcome material from commercial sources for publication but cannot guarantee that it will be used as submitted.

ISSN 0110-6880 (Print)

ISSN 2324-3155 (Online)



ABC audited monthly circulation as at 31 July 2011 – 9,937.

### **VISION 2014:**

Five industry leaders share their perspective of what the coming year will usher in for the engineering industry: Kim Campbell, EMA (P8), Dr Wolfgang Scholz, HERA (P10), John Walley, NZMEA (P12), David Parker, Labour Party (P14), Dr Andrew Cleland (P16).

### **Automation**

Aurora supplies detectors that screen out metallic and plastic contamination (P8). ABB's PCS 100 Reactive Power Conditioner powers Wellington's iconic cable car (P20). Earthquake-damaged house inspectors are using a robot developed by UC (P29).

### Design

National Instruments highlights the fit of the LabVIEW RIO platform to the New Zealand industry (P12).

### Workshop

Hi-Q Components has a range of adjustable and clamping levers (P16). Global Welding Supplies ramps up its Robotic Welding Division (P17)

### **Power Systems**

Seal House invests in new state-of-the-art technology to manufacture seals (P11). Total Lubricants fuels successes in motor sporting and industry (P19). Hydra Cell's seal-less high pressure pumps are alternatives to big-diaphragm and sealed pumps (P21). James Walker New Zealand carries a broad range of sealing solutions for all industry types (P23). Industrial Air Systems' PneuTech compressors deliver reliable, dry and clean compress air supply (P18).

#### **Materials**

Macplas recently launched its engineered plastics solutions into the South Island (P9). Callaghan Innovation researchers have created titanic materials designed for industrial impact (P23).

### **Machinery**

Engel offers innovative injection moulding machines, automation and processing technology (P6). Mitsubishi's EX4500 Laser is a game changer in high power laser cutting (P10). Okuma New Zealand opens up a branch in Christchurch (P13). Trumpf sheetmetal manufacturing technology is setting new standards in efficiency (P14). Quality service and products drive Machinery House's growth (P22).



CONTENTS

### **Environment**

Viking celebrates 35 years of clearing the air (P15). EcoChill and Ceres Enterprises have created the first 'green-rated' cold storage facility in New Zealand (P20). Innovative lighting cuts energy use, CO2 emissions and brings bottom line rewards (P24). A researcher at UC is looking at an alternative way to capture and store energy (P30). Egmont Air offers a range of solutions for extracting welding fumes (P30). NZ Duct & Flex has installed new filters at Samoa's Apia Concrete Products (P33).

### **Management**

MIT introduces a new mechanical engineering course (P27). Six universities under the Metro Group banner are training a new generation of engineers (P31). Two WelTec construction management students have taken out top NZ Institute of Building prizes (P32).

### **Directory**

**Suppliers Directory (P34)** 

**Products and Services Directory:** Automation (P41), Design (P41), Environment (P42), Machinery (P42), Management (P44), Materials (P44), Power Systems (P44), Services (P45), Workshop (P46).

**Brands/Agencies Directory (P48)** 

### **NZ Engineering News Supporters**

ABB (P20), Aotea (P14), Aurora Agencies (P8), CNC Direct (P9), Design Energy (P25), EECA Business (P1), Egmont Air (P30), EMEX (P32), Eurotec (P21), Global Welding Supplies (P17), Hi-Q Components (P16), Hydra Cell (P21), Industrial Air Systems (P18), Industrial Instrumentation (P13), James Walker (P23), KemTek (P27), Kiwi Asset Finance (P3), Machinery House (P22 and OBC), Macplas (P9), MESNZ (P2), Metro Group (P31), NZ Duct & Flex (IBC), Okuma (P13), Powerpac Group (29), Revolution Precision Machinery (P10), RR Fisher (P27), Seal House (P11), SEW-Eurodrive (P5), Sprockets NZ (P13), Stevenson (P20), Supply Services (P20), Techspan (P7 and 24), Torks Precision Engineering (P24), Total Lubricants (P19), TradeMe Jobs (P25), Trimate Industries (P25), VANZ (P24), Viking (P15), Vodafone (IFC),





Engel CC 300 control system

### Engel-more than a machine

Now more than ever, Engel offers its customers clear advantages, in terms of innovative injection moulding machines, automation, processing technology – and value for money!

#### K 2013 huge success for Engel Austria

K 2013 exceeds Engel Austria's expectations. Spotlighting the topics of system integration and automation, Engel's total of 25 machine exhibits focused on the future buzz topics of the global injection moulding industry, attracting many new customers in the process. Visitors were excited above all about the new Engel CC 300 control unit generation, which takes the overall efficiency of the system to another dimension.

### CC 300 control unit generation sets a new trend

The Engel booth in Hall 15 was well visited throughout the K show. Many trade fair visitors took this opportunity to try out the new control unit generation by Engel. They experienced a totally new control solution that still looked familiar at a first glance.

"Devices like our smartphones, which we use every day, acted as the role models for developing the user interface," reports Engel Austria chief executive Dr Peter Neumann. "At the same time, the central control element, e-move, helps us give a feel for the machine back to the operators. With this unique combination, the CC 300 sets a new trend for the entire industry."

As process integration and automation increases, the complexity of the production process rises, and this poses increasingly tough challenges for control technology. The more intuitive and convenient the control unit is, the more safely and efficiently the production system can work. "The control unit has become an important factor of efficiency in integrated and automated system solutions," Dr Neumann says.

### Functions – customised and focused

The new CC 300 control unit allows injection moulding machines and manufacturing cells to be controlled according to tasks such as mould changing, or according to functions such as injecting. The information displayed concentrates on the essential.

The new central operating element (control wheel), which provides millimetre-precise accuracy and speed-sensitive control for movements, is called 'e-move'. The clearly defined functions increase safety levels when sensitive movements are made and significantly reduce the risk of operation error. Simply pressing the intelligent operation button is enough to start the machine and to initiate various movement sequences. Gerhard Dimmler, product research and development head at Engel Austria says, "With 'e-move' we are able to fulfil our customers' wish of making it easier to control injection moulding processes without reducing efficiency or safety levels. It has taken 'one-button-control' for injection moulding machines from being a vision to being reality."

The complete integration of Engel viper

linear robots and Engel easix multi-axis robots, which Engel will continue to use with all the products in its new generation of control units, also contributes to this. The entire manufacturing cell can be controlled and monitored centrally from the injection moulding machine's control panel. The CC 300 therefore offers efficiency-optimised interaction between the injection moulding machine automation, reduces cycle times, and by doing this plays a crucial role in max-

imising competitiveness

### Ergonomics – individualised with higher safety levels

Seeing, feeling and adapting are key factors as far as ergonomic improvements are concerned on the new CC 300 controller. The new 21-inch full HD display, for example, is easier to read and also offers simpler and user-friendlier navigation.

The information and layout of the different screen pages can be adapted to suit the user's individual needs, and touch elements can be assigned different functions. The control panel automatically switches to the position which is best ergonomically suited for the individual operator when they log

### Latest technologies – robust, fast and user-friendly

Thanks to capacitive touch technologies, the new CC 300 machine control unit can be operated as easily as a smartphone and is also just as quick to respond. Safety glass gives it a surface which remains robust and insensitive to dirt even in unfavourable environments.

The increasing degree of process integration and automation is constantly presenting plastics processors with new challenges. Acquiring ENGEL's new CC 300 control unit will ensure that they are as well-equipped as possible for the future and able to program, activate and monitor complex processes easily with outstanding precision and safety.

### Engel viper - the powerful linear robot

Maximum stability, impressive dynamics and maximum user friendliness – the new ENGEL viper combines all of these things with ease. It saves weight thanks to its innovative design using laser-welded steel sections and convinces users with a substantially higher

load-bearing capacity.

robot

### More efficiency thanks to intelligence

Thanks to clever software, the Viper Robot from ENGEL automatically reduces structure-borne vibration, even with longer axis dimensions, and optimises its movements and dynamic values to achieve better efficiency.

The impressive results: ultra-fast cycle times and maximum productivity accompanied by low energy consumption.

#### Light but powerful

Maximum stability and dynamic values despite a low weight and substantially improved manipulation weight. The innovative design using laser-welded steel sections makes this possible. Your economic advantage: smaller robots and lower cost of investment for high manipulation weights.

#### More Intelligence – More efficient

Clever software ensures faster cycle times, improved productivity and a longer working life due to gentler handling of mechanical components:

- 'Mass identification' identifies the manipulated mass 'online', adapts the dynamic values to match, and thus ensures optimised acceleration
- 'Vibration control' reduces structure-borne vibration, even for longer axis dimensions
- 'Efficiency control' optimises robot movements for maximum productivity while consuming very little energy.

### Engel viper robot range

The Engel viper has met the mark. Its high

performance capability and operating efficiencies have won over customers who would still have purchased it even without a new Engel machine.

**Engel viper 6:** 6 kg nominal loadbearing capacity

**Engel viper 12:** 12 kg nominal loadbearing capacity

**Engel viper 20:** 20 kg nominal loadbearing capacity

**Engel viper 40:** 40 kg nominal load-bearing capacity

**Engel viper 60:** 60 kg nominal loadbearing capacity

**Engel viper 90:** 90 kg nominal loadbearing capacity

**Engel viper 120:** 120 kg nominal loadbearing capacity

The Engel viper robots can be supplied on Engel injection moulding machines, or viper can be supplied for injection moulding machines from other manufacturers.

Plastics machinery supplier, Techspan Group, have represented Engel in New Zealand since 1979. Techspan is still a 100 percent New Zealand-owned and operated family husiness

For more information: Phone: 0800 603 603

Email: info@techspanonline.com Web: www.techspanonline.com







### Injection Moulding Machinery

### More Affordable than ever!











25-5500 tonne clamp force | Hydraulic | Hybrid | Fully electric | Automation



Plastics Machinery | Plastic Welding **Ultrasonic Equipment | Process Heating Industrial Printing Systems** 

Phone: (09) 827 6567 or 0800 603 603

Email: info@techspanonline.com www.techspanonline.com

### 2014: It doesn't get better than this

2014 will prove a strong year for growth for stop printing money. our manufacturers, but only for those who Europe's focus will have prepared themselves for the big chance remain on rebuilding its that the year most certainly will offer.

Those who are ready for it will have retooled, embraced Lean, explored and begun to adopt the latest additive manufacturing techniques such as 3D printing, and developed their online strategy for integrating processes and systems.

Sustained investment of this sort is the key. If businesses haven't been re-investing over the past few years they will need to play catch up fast; otherwise they may not be in business much longer.

Those who have been investing steadily are already doing very well, and will do even better next year.

But traditional, contract metal-basher types who focus on serving eastern Australia customers will struggle

Of course the challenges coming up will be no less than for the year just ending. Again there will be volatility in all currencies. No one knows when the US or Japan will

broken balance sheet. The upside from the consequences is for manufacturers to use Kim Campbell



the strong NZ-US and NZ-Australian cross rates to retool.

They need to keep on doing this if they want to join the race at the top, and the type of success that comes with it, rather than scrap at the bottom of the market.

To overcome the challenges of currency volatility and other uncertainty, manufacturers will want to review all their supply chain and communication channels. Are they adding value, or are they a drag on the business? How close can they get to their customers? By honing relationships, skills and systems such as these, markets for them will expand in unprecedented ways.

The green shoot signs of growth are everywhere, albeit in apparently isolated pockets, in areas such as green products, energy,

food processing, biotech and transport. Compac Sorting Equipment and BBC Technologies are just two outstanding examples of local companies focusing intently on what they do so well and growing fast because of it. The Government's contribution is important. It's vital for facilitating

science to business linkages through Callaghan Innovation, the universities

and capability

and other institutes. Continued Government leadership is needed in getting us Asia Ready, and the Government still needs to build a procurement programme designed to enhance our manufacturers' competence

Our manufacturing capability already demonstrates high level prowess on complex engineering projects; and we're good at applying and adapting new technologies to a wide variety of technical challenges. Top priorities are in process control, systems integration, and finding new ways to take advantage of Ultra Fast Broadband.

Getting the right skills to improve and expand a manufacturer's product range is always a challenge, but labour and skills training should never be a problem for

those who invest in their own people. There is never a skills shortage for businesses that hire smart people prepared to invest in themselves. Pay them well, thereby making it really hard to leave.

VISION 2014: EMA

So what did our manufacturers learn this year? First, they should have learned that those waiting for a better time to invest went broke as Tachikawa Forest Products did.

Second, they learned you can't chase profits ahead of safety. Witness Pike River.

We all learned we could live with a stronger dollar than we ever feared we might have to. And we learned that those who could survive the GFC would emerge more resilient, more determined and more successful than ever.

As for New Zealand's wider economic environment, we go into the new year with the prospect of a balanced budget, a very strong relationship with China, a repaired relationship with the US, low interest rates, and low

It simply doesn't get any better than this.

Kim Campbell is chief executive of the Employers and Manufacturers Association.

Email: kim.campbell@ema.co.nz

### Aurora supplies detectors that screen out metallic and plastic contamination

New Zealand Growers supplying supermarkets in New Zealand would be aware of the latest version of the WQA Quality Assurance Standard. This standard is in place for any suppliers to the Countdown supermarkets in New Zealand and includes new standards for foreign object detection.

The new standard states "prepack produce from slipping through food processing and should be subject to metal detection as a minimum standard". The Aurora Quality Assurance team are specialists in foreign matter control and our Cassel metal detectors are known globally as the cutting edge in quality and technology. We supply units to many industries including produce growers and packers to enable them to meet WQA and HACCP standards. With robust food grade manufacture, simple operation and intelligent technology these units ensure a simple solution for a wide range of

It is difficult to stop plastic contamination

packaging checkpoints. Metal detectors and x-ray machines screen out metallic contamination, but plastics are generally invisible to these monitoring systems. Plastic contamination in finished product can have a major negative impact on a food processor or packager. It only takes one incident, just a small amount of plastic contaminant getting to the consumer's mouth, to set off a major recall, possible legal action and unwanted brand damage.

Aurora is able to reduce this risk with our range of Metal Detectable Products. The Metal Detectable Products range has been specifically designed for the food processing industry. Products in the range are manufactured using the unique X-Detect plastic compound which makes them not only metal detectable, but highly X-ray detectable also. Being highly detectable, even small components can be detected and rejected, enhancing food safety for the consumer. The products are impactand shatter-proof and approved to be used in contact with food stuffs. Use of these products is also recommended in the WQA standard stating "detectable versions of equipment required in processing areas shall be sourced where available"

By complying with the new standards and meeting audit requirements growers will ensure they are placing themselves ahead of the market and opening new supply opportunities.

With our range of metal detection, magnetic separation, check-weighing, x-ray and metal detectable products, Aurora is able to assist with reducing risk of foreign matter in your finished product.

Contact Aurora today for all your quality assurance requirements.

### **AURORA** PROTECTING YOUR PRODUCT, **EQUIPMENT AND BRAND**

Eliminate foreign matter contamination with Aurora Quality Assurance solutions. We specialise in high-performance, food and dairy grade magnetic separation; metal detection and x-ray solutions; and metal detectable products for a huge range of

- High Performance Magnetic Separators
- Metal Detection Units
- > X-Ray & Checkweighing Units
- > Metal Detectable Products
- > Onsite Risk Analysis & Magnet Validations



CALL US AND EXPERIENCE OUR QUALITY SERVICE TODAY. 0800 55 77 33 | sales@aurora-nz.com | www.aurora-nz.com





Macplas was originally started from seeing an opportunity for a plastics material supply company that understands the specific needs of engineering companies and we are committed in supporting our customer's requirements and timelines with exceptional service and quality products.

It is service that Macplas has focused on and has found to be the most successful attribute in the continued growth of the business. It is also keeping overhead to a minimum and passing on the cost savings to customer.

For further information please contact Macplas on 0800-506 407

Macplas, New Zealand's newest importer of Plastic materials.

Christchurc Branch Now Open

Plastics for all applications, Engineering, fabrication, etc. Acetal, Nylon, HDPE, UHMWPE, PTFE, PETP.

Machined & fabricated items supplied to drawing, sample or assistance with design given as part of the service. Extensive experience in a wide variety of industries and

applications where plastics are widely and successfully used.



Phone

www.macplas.co.nz sales@macplas.co.nz 0800-506407 09-2806463

With our steady growth in the North Island over the past few years, Macplas has recently launched into the South Island market to extend our engineered plastics solutions at a national level.

Now also based in Christchurch, Macplas manufacturers which give us the ability to Engineering is run by Albear Montocchio, who has over twenty-five years' experience chining, OEM and composites engineering.

provide the full range of engineered plastics from UHMWPE, ACETAL, PEEK, NYLON, in engineered plastics, thermoforming, ma- PTFE, PVC, PVDF, PETP, etc. With many applications solutions across different indus-We are proud to be 100 percent NZ-owned tries, we are able to consult and advise on and managed, with a strong supply chain the right material selection, machining and from a number of large European plastic overall product solutions to meet our cus-



SUPPLIERS OF QUALITY CNC MACHINES & ACCESSORIES

Chevalier	Over 300 machines installed in NZ including: machining centers, grinders, lathes
Takisawa	Incredible value CNC lathes
FAT-HACO	Quality European flat bed CNC lathes
Palmmary	Cylindrical and centerless grinders
Akari HMC	Horizontal machining centers
Freddy Products	Coolant filtration
KOOLRite	Long life coolant, odour free





CHEVALIER.







Fast	cuttina	service

round

Aluminium

6082

		1 2	
Steel		800 x 600 capacity	
Aluminium Grades Stocked			
7075	round	35 - 250	
7075	plate	25 - 200	

1700 x 250 capacity

#### Formodal Cast 5083 plate

Machined	12mm - 60mm	
Saw Cut 75mm	- 150mm	

25 - 250

### **Toolsteel Stocked**

P20	round + block
H13	round + block
D2	round + plate
A2	plate

### **Indent Service**

Titanium, Nickel Alloys, Beryllium Copper and other hard to find metals, fast deliveries.

Ph: 09 6222 169 • cncdirect.co.nz

Commentary

### NZ steel construction sector well placed to face international competition



The heavy engineering industry including fabrication remains very competitive against steel construction continued its steady recovery from the Global Financial Crisis (GFC) during 2013. The January 2013 rolling totals for NZ heavy steel usage stood at 130,000 tonnes and at the end of September they pointed to 135,000 tonnes reflecting an increase of 3.7 percent. With still three months to go in the statistical calendar year further improvements are possible but if we settle with the 3.7 percent, this is well ahead of the New Zealand annual GDP growth rate of 2.6 percent.

However, the fact remains that the industry is still around 25 percent short of its pre GFC. capacity peak of 179,000 tonnes of heavy steel usage. Improved co-cooperation within the steel construction sector points to improved effectiveness with the entire national capacity being available and industry is eagerly waiting the demand from Canterbury to use remaining workshop capacity.

other building material options and also against imports. While overall building and construction cost may have gone up, landed steel cost statistics show that steel prices have actually gone down during the year driven by on-going competitive pressure in the market. Looking ahead to next year, volume increases are expected with likely only modest steel price adjustment however this is highly dependent on exchange rates. Also the steel construction sector is noting increased pressure on procurers to consider imported fabricated metal product options and is responding to this challenge. New Zealand fabricators' main differentiation points against imports are quality, reduced risk and flexibility in doing business. In particular, quality conformance issues are the main concern in the post-Canterbury earthguake environment and this will be reflected in building and general construction specifi-From a productivity perspective steel-based cations which will likely lead to cost increases

for all building material based solutions.

To reliably demonstrate NZ industry competitive advantages the steel construction sector during this year committed to an industry wide and international recognised steel fabrication accreditation scheme. The first major steel construction company has already achieved international accreditation and with many industry members engaging in a significant up-skilling effort, 2014 will see several more NZ companies achieving this steel fabrication quality mark.

I am convinced with its attitude towards innovation including on-going sector overarching industry R&D investment via HERA and SCNZ, the New Zealand steel construction sector will remain competitive and is well placed to face up to international competition.

In view of the 'lowest cost' competition from overseas suppliers, industry members in the general heavy engineering space increasingly recognise the need to move from

VISION 2014: HERA

a lowest-cost tender-based business model to a higher-value manufacturing model based on product ownership and focussed on export markets. Overall, heavy fabrication based industry exports have declined during the last year and this might have just been a blip as the previous year showed a growth trend. There have been outstanding export successes such as the just completed Fitzroy Engineering oil refining plant export to Queensland and the 2013 Metals NZ Export Award winning Southern Cross Engineering's grain stacker exports also to Australia. Both demonstrate that higher-value and export-focused heavy fabrication offerings can be competitively achieved from a New Zealand manufacturing base.

HERA is committed to assist industry members in unlocking more of this potential and is using industry funding in its industry development process. However, a co-operative effort is required by all agencies across government and in the absence of a broadbased industry R&D strategy, much will depend on how the newly formed Callaghan Innovation will interface with HERA and its industry sector.

Dr Wolfgang Scholz is director of Heavy Engineering Research Association. Email: exec@hera.org.nz



efficiently at 4.5KW laser power the cutting ability is closer to other brands 6KW lasers. This is due to Mitsubishi leading technology in laser resonator design and manufacture. The resonator has features such as power saving mode and ultra low laser gas consumption, long service life is an important feature of Mitsubishi laser technology and a major reason why over 10,000 laser have been sold. Revolution Precision Machinery engineers have installed a Ex4500 Series laser at Jericho Walker Sheetmetal and the results are impressive. The cut quality on thick stainless steel is exceptional with a surface close to a milled finish. The steel cutting capacity is 25mm with a very good finish right up to the maximum capacity. Aluminum is also cut easily with up to 16mm thickness to be efficiently laser cut. The Ex Laser has a fully integrated laser unit and body to allow easier installation and increased alignment accuracy & durability over machines with separate units. Body work is to a very high standard as expected for a Japan made machine tool.



AKL 265 0380 REVOLUTION PRECISION MACHINERY CHCH 960 0892

### Mitsubishi EDM

World Leading EDM-WEDM Technology



Official NZ Mitsubishi Laser & EDM Agent Revolution Precision Machinery

www.rpmcnc.co.nz

Mitsubishi EX Series Laser **Exceptional Cut Quality & Efficiency** 



### Seal House invests in new state-of-the-art technology

Seal House recently invested in an SKF Economos SealJet™ NG 060 machine. The latest in seal machining technology, the equipment is capable of producing seals up to 600mm diameter with a rapid turnaround.

stocks more than 17,000 finished seals of tools. and related sealing products for light and Mr Cook says the 30-year-old Kiwi-owned heavy industry, and commercial and do- Seal House's success and reputation are mestic applications across New Zealand.

Seal House general manager Matt Cook there is a focus on quality and flexibility. says the NG 060 is the only machine of its kind in the country that can produce seals up to 600mm. "Joining our two other SealJet machines, the NG 060 is an upgrade that adds significantly to Seal House's stable of capabilities, particularly for large diameter seals found in the likes runs. of the pulp and paper, steel and mining Second, this focus on quality is backed industries," he says.

With this 'all-in-one seals factory' concept, the NG 060 provides a complete production unit consisting of a CNC machine driven by software that offers up to 169 standard seal profiles that can be 10 and 20 years. In addition, we've had customized to suit individual application needs. It uses all modern sealing materials, including rubbers, urethanes and SKF NZ for machined seal materials and plastics. It is fast, with a turnaround from technology in New Zealand...this level raw material to finished product in one of experience and accumulated product hour and often less. Developed in Austria, knowledge is hard to find, and customers plastics, extruded products, rotary seals

East Tamaki-based Seal House manufac- its state-of-the- art technology includes a tures a comprehensive range of seals and disc turret for the automatic positioning

> the result of its culture of excellence. First, Its seals are made from top-quality materials, sourced from around the world, including the United States, Canada and Europe. A major point of difference is its capability to custom manufacture seals, either as a one-off solution or in multiple

by know-how. "We're committed to continue being a long term key player in the New Zealand sealing industry. Our relationships last – many of our employees have been with the company between a 20-year relationship with SKF Economos and are an approved and sole partner to



know they can trust us to provide a seal and adhesives and sealants. that is right for the job," he says.

The stock product line includes backup To watch the Economos SealJet™ NG rings, custom seals, gaskets, door seals, moulded products, mechanical seals, seal house.co.nz/seal-production-sealjet-NG kits, O-rings, packing, hydraulic seals,

060 in action, visit http://www.seal-



NZ's Sealing Specialists Talk to us now, call: 0800 732 573



9 Lady Ruby Drive, East Tamaki, Auckland

Unit C 100 Hayton Road, Wigram, Christchurch

#### Any Seal - Any Shape - Any Size - Any Time Door Seals Wipers **Machined Seals Rotary Oil Seals** Industrial Plastics **Rod Seals Wear Rings** D U Bushes Moulded Products Extrusions Gaskets **O-rings Back-Up Rings Piston Seals** Seal Kits **Packing**

OVER 130 YEARS EXPERIENCE, SEAL HOUSE IS MORE THAN COMPETENT TO HANDLE YOUR SEALING REQUIREMENTS.

- **HEAVY MACHINERY**
- PROTOTYPING CUSTOM PARTS
- FOOD PROCESSING
- MINING
- **AUTOMOTIVE**

- **BEVERAGE FILLING LINES**
- DAIRY PROCESSING
- DRILLING AND EXPLORATION
- PACKAGING
- POWER GENERATION
- HYDRAULIC REPAIR
- **FORRESTRY**
- **OIL AND GAS**
- STEEL MANUFACTURE
- AND MANY MORE

### Manufacturing sector looking forward to 2014



John Walley

2013 has been a year of ups and downs for manufacturing. Some parts of the sector have been doing well, particularly those related to construction and domestic focused, while manufacturers operating in export markets as well as import competing manufacturers have had a tougher time. This is largely due to the continually overvalued dollar putting pressure on margins, as well as relatively soft demand in many export

Although the Manufacturing Inquiry is now lost in the minds of the media, this was important: hearing the stories and difficulties from those operating in the sector which informed the report's policy recommenda-

tions, many of which could greatly help the sector and growth in our economy.

We have also seen new moves from the Reserve Bank of New Zealand (RBNZ), in becoming more active in the use of prudential tools aimed at protecting financial stability through their LVR policy, they have the side effect of reducing the upwards pressure on interest rates and consequently downward pressure on exchange rates. Although it is too early to tell how effective this has actually been, it is an important step towards the RBNZ widening their tool kit to allow them to tackle financial stability and inflation in a more targeted way, and address the economic issues, around the exchange rate and housing inflation. This is an area we hope to see more work and development in 2014.

Looking forward to 2014, there are a number of risks and opportunities which face the manufacturing and exporting

It is reasonable, without some clear policy realignment, to anticipate the exchange rate will remain overvalued, policy elsewhere seems wedded to maintaining **VISION 2014:** 



current positions and printed hot money will come to a close in 2014, but recent docube hunting better returns to the detriment of our exporters. Any discussion on what we might do about this is rejected by the National Government but we might see more debate and possibly some movement as the election approaches.

There have also been comments from the RBNZ that the first set of OCR increases will take place in the second quarter next year, due to continued upwards pressure in the housing market and some higher inflationary expectations. While this is important to addressing potential inflation, this will put pressure on manufacturers in a couple of ways. Raising the OCR will make it more expensive for manufacturers, engineers and exporters to borrow to invest in capital goods they need to grow or even just keep up with global competition, much of which will still be facing record low interest rates. The OCR increases will also put more pressure on our currency, as we will likely be one of the first developed countries to increase our bank rate - currency impacts are far more significant

The TPP negotiations were picked to

ments have suggested we are far from an agreement. While this agreement has the potential to open borders for exporters, it has the potential to come alongside some damaging requirements, particularly from the US. We hope some official documents will be brought to the public eye sooner rather than later so speculation can be replaced by informed debate.

For some the election will be the biggest event for 2014, as it will provide some insight into future political intentions and how the policy framework will be staged in the coming years. We hope to see more quality discussion around developing economic complexity, our exchange rate issues, support for our manufacturing and exporting sectors and other political contentious areas such as accelerated depreciation, research and development tax credits and capital

John Walley is chief executive at New Zealand Manufacturers and Exporters Association

Email: nzmea@nzmea.org.nz

### LabVIEW RIO apt for New Zealand industries

A modern approach to designing, prototyping and deploying embedded monitoring and control systems, graphical system design combines the open LabVIEW graphical programming environment with commercial off-the-shelf hardware to dramatically simplify development, which results in higher-quality designs with the ability to incorporate custom design.

National Instruments Oceania managing director Matej Krajnc says the LabVIEW RIO architecture, an integral part of the National Instruments graphical system design platform, fits the New Zealand industry landscape well

"There are so many interesting ideas coming out of New Zealand where we see that Lab-VIEW RIO architecture can help lower the cost of product design and development. If you design and develop products, it is very important that you minimise the cost from inception until the product appears in the market," Mr Krajnc says.

He says CompactRIO, a LabVIEW RIO-based solution, is popular among New Zealand engineers. "What we have in the CompactRIO is a platform where smaller teams can start prototyping design on commercial off-theshelf technologies. Engineers can focus on developing and implanting some IPs that can then be deployed on our product. And once they are happy with the design, they

can then choose the platform of final deployment of their choice," Mr Krajnc says. Among the case studies presented at the National Instruments Technical Symposium in Auckland in November is Falcon Engineering's use of the CompactRIO to upgrade its A-grader, an automated timber grading solution that is approved for use in

"Falcon Engineering needed to take their existing IP and deploy this to a platform that provided high performance and was well suited to rugged, industrial applications. That's where we came in with the CompactRIO," Mr Krajnc says.

The upgraded A-grader tests about 250 boards per minute, which means about four boards are being tested within one second. The test involves stimulating the board with a hammer, capturing the acoustical footprint and establishing whether the board passes or not based on an algorithm, and the tests have to happen extremely fast.



"They needed extremely fast signal processing and extremely fast and complex control. That's what CompactRIO delivered," Mr Krainc says

National Instruments Embedded Systems senior product manager Brett Burger says the LabVIEW RIO architecture will also help nurture New Zealand's 'clean and green'

"If you look at heavy industry today, whether its power generation or whether its manufacturing industry, there are a lot of enhancements that can be made to reduce environmental pollutions and reduce energy use. There are a lot of engineers and scientists that are embracing that challenge and using the LabVIEW RIO architecture to solve that problem," Mr Burger says.

What engineers are doing is they are taking old motors and machines that were not



designed to be fuel efficient but are still functional even after running for decades, and they are building advanced control systems on the latest technology to make them more efficient.

"It's more like fuel economy for a car with all of the computers and electronic fuel injection, same thing for heavy industry, whether it's a coal-fired power plant or a large press or steel mill operation. Retrofitting old motors and machines with these advanced control systems, you get tremendous gains in energy efficiency just by shaving off a fraction of a percent of performance improvement, just because of the large amount of energy that they use," Mr Burger says.

"Its problems like that that I see New Zealand businesses being able to take advantage of with the CompactRIO systems."

### Okuma New Zealand sets up in Christchurch



Okuma Japan, the only machine tool vendor with comprehensive direct representation in the New Zealand market announces that plans are well advanced to expand their New Zealand operation by establishing a new branch office in Christchurch, opening early December 2013

"We have always recognised the high of higher technology, greater accuracy, invalue of the South Island customer base for creased performance and high-level product Okuma," says Fred de Jong, Okuma New supportability are the dominant consider-Zealand general manager. "It has always been our intention to be in a position to helps that currency exchange rates are offer the same high quality and prompt sales and service support afforded to our North Island customers but the path to achieving this has been difficult. The market has been flat for some time as New Zealand manufacturing struggled with high exchange rates, the GFC and difficulties obtaining and that Okuma's decision to establish an office retaining skilled employees but we have noticed a steady improvement over the 2013 reliable service support function as well as calendar year and believe this will continue sufficiently for us to make this commitment service those many customers that can no to our South Island customers."

Mr de Jong also notes that 50 percent of Okuma's new orders received this year are from first time Okuma buyers which clearly signals a move back toward higher quality Japanese-built machines. Also interesting is his observation that all new orders received this year have been for higher specification machines which signals that recognition

ations in machine selection again. It also making Japanese machines so much more affordable again.

Mr de Jong also believes that the increased confidence means that many customers who have been quiet are ramping up so will need more up time on their existing machines and in Christchurch will provide a credible and a more present machine sales initiative to longer defer new machine purchasing decisions for replacement and/or expansion of their current metal cutting capabilities.

The new Christchurch office will be run by Ian Cox, a well-known and highly respected service and applications engineer who has worked with Okuma New Zealand since its inception in July 2004. "We see this as a real win, win development. It is a great oppor-



tunity for Ian to develop skills further and share the benefit of his wealth of knowledge with our South Island customers," says Mr. de Jong. This is not just a reallocation of For more information, resource, however. Okuma New Zealand is also seeking to employ an additional service



and applications engineer to join the Auckland-based team.

Tel: 09 570 7025 Visit: www.okumanz.co.nz





#### Commentary



New Zealand is an excellent producer of pri-

mary products. We have the resources, the

climate and the history to produce the raw

goods of logs, milk, meat and coal that we

It is part of our DNA as a nation to think of

primary products as the 'backbone' of the

But too often we neglect to remember that

it is what we do with these commodities

after they leave the farm gate or are cut

Fundamentally, we also need to value and

As a nation we need to move from volume

to value. That means creating high quality

nurture exports from non-primary sectors.

from the tree-stump that adds value

economy, and in many respects they are.

David Parker

can send overseas.

### On the Parliamentary Inquiry into the manufacturing sector



niche products here that can be sold for a good price overseas.

An important part of a prosperous economy is higher value manufacturing.

A strong manufacturing sector is vital for our country. A job in manufacturing creates between two and five jobs elsewhere in the economy. Manufacturing is not just about widgets but extends to manufacturers of software solutions that support another husiness

Manufacturing drives high value supply chains, sustaining well-paid jobs and the innovation we need in New Zealand if we are to avoid the trap of an economy based on commodity sales and an over dependence on low wages in the service sector

Just over a year ago, Labour, along with the Greens, New Zealand First and Mana, embarked on a Parliamentary Inquiry into the manufacturing sector

We knew there was a problem in manufacturing and the inquiry struck a chord.

The main recommendations from the inguiry will make a real difference. We know

that because that's what business told us. First, tackle our overvalued and volatile dollar.

The currency is crippling exporting manufacturers. They need a level playing field to compete internationally.

We must overhaul the Reserve Bank's outdated tunnel vision mandate, which gives primacy to inflation targeting. The Reserve Bank needs a broader mandate which includes the currency or external balance.

Second, encourage innovation through a better tax system. Research and development tax credits stimulate innovation and development of new export markets.

That's what our companies told us they need.

Third, give manufacturers a strong base to start from. Surely, giving our own people a fair go via government procurement is just common sense? The purchase of railway wagons from overseas instead of Hillside workshops is an obvious recent example. More broadly, by ensuring Kiwi companies can compete for Government procurement

they will have a stronger business base when they export.

Two other core Labour policies will also drive fundamental improvements to our productive export sectors.

Our policy to make KiwiSaver universal, rather than optional, will increase the pool of investment capital (as well as creating a nest egg for retirement).

Our pro-growth tax reforms include a capital gains tax (excluding the family home) to direct more of our precious capital into industrial investment rather than property

The next government must deliver the genuine step-change we need – a step-change that takes us from volume to value.

In order to maintain and grow our prosperity and meet the challenges of tomorrow we need new thinking

That's what a Labour Government will bring.

David Parker is finance spokesman for the Labour Party.

Email: david.parker@parliament.govt.nz



### A new standard in punching efficiency TruPunch 3000











### Trumpf technology a good fit with NZ

Sheetmetal manufacturers scanning the horizon for equipment that can sustainably produce world-class products will be better off investing in price-competitive, technologically advanced Trumpf machines.

and the smaller but agile companies on short production runs both benefit from the efficiency, low material wastage and high end-product quality that technologically advanced Trumpf machines deliver

"Metal Concepts, a company with high-profile projects and who recently installed a Trumpf TruPunch 3000 punching machine, illustrates the point," Aotea managing director Peter Thompson says.

Metal Concepts director Tony Savage says the new generation Trumpf machine "... will afford us increased capability to compete more effectively in our highly specialised niche and gives us the ability to access new markets, also in the international arena... [see NZEN November 2013, page 26]."

Trumpf is a leader in sheetmetal work applications, including laser cutting, 2D laser cutting, 3D laser cutting, laser type processing, CNC punches and CNC bending machines. It is the only company that produces its own invitation to them," Mr Thompson says.

Companies who are doing mostly long production runs laser resonators and owns technology for punching machine heads and similar operations.

> Trumpf machines fit into the manpower structure of the New Zealand industry. Their features, like automation, reduce reliance on skilled labour. They have processing strategies that maximise the use of materials, which means producing more in the available production hours.

> One of the challenges for manufacturers in New Zealand is that they don't see much of what new generation machines can do. In the case of Metal Concepts, Mr Savage attended Intech, Trumpf's invite-only, annual in-house trade fair to see what's out

> "Intech 2014 will be happening from March 25 to 29 at the TRUMPF headquarters in Ditzingen on the outskirts of Stuttgart, Germany. Manufacturers who'd like to see how the Trumpf machines are built, access the latest sheetmetal technology and processes, and tour facilities to see these machines' vast potential in action should get in touch with us so we can extend an



- Electric punching head, average power consumption of 5.9kw
- High resource efficiency
- Skeleton-free processing
- Scratch-free material handling
- Extensive automation
- Small machine footprint
- •Work area (X x Y) 3000 x 1500mm
- Max sheet thickness 6.4mm
- Max stroke rate when punching, 900'/min



10E Maurice Road, Penrose, Auckland 1642 Phone: 9525 6907 • www.aoteamachinery.co.nz

Annual 2014 www.engineeringnews.co.nz

### Viking celebrates 35 years of clearing the air

Family owned and operated Viking 1978 Ltd has continuously served the manufacturing industries of New Zealand for 35 years. The company's core expertise is air pollution control systems, specialising in the provision of systems for dust extraction, spray booths, modular ducting and welding fume extraction.





Viking was founded by Gavin and Molly Smith in 1978. Their son Lester Smith took over the reins in 1990, after he completed his design and engineering internship in the European air pollution control industry. It was Lester, who now serves as Viking's managing director, who added a marine branch called VK Marine to the company's core operation. Since its inception, Viking has been providing tailor-made solutions to problems related to the reduction of air pollution within the work place to allow for a safer, more efficient environment.

"Customers can tell us their manufacturing concerns, we then design a product that addresses their concerns, build it, install it and maintain it. From start to finish we work towards solving intricate issues involving the extraction and filtration of dust and fumes associated to industry," Viking manager Ross Metcalf says.

### Hands-on practical experience

Operating in its 1200sqm fabrication facility in Auckland, Viking relies heavily on its staff's hands-on practical experience when providing solutions to dust and fume issues, especially in processing plants, Mr Metcalf continues. "When a salesperson visits to

scope a project, that salesperson will have been well-versed in providing practical advice due to a trade background. Honest, knowledgeable advice is often derived from experience, something a traditional salesman may not fully comprehend."

Mr Metcalf himself has served as a fitter and turner in the heavy engineering sector, then through to maintenance engineering and then into sales within the industry. He joined Viking some 20 years ago. "When it came to giving advice, I had the industry knowledge and years of experience to call upon. We don't design and sell our products from brochures; we design and sell from experience," he says.

'Hands-on' is an ethos that Viking has been promoting among its 12-strong staff, most of whom have been with the company for more than 10 years. "Hierarchy is almost obsolete within the company. We're a solid, old fashioned Kiwi company, we don't need titles within our work place - we operate seamlessly as a well-oiled machine," Mr Metcalf says. Diversity is undoubtedly the key to Viking's longevity. After 35 years the team remains innovative, practical and growing ever more knowledgeable.

#### Kiwi and proud

Viking uses only New Zealand-made materials, with the exclusion of a few imported components from Denmark and Italy.

Mr Metcalf says the company's sourcing strategy to choose "Kiwi-made above the cheaper alternative" supports the New Zealand manufacturing industry, "which has long-since been reeling from the influx of average- to poor-quality imports from abroad".

"We believe by being just an importer, a company risks the lack of backup and design depth, but by refining the design and performance of a system with New Zealand manufacturing and local industry knowledge, we have managed to achieve a sustained level of success for Viking.

"Viking is a true example of Kiwi manufacturing at its best. Combining New Zealand-made materials with a skilled staff and occasionally using the best of imported equipment to deliver a well-balanced result for our clients," he says. As an example, Viking manufactures machinery for German-branded Keller, a world leader in dust extraction, for distribution in New Zealand.

"We're a company proud of our New Zealand roots, we use as much Kiwi product as possible to support our economy and we en-

courage our staff to apply the good old Kiwi tradition of innovating in the work place," Mr Metcalf says.

#### Modular and made-to-order solutions

Viking's proprietary ducting solution consists of an extensive array of modular ducting components. Its off-the-shelf solution ranges from 100mm to 500mm, but the company is able to fabricate any size ducting to suit a client's needs.

An extensive range of filtering options tandem with the different cleaning systems to extract hazardous dust from a work area. It has modular 'reverse flow' filters that may be used in expansion projects, as well as cartridge filters that offer superior filtration performance coupled with a reduced area to volume footprint. Viking work with Camil Farr and represents the company's products including the impressive 'gold series technology' integrated in their range of cartridge filters.

Viking is the largest manufacturer of spray painting booths in the country, providing these in all sizes, temperatures and shapes. It stocks kit sets ranging from 1m to 4m wide which can be freighted nationwide and easily installed. It also supplies a range of 'multi-cure booths' with spray and bake temperatures ideal for every industry.

VK Marine, backed up by Viking's metalworking and aluminium knowledge, works with yacht designers to produce aluminium boats. It carries out marine fabrication and modifications/repairs on a wide range of vessels from small trailer boats to super yachts.

For more information: Viking Ironcraft 1978 Ltd 151b McLeod Road, Edmonton Te Atatu South, Auckland Tel: (09) 835 4090 www.vikingltd.co.nz

### VIKING

EXTRACTION SPECIALISTS



### **SPRAY BOOTHS**

- · Kit set open face booths
- Auto spray lines
- Heated spray and bake booths
- Heated drying rooms
- Paint work stations
- Spray plenums



### **DUST EXTRACTION SYSTEMS**

- Reverse pulse bag filters
- · Camfil Gold series collectors
- · Cyclones and static filters
- Fans and rotary valves
- Design build, project management
- · Sheet metal and general engineering

### 35 YEARS MANUFACTURING IN NEW ZEALAND







Welding Fume Extraction
Arms from \$1000 +GST

T: (09) 835 4090 / F: (09) 835 4070 www.vikingItd.co.nz 151B McLeod Road, Te Atatu South, Auckland

#### Commentary



Dr Andrew Cleland

### **Engineering New** VISION 2014: ☐ IPENZ Zealand's future economy towards diversity and high-tech

future manufacturers would operate in niches so specialised that their viability was not strongly linked to the NZ dollar. It is all but impossible for a government to predict what those niches might be. The trick will be to identify where we have world-beating innovation - pick the right services and products supporting it (the role of Callaghan Innovation) then grow the private sector's capital contribution and realise the potential. Clusters of companies feeding off each other (called a technology platform) add collective strength to this, while each satisfying

A challenge to enable this future economic growth is up-skilling our companies. We need company managers who see innovation as the key. Companies will then absorb more R&D workers, need leading edge precision trades and technicians, logistics experts and top-rung international marketers. The danger of not up-skilling our workforce can be seen in disappointing results of the past

different, individual niche markets.

when private sector capital has been applied to industries' bricks and mortar. In the hitech companies, capital goes into ideas and creative people, proving the best pay-off is earned working smarter not harder.

There is already exciting growth in the number of university engineering graduates, but in 2014 one challenge is to grow the pipeline of engineers with Level 6 diplomas and Level 7 degrees in engineering. These people are great to have in our small to medium size enterprises - practical and quickly assimilated. Institutes of Technology and Polytechnics (ITP's) create these graduates but as a sector it has largely been neglected in the government's innovation-based economic development packages of the last three years. Hopefully in 2014 the government will focus on the ITP sector, recognising its role to 'realise innovation' through smart development and providing piece prototype manufacturing capability, creating a platform for an excit-

ing new dimension on the NZ innovation landscape.

Looking ahead it's clear what manufacturers need to do.They need to recognise that a high exchange rate is here to stay and position themselves in a niche where their margins can withstand. That means aiming to compete on technology advantages, not on low costs, to attract premium prices in the marketplace. In turn that means shifting the company's private capital towards nurturing competitive advantage through confidential know-how, ideally in a niche that is too specialised for a large multi-national. It means forming strong local partnerships and this cannot be done overnight, but doing the above well will see NZ slowly turn an already great hi-tech sector into an even greater one.

Dr Andrew Cleland is chief executive at Institution of Professional Engineers New Zealand.

as vital to this and will lead to elaborately transformed manufactured exports over a period of time. In the past, New Zealand has limited itself by assuming new companies need to be based on a natural resource.

It has not been quick, but at last New

Zealand leaders support the need for a

diversified economy and recognise that en-

I cannot recall when the Minister of Eco-

nomic Development was last such a strong

believer in the contribution that engineering

innovation can bring to a diverse economy.

New Zealand's engineering capability is seen

gineering is an essential part of this.

However, this is not true for the high technology sector where whatever we do at world class standard can be the base for a new company. Following this model, our

### Adjustable levers and clamping levers

Hi-Q Components has a range of adjustable levers as part of its large range of industrial components and operating elements.

The range of plastic adjustable levers is comes in M5, M6, M8, M10, M12 thread manufactured in reinforced polyamide. The adjustable push button has a stainless steel

There is a female and male lever version

insert in sizes M4, M5, M6, M8, M10 and M12. There are three handle length sizes of 51mm, 75mm and 98mm for the different thread sizes. There are also colour combinations: black lever and button, black lever with orange button, and orange lever with black button.

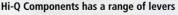
The male version with treated steel studs or visit www.hiq.co.nz

sizes. The lever body is available in orange or black with the option of reverse coloured buttons in black or orange

Hi-Q also has a range of other levers includ-The female levers come with threaded brass ing, die cast adjustable levers, fixed levers, revolving handles, foldable revolving handles and crank handles.

> For further information contact Hi-Q Components: sales@hiq.co.nz, or free phone NZ 0800 800 293







**KNOBS & HANDLES** 

Extensive range in stock, fast delivery

- Knobs & handles
- Handwheels
- Levers
- Adjustable feet



sales@hiq.co.nz NZ 0800 800 293 www.hiq.co.nz

components



### Ramps Up Robotic Welding Division

Global Welding Supplies is making sure its newly formed Robotic Division is fulfilling the requirements of its triple treat motto of 'Best Service, Best Quality and Best Price'.



GWS's business principle is aimed at helping its clients remain competitive when manufacturing to supply consistent, high-quality, low-cost products 365 days of the year for the world export and NZ markets.

GWS sales and marketing manager Michael Atkinson says 'The Triple Treat' is applicable to every engineering workshop across New Zealand. "It means that we are committed in working with our customer's needs, and the new Robotic Division at GWS is fulfilling

these requirements."

Formed in the last half of 2013, the Robotic Division was set up in partnership with ABB and Kemppi. It strengthens the position of GWS as a nationwide leader in welding technology, supplies and service.

GWS's quality welding equipment, below, is anchored around Kemppi, Finland's global leader of mig and tig machines; CEA – Italian manufacturer of affordable high-quality pulse mig, tig and arc machinery; and Hy-

pertherm, producer of advanced plasma cutting machines.

As an exclusive distributor of Mosa Enginedrives, Superon wires and electrodes, MTL alloy wires and Menam stainless wires, GWS also has a Welder Repair Service Center, headquartered in its new premises at 13 Patiki Rd Avondale Auckland, spearheaded by general manager Dave Page and operations manager Ryan Hunter.

Mr Page says GWS is about New Zealanders. "Kiwis started the company and kiwis own the company. At the end of the day, all we are looking to do is offer a quality product range and a VIP service to the NZ engineering industry," Mr Page says. "We import high quality welding consumables from around the globe and brand them. For example, the Migarc range is for MIG-related products, Tigarc for TIG-related products and Weldarc is for arc welding and accessories etc. We have trademark branded them as a benchmark for quality assurance and are now ready to appoint qualified distributors or set up GWS branches throughout New Zealand.'

Mr Page says the company is very passionate about what it delivers. "GWS purchased Auckland Welder Repairs with

Phil Lovegrove and that is why we brought in Shawn Keppler, an experienced first class operator from Durban, as our new Welding Robotic Technician.

"Between the two of them, there is very little they cannot fix. Recently, for example, instead of replacing a welding machine's whole board and charging \$1500, they fixed it for \$195," Mr Page says.

"It's a key part of our operations to keep repairs and maintenance costs down so customers can afford to continue to run equipment outside of its warranty"

GWS is owned by Mr Atkinson and his old school mate Steve Smith both with 29 years experience within the engineering industry. Steve has specialised in the marine industry and has made his mark in the world of sailing as part of Team NZ, Team Alinghi and lately Team Luna Rossa.

"The team at Global Welding Supplies offers a VIP service that supports and repairs everything they sell! We look forward to working with you in 2014."



See us at Emex Snow Stand #2110, May 27/28/29, 2014



Phone: 09 828 9888 0800 KEMPPI

13 Patiki Rd, Avondale, Auckland

### **Industrial Air Systems** delivers benefits

National industrial rotary screw compressor supplier Industrial Air Systems NZ delivers benefits to your CNC machining process that will reduce the risk of an expensive breakdown and result in higher productivity while saving on operating expenses, through the installation of its Pneutech RS and RSCR integrated rotary screw compressors and aluminium air reticulation system.

### **Pneutech brings CNC benefits**

Industrial Air Systems director says too often companies are installing expensive CNC machine tooling for highly productive or precision machining work and completely overlooking the need to provide a matching reliable, dry and clean compressed air supply that these machines are so dependent on.

A substandard or insufficient compressed air supply can lead to the spoiling of the machining process or worst still the breakdown of the CNC tool itself leading to very expensive repairs and costly downtime, when ultimately these units need to be kept in constant production for maximum yield and fast payback

He says why risk coupling an old, worn out \$1000 piston compressor to an air system that supplies air to CNC machinery worth \$50,000, when it is such an integral part to its operation? You are asking for trouble. It's With an oversized air-end and spinning like driving a Lamborghini performance car on worn out retread tyres. At the end of the belt driven screws, these units runs cooler,

day the vehicle will only go as far as the tyres do and most probably have an accident in the meantime!

Industrial Air Systems recommends that the simple installation of their quality Pneutech Rotary screw compressor and dryer packages will not only safeguard the system against any potential air contamination, but improve machining productivity while decreasing the compressed air operational costs.

The Pneutech RS and RSCR screw compressors bring a win-win-win benefit and an investment that CNC operators will not look back on. These renowned screw compressors offer the unique advantage of having a direct driven motor/air end transmission system – usually only found on much larger models, which greatly enhance their operating life, and saving on energy and maintenance costs.

at less than half the RPM of conventional



Industrial Air System's Pneutech RS and RSCR integrated rotary screw compressors deliver reliable, dry and clean compressed air supply. In photo is the RS2000TR

quieter and cleaner than most other models drains, but it can also lead to the saving of in the industry and with less moving and thousands of dollars annually in operational wearing parts, these compressors can be very easily serviced by the operator.

A smaller oil reticulation system enables the screw compressor to run in stop/start or continuous on-load/off-load modes, depending on the going work load, for optimising energy efficiencies and reducing unnecessary wear. This means the compressor's operational programme can be customised to suit every compressed air environment within its output capacity.

### Industrial air reticulation saves thousands

One area many factories operating a compressed air system overlook is the crucial need for an effective and efficient air reticulation or pipe system.

It's one thing to have a correctly sized air compressor, but if the pipe to transport the air supply is too small, or contaminated with compressor output.

The key to an effective and efficient compressure to an absolute minimum, while providing for maximum air volume.

costs as the compressor can work at lower air pressures, reducing the energy consumption substantially.

Industrial Air System's aluminium piping system offers the ultimate air reticulation solution for any compressed air set-up bringing the best of both worlds – economy and efficiency.

Incorporating easy-to-hang 4m lightweight pipe lengths and reusable push-lock nylon fittings, this aluminium system can be quickly erected by a single installer, and being so rigid, the piping requires only minimum support and allows for no water-collecting sags. With an ultra-smooth internal finish and very fine wall thickness, the piping facilitates optimum air delivery at minimal operating pressures, which takes the load off the compressor and resulting power and maintenance hills

Industrial Air Systems director says: "The oil, the actual air delivery will not match the brilliant features of our aluminium air piping are that you get the quality characteristics of steel and poly piping all in one; it is inexpenpressed air system is to keep the operating sive and easy to install; and can be re-used at any point down the track. Once people have tried the aluminium air piping, they never ever go back to traditional galvanised. black pipe or poly pipe - our aluminium is superior in every respect".





Lubrication is a huge part of the motor sporting world and our industries, and Oil Imports Ltd has been supplying them with quality oil that delivers peak performance and longevity to engines, transmissions and gearboxes.

World champion jetsprinter, Peter Caughey the water can be credited to the support of successfully completed major projects, has many secrets when it comes to racing. but there is one he's happy to share with his supporters. competitors because as well as racing boats he also builds them.

Peter Caughey's company, Sprintec, has designed and built some of the fastest sprint boats in the world.

"The guys I race are often driving boats which I have built. When we build a winning boat it can be tempting to race it myself, but I also love seeing Sprintec boats win races, no matter who is driving," Mr Caughey says. Sprintec is one of the world's leading jetsprint motorsport businesses. For more than 20 years Mr Caughey and his talented team have been racing and building sprint boats for successful teams around the world.

"We are a unique business in that we offer a one-stop shop and will design and build the whole boat. The customer will usually bring in the engine and we do the rest and the only thing we will import from overseas is the steering wheel."

Sprintec now builds up to 12 boats a year and to keep up with demand it has now set up a new workshop in North Canterbury. This expansion is not surprising given so many of the boats Sprintec has engineered have won championship races in NZ, Australia and USA

"The popularity of jetsprinting is now spreading across the world. It's especially gaining momentum as a spectator sport and at some events we attract over 15.000 fans," says Mr Caughey, who now holds six World titles and eight New Zealand titles.

he has received from various sponsors and

"I sparked up a relationship with Oil Imports Ltd 10 years ago and they have helped fuel my success by providing a huge range of Total Lubricants products for racing and the workshop. Top lubrication is a huge part of ietsprinting. We are driving the boat engines hard and pushing them to their limits, often well beyond their optimum performance range. Jetsprint motors will spend a lot of time at full throttle and peak power.

"The oil is not only lubricating the engine but it is taking out 80 percent of the motor's heat. Oil acts as the primary cooling agent especially with our billet alloy engines which use five-stage dry sump oiling systems."

Mr Caughey says using good quality oil products are a key component to being a successful jetsprinter.

"If you use poor quality oil, it will rip your motor apart in minutes. Oil is one of the cheapest components of jetsprinting, but if you get it wrong and use bad lubrication it will cost you massively in the long run."

#### Fuelling Growth

Brightwater, a Nelson based industrial engineering company also values its supplier

Brightwater marketing manager Hayden Campbell says the company provides engineering solutions to the resources, industrial energy, quarry and minerals, and wood and forestry sectors.

'Our reputation is built on long-standing He says part of his success both on and off relationships, repeat business, a wide range

innovative mobile equipment, and service partnerships."

Brightwater employs more than 250 employees and has been operating for over 30 For more information: years with branches in Auckland, Nelson, Greymouth, Westport, Perth and Brisbane. Mr Campbell says loyal relationships and a

passion for innovation are key to the company's growth.

"Oil Imports Ltd has been a key supplier and contributor to the growth of Brightwater. It has been supplying key oil products for the manufacturer of our Forestry Cable Logging Yarders. These products include engine oil, transmission oil, hydraulic oil and grease. Oil Imports has always been willing to go the extra mile and delivers exceptional service every time. This kind of quality and service helps Brightwater grow."

For the last 30 years Brightwater's reputation has been built on providing the highest quality projects, services and products. It has been involved in some notable projects including the Solid Energy Stockton Coal Handling and Processing Plant on the West Coast and it has manufactured more than 60 cable logging tower and swing varders.

"Using oil of the highest quality is crucial to our business. Cable Logging Yarders operate in extremely tough conditions so using top quality oil products in the transmissions, gearboxes and engines is absolutely paramount as the oil quality ultimately determines the performance and longevity of the equipment," Mr Campbell says.

"Through partnering with appropriate companies who are industry leaders in their particular discipline, we bring expertise together, providing a one-stop shop for cost effective solutions. It provides the foundation of Brightwater's future growth."

www.totaloilsolutions.co.nz www.sprintec.co.nz www.brightwater.co.nz



### ABB's PCS100 Reactive Power Conditioner powers one of New Zealand's most popular tourist attractions

Passengers will be treated to a smooth, uninterrupted journey on Wellington's iconic cable car, courtesy of ABB's 100 kVar Reactive Power Conditioner (RPC) which is helping improve the power quality for the cable car's electrical drive system.

The project on New Zealand's capital city's provide such benefits as: funicular railway includes many exclusive milestones for ABB. As well as being the first PCS100 installed in New Zealand, it • Ensuring correct operation of 3-phase is the first in the public transport industry rectifier loads, extending their lifetime, by globally. It is also the smallest footprint PCS100 product ever built.

The cable cars are driven by a DC drive which produced notching and harmonic disturbances onto the electrical distribution network and draws a poor power factor. With ABB's PCS100 RPC employed, the power factor is corrected back to unity as required as well as mitigating the low order

Gavin MacIntyre, Wellington Cable Car's maintenance manager, highlighted how the RPC will improve the cable car's performance: "The RPC will correct power factor grid compliance and dampen the harmonics that can disrupt the cable cars positioning system and relays"

#### An economical solution

Based on a unique modular design providing high reliability, the PCS100 RPC will

- Preventing costly penalties due to poor power factor or harmonics
- correcting for voltage unbalance
- Lowering maintenance costs by not exposing equipment to poor quality power
- Eliminating the risk associated with traditional power factor capacitor correction systems such as, overheating caused by harmonic resonance problems.

Mr MacIntyre comments that grid compliance was important and a specific business driver for this project. "Several times a journey, the cable car regenerates, returning power to the grid, so grid compliance was very important to us," he says.

He further comments that using a capacitor-based solution would not be financially viable. "We looked at a capacitor-based solution but with the specific usage we have, we would be having to replace capacitors so often, that it would be become financially nonviable," he says.



In 2012, the cable car celebrated 110 years of service to the City of Wellington. A favorite of locals and visitors alike, the cable car allows easy access from its terminal on Lambton Quay in the CBD, to the top entrance of the Botanic Garden and the Kelburn lookout. Three intermediate stops allow for easy access to local residential and business addresses, and at Salamanca access to the Kelburn campus of Victoria University. ABB's PCS100 RPC is the ideal solution for

improving power quality in commercia and industrial electrical installations, across a wide range of industries like the public transport industry. With power ratings from 100 kVAr to 2 MVAr, the RPC responds instantly to power quality events while providing continuous reactive power correction.

For further information please visit: www.abb.com/pcs100-power-converters

### **Green-rated** refrigeration system developed

Two environmentally focussed Kiwi businesses, EcoChill and Ceres Enterprises, have come together to create the first 'greenrated' cold storage facility in New Zealand.

for supermarkets, coolstores and processing carbon dioxide (CO2), propane and water as the coolants. With such a passion for keep-'green home'

Manufacturing novel refrigeration systems Ceres Enterprises director David King says that when first researching refrigeration plants, EcoChill uses natural gases, such as solutions for their organic produce, they came across EcoChill and it felt such a natural fit. "Our brief to EcoChill was to create ing New Zealand cool and green, it has now a cool room with a volume of over 2550 helped Ceres Enterprises with their new sqm, capable of operating down to 2 degrees C."

EcoChill owner Matthew Darby says that traditionally, a system of the size specified by Ceres Enterprises requires a significant quantity (30+ kg) of synthetic greenhouse gases, posing massive global warming potential, and significantly more electrical input (for defrosting).

What EcoChill created is a system that not only meets the operating requirements but uses 80 percent less refrigerants with no electrical defrost requirements whatsoever. In addition, the refrigerant used is a natural substance, so no synthetic greenhouse gasses are used at all.

"Replacing the synthetic gases with natural refrigerants such as propane and CO2, while using technology to manage the safety issue, can reduce the downside of



refrigeration," Mr Darby explains.

"When you take some of that global warming potential away by using refrigerants inside and make it use less power to do that, you've got a two-fold benefit to the end user.

### **Tristar** CJ & FCJ Composite Bearings

Won't rust, self lubricating, high load, shock resistant, low friction... CJ for lift & tilt and oscillating applications. FCJ for soft shafts, linear and rotary motion





www.supplyservices.co.nz Ph. 0800 102 112

### HYDRAULIC ENGINEERING

Specialists in all forms of re-building and servicing hydraulic cylinders

- Honing up to 1000mm diameter x 10m
- Large capacity stripping/assembly and testing facility
- Full painting facility
- All types of welding
- The use of quality materials
- » Custom design and build
- Expertise in sealing technology
- Grinding and chroming services available
- Full machine shop facility one stop



STEVENSON

PHONE 09 985 4900 www.stevensonengineering.co.nz

### A better alternative to big-diaphragm and



Hydra-Cell pumps deliver small volume at high frequency

In applications where difficult or less than environmentally friendly fluids are being pumped, sealless pumps have rapidly become the technology of choice.

sibility of seal wear and the associated from pumped fluid. concerns over seal replacement costs - per- Single cell, three cell and five cell arhaps even replacement of the whole pump rangements are commonly used. Unlike – and the effects of any possible leakage. If a conventional pumps which are slow moving sealless design is what you're after, there are a number of options, but one that is steadily gaining in popularity is the Hydra-Cell pump. Manufactured by Wanner Engineering Inc, the Hydra-Cell offers an interesting alternative not only to bigger diaphragm pumps, but to many other types of sealed and sealless pump. Compared to alternative technologies offering a similar flow, the Hydra-Cell pump is extremely compact. In the PH: 04 5264415 design, positive displacement pumping is Email: sales@hydra-cell.co.nz provided by diaphragms flexed from behind by hydraulic fluid. Each diaphragm closes

If there are no seals, then there is no pos- off a hydraulic cell and separates drive fluid

and deliver a large volume on each stroke, Hydra-Cell pumps work at high speed, delivering a small volume from each cell but at high frequency. As well as reducing pulsation, this is one reason why the pumps can be so small in relation to flow capacity.

For more information contact: Hvdra-Cell Pumps Ltd.



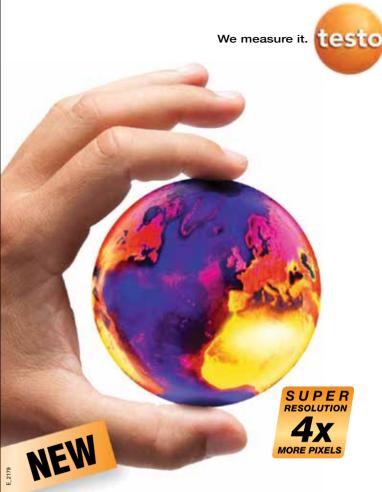
- For Cost Savings On Coolant Delivery
- Positivé Displacement
- Low Maintenance
- Compact, Relatively Light Weight
- For Water, Chemicals, Slurries, Hot & Cold Liquids
- Low Energy Requirements
- Seal-Flush
- High Pressure Wash-Down

For More Information Contact: PO Box 40 281 Unit 4-26 Goodshed Road



- Bentonite
- Chocolate Transfer
- High Head Lift Stock Water
- Dosing & Metering
- Trim Squirt
- Machine Tool Coolant

Upper Hutt, Wellington Ph: 04 526 4415 • Fax: 04 526 4416 Email: chris@hydraflow.co.nz Website: www.hvdra-cell.com



### SEE MORE.....SEE BETTER

### **Experience the difference!** Better image quality & accuracy with SUPER RESOLUTION TECHNOLOGY

Visit: http://www.youtube.com/watch?v=3VuLGi5H8Z8



The new Testo 890 series Cam-Corder style with rotatable display 640 x 480 resolution - with Super Resolution = 1280 x 960 pixels!



The new Testo 875 series available with Super Resolution Imaging (320 x 240) from only \$3799.00+GST. Testo 882 & 885 series with Super Resolution =  $640 \times 480$  pixels.

### SUPER RESOLUTION SUPPLIED FREE OF CHARGE ON ALL ORDERS REC'D PRIOR TO 31st MARCH 2014!\*

With the new thermal imagers from Testo, you are on the safe side when measuring: Thanks to sharp focus images and the 32° lens, you no longer ever miss a detail. In addition to the intuitive menu structure, you can also rely on a fast and comprehensive analysis of your image data - thus saving money in the long term. The new thermal imagers family from testo with Super Resolution: See more and have more security and flexibility when thermographing!

Only available with purchase of the Testo 875, 882, 885 and 890 models



AUCKLAND: Tel: (09) 579 1990 WELLINGTON: Tel: (04) 499 3591 CHRISTCHURCH: Tel: (03) 366 0017 Email: sales@eurotec.co.nz WEBSITE: www.eurotec.co.nz

HVAC • Refrigeration • Electrical • Measurement

### Quality service and products drive Machinery House's growth

A strategy of continued Investment in quality service and products has resulted in another rise in turnover sales year-on-year for Machinery House in New Zealand.



First row, left to right; sales manager Bill Lee, accounts officer Grace He, storeman Mike Hackett, Second row; technician Campbell Douglas, technical sales officer Darren Sharpe, service engineer George Nam. Third row: storeman Raymond Peni, technical sales officer Wilfred D'Mello, branch manager Miles Donald, technical sales Kevin Lamb

New Zealand branch manager Miles Donald says the company's continuing success since the branch opened in 2008 validates the effectiveness of the strategy.

Several components support Machinery House's strategy to retain and grow its market share in New Zealand. It has an experienced sales team, a strong backup service, an extensive range of on-site stock which is also accessible through its website, and broad industry knowledge. All of which strengthen the professional image the company portrays.

"As a result of continually improving the individual components of our strategy, we've had good growth again this year. This is a positive position especially as we are seeing more manufacturing confidence in the market," Mr Donald says

On top of the list of the company's strengths is a great sales team with decades of technical experience. Miles Donald has 20 years industry experience, sales manager Bill Lee more than 40 years, service engineer George Nam more than 30 years, technical sales officer Kevin Lamb 20 years, and tech-

nical sales officers Darren Sharpe and newly hired Wilfred D'Mello about 10 years each.

"Part of our service is having two technicians and two storemen on site to assist customers," Mr Donald says. "Our technicians also make sure that everything that leaves our place is pre-run and tested. If a machine is in a crate, it will be opened, greased, run and oiled. Once we are happy with it, it goes back to the crate and made ready to send out. This ensures fast on-site commissioning for customers wherever they are."

The range carried by Machinery House covers the whole product spectrum for the engineering industry – from the model train builder right up to the full-on engineering

The company distributes imported metalworking and sheetmetal fabrication equipment from Hafco Metalmaster, Soco. Sunrise, Sahinler, SIEG and Rong Fu. It is also one of the biggest distributors for Auckland-based precision engineers and machine tool manufacturers R R Bramley, which produces quality metalcutting, forming, shaping and grinding equipment under

the Bramley, Linishall and Garrick machine stock that we need to hold and the product tools brands, and NZ-made Bulldozer hori-

Machinery House has a philosophy that if something else is an added benefit to what it already sells, then it will stock that as well. In line with this, the company is stocking more gear sourced from domestic

"We are always supporting the local market and one way to do this is to enter into distribution partnership with domestic manufacturers and wholesalers. This in turn has broadened our product range, especially in our welders and compressors. We are now also distributing power tools, grease guns and Hitachi electric chain blocks," Mr Donald says

With the volume of on-site stock increasing at its East Tamaki headquarters. Mr Donald says there is pressure for the company to move to a bigger premises in a couple of years. "We are now holding more stock than ever before. We know that in two or three years we will have to move to a 5,000sqm facility to accommodate the amount of

Clients can register online to become a Machinery House mate and get specials vear-round

lines we have."

Machinery House's website is helping put the word out to clients, who are able to get all the information they need about the machines and other products, from technical specifications to shipping information, like weight and volume, to prices. This in turn enables them to make a buying decision. Clients who register online and become a Machinery House mate get specials and other freebies year round. They also get a \$20 youcher for a \$100 purchase, and a \$50 voucher for a \$300 purchase

"We do everything we possibly can to benefit customers. For example, the advice we give may not always end up in the customer making a purchase, but we give the right advice anyway because that is the important thing to do." Mr Donald says.

"We give them good product, good service and good back-up service. With that, customers often return to make further purchases because they have confidence in our knowledge and experience."

w.machineryhouse.co.nz



VIEW OVER 3,500 PRODUCTS ONLINE

Unit D/38 Highbrook Dr, East Tamaki Ph: (09) 2717 234

### Titanic materials designed for industrial impact

Callaghan Innovation researchers have created advanced new materials based on the wonder metal titanium that have exciting commercial applications, and are designed to meet the needs of a broad range of sectors from biomedical implants to aerospace engineering and beyond.

Dr Ian Brown from Callaghan Innovation says industry focused research carried out in support of a national Ministry of Business, Innovation and Employment (MBIE)-funded titanium research platform, the New Zealand Titanium Technologies Platform (TiTeNZ), has led to the creation of new titanium materials with properties that promise to add significant value to high-value exports in a range of key sectors.

"In Callaghan Innovation's role as a key research innovator in the Titanium Technologies NZ platform, our researchers have made major advances in the creation of titanium alloy structures possessing unique properties catering to businesses in the biomedical, engineering, construction, marine and other fields," Dr Brown says.

He says the research is part of TiTeNZ, under which Callaghan Innovation has been partnering with other New Zealand research properties of these new materials were pre-

pan-industry manufacturing base for high value export products.

He says the team, working closely with the Titanium Industry Development Association (TiDA), has made significant advances in the processing of titanium powder to create materials with highly controlled porosity, greatly improving the ability to control the qualities of titanium alloys in order to produce lightweight, durable structures ideal for advanced engineering

New materials range from those that mimic natural bone-like structures for biomedical implant design, created using foam templating methods, to custom structures created using 3D laser printing methods, with a range of advanced engineering

Elements of the design, fabrication and providers with the vision of developing a sented by Callaghan Innovation researchers



Examples of porous titanium alloy structures made using (from left to right) sacrificial polyurethane foam templates, 3D laser printing, and spaceholder methods.

at an International Titanium Materials conference in Hamilton in December 2013.

Dr Brown says Callaghan Innovation is in presently in discussions with a number of potential partners for uptake of the new materials, which have been developed so their properties and performance can be altered according to particular customer

Callaghan Innovation is a Crown entity whose aim is to accelerate the commercialisation of innovation by businesses in New

Zealand. It connects high-value manufacturing and services businesses with research organisations across the innovation system, as well as operating its own extensive science, engineering and technology laboratories and specialist equipment.

Callaghan Innovation also helps businesses develop their own skills and expertise to successfully take ideas to market, and manages more than \$140 million a year in funding and grants to support business innovation and capability building.

### First call for sealing solutions of any kind

Since 1936, James Walker New Zealand has been responding to the country's need for high performance sealing solutions. With branches in Auckland and Christchurch and a countrywide technical support team, we service all industry sectors and locations.



We justifiably claim that our products span ocean depths to outer space. They also help tame nature's forces with innovative sealing solutions for hydroelectric turbines, tidal barrages and wind turbines, as well as enhancing the safety and productivity of nuclear plant, jet aircraft, oil and gas conditioning service for mechanical seals. production plus the manufacture of phar- Whilst few of our competitors can match maceutical, food and drink products.

But the vast majority of our output simply and effectively keeps the wheels of global industry turning year-in and year-out; the driving force behind our sealing solutions being to optimise operational costs for our customers by extending maintenance any kind. intervals, eliminating unscheduled downtime and improving plant reliability. James Walker has a global reputation as a leader in elastomer and thermoplastic sealing materials and the creation of innovative seal engineering

solutions using these materials plus compression packing and precision machined metallic components in high nickel alloys. In addition to this core range of fluid sealing products, here in New Zealand, we also offer a full design, manufacturing and re-

our broad product range, none can match our people, their expertise, knowledge and their real-world applications experience from thousands of projects across virtually every industrial sector, which makes James Walker the first call for sealing solutions of





to the bottom line. The home-grown technology is a New Zealand first, and is now being trialled in Australia.

#### Lighting automation via wireless

In two of Progressive Enterprises' Auckland and Christchurch distribution centres, forklifts are fitted with wireless devices that activate LED lights, illuminating work areas as they move around the site. The high-tech project has eliminated over-lighting and improved safety, while also cutting annual energy costs to the tune of \$494,000. It's put Progressive in a great position to not just meet, but exceed its corporate CO2 targets – despite increasing store numbers and the size of its distribution centres.

#### Corporate drive to cut energy use

Progressive Enterprises owns and operates 166 Countdown supermarkets throughout New Zealand. Owned by Australian parent company Woolworths, it's tasked with meeting corporate sustainability targets to reduce its carbon footprint by 40 percent

However, growth meant that in 2011 the company had to open a fourth distribution centre in Wiri, Auckland, adding 30,000sqm to its logistics network. It also expanded its Christchurch distribution centre, which was badly damaged in the earthquakes. With

growing energy demand, meeting the ambitious CO2 target needed creative solutions.

#### Innovative technology to cut over-lighting

In 2011. Progressive decided to close the smaller of its two Christchurch distribution centres and expand the larger Hornby centre by 10,000m2. This was a perfect opportunity to improve lighting efficiency in the expanded site

Digital Light Solutions, working with Auckland-based LED manufacturer Compuspec, Three-month trial enabled fine-tuning

- highly efficient 120-watt LED lights in high-bay fittings
- daylight sensors to make the most of available natural light
- motion detectors on lights switched on via wireless emitters on forklifts.

The innovative design effectively has lights and forklifts 'talking' to each other - when a forklift approaches, the area lights up - and when it moves away, lights switch off again.

Before committing to the project, Progres-









sive ran a three-month trial at the Hornby centre. In particular, they were keen to see whether the technology interfered with the existing wireless network used for orders. Technically the controls worked well, and the trial helped set the optimum lighting area. Initially set to illuminate a 25m area in front and behind the forklifts, this lit area proved uncomfortably tight for operators; the distance was widened to 40m and staff were happy.

### Less than three-month payback in extension

Following the trial's success, the Hornby fit-out got the green light, and was complete by May 2012. Although LEDs have a higher upfront capital cost than other types of lighting, installing them in the new extension from the outset proved surprisingly

The cost for LEDs was around \$110,000 more than using T5 fluorescents. But the revised design meant many building costs could be removed, and there was no need for a C-Bus system to run the lights. This

eliminated the need for around \$100,000 worth of kit – meaning the LEDs effectively paid for themselves in less than three reach its CO2 emissions target. months

### Auckland gained further savings

The Mangere distribution centre in South Auckland was next to be retrofitted, with the project completed in February 2013. Nearly twice the size of Christchurch, Mangere has achieved 41 percent electricity savings - 1,770 MWh per year.

the extra energy use of the new 30,000sqm

distribution centre in Wiri. Auckland - putting Progressive on track to comfortably

#### Safety and maintenance benefits

As well as improved efficiency, the new LED lights are longer-lasting, saving on maintenance costs. According to National Facilities Manager Jared Day, the LEDs have an expected life of 100,000 hours but they're not running at 100 percent, so they won't need maintaining for a stagger-These energy savings have more than off-set ing 14 years. This compares to an average two-year life for the fluorescent tubes and





TEST YOUR **WALLET'S** LOAD BEARING **CAPACIT** 

Get a pay rise with stacks of engineering jobs online now.





metal halide bulbs they replaced to maintain operational lighting levels. The project also enabled a side safety initiative: safety vests issued to site visitors are fitted with wireless—the chance of accidents

emitters. These work in conjunction with forklift hoists, making a distinctive beep when someone approaches - minimising

### A case for state-of-art lighting controls

#### Key features

- 120-watt LED lights installed in Auckland Key benefits and Christchurch distribution centres
- Daylight sensors measure natural light, dim lights accordingly
- Motion detectors turn lights on in 40m Total cost saving \$494,000 a year radius of forklift zone
- 2.5 month payback on LEDs in Christchurch extension
- Electricity saved more than entire annual consumption of new 30,000 m2 Wiri distribution centre

• Safety controls added to forklifts

- 2,906 MWh electricity saving per year
- CO2 emissions reduced by 375 tonnes/
- On target to reduce CO2 emissions to 2006 levels by 2015
- Improved site safety

### Sector applicability

- Commercial Lighting
- Most office environments

### Savings

Site	Hornby, Christchurch	Mangere, Auckland
Site size	30,000 m <sup>2</sup>	56,000 m <sup>2</sup>
No. of LEDs installed	595	1,041
Electricity reduction / yr	1,136 MWh	1,770 MWh
Energy cost reduction	51%	41%
Energy cost savings / yr	\$159,000	\$230,000
Maintenance savings / yr	\$30,000	\$75,000

EECA BUSINESS offers information, resources, advice and funding to help you make the most of the energy you use. For more information contact The Energy Efficiency and Conservation Authority:

Email: business@eeca.govt.nz www.eecabusiness.govt.nz



"Progressive has a very strong commitment to improving our environmental performance, so trialling and installing new lighting technology when we had the chance, was a good fit with our vision. We're delighted with the result - this project alone has cut our annual CO2 emissions by around 375 tonnes, not to mention strong financial savings and safety benefits. We're better equipped to service the needs of our suppliers and customers and we're well positioned for growth.

"The lighting technology in our distribution centres is a first in New Zealand – making them the most energy efficient facilities of this type in the country. This Kiwi-designed and manufactured product is now being trialled by other Woolworths businesses in Australia. It's market-leading technology."

- Dave Chambers, Countdown managing director



### MIT introduces a new course to encourage youth into mechanical engineering

Manukau Institute of Technology (MIT) has introduced a new qualification aimed at offering young men and women a head start in the Mechanical Engineering industry.

The National Certificate Mechanical Engineering programme (Level 4) is a two year course offered at MIT's Manufacturing and Technology Unit. The programme covers two strands: Machining and General Engineering. Students will receive technical skills and the knowledge necessary to open a world of opportunities in the engineering

MIT already offers a Level 2 pre-apprenticeship programme but the decision to expand resulted from the industry's need for apprentices and student desire for higher qualification.

Mechanical and Civil Engineering senior lecturer Blair Cornwall says the qualification "will provide them with a pathway to pick up the necessary skills to carry on to either a higher level qualification or to slot into a workplace with some great skills"

"By the time the students complete the Level 4 certificate they are work ready," he

Jason Dimock from Howick was working as a marine engineer apprentice when he decided it was time for a change.

"I am still working part time at my marine



From left to right, Sanjeer Kumar, Blair Cornwall, Cynthia Teri Teokota and Jason Dimock learning how to set and operate the Computer Numerical Control (CNC) in MIT's machining centre

also see if I can find a part-time position in a machine shop which will relate more to what I am learning now," he says.

Sanjeer Kumar from Manurewa High School was awarded a scholarship to study the Level 2 Mechanical Engineering programme. "I was pleased when they started the new

job while I am completing the course. I will Level 4 course," he says. "I was looking to continue studying at the next level up so this course is great as it is more practical and not just looking at theory."

> Cynthia Teri Teokota won an MIT Emerging Leaders scholarship in 2012 and is the first female to be enrolled in the course.

"I knew I wanted to do something in engithing better by machining it," she says.

neering." she says. "I did an aviation course at high school because I am interested in planes and then I became interested in making things, machining parts and things like that

"In a way it makes me feel good, like I'm achieving something. You can make some-





100% synthetic, with Teflon • Non-toxic & nonstaining • Long lasting and penetrating • Impervious to salt water • No effect on rubber, plastic, wood, leather, fabric or paint • Compatible with other lubricants • Excellent dielectric.



#### RR Fisher & Co Ltd PO Box 23293 Auckland

AUCKLAND: Ph: 0-9 278 4059 Fx: 0-9 279 8286 CHRISTCHURCH: PH: 0-3 377 0025 FX: 0-3 377 0086

# Waterbased Primer For Heavy Rust

A single-pack water-based rust converting etch primer, for application over rusted steel. The product converts the rust layer into a metal phosphate and simultaneously cures into a tough abrasion-resistant skin, which is impervious to further rusting.



#### MetalFix®

- Water wash up (no solvents)
- Protects rusted exhaust systems
- \* Safe for hazardous areas (e.g. fuel depots)
- \* Fire retardant properties
- \* Operates from sub zero to 900 C+
- Repairs rusted holes (e.g. water tanks)



### MetalFix 1000®

- Imparts a resistance to fire
- Non toxic in the dry state
- \* May be used safely in confined spaces
- No sandblasting necessary, the paint has a quick recoating time



for details visit: www.kemtek.co.nz

## Six month subscription to **NZ Engineering News Only \$1**

Subscribe to New Zealand Engineering News for 6 months and receive: 5 issues of NZ Engineering News (Feb to June) and 5 issues of Machinery Seller.

NZ\$95 incl. GST	NZ\$200 Australia	Rest of World NZ\$26
ease complete the form and return	M 10 HAYLEYMEDIA LIMITEG	
Company name:		
Contact name:	Position:	
Industry Type:		
Postal Address:		
Telephone:	Fax:	
Email:		
☐ Cheque to: HAYLEYMEDIA Limite ☐ Direct Credit to bank account: 123110-0072666-00 ASB Bank Li East Auckland Commercial Bank	imited,	
☐ Credit Card: Please complete deta ☐ Mastercard ☐ Visa ☐ A	ails below merican Express	
Credit Card No#:		
Expiry Date /		
Cardholder's Name:		
Cardholder's Signature:		

**RETURN THIS FORM WITH PAYMENT TO:** 

HAYLEYMEDIA

**HAYLEYMEDIA** Limited

PO Box 33146, Takapuna, North Shore City 0740

Tel: 09 486 0077, Fax: 09 486 0078

Subscriptions Info: subs@hayleymedia.com

# Earthquake-damaged house inspectors using UC rover robot to look under house piles

A government-owned company responsible for settling claims from the 2010 and 2011 earthquakes is using a University of Canterbury (UC) designed rover robot to inspect for damage under building piles.



Southern Response/Arrow International has been using the UC rover robot since September and has so far inspected and videoed about 100 damaged houses.

UC rover robot designer Dr Chris Hann says there has been some interest for using the rover in other areas, such as inspecting for termites in Australia and search and rescue. UC postgraduate student Josh Gibson is looking to improve the rover robot as part of his research project and three of Dr Hann's summer scholarship students are also working on projects related to it.

Mr Gibson's role is in developing a localisation and mapping system, and making the system as simple as possible to operate.

"We have started using a high definition wide angle camera, this gives us high quality images and the high field of view makes driving easier. We have also upgraded the transmitters to allow the rover to cover a greater distance," Mr Gibson says.

The rover has a number of benefits. It allows the inspection to be done by only one person. It is much safer especially when looking under potentially damaged houses where there is the possibility of collapse.

The rover can also drive around under a house much faster than a person can crawl. Houses can be pretty dirty underneath as well as a health risk. Using the rover means

the operator never needs to go under the house. It is smaller than a person so can get to areas under a house where people can't get to.

"The information the rover provides gives the engineers a better idea of what is going on under the house before the repair process has begun. This means that the extent of the repair is better known, such as how many piles need to be repaired instead of finding out after the work has started," Mr Gibson says.

The rover runs off a simple programme from a laptop. It is controlled using a laptop so that the video feed can be displayed on screen and it is driven with a joystick or a game pad.

"We are not aware of any other under-floor rovers in New Zealand. Quad-copters have been used for building inspection in Christchurch but I am unaware of any under-floor rovers being used," Mr Gibson says.

The assessment of earthquake damage to structures can be an arduous, and at times, dangerous, requiring access to confined spaces. The UC rover robot uses an array of sensors to identify and map the size and extent of cracks and measure damage under a building. The rover carries a light, a video and a still camera.

High definition video and still imagery records the condition of piles and other structures beneath houses



### CALL US ABOUT TRADE IN DEALS AND FREE CUTTER SET OFFER

#### 32RC

An updated version of the 32/50 with an easier to use touch panel, quick release cutter system, 38% increase in magnetic adhesion



- 32mm core drill capacity –
   50mm depth
- 13mm twist drill capacity, Quick release cutter change
- Weight 10.6kg
- 1 speed 450rpm
- Very short spindle to reduce the risk of shaft wobble

### **PICCOLO 32/50**

With its extremely compact design is excellent for site work.

- 32mm core drill capacity –
   50mm depth
- 13mm twist drill capacity,
- Weight 10.6kg
- 1 speed 400rpm
- Very short spindle to reduce the risk of shaft wobble

### MINI 40/2

With its extremely compact design is excellent for site work.

- 40mm core drill capacity –
   50mm depth
- 13mm twist drill capacity,
- Weight 15.6kg
- 2 speed 250/450rpm
- Very short spindle to reduce the risk of shaft wobble

Phone 0800 654 030





POWERPAC G

www.powerpac.co.nz

### UC research looking at alternative energy capture and storage

A University of Canterbury chemistry researcher is looking to develop game-changing ways of solving nanotechnology design problems, focusing particularly on developing alternative energy technologies.



Deborah Crittenden has received \$300,000 of Marsden funding to study the fundamental principles of biological photosynthesis with a view to designing simpler chemical systems that work on the same principles

She hopes that this could one day result in households having low-cost, high-efficiency and carbon-neutral solar energy capture, conversion and storage systems on their roofs

Photosynthesis is the main way of converting light energy from the sun into electrical energy. Its main advantage over other elec-

trical energy generation technologies such as solar panels, wind and geothermal, is that the electrical energy is further converted into chemical energy that can be stored for long periods of time until needed," Dr Crittenden says

"Depending on how you look at it, photosynthesis is either remarkably efficient, converting almost 100 percent of photons from the sun into electrical current, or remarkably inefficient, only finally storing 3 percent of the total energy arriving on a leaf's surface, with a lot of energy going into making biochemical by-products and heat.

own game, designing simpler chemical systems that:

- extract as much energy as possible from arriving photons to prevent this energy being lost as heat,
- retain the same 100 percent photon to free electron conversion rate, and
- convert the electrical energy into chemical energy without wasting energy on biochemical by-products.

To achieve this, we must first understand how the arrangement of atoms within the photosynthetic reaction centre leads to its ability to absorb light energy and liberate electrons to produce electrical current.

"This behaviour of electrons before, during and after absorption of light by a molecule is governed by the laws of quantum mechanics. Working out how these laws of quantum mechanics apply during photosynthesis sounds like a hard problem - because it is.'

Dr Crittenden says that at the moment, there aren't many good computational quantum chemical methods available for

modelling the behaviour of electrons before and after absorption of light, and none that can be applied to systems as large as the photosynthetic reaction centre.

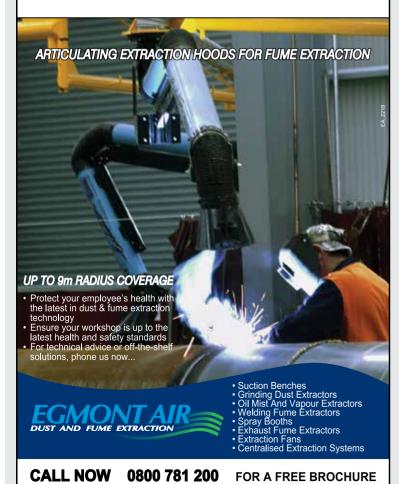
The key innovation at the heart of the research project is developing a new mathematical and computational framework that will allow the researchers to establish the "Our aim is to beat photosynthesis at its link between molecular structure, photon absorption, electrical current production and the process of storing electrical energy by rearranging chemical bonds.

> "The next step will be using this method to work out how to modify the arrangement of atoms to maximise the energy capture, conversion and storage efficiencies

> "This fundamental understanding underpin the development of new lowcost, high-efficiency and energy storage technologies, which will be of significant environmental and economic importance, as the impact of increasing carbon dioxide emissions and the need to find alternative carbon neutral energy sources becomes ever more pressing," Dr Crittenden adds.

> Meeting the world's ever-increasing energy needs without increasing carbon dioxide emissions is one of the most pressing scientific and technological challenges of the modern age. "Tapping solar energy is a potential solution, but robust, cost-effective solar technology has not yet been realised," she savs

### "Welding Fume Extraction"



### Are you safe from welding fumes?

Egmont Air, specialists in dust and fume extraction, offers a huge range of solutions for extracting welding fumes.

"Welding without adequate ventilation or extraction is dangerous," comments Mr Cameron Prestidge from Egmont Air. "Symptoms of a sore throat, dry cough, bleeding nose, headaches, breathlessness, sweating, chills and pneumonia are all signs that a correctly designed fume extraction system is urgently overdue.

Mr Prestidge says increased productivity, employee wellbeing, reduction in ab-

senteeism and staff turnover are direct benefits they have seen from installing an Egmont Air extraction

"Our systems are designed to compliment the work engineers do, so that productivity increases because of the improved and safer working conditions for welders," Mr Prestidge explains. "Job satisfaction and care of employees and their health is seen as a major contribution to retaining staff and creating loyalty between workshop employees and management."



**Before: Welding fume** 



After: With Clean-Go

Egmont Air Fume extraction systems are designed to suit welding bays, general engineering or maintenance workshop scenarios. Options are available for special processes such as robot welders, plasma fumes, grinding, and dust applications.

For a free brochure and more information contact Egmont Air on 0800 781 200 or visit their website www.egmontair.co.nz

### Metro Group engineering a future

Growing New Zealand's engineering capability is a high priority for the Government and they are keen to invest in Technologist and Technician Engineer training to make this happen.

mission (TEC), there needs to be a 120-230 students studying core papers during their percent growth in the number of grad- first year including Engineering Mechanics, uates from NZQA Level 7 engineering Communication and Mathematics. This is programmes. The Bachelor of Engineering then followed by discipline-specific core Technology (BEngTech) has been developed to meet this demand.

Jointly developed and offered by six of New the final year. Zealand's largest institutes of technology, known as the Metro Group, this is an internationally-benchmarked qualification that is accredited by the Institution of Professional Engineers (IPENZ).

Designed in tandem with industry, this ployers' workplace needs and expectations. "The strength of the Metro Group programme lies in its production of graduates who are highly capable from day one," Management Group (BEngTech).

Leading to a career as an Engineering Technologist, the degree offers three majors: Civil, Mechanical or Electrical Engineering. There are then specialties available within these majors such as Geotechnical, Roading-Transportation, Mechatronics and many more

The qualification progressively builds upon credit for most of the second year and pro-

According to the Tertiary Education Com- the learner's body of knowledge with all modules and electives in their second year and a significant industry-based project in

> "The Professional Engineering Practice paper coupled with the Engineering Development project is a huge highlight of the degree," says Mr Findlay.

"Students identify an engineering problem and then use their practical and theoretical hands-on degree responds directly to em-skills to research and design a solution. This may involve building a prototype or working alongside their industry supervisor to utilise industry contacts to reach a resolution.

"This engagement with industry, along explains John Findlay, chair of the Metro with the problem-solving and critical-thinking skills they have developed, leads to our graduates being solution-orientated and work ready."

> And it is not only the students who benefit from the industry project.

> Graduates of the New Zealand Diploma in Engineering can use their advanced standing to study the core first year papers, get



Bachelor of Engineering Technology graduates are highly capable from day one

gress straight into their third year project

A lot of these advanced standing graduates are already employed and their employer often sponsors their degree study for professional development reasons. The employed

graduates can choose to use their industry project as an opportunity to solve a problem at their workplace, adding value to the business, and creating a positive outcome for both employer and employee.



### **SAY HELLO TO A NEW GENERATION OF ENGINEERS**

For engineers who are trained and ready to hit the ground running, choose a Metro Group graduate.

Our Bachelor of Engineering Technology programmes are developed with industry, to give students the knowledge and skills to deliver on New Zealand's major projects.















Metro Group - New Zealand's major metropolitan institutes of technology www.metros.ac.nz

Annual 2014

www.engineeringnews.co.nz

### WelTec Construction Management students take out industry top awards

Two Wellington Institute of Technology Construction Management students have taken out the Central Region top prizes for the New Zealand Institute of Building this year.



Richard Kikta with the NZIOB Supreme student award with category sponsor Mike Lee of **Redican Allwood** 



Daniel Boyle receiving his Most promising first year student Award from Jake Theron of **Hays Recruitment** 

Richard Kikta, a 2013 graduate of the WelTec's award winning hospitality campus National Diploma in Construction Manage- at 54 Cuba Street, Wellington. ment won the top performing student on Malcolm Fleming, NZIOB national councillor a Diploma level course and the overall Su- and Central Chapter president commentpreme Student Award.

year Diploma student at an event hosted at these awards is not academic performance

ed. "What sets the NZIOB Student Awards Daniel Boyle won the top performing first apart is that the criterion for nomination for

alone; the students have been nominated according to any criteria which appraises exceptional students. What that criteria consists of, is left entirely to the nominating in winning these awards having won three institution, and this makes these awards of the top five awards last year and being very special."

"Richard and Daniel have done well with WelTec lecturer Sean Irion.

their accomplishments and have been recognised by the industry they will be working in. WelTec students have a strong reputation award winners in previous years," says



Annual 2014 www.engineeringnews.co.nz



#### 2degrees

Phone: 0800 022 249

### **3 Way Solutions Ltd**

Phone: 03 348 0432

#### **3D Printing Systems** Phone: 09 281 4206

**3M Personal Safety Division** 

94 Apollo Drive, Rosedale, Auckland, New Zealand

PO Box 33246, Takapuna, Auckland

0740, New Zealand Phone: 09 477 4040

Email: anz3msafety@mmm.com Website: www.3m.com/nz/PPESafety Contact: Joselyn Tan, marketing & communications coordinator

#### 4 PUMPS

Phone: 0061 1300 101 277

### **Absolute Vacuum Services Limited**

Unit 4, 65 Firth Street, Drury, Auckland,

New Zealand

PO Box 514, Drury, Auckland 2247,

New Zealand

Phone: 09 294 7380

Email: adrian@absolutevacuum.co.nz Website: www.absolutevacuum.co.nz

Contact: Adrian Bridgeman AceCad Software

Phone: 00618 9582 2748

**Action Engineering Ltd** Phone: 03 477 1643

### **AES Waterblasters**

46 Sir William Avenue, East Tamaki, Auckland, New Zealand. PO Box 58636, Botany, Auckland 2163,

New Zealand.

Phone: 09 271 4782 Email: alan@aesblasters.co.nz Website: www.aesblasters.co.nz Contact: Alan Bisley, director

#### **Air New Zealand Calibration** Services

25 Perimeter Road, Harewood, Christchurch, New Zealand PO Box 14005, Christchurch 8053,

New Zealand Phone: 03 374 7687

Fax: 03 374 7670 Email: calibration@airnz.co.nz

Contact: Dean Sole



#### **Aiax Productions Ltd**

"Pressing ahead of the rest." Ajax are specialists in metal pressing, supplying quality at the right price. Small or large production runs, special one offs, design, tooling, general engineering and wire cutting services. We can manage a job from concept to delivery, whether to yourself or to your customer.

4-6 Drury St, New Lynn, Auckland 0640,

New Zealand

PO Box 15-026, New Lynn, Auckland

0640. New Zealand Phone: 09 827 6926

Email: sales@ajaxproductions.co.nz Website: www.ajaxproductions.co.nz

Contact: Sales team

### **ALS Tribology**

74 Seaview Road, Seaview, Lower Hutt, New Zealand

PO Box 39108, Wellington Mail Centre, Lower Hutt, Wellington 5045,

New Zealand Phone: 04 586 6202 Fax: 04 586 6262

Email: office.wellington@alsglobal.com

Website: www.alsglobal.com/en/ Our-Services/Industrial/Tribology Contact: Ken Lawrence, NZ business manager

### **Aniseed Engineering Ltd**

58 Factory Road, Brightwater, Nelson, New 7ealand

120 Aniseed Valley Road R D 1, Richmond, Nelson 7081,

New Zealand

Phone: 0274 511 349

Email: aniseed.engineering@xtra.co.nz Website: www.ferroscanning.co.nz Contact: Alan Wareing, director

### **Aotea Machinery Limited**

Phone: 09 525 6907 **APC Group** 

Phone: 021 757 758

APPOINTMENTS . Recruitment Specialists Ltd Engineering & Trade Recruitment

#### **Appointments Recruitment** Specialists Ltd

**Appointments Recruitment** Specialists offers a professional service specialising in engineering & trade recruitment with permanent placements & temps on hire; and casual temps including machinists lathes and milling, F&T, welders & fabricators plus cabinetmakers NZ country wide.

11 Serrata Place, Browns Bay, Auckland

0630, New Zealand

PO Box 46 018, Herne Bay, Auckland

1147, New Zealand Phone: 09 478 9954 Fax: 09 630 2180 Email: dennis@appts.co.nz

Website: www.appts.co.nz Contact: Dennis Mawhinney, director/

#### **APS Tooling Ltd**

Phone: 09 579 2208

#### apt Group

Level 3, Suite 1, 13-15 Wentworth Ave, Sydney, Australia

Level 3, Suite 1, 13-15 Wentworth Ave,

Sydney 2000, Australia Phone: 00612 9269 1500 Email: geoffs@aptgroup.com.au Website: www.aptgroup.com.au Contact: Geoff Soper, director

### **ASTO NZ**

7 Te Puni St, Petone, Wellington, New Zealand

PO Box 30-018, Lower Hutt, Wellington 5040, New Zealand

Phone: 0800 278 669

Email: accounts@autolineindustrial.co.nz Website: www.astonz.co.nz

Contact: Andy Thomas, manager

### **ATS Pneumatics**

**ATS Pneumatics** 

77 Brisbane St, Sydenham, Christchuch,

New Zealand

PO Box 13740, Christchurch 8141,

New Zealand Phone: 03 377 4796

Email: atspneumatics@xtra.co.nz Website: www.atspneumatics@xtra.co.nz

Contact: Garry Robinson, sales director

### Go to the **NZ Engineering News** website

www.engineeringnews.co.nz



#### **Aurora Process Solutions**

Aurora Process Equipment has had many years of experience in many processing industries allowing us to offer the most advanced systems for increasing the efficiency of your process. Aurora offers bulk materials handling & industrial packaging systems; fluid processing equipment; and quality assurance systems.

21 Bandon Street, Frankton, Hamilton,

New Zealand

assistant

PO Box 9573, Frankton, Hamilton 3240,

New Zealand Phone: 07 847 5315

Email: chloe.etchells@aurora-nz.com Website: www.aurora-nz.com Contact: Chloe Etchells, executive

#### Autobend Ltd - Auckland

25 Andromeda Cres, East Tamaki, Auckland, New Zealand

PO Box 4019, CBD, Christchurch 8140,

New Zealand Phone: 0800 288 623

Email: rvupton@xtra.co.nz Website: www.autobend.co.nz Contact: James Patterson, Auckland

### **Autobend Ltd - Christchurch**

15 Vulcan Place, Middleton, Christchurch, New Zealand

PO Box 4019, CBD, Christchurch 8140, New Zealand Phone: 0800 288 623 Email: johng@autobend.co.nz Website: www.autobend.co.nz

### Contact: John Gulland, sales manager

**Autoline Industrial** 7 Te Puni St, Petone, Wellington,

New Zealand PO Box 30-018, Petone, Wellington 5012,

New Zealand Phone: 04 570 0164

Email: sales@autolineindustrial.co.nz Contact: Andy Thomas, manager

#### **Automation Design Ltd**

36 Birmingham Drive, Middleton, Christchurch, New Zealand PO Box 37 154. Halswell, Christchurch

8245. New Zealand Phone: 03 338 1762 Email: rf@adlnz.com Website: www.adlnz.com Contact: Richard Fenton, director

### Automation Equipment (N.Z.) Ltd

26 Tawn Place, Pukete, Hamilton, New Zealand

5656, Frankton, Hamilton 3242,

New Zealand Phone: 0800 847 200

Email: sales@autoequip.co.nz Website: www.autoequip.co.nz Contact: Internal sales team

### **B&H Distribution Ltd**

600 Omahu Road, Frimley, Hastings, New Zealand

PO Box 2042, Stortford Lodge, Hastings 4153, New Zealand Phone: 06 872 6777

Email: david@bhdl.co.nz Website: www.bhdl.co.nz Contact: David Smith, director

### Baskiville.Com Ltd

16 Methven Chertsey Road, Methven, Mid Canterbury, New Zealand PO Box 10, Methven, Mid Canterbury 7745, New Zealand





#### Blastquip

Blastquip is supplier of abrasive blasting equipment and abrasives in New Zealand. We also stock a large range of coating thickness gauges, wall thickness gauges and a wide range of other inspection equipment. Supplying the latest technology equipment backed up by its world leading manufacturers and a team of experienced and helpful staff.

12 Holt Place, Harewood, Christchurch,

New Zealand

PO Box 39036, Harewoood, Christchurch 8545, New Zealand

Phone: 03 358 8493 Email: jodie@blastquip.com Website: www.blastquip.com

Contact: Jodie Ivory, operations manager



### **Boge Compressors Australia** Importer and wholesale distributor of German engineered screw compressors, oil injected and oil free, piston compressors, boosters, dryers

and ancillary equipment.
49 National Avenue, Pakenham,

Melbourne, Australia 49 National Avenue, Pakenham, Melbourne 3810, Australia Phone: 00613 5940 3266 Email: j.rohner@boge.com Website: www.boge.co.nz

### Contact: Jim Rohner, general manager **Brevini NZ Ltd**

9 Bishop Croke Place, East Tamaki, Auckland, New Zealand PO Box 58418, Botany, Manukau 2163,

New Zealand Phone: 09 250 0050 Email: kevin@brevini.co.nz Website: Brevini.co.nz

Contact: Kevin Mowles, sales manager

### **CADPRO Systems Ltd**

Level 1, 527 B, Harbour Side Business Park, Rosebank Road, Avondale, Auckland, New Zealand PO Box 90847, Victoria Street West,

Phone: 09 302 4028 Email: hans.g@cadpro.co.nz Website: www.cadpro.co.nz Contact: Hans Grootegoed, director

Auckland 1142, New Zealand

### **Calmac Engineering Ltd**

739 Great South Rd, Papatoetoe, Auckland, New Zealand

PO Box 23-511, Hunters Corner, Auckland 2155, New Zealand Phone: 09 270 2097 Fax: 09 276 2507

Email: malcolm@calmac.co.nz Website: www.calmac.co.nz Contact: Malcolm Wheeler, director

> Go to the NZ Engineering News website

www.engineeringnews.co.nz



#### **Camfil New Zealand**

Camfil is the leader in clean air solutions, covering more than 50 countries, we provide air filters. housings and hardware, molecular gas removal products, cartridge dust collectors and are IANZ accredited to certify clean rooms and laboratory air-systems. All enquires are welcome please contact us on 0800 222 006

Unit 30, 930 Great South Road, Penrose, Auckland, New Zealand

PO Box 112097, Penrose, Auckland 1642,

New Zealand Phone: 09 696 0663 Fax: 09 636 0963

Email: Suzanne.Charteris@camfil.com

Website: www.camfil.com

Contact: John Brock, Suzanne Charteris, sales manager, sales coordinator

#### **Capital Safety**

Phone: 021 682 505

#### **Carac Couplings**

53 Bridge Street, Eltham, New Zealand PO Box 145, Eltham 4322, New Zealand Phone: 06 764 8254

Fax: 06 764 8253 Email: carac@xtra.co.nz Website: www.caracnz.com

Contact: John Burling, managing director

#### Carbidenz

2 Ballance St, West, Masterton,

New Zealand Phone: 06 3777 904 Email: carbidenz@xtra.co.nz

Website: www.carbidenz.co.nz/store/

index.php

Contact: Evan Dawkes, owner

#### **Carlton Taylor Industries Limited**

Phone: 03 366 9064

#### **Carr New Zealand Limited**

6 Ra Ora Drive, East Tamaki, Auckland, New Zealand

PO Box 204110, Highbrook, Auckland 2161, New Zealand

Phone: 0800 534 783 Email: info@carrgroup.co.nz Website: www.carrgroup.co.nz Contact: Dejay Potaka, sales

#### **CC Hydraulics Ltd**

53 Aviation Avenue, Mount Maunganui, Tauranga 3116, New Zealand

Phone: 07 928 7722 Fax: 07 928 7721

Email: kim@cchydraulics.co.nz Website: www.cchydraulics.co.nz Contact: Kim Clarke, sales & marketing

#### **Chemtech Services Ltd**

Phone: 0272 907 911

#### **Chemz Ltd**

654 St Georges Road South, Hastings, New Zealand

PO Box 8895, Havelock North, 4157, New Zealand

Phone: 06 877 9690 Fax: 06 877 9119

Email: info@chemz.co.nz Website: www.chemz.co.nz

#### **Chris Matthews and Associates** Ltd

Phone: 027 452 3975

Go to the **NZ Engineering News** website

www.engineeringnews.co.nz



#### Ciaweld

Victor Technologies Asia Pacific, headquartered in Preston, Victoria is a manufacturer and distributor of welding and cutting equipment. The company is home to several market leading brands in the welding and metal fabrication industry, including CIGWELD, Victor Thermal Dynamics, Tweco, Stoody, Arcair & Victor.

71 Gower Street, Preston, Victoria, Australia

PO Box 92, Preston, Victoria 3072, Australia Phone: 006 1300 654 674

Email: marketing@cigweld.com.au Website: www.cigweld.com.au Contact: Laura Carrazza, marketing communications manager – Asia Pacific

# **Clyth MacLeod Limited Business**

460 Manukau Road, Epsom, Auckland, New Zealand

PO Box 26-203, Epsom, Auckland 1344, New Zealand

Phone: 021 350 952 Fax: 09 631 5091

Email: mdgale@clythbiz.co.nz Website: www.clythbiz.co.nz

Contact: Michael Gale, business broker -

Licensed REAA 2008

# Clyth MacLeod Ltd - Business

460 Manukau Road, Epsom, Auckland,

New Zealand PO Box 26-203, Epsom, Auckland 1344,

New Zealand Phone: 021 336 138 Email: tim@clythbiz.co.nz

Website: www.clvthbiz.co.nz

Contact: Tim McLaren, business broker -

Licensed REAA 2008

#### **CNC Engineering Solutions Ltd**

96 Tallyho Street, Mangakakahi, Rotorua, New Zealand

PO Box 1217, CBD, Rotorua 3040,

New Zealand

Phone: 07 349 6821

darryl@cncengineeringsolutions.co.nz Website: www.plazmax.co.nz

Contact: Darryl Aston, MD

#### **CNC Services Ltd** Phone: 09 521 6366

Codemark Ltd

Phone: 09 479 5155

#### **Colourgrip Surfacing Ltd**

1 Nandina Avenue, East Tamaki, Auckland, New Zealand PO Box 58487, Botany, Auckland 2163,

New Zealand Phone: 09 274 4284

Email: simon@colourgripsurfacing.co.nz Website: www.colourgripsurfacing.co.nz

#### Contact: Simon Fletcher, director **Compressed Air Maintenance**

28 Church Street, Northcote, Auckland, New Zealand

PO Box 340 161, Birkenhead, Auckland 0746, New Zealand

Phone: 0800 874 926 Email: peter.bell@compressedair.co.nz

Website: www.compressedair.co.nz Contact: Peter Bell, manager

# **Concrete Pumping Equipment NZ**

47 Main Road, South Levin, New Zealand,

Po Box 426 Levin, Levin 5540,

New Zealand Phone: 06 368 4044 Fax: 06 368 3232 Email: kelly@cpenz.co.nz

Website: www.concretepump.co.nz Contact: Justin Rangi, manager

#### **Connection Technologies Ltd**

Building A, 59 Marsden St, Lower Hutt,

Wellington

PO Box 39340 Marsden Street, Lower Hutt, Wellington, New Zealand Wellington Mail Centre, Lower Hutt, Wellington 5045, New Zealand Phone: 04 566 5345

Fax: 04 566 5347

Email: leanne@connectors.co.nz Website: www.connectors.co.nz Contact: Lewis Woodward, managing

director



#### **Control Devices**

Distributors of European companies -Penny + Giles, PG Drives Technology, Lika Electronic, APEM, Seika, Ditel, L'Essor FranÁais Electronique (EFE), Mobile Control, Gill Sensors who manufacture advanced industrial solutions for measurement and control. We design and build custom joysticks.

5E/14 Waikumete Road, Glen Eden, Auckland, New Zealand

PO Box 95204, Swanson, Auckland 0653,

New Zealand

development

Phone: 09 813 0871 or 0800 443 346 Email: nzsales@controldevices.net Website: www.controldevices.net Contact: Vicki Beveridge, sales & business

#### **Cranequip Engineering Ltd**

17D Andromeda Crescent, East Tamaki, Auckland, New Zealand

PO Box 64-220, Botany, Auckland 2163,

New Zealand

Phone: 09 272 7029 Email: cqe@cranequipengineering.com Website: www.cranequipengineering.com

#### Contact: Cobus Van Der Walt, manager **Custom Cutting Formes Ltd**

21 Garlands Rd, Woolston, Christchurch, New Zealand

PO Box 22784, CBD, Christchurch 8140, New Zealand

Phone: 03 381 2651 Email: alan@formes.co.nz Website: www.formes.co.nz Contact: Alan Pearce, manager



#### **Denis Cunningham Ltd**

Denis Cunningham Ltd is the largest stockist of welding equipment and consumables in the South Island. The company has sales, used and repair divisions and a large hire fleet. We cater for all major brands like Lincoln, Miller, Esab, CIG, Hypertherm, Unimig, Kemppi, Weldwell, Speedglas and Binzel to list a few.

198 Springs Road, Hornby, Christchurch, New Zealand

Unit A1, PO Box 37226, Halswell, Christchurch 8245, New Zealand

Phone: 03 349 9353 Fax: 03 349 9354

Email: bede@dcwelding.co.nz Website: www.dcwelding.co.nz Contact: Bede Cunningham, manager



#### **Design Energy Ltd**

Design Energy is a mechanical engineering design consultancy based in Christchurch, New Zealand. We specialise in automation, robotics and new product development. We offer a range of services from engineering, CAD modelling and design through to supply of custom turnkey automation and robotic.

Unit 5, 44 Clarence St South, Addington, Christchurch, New Zealand PO Box 33403, Christchurch 8024, New Zealand Phone: 03 943 2143 Fax: 03 943 2263

Email: andrew@designenergy.co.nz Website: www.designenergy.co.nz Contact: Mike Shatford, managing

#### **Digital Light Solutions**

116B Takanini School Rd, Takanini, Auckland, New Zealand 116B Takanini School Rd, Takanini, Auckland 2105, New Zealand Phone: 021 889 997

Email: trish@diffusers.co.nz Website: www.digitallightsolutions.co.nz

Contact: Dave Reid, director

**Dixon Manufacturing Ltd** 26 Glenmore Drive, Warkworth 0910, New Zealand

Phone: 09 422 3595 Fax: 021 4748 3647 Email: dixon@pl.net Website: www.dixon.co.nz

#### Contact: Jane Warren, MD **Drills, Taps & Dies Ltd**

Unit 2/15 Green Lane, Sockburn, Christchurch

PO Box 11154, Sockburn, Christchurch

8443, New Zealand Phone: 03 343 6345

Email: geoff.dtd@paradise.net.nz Website: www.drillstapsdies.co.nz Contact: Geoff Dillon, manager/director

#### **Driveshaft New Zealand Ltd**

Phone: 09 550 2805

#### **Ducare NZ Ltd**

10-12 Bruce Road, Levin, New Zealand PO Box 418, Levin 5540 Phone: 0508 382 273 Fax: 06 376 9310 Email: sales@ducare.co.nz Website: www.ducare.co.nz Contact: Ian McKenzie, sales manager

#### **Dust Extraction Systems Ltd**

32B Barrys Point Road, Takapuna, Auckland, New Zealand PO Box 33 492, Takapuna, Auckland 0740, New Zealand Phone: 09 948 1664 Fmail: ken@dustex co.nz Website: www.dustex.co.nz Contact: Ken Skinner, company director

#### **Dyno NZ Conveyors**

Phone: 03 216 1440

Go to the **NZ Engineering News** website

www.engineeringnews.co.nz

# ebmpapst

#### ebm-papst A&NZ

ebm-papst is the leading global manufacturer and supplier of fans, blowers and air moving products in the manufacturing industry. As an engineering company with expertise in the fields of aerodynamics, motor technology and design and development, ebm-papst A&NZ can offer the best air movement solution for your application.

Unit H, 61 Hugo Johnston Drive, Penrose, Auckland, New Zealand

PO Box 112278, Penrose, Auckland 1642,

New Zealand Phone: 09 525 0245

Email: caroline.bommes@au.ebmpapst.

Website: www.ebmpapst.co.nz Contact: Sharon Clay, sales manager

#### edenfx HSE Recruitment

1A Sundown Ave, Manly, Auckland, New Zealand

PO Box 469, Whangaparaoa, Auckland 0943, New Zealand

Phone: 09 424 8367 Fax: 09 424 8378 Email: aqill@edenfx.co.nz

Website: www.edenfx.co.nz Contact: Alison Gill, managing director

#### **Electropar Preformed Line Products**

Phone: 09 274 2001

#### **Elliott Scott Ltd**

11 Hawford Road, Opawa, Christchurch, New Zealand

PO Box 10-234, Phillipstown, Christchurch

8145, New Zealand Phone: 03 337 0970

Fax: 03 337 0954 Email: info@elliott-scott.com

Website: www.elliott-scott.com Contact: Mr A Scott, manager



#### EMEX - Engineering, Machinery & **Electronics Exhibition**

**EMEX** is New Zealand's premier tradeshow for the manufacturing, engineering, machinery, electronics & technology industries. Show Dates: 27-29 May 2014. Where NZ manufacturing innovation takes off. Showcasing the latest engineering products and consumables, electronics solutions, cutting edge machine technologies and tooling that encapsulates new innovations in the manufacturing industry.

**ASB Showgrounds** 

XPO Exhibitions, 217 Greenlane Road West, Greenlane, Auckland, New Zealand PO Box 9682, Newmarket, Auckland

1149, New Zealand Phone: 09 976 8382 Fax: 09 379 3358 Email: aad@xpo.co.nz Website: www.emex.co.nz Contact: Mike Lust, exhibition sales

#### **Endel Lust Civil Engineer Limited**

Phone: 03 366 9989

**Enercon** 

212 Hazeldean Road, Sydenham,

Christchurch, New Zealand PO Box 17568, Sumner, Christchurch 8840, New Zealand

Phone: 03 384 7905 Fax: 03 384 7955 Email: samr@enercon.co.nz

Website: www.enercon.co.nz Contact: Sam Roose, senior energy

#### **Envivo Planning Surveying Engineering**

Phone: 09 630 9512

#### **EQM Industrial**

518 Omahu Road, Frimley, Hastings, New Zealand PO Box 2162, Stortford Lodge, Hastings 4153, New Zealand Phone: 06 878 8475

Fax: 06 878 8472 Email: tim@egm.co.nz Website: www.eam.co.nz

Contact: Tim Bloxham, sales & customer

#### **Eric Paton Ltd**

89 Station Road, Penrose, Auckland, New Zealand

PO Box 12047, Penrose, Auckland 1642,

New Zealand Phone: 09 579 1139 Fax: 09 579 8351

Email: gavin.davies@ericpaton.co.nz Website: www.ericpaton.co.nz Contact: Gavin Davies, sales engineer

#### **ESL Industries Limited**

1 Aranui Street, Miramar, Wellington, New Zealand

15200, Miramar, Wellington 6243,

New Zealand Phone: 04 891 0249 Email: nick@eslind.co.nz Website: www.eslind.co.nz

Contact: Nick Beauchamp, managing



#### **Eurotec Ltd**

**Eurotec is a leading New Zealand** supplier of technology solutions for the HVAC, electrical, industrial, refrigeration & food manufacturing, processing, distribution and retailing sectors. Solutions for maintenance & industrial sectors include Testo Instruments, Loggers and Thermal Imagers; DUSPOL Voltage Testers/ Multimeters and a comprehensive range of gas leak detections systems.

750 Great South Rd, Penrose, Auckland, New 7ealand

Box 14543, Panmure, Auckland 1741, New Zealand

Phone: 09 579 1990 Fax: 09 525 3334 Email: cfarmer@eurotec.co.nz

Website: www.eurotec.co.nz Contact: Chris Farmer, sales & marketing

**Forman Building Systems** 

Phone: 09 276 4000

#### Galco NZ Ltd

13 Fairfax Avenue, Penrose, Auckland, New 7ealand

PO Box 12-488, Penrose, Auckland 1064, New Zealand Phone: 09 579 6769

Fax: 09 579 6768

Email: hanyh@galco.co.nz Website: www.galco.co.nz Contact: Hany Hanna, operations



#### **Gallagher Contract Manufacturing** By employing Gallagher's range of core competencies, your own business will be able to focus on what it does best. Take your pick of the capabilities of all Gallagher divisions for a costeffective, complete turnkey solutions.

181 Kahikatea Drive, Melville, Hamilton, New Zealand

Private Bag 3026, Waikato Mail Centre, Hamilton 3240, New Zealand Phone: 0800 731 500

Fax: 07 838 9801

Email: scott.ellery@gallagher.co Website: www.gallagher.co/about-us/ business-units/contract-manufacturing/ Contact: Scott Ellery, business

development manager

#### **GEA Westfalia Separator New** Zealand Ltd

8 Fisher Crescent Mount Wellington Auckland, New Zealand PO Box 12008, Penrose, Auckland 1642,

New Zealand Phone: 09 276 2388 Fax: 09 259 0173

Email: nick.ramsden@gea.com Website: www.westfalia-separator.com Contact: Nick Ramsden, managing



#### Gilsen Ltd

We blast and prepare surfaces for construction, repair or restoration and remove contaminants and grime from equipment during routine maintenance, using our engineering expertise and advanced technologies dry ice blasting and vapour/ wet-abrasive blasting - to deliver superior results with lower overall costs.

292 Somerset Road, Parkvale, Carterton, New Zealand Box 273, Masterton, Masterton 5840, New Zealand Phone: 0508 445 736 Email: chris.giles@gilsen.co.nz Website: www.gilsen.com Contact: Chris Giles, manager



#### Global Stainless Ltd

Manufacturers of stainless steel vessel dome ends, dished and flange heads, hemispherical domes, jacketed pans, stainless steel spheres for vacuum and pressure vessels, long radius bends, stainless steel water pressure tanks, knuckling and tube bend rolling service, certified domes, pharmaceutical vessel dome heads, teat sprayer tanks, milk cooling tanks. 5704 Mountain Rd, Normanby, Hawera, New Zealand PO Box 720, Hawera 4640, New Zealand Phone: 06 272 8544 Fax: 06 272 8545 Email: admin@globalstainless.co.nz

Website: www.globalstainless.co.nz Contact: Lincoln Raikes, manager

#### **Hach Pacific**

Phone: 0800 50 55 66

#### **Hancock Industrial Ltd**

Phone: 09 373 2760

#### **Hastings Rubber Stamps**

416 West Heretaunga Street, Hastings, New Zealand

PO Box 269, Hastings 4156, New Zealand

Phone: 06 876 4865 Fax: 06 876 4869 Email: shop@hasbub.co.nz Website: www.hasrub.co.nz Contact: Donald Hurley

#### **HBM Plastics & Packaging**

PO Box 9270, Newmarket, Auckland 1149, New Zealand Phone: 09 271 6144 Email: leanne@hbm.com.au

Website: www.hbm.com.au Contact: Gary Brown, managing director



#### **Hilton Industrial Vacuums & Engineering Ltd**Powerful vacuums for difficult jobs.

With 20+ years industrial cleaning, and 18 year designing specialist vacuum cleaner systems. Hilton engineers innovate products as 'OH&S ready' solutions for the "people, process and plant" elements of industrial dust & waste management and used in over 26 different industries by many industry leaders. Dry & wet, sell & rent, OEM & customised.

240 Marua Road, Mt. Wellington, Auckland, New Zealand PO Box 11404, Ellerslie, Auckland 1542,

New Zealand Phone: 09 580 1467 Fax: 09 580 1468

Email: promotions@hiltonvacuums.com Website: www.hiltonvacuums.co.nz Contact: Dean Kelsall, director

#### **Hi-Tech Metal Fabrications Ltd** Phone: 09 274 6513

#### **Hydra-Cell Pumps Limited**

Unit 4 26 Goodshed Road, Maidstone, Upper Hutt, New Zealand PO Box 40-281, Upper Hutt 5140, New Zealand Phone: 04 526 4415 Email: sales@hydra-cell.co.nz Website: www.hydra-cell.com

Contact: Chris Anderson, service & sales

#### **Hydraulic Wholesalers Ltd**

3 Latham Court, Frankton, Hamilton, New Zealand

PO Box 5635, Hamilton 3242, New Zealand

Phone: 07 847 3487

Email: sales@hydraulicwholesalers.co.nz Website: www.hydraulicwholesalers.co.nz Contact: Brian Wallace, general manager

#### **Hydraulink Fluid Connectors** Limited

Phone: 0800 806 666

#### iCNC Ltd

2/501 Mt Wellington Highway,

Mt Wellington, Auckland, New Zealand PO Box 17074, Greenlane, Auckland

1546, New Zealand Phone: 0800 85 87 84 Email: beth@icnc.co.nz Website: www.icnc.co.nz Contact: Craig McGill, general manager

**IDC Technologies** 

Phone: 09 263 4759

Units 485 The Old Mill 10 Walker Street

Kaiapoi 7630, New Zealand Phone: 0508 312 780 Email: sales@i-e-s.co.nz Website: www.i-e-s.co.nz Contact: Mark Compton, owner

#### **Industrial Maintenance Group NZ** Ltd

101 Durham Street, Sydenham, Christchurch, New Zealand PO Box 33 083, Barrington, Christchurch 8244 New 7ealand Phone: 03 366 2920 Fax: 03 366 4561

Email: tom@industrialmaintenance.co.nz

Website:

www.industrialmaintenance.co.nz Contact: Tom Holtslag, managing director

#### **Innovative Prototype Services**

Phone: 07 823 0186

#### **Invert Robotics**

487 Tancreds Road, Lincoln, Canterbury. New Zealand

PO Box 69243, Lincoln, Canterbury 7640, New Zealand

Phone: 027 491 1070

Email: james@invertrobotics.com Website: www.invertrobotics.com Contact: James Robertson, CEO

#### **Iscar Pacific Ltd** Phone: 0800 808 477

**ITW Polymers & Fluids NZ** 

Phone: 0800 476 265

# James Walker

**James Walker New Zealand Ltd** Respected designer and manufacturer of innovative high-performance sealing products and solutions that keep the wheels of global industry turning. With comprehensive technical support the company is focused on solutions that extend maintenance intervals, eliminate unscheduled downtime and improve plant reliability.

Unit B, 43 Lady Ruby Drive, East Tamaki, Auckland, New Zealand

PO Box 58852, Botany, Manukau 2163,

New Zealand Phone: 09 272 1599 Fax: 09 272 3061

Email: chris.jacob@jameswalker.co.nz Website: www.jameswalker.biz Contact: Chris Jacob, managing director

#### **Jonassen Industrial Projects** Limited

85 Oteha Valley Road, Albany, Auckland 0632. New Zealand

Phone: 09 479 3952 Email: gen.lynch@jipl.co.nz Website: www.jipl.co.nz

Contact: Chris Jonassen, managing

director

#### JWB Group

18 Lorien Place, East Tamaki, Auckland, New Zealand PO Box 204104, Highbrook, Auckland

2161, New Zealand

Phone: 09 274 5727 Fax: 09 274 6712 Email: bryan@jwb.co.nz Website: www.jwb.co.nz Contact: Grant Bowring, managing



#### makes a difference

#### Karcher Ltd

Karcher has a complete range of cleaning solutions for the engineering and manufacturing industries including cleaning machinery, cleaning agents and service support.

66 Allens Road, East Tamaki, Auckland,

New Zealand

PO Box 58547, Botany, Manukau 2163,

New Zealand Phone: 09 274 4603 Fax: 09 274 5609 Email: mike@karcher.co.nz

Website: www.karcher.co.nz Contact: Mark Robinson, business development manager - professional

#### Kerzan (NZ) Ltd

Phone: 03 385 7619

#### **Kevin O'Connor & Associates** Limited

Phone: 06 356 7000

Leabourn & Rose Ltd Phone: 09 274 6186

**Leighton Contractors New Zealand** 

Phone: 09 362 1800

Leussink Engineering Phone: 00612 4260 7777



#### **LINAK New Zealand Ltd**

LINAK provide products that improve people's quality of life and working environment. The TECHLINE Division focuses on providing products for use in industrial equipment like machinery and workspace, building and construction, and mobile equipment. They produce quality actuator systems and lifting columns that improve the working environment.

Unit G, 61 Hugo Johnston Drive, Penrose,

Auckland, New Zealand PO Box 112390, Penrose, Auckland 1642,

New Zealand Phone: 09 580 2071 Mob: 021 4748 3647 Email: djohns@linak.com.au Website: www.linak.com.au

Contact: David Johns, branch manager

#### **LORDCO (CWG) NZ LTD**

Phone: 04 939 3944

#### **Mace Engineering Ltd**

40 Walker Street, Christchurch, New Zealand PO Box 4049, Christchurch, 8140, New Zealand

Phone: 03 379 5750 Email: geoff.sanders@maceengineering.

co.nz Website: www.maceengineering.co.nz Contact: Geoff Sanders, sales engineer

#### **Machinery House PTY NZ Ltd**

Unit D, 38 Highbrook Drive, East Tamaki, Auckland, New Zealand PO Box 276079, Manukau, Auckland 2241, New Zealand

Phone: 09 271 7234 Fax: 09 271 7237

Email: mdonald@machineryhouse.co.nz Website: www.machineryhouse.co.nz Contact: Miles Donald, branch manager

#### Magnetic Solutions (NZ) Ltd

74 Wallace Road, Dinsdale, Hamilton, New Zealand

PO Box 15204, Dinsdale, Hamilton 3243,

New Zealand Phone: 07 847 8881 Fax: 07 847 8851

Email: rob@magneticsolutions.co.nz Website: www.magneticsolutions.co.nz Contact: Rob Gillard, managing director



#### **Maintenance Engineering Services** Ltd

**Maintenance Engineering Services** Ltd (or MES as we are well known by) is a personal New Zealand business that has been established to supply manufacturing businesses with quality general engineering services such as plant installation & commissioning; site & factory maintenance; emergency breakdown and shift cover service, 24 hours a day - 7 days a week - 365 days a year.

22 Oakleigh Avenue, Takanini, Auckland,

New Zealand

PO Box 19085, Avondale, Auckland 1746,

New Zealand Phone: 021 308 250

Email: meservices@xtra.co.nz Website: www.meservices.co.nz Contact: Martin Luff, director

#### **Master Drive Services Ltd** Phone: 04 566 2341

**Matting Systems 2011 Ltd** Phone: 021 170 4179

#### maxon motor Australia

Phone: 00612 9476 4777

#### **Metal Monster Ltd**

PO Box 305 345 Triton Plaza, North Shore 0757, Auckland, New Zealand Phone: 09 473 0705

Fax: 09 473 0706 Email: sales@metal-monster.co.nz

Website: www.metal-monster.co.nz Contact: Len Wood, MD

#### **Metal Pro Ltd**

Phone: 09 448 5510

#### **Metal Spray Suppliers NZ Itd**

Unit D, 400 Great North Road, Grey Lynn, Auckland, New Zealand PO Box 47-409, Ponsonby, Auckland 1144, New Zealand Phone: 09 376 0463

Fax: 09 378 1509 Email: mark@metal-spray.co.nz Website: www.metal-spray.co.nz Contact: Mark Pearson, manager

#### **Millar Paterson Metals Limited.**

Phone: 09 303 4619

#### **Modular Conveyors Ltd** 1/42 Ellice Rd, Wairau Valley, Auckland,

New Zealand Phone: 09 969 3281 Email: phil@mcl.net.nz Website: www.mcl.net.nz Contact: Phil Cooper, director **Motus Hydraulics Limited** 

Phone: 09 829 0913



#### Multi-Mig (NZ)

Multi-Mig (NZ) is a 100% NZ owned independent importer/distributor of welding equipment. Established in 1985 Multi-Mig continues to supply European made welding machines, parts and consumables throughout NZ via its distribution network.

11/46 Ellice Road, Glenfield, Auckland,

New Zealand

PO Box 101151, North Shore Mail Centre, Auckland 0749, New Zealand

Phone: 09 443 4248 Fax: 09 443 4249

Email: graham@multimig.co.nz Website: www.multimig.co.nz Contact: Graham Fleury, managing

**MWH Global** 

director

Phone: 00614 381 6745

**NALCO | National Aluminium Ltd** 



#### National Instruments

National Instruments graphical programming software, LabVIEW, and modular, open hardware, redefines engineers work throughout the product design, delivering easy solutions for a variety of applications from data logging to high-performance automated test, industrial control, advanced embedded control and monitoring.

Unit 104, Level 1, 23 Edwin Street, Mt Eden, Auckland, New Zealand PO Box 147801, Ponsonby, Auckland 1034 New Zealand

Phone: 0800 553 322 Email: info.newzealand@ni.com Website: www.nz.ni.com Contact: Sayuj Nath, national sales manager (New Zealand)

**Network International Freight** 

Phone: 09 275 5970



#### **New Zealand Duct & Flex** Largest stockist Modular LIPLOCK ducting. Galvanised, stainless, 2mm Heavy steel, smooth pressed bends and connectors. German flex including specialist weld flex. Fans and complete filtration systems from

Danish JKF Industri. Fume arms - in stock for overnight delivery. 13F Saleyards Road, Otahuhu, Auckland, New Zealand

PO Box 87241, Meadowbank, Auckland 1742, New Zealand Phone: 09 276 8020

Email: alison.campbell@nzduct.co.nz Website: www.nzduct.co.nz Contact: Alison Campbell, marketing **New Zealand Wind Energy** 

**Association** Phone: 04 499 5046



#### **NHP Electrical Engineering** Products (NZ) Ltd

NHP specialise in motor control, power distribution and automation systems. With locations across the North and South Islands and exclusive distributorship of Rockwell Automation and Allen-Bradley®, NHP offer complete industrial electrical and automation solutions to the New Zealand market.

118a Carbine Road, Mount Wellington, Auckland, New Zealand PO Box 62009, Sylvia Park, Auckland 1644, New Zealand Phone: 09 276 1967 Fax: 09 276 1992 Email: gthomson@nhp-nz.com Website: www.nhp-nz.com Contact: Greg Thomson, general manager, New Zealand

#### Nightside Test Design Ltd.

Unit 11, 40 Hayton Road, Wigram PO Box 9040, Tower Junction, Christchurch 8042, New Zealand Wigram

Phone: 03 338 0034 Fax: 03 338 2034

Email: peter@nightside.co.nz Website: www.nightside.co.nz Contact: Peter Brown, managing director

#### Norgren

Phone: 09 579 0189

#### **North Hydraulics Ltds**

8B Trugood Drive, East Tamaki, Auckland, New Zealand

PO Box 58098, Botany, Auckland 2163, New Zealand

Phone: 09 274 7530 Fax: 09 274 6496

Email: neil.calvert@northhydraulics.co.nz Website: www northhydraulics.co.nz Contact: Neil Calvert, manager

#### **NSK New Zealand Limited**

3 Te Apunga Place, Mount Wellington, Auckland, New Zealand PO Box 9439, Newmarket, Newmarket

1149, New Zealand Phone: 09 276 4992 Email: wilson-t@nsk.com Website: www.nsk.co.nz Contact: Tony Wilson, operations

manager

**NZ Aerial Mapping** Phone: 06 873 7550

**NZ Welding Repair Services Ltd** 

Phone: 09 826 1425



#### **NZ Welding School**

NZ Welding School is Australasia's largest provider of high quality welding training at certificate levels 3 and 4. We also provide industry specific ticketing and training tailored to the individual needs of the business and its employees.

5D Owens Place, Mount Maunganui, Tauranga, New Zealand PO Box 10070, Bayfair, Tauranga 3152,

New Zealand Phone: 07 927 6700

Fax: 07 927 6716

Email: karen.tangaere@weldingschool.

Website: www.nzweldingschool.co.nz Contact: Karen Tangaere, general



#### Objective 3D - 3D Printing Solutions

Objective 3D are the largest distributor of Stratasys 3D Printers across Australia and New Zealand. Objective 3D also offer a state-of-theart build centre with 12 professional 3D printers and expert staff onsite to print 3D parts for you. We also provide full part finishing capability including painting.

New Zealand Office: PO Box 4057, Glenfield, Auckland 0747, New Zealand, Australia 3D Printers 3D parts, Unit 7/490 Frankston Dandenong Road, Carrum Downs, Australia

Phone: 09 801 0380

Email: michellet@objective3d.com.au Website: www.objective3d.com.au Contact: Michelle Turner, marketing



Oli Vibrators Pty Ltd A global leader in the supply of quality industrial vibrators and flow aids, Oli Vibrators is now one of the most preferred vibrator companies in the New Zealand market. Oli's vibrators are engineered to the highest European standards, with a competitive price to performance ratio and an enviable reliability factor.

Factory 4, 3 Gatwick Road, Bayswater, Melbourne, Australia

PO Box 441, Kilsyth, Melbourne 3137, Australia

Phone: 0613 8761 6911 Email: mark@olivibrators.com.au Website: www.olivibrators.com.au Contact: Mark Thompson, general



#### **Omron Electronics**

As a leading supplier of control equipment for the manufacturing industry, Omron provides a wide spectrum of equipment ranging from factory automation (FA) controllers to sensors, switches, relays and safety equipment that meet some 100,000 specifications and support innovation and productivity improvement in all types of production operations. Omron products can be found in both consumer products and commercial applications. Omron relays and switches play an important role in the operation of household appliances, automobiles and machinery. Temperature control devices ensure the efficiency of

heating and air-conditioning devices as well as monitor annealing ovens on manufacturing lines. Sensors and programmable controllers automate control on manufacturing lines. For all these products, Omron works with customers to create effective, cost-efficient solutions.

65 Boston Road, Mt Eden, Auckland, New Zealand 65 Boston Road, Mt Eden, Auckland 1023, New Zealand Phone: 09 358 4400

Fax: 09 358 4411

Email: jwong@ap.omron.com Website: www.omron.co.nz Contact: Ross Winks, regional manager

#### **ORIX New Zealand Limited** 32 Manukau Road, Newmarket.

Auckland, New Zealand Private Bag 999 24, Newmarket, Auckland 1149, New Zealand Phone: 09 520 9700 Fax: 09 520 9792 Email: suvia.desa@orix.co.nz

Website: www.orix.co.nz Contact: Andrew Griffin, national commercial manager

#### P L Berry & Associates

Phone: 03 366 2761



Page Macrae Engineering Engineering design, heavy fabrication, pipe spooling, storage tank construction, stainless steel fabrication, onsite installation and project management are just some of the services that we provide. We pride ourselves on the ability to solve problems through innovation and "thinking outside the square".

61 Aerodrome Road, Mount Maunganui, Tauranga, New Zealand PO Box 4050, Mount Maunganui South, Tauranga 3149, New Zealand

Phone: 07 575 5079 Fax: 07 575 5994

Email: melh@page-macrae.co.nz Website: www.page-macrae.co.nz Contact: Melanie Hartwell, marketing

#### **Pakrite Systems Ltd**

Phone: 03 358 4631

#### Pall NZ

Phone: 021 190 4359

#### **Permark Industries Limited**

103 Felton Mathew Ave, St Johns, Auckland, New Zealand PO Box 14-142, Panmure, Auckland 1741, New Zealand

Phone: 09 578 2901 Email: sales@permark.co.nz Website: www.permark.co.nz Contact: Martin Crooks, sales manager

#### **Perry Grating**

119 Oropi Road, Greerton, Tauranga, New Zealand

PO Box 9226, Greerton, Tauranga 3142, New Zealand

Phone: 07 577 9448

Email: brendan.bass@perry.co.nz Website: www.perrygrating.co.nz

Contact: Brendan Bass, manager

Go to the **NZ Engineering News** website

www.engineeringnews.co.nz



**Phoenix Wrapping Australasia Ltd** Importers, distributors & service agents of pallet wrapping machinery & consumables. Manual, semi-automatic & fully-automatic machines, high or low profile turntable, rotary arm, high speed rotating ring machines. Line integration. Maintenance & servicing. Quality hand & machine rolls, 7-layer cast film, high clarity, superior stretch-ability, memory flexibility, optional recycled film.

15 Dunlop Road, Onekawa, Napier,

New Zealand

PO Box 3002, Onekawa, Napier 4142,

New Zealand

Phone: 0800 869 727

Email: orders@phoenixwrap.co.nz Website: www.phoenixwrap.co.nz Contact: Alan Haslett, managing director

#### **PowerBox Pacific Ltd**

1A Henry Rose Place, Albany, Auckland, New Zealand PO Box 300 479, Albany, Auckland 0752,

New Zealand Phone: 09 415 8320

Fax: 09 415 9780 Email: ajeffcoat@powerBox.co.nz Website: www.powerBox.co.nz

Contact: Alistair Jeffcoat, general manager

#### **POWERGEN Group Ltd**

49 Whiore Avenue, Tauriko, Tauranga, New Zealand PO Box 14254, Tauranga 3143,

New Zealand Phone: 07 543 1336

Email: frances@powergen.co.nz Website: www.powergen.co.nz Contact: Ken Amerson, contracts

manager & estimator

#### **PowerSave Light Company (2012)** Limited

Unit H, 6 Polaris Place, East Tamaki, Auckland, New Zealand PO Box 259127, Botany, Auckland 2163, New Zealand

Phone: 09 265 1200 Fax: 09 265 1203

Email: save@powersavelight.co.nz Website: www.powersavelight.co.nz Contact: Mike Stewart, director

#### **Prescott Engineering Ltd**

7 Prescott Street, Penrose, Auckland, New Zealand PO Box 12225, Penrose, Auckland 1642,

New Zealand Phone: 09 579 7424

Email: bob@prescottengineering.co.nz Website: www.prescottengineering.co.nz Contact: Bob Hulme, managing director

#### **Pro Sheetmetals Ltd**

Phone: 09 271 2391

#### **Production Turned Parts Ltd.**

Unit 4, 65 Firth Street, Drury, Auckland, New Zealand

New Zealand Phone: 09 294 8102 Email: ptp@proturn.co.nz

PO Box 186, Drury, Auckland 2247,

Website: www.proturn.co.nz Contact: Darlene Harkins, accounts/office

#### manager

Prolan 1357 State Highway 2, RD 2, Omokoroa, Tauranga 3172, New Zealand Phone: 07 548 0823

www.engineeringnews.co.nz

Email: info@prolan.co.nz Website: www.prolan.co.nz Contact: Murray Shaw, director

#### **Quicksilver Truck Liners** Phone: 09 836 9627

**R & P TRADERS** 

Phone: 09 818 2400

#### RasterTech New Zealand

1 Te Mara Place, Merrilands, New Plymouth, New Zealand PO Box 3087, Fitzroy, New Plymouth 4310, New Zealand Phone: 06 769 6864

Fax: 06 769 6861 Email: kevin@rastertech.co.nz

Website: www rastertech co nz Contact: Kevin Breedveld, managing director

#### **Realcold New Zealand Limited**

Phone: 09 526 5700



#### **ReCoila Hose & Cord Reels** We've been designing and engineering quality spring, manual and motor rewind hose reels for over 30 years - just one of the reasons why we're Australia and New Zealand's premier hose reel manufacturer.

Unit 1/A, 93 Ellice Road, Glenfield, North Shore City, New Zealand PO Box 101582, North Shore, Auckland

0745, New Zealand Phone: 09 441 0177 Fax: 09 441 0178

Email: design@recoila.com.au Website: www.recoila.com.au Contact: Judi, office manager

#### **Reform Automation**

30 Holyoake Crescent, Avalon, Lower

Hutt, New Zealand

PO Box 38 736, Wellington Mail Centre, Lower Hutt 5045, New Zealand

Phone: 0800 288 668 Fax: 04 576 9341

Email: ray@reform-automation.co.nz Website: www.reform-automation.co.nz Contact: Ray Connon, service & sales

#### **Revolution Precision Machinery**

223 Annex Road, Middleton, Christchurch, New Zealand PO Box 21015, Edgeware, Christchurch 8048, New Zealand

Phone: 022 653 4817 Fmail: sales@rpmcnc.co.nz Website: www.rpmcnc.co.nz Contact: Phil Robinson

#### **RML Engineering Ltd**

Phone: 07 849 3215



**Roadrunner Manufacturing NZ Ltd** New Zealand distributor of OMAX and MAXIEM Abrasive Wateriet Machines. We have a trained OMAX technician in New Zealand to offer our customers full in-country after sales support, service and spare part supplies. Manufacturer of aluminium equipment for the transport, marine and agriculture industries.

53 Bridge Street, Bulls, New Zealand

Phone: 06 322 1575

Fax: 06 322 1351

Email: info@roadrunnerltd.co.nz Website: www.roadrunnerltd.co.nz Contact: Fred Ward, director

#### Rockwell **Automation**

**Rockwell Automation N.Z. Ltd Rockwell Automation New Zealand** is the subsidiary of Rockwell Automation, Inc. - a leading global provider of industrial power, automation control and information solutions that helps manufacturers achieve a competitive advantage in their businesses. The company's leading global brands include Allen-Bradley® controls and Rockwell Software® factory management software.

2B Pacific Rise, Mt Wellington, Auckland, New Zealand

PO Box 14047, Panmure, Auckland 1741, New Zealand

Phone: 09 276 3070 Fax: 09 276 5406

administrator

Email: grazey@ra.rockwell.com Website: www.rockwellautomation.co.nz Contact: Greta Razey, sales and marketing

#### **Rose Engineering Ltd**

22 Akatea Rd, Glendene, Auckland, New 7ealand

Auckland 0602, New Zealand Phone: 09 818 4670

Email: admin@roseengineering.co.nz Website: www.roseengineering.co.nz Contact: Dave Ash, sales/engineer

#### **SAECOWilson**

88 Hastie Avenue, Mangere, Auckland,

New Zealand

PO Box 22256, Otahuhu, Auckland 1640, New Zealand

Phone: 0800 338 833

Email: paul.connolly@saecowilson.co.nz

Website: www.saecowilson.co.nz Contact: Branch managers

#### Safety Equipment Australia Pty Ltd

Phone: 0612 9910 7500



Salesoft CAD Solutions Ltd Salesoft CAD Solutions Ltd is an authorised value added reseller for Autodesk. We offer professional computer aided design software, training, support and consulting for a wide range of industries, including architectural, engineering and education. Salesoft CAD Solutions is also an Autodesk authorised training and certification centre. We have a respected position in the market after 25 years to the industry.

115 Grafton Road, Grafton, Auckland, New Zealand

PO Box 90 394, Victoria St West, City Centre, Auckland 1142, New Zealand

Phone: 09 373 2989 Email: team@salesoft.co.nz Website: www.salesoft.co.nz Contact: Peter Ostrowski, sales consultant

#### Schneider Electric

38 Business Parade South, Highbrook, Auckland, New Zealand PO Box 259370, Botany, Auckland 2163, New Zealand

Phone: 0800 652 999 Fax: 09 829 0491

Email: jessica.snook@schneider-electric.

com

Website: www.schneider-electric.com Contact: Jessica Snook, marketing communications executive

#### Scion

49 Sala Street Private Bag 3020, Rotorua Mail Centre, Rotorua 3046, New Zealand Whakarewarewa, Rotorua, New Zealand

Phone: 07 343 5899

Email: douglas.gaunt@scionresearch.com Website: www.scionresearch.com Contact: Douglas Gaunt, science leader, wood and fibre

#### **Scott Machinery**

Auckland, Christchurch, Dunedin, New Zealand PO Box 16213, Hornby, Christchurch 8441 New Zealand Phone: 0800 215 215

Email: sales@scottmachinery.co.nz Website: www.scottmachinery.co.nz Contact: Christian Scott, general manager

#### **Screw Productions Ltd**

Phone: 07 348 8050



#### Shape NZ Limited

Shape NZ provides a full range of manufacturing solutions and is focused on delivering high level service and satisfaction to all customers. With over 20 years experience in metal manufacturing and assembly we offer a strong working partnership. Shape is a successful exporter, and is proud to offer world-class products and solutions.

44 Clarence Street South, Addington, Christchurch, New Zealand PO Box 9096, Tower Junction, Christchurch 8024, New Zealand Phone: 03 338 6386

Fax: 03 338 6387 Email: nick@shapenz.com Website: www.shapenz.com Contact: Nick Cairns, business development manager



#### SICK Pty Ltd

SICK is a specialised sensor company providing a unique combination of world leading sensor manufacturers with vast application experience. SICK personnel are trained service and technical engineers, ensuring fast, reliable solutions for a wide variety of situations, from standard applications to customised.

Unit 6/13 Beatrice Tinsley Crescent North Harbour Industrial Estate, Albany, Auckland, New Zealand

PO Box 302022, NHPC, Auckland 0751, New Zealand Phone: 0800 222 278

Email: aharika@sick.com.au Website: www.sick.co.nz

Contact: Abla Harika, marketing assistant **Sigma Sheetmetal Products Ltd** 

Phone: 09 636 3657

#### Sika NZ Ltd

85-91 Patiki Road, Avondale, Auckland, New Zealand

PO Box 19192, Avondale, Auckland 1746,

New Zealand Phone: 09 820 2900

Email: robertson.duncan@nz.sika.com

Website: www.sika.co.nz

Contact: Duncan Robertson, marketing

and communications manager

#### **Simpro Handling Equipment Ltd**

51 Church St, Onehunga, Auckland,

New Zealand

PO Box 13-679, Onehunga, Auckland

1643, New Zealand Phone: 09 634 7445 Fax: 09 634 7438

Email: steve@simpro.net.nz Website: www.simpro.net.nz Contact: Steve Simmons, manager

#### Skellerup

Phone: 03 389 9189

#### Society of Manufacturing **Engineers Chapter 415**

Phone: 03 983 2389



**Southern Engineering Services** SES Group has a reputation for high quality engineering services and products. SES Head office is in NSW . Australia, with operating divisions in Australia and Auckland, New Zealand. SES Group provides engineering and key product support services to customers in steel, paper, mining, timber, engineering, packaging, manufacturing and more.

Unit I/138 Harris Road, East Tamaki, Auckland, New Zealand

PO Box 58 573, Botany, Auckland 2163,

New Zealand

Phone: 09 273 9723 Email: colin.downey@sesgroup.com.au Website: www.sesgroup.com.au Contact: Colin Downey, regional sales

manager NZ



#### **Southern Institute of Technology Southern Institute of Technology** - home of the Zero Fees Scheme! Campuses in Invercargill, Queenstown, Christchurch & Gore, New Zealand.

133 Tay Street, Richmond, Invercargill, New Zealand

Private Bag 90114, Invercargill 9840, New Zealand

Phone: 0800 403 337 Email: info@sit.ac.nz Website: www.sit.ac.nz

Contact: Susie Lum, marketing team

**Specialty Oils (NZ) Limited** 

#### Phone: 09 432 0529 **Sprockets NZ - Precision** Manufacturing

31-35 Haybittle Street, Feilding, New Zealand PO Box 65, Feilding 4702, New Zealand

Phone: 06 323 6072 Fax: 06 323 6212

Email: sales@pmlnz.com Website: www.sprocketsnz.co.nz Contact: Darrell, owner/sales manager

# STEVENSON

#### Engineering

**Stevenson Engineering Ltd** Stevenson Engineering is New Zealand's leading mechanical and engineering support company providing support and engineering solutions for fixed and mobile plant on or offsite. Stevenson's offer fully dedicated weld shop, machine shop, hydraulic shop, specialised fitting, heavy plant, engine & transmission overhauls, lube service, auto electrical and dyno shop.

59 Lady Ruby Drive, East Tamaki, Auckland, New Zealand PO Box 58476, Botany, Auckland 2163, New Zealand

Phone: 09 985 4900

Email: kevin.hickey@stevenson.co.nz Website: www.stevensonengineering.

co.nz

Contact: Kevin Hickey, customer relations and sales

#### Stormwater360

Phone: 09 476 5586

#### **SWP N.Z Ltd**

16A Saltash Street, Upper Vogeltown, New Plymouth, New Zealand PO Box 8140, New Plymouth 4342, New Zealand

Phone: 06 753 8044 Email: warren@swp.co.nz Website: www.swp.com.au Contact: Warren Johns, operations manager

#### Tai Poutini Polytechnic

Phone: 0800 800 411

**Taslo Steel Security Ltd** 

Phone: 07 347 4644



#### **Tasman Machinery Ltd**

Tasman Machinery Ltd is one of the leading suppliers of quality plastics machinery and 3D printing equipment into New Zealand and Australia with offices in Auckland, Dunedin and Melbourne

14-16 Auburn St, Grafton, Auckland,

PO Box 1644, Auckland CBD, Auckland 1023 New Zealand

Phone: 09 379 5716

Email: oliver@tasmanmachinery.co.nz Website: www.tasmanmachinery.co.nz

www.tasman3d.co.nz

Contact: Oliver Wolf, national sales

### **Tauranga Engineering Industries**

26 Newton Street, Mount Maunganui,

New Zealand

PO Box 4325, Mount Maunganui South, Mount Maunganui 3149, New Zealand

Phone: 07 575 7960 Fax: 07 575 8502 Fmail: tina@tei.co.nz Website: www.tei.co.nz

Contact: Tina Heath, general manager



#### **Technical Forgings**

Technical Forgings was created in 1989, is wholly New Zealand owned and is the largest non-ferrous forging component supplier in New Zealand. We specialise in brass/copper alloys, aluminium alloys/magnesium and more recently titanium is under development. We are AS/NZ ISO 9001-2008.

4 Bancroft Crescent, Glendene, Auckland, New Zealand

PO Box 31043, Milford, Auckland, New Zealand

Phone: 09 813 3270 or 027 472 1021

Fax: 09 813 3271

Email: karolina@techforge.co.nz Website: www.technicalforgings.com Contact: Karolina Bratek, factory manager

#### TechRentals NZ Ltd

669 Gt South Rd, Penrose, Auckland, New Zealand PO Box 12032, Penrose, Auckland 1642,

New Zealand

Phone: 09 589 2030 Fax: 09 589 2031

Email: JohnT@techrentals.co.nz Website: www.techrentals.co.nz Contact: John Thurston, director

#### Teknic Deezinez Ltd

Phone: 07 959 2012

#### The Boltholder Ltd

9 Farmers Road, Matamata, New Zealand PO Box 259, Matamata 3440,

New Zealand

Phone: 07 881 9180

Fmail: lisette@theboltholder.co.nz Website: www.theboltholder.co.nz Contact: Roger Collins, operations

#### The Engine Room Ltd

Phone: 09 480 2248

#### Toolharn Itd

Phone: 09 570 8064

#### **Trade Scales Limited**

Phone: 09 537 4776 Fax: 09 537 4778

Email: catriona@tradescales.co.nz Website: www.tradescales.co.nz Contact: Catriona MacLean, sales &

#### Tradegear Ltd.

Phone: 0800 22 4434

#### Treadway Ltd

55 Whangarei Heads Rd, Onerahi. Whangarei, New Zealand

PO Box 246. Central. Whangarei 0140.

New Zealand

Phone: 09 436 2044 Fax: 09 436 2046 Email: john@treadway.co.nz Website: www.treadway.co.nz Contact: Graeme Bill, sales manager



#### **Trotec Laser**

Trotec Laser offers the largest and most advanced laser engraving and laser cutting machine portfolio across Australia and New Zealand. which makes us the perfect partner for every type of laser application. European built, locally sold and serviced.

Unit 2, 40 Dunn Road, Smeaton Grange, Sydney, NSW 2567, Australia Phone: 0612 4647 7600 Fax: 0612 4647 9677

Email: info@troteclaser.com.au Website: www.troteclaser.com.au Contact: Angela Perkiss, marketing

#### **Turnco Engineering Limited**

Phone: 09 269 0160

#### W & R Jack Ltd ("Jacks")

19 Allens Road, East Tamaki, Auckland, New Zealand

PO Box 259174, Botany, Manukau 2163,

New Zealand Phone: 0800 522 577 Fax: 09 271 7728

Email: richard.bealing@jacks.co.nz

Website: www.jacks.co.nz

Contact: Richard Bealing, marketing

#### **Washtech Ltd**

Phone: 0800 STARLINE (782 75463)

#### **Weldwell New Zealand**

64 Thames Street, Pandora, Napier,

New Zealand

Private Bag 6025, Onekawa, Napier 4142,

New Zealand Phone: 06 834 1600

Fax: 06 835 4568 Fmail: rborschmann@weldwell co.nz

Website: www.weldwell.co.nz Contact: Russell Borschmann, national business development manager

#### Wellforces Ltd

Phone: 0800 888 786



#### White International

**New Zealand Ltd** Importer and Distributor of Water Pumps and accessories. Agents for DAB, ZENIT, BIANCO, TESLA, TREVI,

PONDMATE, CNP, GWS. Eastfield Estate, 15G Kerwyn Avenue, East Tamaki, Auckland, New Zealand PO Box 12-704, Penrose, Auckland 1642,

New Zealand Phone: 09 579 9777 Fax: 09 579 7775

Email: garth.cohen@whiteint.co.nz Website: www.whiteint.co.nz Contact: Garth Cohen, NZ manager

#### Windsor Engineering Group -**IPSCO Division**

Phone: 09 262 4474

**Winston & Gordon Davies Ltd** 

Phone: 09 415 9333

**Wireless Control Systems** Phone: 09 623 3748



# Romy knows the engineering industry

Romy Udanga, an engineer, has been in the publishing industry for more than two decades. Call him to discuss your editorial needs.

027 559 5771 or romy@hayleymedia.com

#### **Automation**

#### **Analytical instrumentation**

Absolute Vacuum Services Limited Air New Zealand Calibration Services apt Group

Eurotec Ltd

National Instruments

Rockwell Automation N.Z. Ltd Southern Institute of Technology

TechRentals NZ Ltd

#### **Automated data collection**

ant Group

Design Energy Ltd

Eurotec Ltd

National Instruments

NHP Electrical Engineering

Products (N7) Ltd

Nightside Test Design Ltd

Rockwell Automation N.Z. Ltd

SICK Pty Ltd

#### **Automated materials handling** systems

Aurora Process Solutions Automation Design Ltd

CADPRO Systems Ltd

Design Energy Ltd

Oli Vibrators Pty Ltd

Phoenix Wrapping Australasia Ltd

Reform Automation

Roadrunner Manufacturing NZ Ltd

Rockwell Automation N.7 Ltd

Schneider Electric

SICK Pty Ltd

#### **Automation & control systems**

**ATS Pneumatics** 

Aurora Process Solutions

Autoline Industrial

Automation Design Ltd

Connection Technologies Ltd

Control Devices

Design Energy Ltd

Eurotec Ltd

LINAK New Zealand Ltd

National Instruments

NHP Electrical Engineering

Products (NZ) Ltd

Omron Electronics

Phoenix Wrapping Australasia Ltd

Powerbox Pacific Ltd

Rockwell Automation N.Z. Ltd

Schneider Flectric

SICK Ptv Ltd

#### **Barcoding equipment**

Gallagher Contract Manufacturing SICK Pty Ltd

#### Circuit boards

Baskiville.Com Ltd

Gallagher Contract Manufacturing

Multi-Mig (NZ)

Nightside Test Design Ltd

#### **Data aquisition equipment**

apt Group

Furotec Ltd

National Instruments

NHP Electrical Engineering

Products (NZ) Ltd

Nightside Test Design Ltd

Phoenix Wrapping Australasia Ltd

TechRentals NZ Ltd

#### Digital readout equipment

Control Devices

NHP Electrical Engineering Products (NZ) Ltd

SICK Pty Ltd

#### **Electronics**

Baskiville.Com Ltd

EMEX – Engineering, Machinery &

**Electronics Exhibition** 

Gallagher Contract Manufacturing

National Instruments

Objective 3D – 3D Printing Solutions

Omron Electronics

Permark Industries Limited

Powerbox Pacific Ltd

Rockwell Automation N.Z. Ltd

SICK Ptv Ltd

Southern Institute of Technology

Technical Forgings

#### **Electronics test equipment**

Air New Zealand Calibration Services

Baskiville.Com Ltd

Gallagher Contract Manufacturing

Magnetic Solutions (NZ) Ltd

National Instruments

Nightside Test Design Ltd

Powerbox Pacific Ltd

Southern Institute of Technology

TechRentals NZ Ltd

#### Instrumentation & controls

Absolute Vacuum Services Limited Air New Zealand Calibration Services

Appointments Recruitment Specialists Ltd

Baskiville.Com Ltd Connection Technologies Ltd

Control Devices

Furotec Ltd

**National Instruments** 

NHP Electrical Engineering

Products (NZ) Ltd

Nightside Test Design Ltd Omron Electronics

Permark Industries Limited

Phoenix Wrapping Australasia Ltd

Rockwell Automation N.Z. Ltd SICK Ptv Ltd

Southern Institute of Technology

#### Measurement & control

Absolute Vacuum Services Limited Air New Zealand Calibration Services

apt Group Aurora Process Solutions

**Control Devices** 

Design Energy Ltd

Eurotec Ltd

Galco NZ Ltd

Magnetic Solutions (NZ) Ltd

**National Instruments** 

Nightside Test Design Ltd

Omron Electronics

Phoenix Wrapping Australasia Ltd

Rockwell Automation N.Z. Ltd Schneider Electric

SICK Pty Ltd

Southern Institute of Technology

TechRentals NZ Ltd

#### **Monitors & analysers** apt Group

Eurotec Ltd

National Instruments

NHP Electrical Engineering Products (NZ) Ltd

Rockwell Automation N.Z. Ltd

Schneider Electric

SICK Ptv Ltd

Southern Institute of Technology

#### **PLCs (Programmable logic** controllers)

Automation Design Ltd LINAK New Zealand Ltd National Instruments

NHP Electrical Engineering

Products (NZ) Ltd

Omron Flectronics Phoenix Wrapping Australasia Ltd

Rockwell Automation N.Z. Ltd

Schneider Electric

#### **Process controls**

Appointments Recruitment Specialists Ltd ASTO N7

ATS Pneumatics

Control Devices

National Instruments

NHP Electrical Engineering

Products (NZ) Ltd Omron Electronics

Phoenix Wrapping Australasia Ltd

Rockwell Automation N.Z. Ltd

Schneider Flectric

SICK Ptv Ltd **Process instrumentation** 

Absolute Vacuum Services Limited

Control Devices

National Instruments

Omron Electronics Rockwell Automation N.Z. Ltd

SICK Ptv Ltd TechRentals NZ Ltd

**Remote control systems** 

Control Devices

Eurotec Ltd

National Instruments NHP Electrical Engineering

Products (NZ) Ltd

Omron Electronics Rockwell Automation N.Z. Ltd

#### SICK Pty Ltd

**Robots & robotics** Appointments Recruitment Specialists Ltd

Automation Equipment (N.Z.) Ltd Denis Cunningham Ltd

Design Energy Ltd EMEX – Engineering, Machinery &

**Electronics Exhibition** Metal Monster Ltd

National Instruments

Objective 3D - 3D Printing Solutions

Omron Electronics Phoenix Wrapping Australasia Ltd

Roadrunner Manufacturing NZ Ltd Shape NZ Limited

SICK Pty Ltd Tasman Machinery Ltd

**Scanners** NHP Electrical Engineering

Products (NZ) Ltd Objective 3D – 3D Printing Solutions

Omron Electronics

SICK Pty Ltd

#### Sensors & sensing equipment

Baskiville.Com Ltd

Control Devices

Design Energy Ltd

Magnetic Solutions (NZ) Ltd

Omron Electronics

Phoenix Wrapping Australasia Ltd

Schneider Flectric

SICK Ptv Ltd

Connection Technologies Ltd

Eurotec Ltd

Galco N7 Ltd

Multi-Mig (NZ)

NHP Electrical Engineering

Products (NZ) Ltd

Phoenix Wrapping Australasia Ltd

Rockwell Automation N.7. Ltd.

SICK Ptv Ltd

White International New Zealand Ltd

Omron Electronics Phoenix Wrapping Australasia Ltd

Powerbox Pacific Ltd

Design Energy Ltd

Nightside Test Design Ltd

Reform Automation

# SICK Pty Ltd

CADPRO Systems Ltd EMEX - Engineering, Machinery &

Gallagher Contract Manufacturing

Objective 3D – 3D Printing Solutions

#### **CadCam software**

Gallagher Contract Manufacturing Objective 3D – 3D Printing Solutions

Reform Automation

**Technical Forgings** 

Eurotec Ltd

National Instruments

NHP Electrical Engineering

Products (NZ) Ltd

Nightside Test Design Ltd

Rockwell Automation N.Z. Ltd

White International New Zealand Ltd

#### Switches & switchgear

Chemz Ltd

**Control Devices** 

LINAK New Zealand Ltd

**National Instruments** 

**Omron Electronics** 

Schneider Electric

**Systems integration** 

**National Instruments** 

**Systems intergration** 

National Instruments

Rockwell Automation N.Z. Ltd

#### Design

3D printing

NZ Welding School

**Electronics Exhibition** 

Tasman Machinery Ltd

CADPRO Systems Ltd

RasterTech New Zealand

Southern Institute of Technology

#### Computer Assisted Design (CAD)

Appointments Recruitment Specialists Ltd Automation Design Ltd CADPRO Systems Ltd Calmac Engineering Ltd

Cranequip Engineering Ltd

Custom Cutting Formes Ltd

Design Energy Ltd

EMEX – Engineering, Machinery & Electronics Exhibition

Gallagher Contract Manufacturing JWB Group

NZ Welding School

Objective 3D – 3D Printing Solutions

Page Macrae Engineering

RasterTech New Zealand

Roadrunner Manufacturing NZ Ltd

Salesoft CAD Solutions Ltd

Shane N7 Limited

Simpro Handling Equipment

Southern Institute of Technology Technical Forgings

#### **Control design & integration**

ATS Pneumatics Automation Design Ltd National Instruments

Omron Electronics

Phoenix Wrapping Australasia Ltd Southern Institute of Technology

#### Controllers

Control Devices National Instruments Phoenix Wrapping Australasia Ltd Southern Institute of Technology

Appointments Recruitment Specialists Ltd Automation Design Ltd CADPRO Systems Ltd Design Energy Ltd Gallagher Contract Manufacturing Objective 3D - 3D Printing Solutions Phoenix Wrapping Australasia Ltd Powerbox Pacific Ltd Prescott Engineering Ltd RasterTech New Zealand Salesoft CAD Solutions Ltd

Southern Institute of Technology

#### **Industrial design**

**AES Waterblasters** Automation Design Ltd CADPRO Systems Ltd Colourgrip Surfacing Ltd Control Devices Design Energy Ltd **ESL Industries Limited** Gallagher Contract Manufacturing Mace Engineering Ltd National Instruments New Zealand Duct & Flex NZ Welding School Objective 3D - 3D Printing Solutions Oli Vibrators Pty Ltd

Powerbox Pacific Ltd RasterTech New Zealand

Permark Industries Limited

Salesoft CAD Solutions Ltd

SICK Ptv Ltd

Perry Grating

Simpro Handling Equipment

Southern Engineering Services Southern Institute of Technology Treadway Ltd

#### **Machinery designers**

Automation Design Ltd

**Control Devices** 

Design Energy Ltd

EMEX – Engineering, Machinery &

Flectronics Exhibition

Hydraulic Wholesalers Ltd.

Industrial Maintenance Group NZ Ltd Objective 3D - 3D Printing Solutions

Oli Vibrators Pty Ltd

Omron Electronics

Prescott Engineering Ltd

Salesoft CAD Solutions Ltd

Shape NZ Limited

Simpro Handling Equipment Ltd

Southern Institute of Technology

#### **Environment**

#### **Breathing apparatus**

ASTO NZ

Boge Compressors Australia ReCoila Hose & Cord Reels

#### Cleaning equipment & systems

**AES Waterblasters** 

Baskiville.Com Ltd

Carr New Zealand Limited

Colourgrip Surfacing Ltd

Concrete Pumping Equipment NZ Ltd

Elliott Scott Ltd

Gilsen I td

Hilton Industrial Vacuums

& Engineering Ltd

Hydra-Cell Pumps Limited

Karcher Ltd

New Zealand Duct & Flex

SICK Ptv Ltd

#### **Dust control equipment**

Baskiville.Com Ltd

Camfil New Zealand

Denis Cunningham Ltd

Dust Extraction Systems Ltd

Hilton Industrial Vacuums

& Engineering Ltd

Hydra-Cell Pumps Limited

LINAK New Zealand Ltd



New Zealand Duct & Flex Oli Vibrators Pty Ltd SICK Pty Ltd W & R Jack Ltd ("Jacks")

#### **Energy efficiency products**

**Aurora Process Solutions** ebm-papst A&NZ Enercon Hydra-Cell Pumps Limited New Zealand Duct & Flex NSK New Zealand Limited Roadrunner Manufacturing NZ Ltd

Rockwell Automation N.Z. Ltd

TechRentals NZ Ltd

POWERGEN Group Ltd

#### **Enviromental equipment &** services

Carr New Zealand Limited Cranequip Engineering Ltd

EMEX - Engineering, Machinery &

Electronics Exhibition

GEA Westfalia Separator New Zealand Ltd Hilton Industrial Vacuums

& Engineering Ltd

IFS

Karcher Ltd

New Zealand Duct & Flex

Oli Vibrators Pty Ltd

Perry Grating

Roadrunner Manufacturing NZ Ltd

Salesoft CAD Solutions Ltd

#### Filters

Boge Compressors Australia

Camfil New Zealand

Hilton Industrial Vacuums & Engineering Ltd

IES

Magnetic Solutions (NZ) Ltd

Oli Vibrators Ptv Ltd

Stevenson Engineering Ltd

White International New Zealand Ltd

#### **Filtration**

Baskiville.Com Ltd

Boge Compressors Australia

Camfil New Zealand

Hilton Industrial Vacuums

& Engineering Ltd

Hydraulic Wholesalers Ltd

IES Magnetic Solutions (NZ) Ltd

New Zealand Duct & Flex Oli Vibrators Pty Ltd

#### Fire protection systems

Galco NZ Ltd

ReCoila Hose & Cord Reels

#### Health & safety equipment

3M Personal Safety Division

Aurora Process Solutions

Colourgrip Surfacing Ltd

Denis Cunningham Ltd

EMEX – Engineering, Machinery & **Electronics Exhibition** 

Hastings Rubber Stamps

Hilton Industrial Vacuums

& Engineering Ltd

Multi-Mia (NZ)

New Zealand Duct & Flex NZ Welding School

Perry Grating

ReCoila Hose & Cord Reels

Simpro Handling Equipment Ltd Southern Engineering Services

Southern Institute of Technology TechRentals N7 Ltd

Chemz Ltd

ebm-papst A&NZ

Galco NZ Ltd

Salesoft CAD Solutions Ltd Schneider Electric

**Heating & ventilation** 

#### Lighting

PowerSave Light Company (2012) Ltd

Salesoft CAD Solutions Ltd

Shape NZ Limited

SICK Ptv Ltd

**Technical Forgings** 

#### **Noise control**

Oli Vibrators Pty Ltd

POWERGEN Group Ltd

TechRentals NZ Ltd

#### Safety equipment

3M Personal Safety Division

Cigweld

Colourgrip Surfacing Ltd

Denis Cunningham Ltd

Furotec Ltd

Hilton Industrial Vacuums

& Engineering Ltd

New Zealand Duct & Flex

NHP Electrical Engineering Products (NZ) Ltd

NZ Welding School

Omron Electronics

Perry Grating ReCoila Hose & Cord Reels

Reform Automation

Rockwell Automation N.Z. Ltd

SICK Ptv I td

**Security systems** 

Hastings Rubber Stamps Phoenix Wrapping Australasia Ltd

Rockwell Automation N.Z. Ltd

Shape NZ Limited SICK Pty Ltd

### **Machinery**

**Benders & shears** Aotea Machinery Limited

MachineryHouse Pty NZ Ltd Shape NZ Limited

**Bending machines** 

Appointments Recruitment Specialists Ltd

Autobend Ltd – Auckland Autobend Ltd - Christchurch

**ESL Industries Limited** MachineryHouse Pty NZ Ltd

Reform Automation Shape NZ Limited

**Boring machines** W & R Jack Ltd ("Jacks")

**Bulk handling machinery** 

**Aurora Process Solutions** 

Design Energy Ltd Phoenix Wrapping Australasia Ltd

Simpro Handling Equipment Ltd

#### Treadway Ltd

**CNC** equipment Aotea Machinery Limited

Carac Couplings

Carbidenz

Design Energy Ltd

EMEX – Engineering, Machinery & Electronics Exhibition

Hydra-Cell Pumps Limited iCNC Ltd

New Zealand Duct & Flex

Objective 3D – 3D Printing Solutions

Prescott Engineering Ltd Reform Automation

Shape NZ Limited

Annual 2014 www.engineeringnews.co.nz

Tasman Machinery Ltd Trotec Laser W & R Jack Ltd ("Jacks")

#### **CNC** machiners

Aotea Machinery Limited Appointments Recruitment Specialists Ltd Autobend Ltd - Auckland Autobend Ltd – Christchurch Boge Compressors Australia Custom Cutting Formes Ltd Gallagher Contract Manufacturing iCNC Ltd Production Turned Parts Ltd Revolution Precision Machinery Rose Engineering Ltd Scott Machinery Southern Institute of Technology Tauranga Engineering Industries Limited W & R Jack Ltd ("Jacks")

#### **CNC** programming

Custom Cutting Formes Ltd Gallagher Contract Manufacturing **Revolution Precision Machinery** Roadrunner Manufacturing NZ Ltd Shape NZ Limited Southern Institute of Technology

#### Conveyors

ASTO NZ

Aurora Process Solutions Calmac Engineering Ltd Design Energy Ltd **EQM** Industrial **HBM Plastics & Packaging** LINAK New Zealand Ltd Modular Conveyors Ltd Objective 3D – 3D Printing Solutions Oli Vibrators Pty Ltd Phoenix Wrapping Australasia Ltd Tasman Machinery Ltd

#### **Cutting & slitting machinery**

Ajax Productions Ltd Boge Compressors Australia Custom Cutting Formes Ltd Denis Cunningham Ltd

#### **Drilling machinery**

Ajax Productions Ltd Carac Couplings Carbidenz Concrete Pumping Equipment NZ Ltd Elliott Scott Ltd MachineryHouse Pty NZ Ltd Prescott Engineering Ltd Scott Machinery

#### **EDM (Electrical Discharge** Machining)

Gallagher Contract Manufacturing iCNC Ltd Tasman Machinery Ltd

#### **EDM** wire cutting machines

Ajax Productions Ltd Aotea Machinery Limited iCNC Ltd **Revolution Precision Machinery** Tasman Machinery Ltd

#### **Engineering machinery**

Air New Zealand Calibration Services Ajax Productions Ltd **ALS Tribology** 

ASTO NZ

Boge Compressors Australia

Carac Couplings

Carbidenz

Chemz Ltd

Cigweld Control Devices

Denis Cunningham Ltd

Design Energy Ltd

EMEX - Engineering, Machinery &

Electronics Exhibition

GEA Westfalia Separator New Zealand Ltd

HBM Plastics & Packaging

iCNC Ltd

MachineryHouse Pty NZ Ltd

NSK New Zealand Limited

NZ Welding School

Objective 3D – 3D Printing Solutions

Oli Vibrators Pty Ltd

Roadrunner Manufacturing NZ Ltd

Southern Engineering Services

Southern Institute of Technology

Technical Forgings

#### **Folding machines**

Appointments Recruitment Specialists Ltd Boge Compressors Australia **ESL Industries Limited** Reform Automation Scott Machinery

#### **Grinders & grinding accessories**

Ajax Productions Ltd Gallagher Contract Manufacturing **HBM Plastics & Packaging** Scott Machinery

#### Guillotines

Ajax Productions Ltd Appointments Recruitment Specialists Ltd MachineryHouse Pty NZ Ltd **Revolution Precision Machinery** Scott Machinery

#### **Injection moulding machines**

Aotea Machinery Limited

Boge Compressors Australia Design Energy Ltd **ESL Industries Limited HBM Plastics & Packaging** Objective 3D – 3D Printing Solutions



Tasman Machinery Ltd

Aotea Machinery Limited

#### Lasers

Autobend Ltd - Auckland Autobend Ltd – Christchurch Boge Compressors Australia Carac Couplings Cigweld Denis Cunningham Ltd Reform Automation **Revolution Precision Machinery** Shape NZ Limited

#### Trotec Laser Lathes

Ajax Productions Ltd Aotea Machinery Limited Boge Compressors Australia Carac Couplings

Carbidenz

Dixon Manufacturing Ltd

Gallagher Contract Manufacturing

iCNC Ltd

MachineryHouse Pty NZ Ltd

Prescott Engineering Ltd

Revolution Precision Machinery

Rose Engineering Ltd

Scott Machinery

Shape N7 Limited

The Boltholder Ltd

#### Lifting equipment

Automation Equipment (N.Z.) Ltd

Control Devices

Cranequip Engineering Ltd

EMEX – Engineering, Machinery &

Electronics Exhibition

Industrial Maintenance Group NZ Ltd

LINAK New Zealand Ltd

Magnetic Solutions (NZ) Ltd

Rockwell Automation N.Z. Ltd

Rose Engineering Ltd

Simpro Handling Equipment

Simpro Handling Equipment Ltd

The Boltholder Ltd

#### **Machine tools**

Ajax Productions Ltd Aotea Machinery Limited Boge Compressors Australia Carbidenz Carr New Zealand Limited

Cigweld Drills, Taps & Dies Ltd

iCNC Ltd

MachineryHouse Pty NZ Ltd NSK New Zealand Limited

Prescott Engineering Ltd

Prolan



Tasman Machinery Ltd **Technical Forgings** 

#### Machinery

Ajax Productions Ltd ALS Tribology

Appointments Recruitment Specialists Ltd Boge Compressors Australia

Carbidenz

Chemz Itd

Ciaweld

Denis Cunningham Ltd

Design Energy Ltd

EMEX - Engineering, Machinery & Electronics Exhibition

GEA Westfalia Separator New Zealand Ltd

**HBM Plastics & Packaging** 

iCNC Ltd

MachineryHouse Pty NZ Ltd

NSK New Zealand Limited

NZ Welding School

Objective 3D – 3D Printing Solutions

Oli Vibrators Pty Ltd

Phoenix Wrapping Australasia Ltd

Prolan

Roadrunner Manufacturing NZ Ltd

Tasman Machinery Ltd

Treadway Ltd

W & R Jack Ltd ("Jacks")

#### Milling machinery

Aiax Productions Ltd

Carbidenz Control Devices

Gallagher Contract Manufacturing

iCNC Ltd

NSK New Zealand Limited

Objective 3D - 3D Printing Solutions

Prescott Engineering Ltd

**Revolution Precision Machinery** 

Scott Machinery

Tasman Machinery Ltd

#### Pipe & tube benders

Ajax Productions Ltd

Aotea Machinery Limited Autobend Ltd – Auckland

Autobend Ltd – Christchurch

Boge Compressors Australia

Dixon Manufacturing Ltd

**Revolution Precision Machinery Scott Machinery** 

#### Pipe and tube cutting equipment

Autobend Ltd - Auckland Autobend Ltd – Christchurch

Boge Compressors Australia Chemz Ltd

Cigweld

Denis Cunningham Ltd

Dixon Manufacturing Ltd

Elliott Scott Ltd

Galco N7 Ltd

HBM Plastics & Packaging Multi-Mig (NZ)

**Scott Machinery Technical Forgings** 

#### Plasma cutting machinery

Boge Compressors Australia Cigweld

CNC Engineering Solutions Ltd

Denis Cunningham Ltd EMEX – Engineering, Machinery &

**Electronics Exhibition** 

Metal Monster Ltd

Multi-Mig (NZ)

NZ Welding School Southern Institute of Technology

#### **Press brakes**

Appointments Recruitment Specialists Ltd

Autobend Ltd - Auckland

Carac Couplings

**ESL Industries Limited** 

MachineryHouse Pty NZ Ltd

Reform Automation

**Revolution Precision Machinery** 

Scott Machinery

Shape NZ Limited

#### **Production engineering machines**

Ajax Productions Ltd Control Devices

Denis Cunningham Ltd Design Energy Ltd NSK New Zealand Limited

Objective 3D – 3D Printing Solutions

Oli Vibrators Pty Ltd

Rockwell Automation N.Z. Ltd Southern Institute of Technology Technical Forgings

#### **Sheetmetal equipment**

Aotea Machinery Limited Boge Compressors Australia Denis Cunningham Ltd Design Energy Ltd Galco NZ Ltd NZ Welding School

# **Sheetmetal machinery**Denis Cunningham Ltd

Shape NZ Limited

EMEX – Engineering, Machinery & Electronics Exhibition Galco NZ Ltd MachineryHouse Pty NZ Ltd Reform Automation

#### Water

Boge Compressors Australia

#### **Water cutting machinery**

Autobend Ltd – Auckland Autobend Ltd – Christchurch Carac Couplings Elliott Scott Ltd EMEX – Engineering, Machinery & Electronics Exhibition Hydra-Cell Pumps Limited

#### **Management**

#### **Businesses sales**

Clyth MacLeod Limited Business Sales

Roadrunner Manufacturing NZ Ltd

#### **Finance advice**

Hastings Rubber Stamps

#### **Human resource services**

edenfx HSE Recruitment NZ Welding School

#### Internet services

CADPRO Systems Ltd

#### **Leasing services**

Denis Cunningham Ltd Hastings Rubber Stamps

CADPRO Systems Ltd

Denis Cunningham Ltd

#### **Management consultancy**

edenfx HSE Recruitment

EMEX – Engineering, Machinery & Electronics Exhibition

Enercon

New Zealand Duct & Flex

NZ Welding School

Perry Grating

Roadrunner Manufacturing NZ Ltd

Southern Institute of Technology

Technical Forgings

#### **Marketing services**

Clyth MacLeod Ltd – Business Sales Hastings Rubber Stamps

#### **Training & education services**

CADPRO Systems Ltd
Denis Cunningham Ltd
edenfx HSE Recruitment
EMEX – Engineering, Machinery &
Electronics Exhibition
Hastings Rubber Stamps
Metal Monster Ltd
National Instruments

New Zealand Duct & Flex NZ Welding School Objective 3D – 3D Printing Solutions Rockwell Automation N.Z. Ltd Southern Institute of Technology

#### Truck & van sales

Hastings Rubber Stamps

#### **Materials**

#### Alloys

Dixon Manufacturing Ltd Metal Monster Ltd Metal Spray Suppliers NZ ltd Oli Vibrators Pty Ltd Roadrunner Manufacturing NZ Ltd SWP NZ Ltd Technical Forgings

#### **Aluminium**

NZ Welding School Perry Grating Roadrunner Manufacturing NZ Ltd Shape NZ Limited Technical Forgings

#### Anti corrosion coatings

Colourgrip Surfacing Ltd Connection Technologies Ltd Metal Monster Ltd Metal Spray Suppliers NZ ltd Perry Grating Prolan Shape NZ Limited SWP NZ Ltd

#### **Bulk handling machinery**

Technical Forgings

Aurora Process Solutions
Control Devices
EMEX – Engineering, Machinery & Electronics Exhibition
Hilton Industrial Vacuums
& Engineering Ltd
Oli Vibrators Pty Ltd
Simpro Handling Equipment
Treadway Ltd

#### Cast iron

SWP N7 Ltd

#### Castings

Mace Engineering Ltd

#### **Chemical handling equipment**

Aurora Process Solutions
EMEX – Engineering, Machinery &
Electronics Exhibition
ESL Industries Limited
Oli Vibrators Pty Ltd
Simpro Handling Equipment

#### Composites

Automation Equipment (N.Z.) Ltd NZ Welding School Roadrunner Manufacturing NZ Ltd Scion Technical Forgings

#### Corrosian control systems

EMEX – Engineering, Machinery & Electronics Exhibition Metal Monster Ltd SWP NZ Ltd

#### Flow meters

Air New Zealand Calibration Services Control Devices Denis Cunningham Ltd Eurotec Ltd Multi-Mig (NZ) TechRentals NZ Ltd

#### **Hydraulic hoses & fittings**

ALS Tribology ReCoila Hose & Cord Reels Stevenson Engineering Ltd

#### **Materials handing equipment**

ASTO N7

Aurora Process Solutions Compressed Air Maintenance Control Devices Cranequip Engineering Ltd

EQM Industrial Hastings Rubber Stamps Hilton Industrial Vacuums & Engineering Ltd

Modular Conveyors Ltd
New Zealand Duct & Flex
Oli Vibrators Pty Ltd
Page Macrae Engineering
Phoenix Wrapping Australasia Ltd

Rose Engineering Ltd Simpro Handling Equipment Stevenson Engineering Ltd Treadway Ltd

#### **Materials handling**

ASTO NZ

Aurora Process Solutions
Compressed Air Maintenance
Cranequip Engineering Ltd
Hilton Industrial Vacuums
& Engineering Ltd
Modular Conveyors Ltd
New Zealand Duct & Flex
NZ Welding School
Oli Vibrators Pty Ltd
Phoenix Wrapping Australasia Ltd
Roadrunner Manufacturing NZ Ltd
Simpro Handling Equipment
Treadway Ltd

#### Powder & powder coating

W & R Jack Ltd ("Jacks")

Boge Compressors Australia Carac Couplings Oli Vibrators Pty Ltd Shape NZ Limited Technical Forgings

#### **Spraying equipment**

AES Waterblasters
Boge Compressors Australia
Concrete Pumping Equipment NZ Ltd
Industrial Maintenance Group NZ Ltd
Metal Monster Ltd
ReCoila Hose & Cord Reels

#### **Tubes & tubing**

ATS Pneumatics
Autobend Ltd – Auckland
Autobend Ltd – Christchurch
Autoline Industrial
Automation Equipment (N.Z.) Ltd
Compressed Air Maintenance
Dixon Manufacturing Ltd
Global Stainless Ltd
Technical Forgings

#### **Power systems**

#### Electrical & mechanical equipment

Air New Zealand Calibration Services

Aurora Process Solutions

Chemz Ltd Cigweld

Concrete Pumping Equipment NZ Ltd

Control Devices

Denis Cunningham Ltd

Elliott Scott Ltd

 ${\sf EMEX-Engineering,\,Machinery\,\&}$ 

Electronics Exhibition

Galco NZ Ltd

LINAK New Zealand Ltd Magnetic Solutions (NZ) Ltd NHP Electrical Engineering

Products (NZ) Ltd NZ Welding School

Objective 3D – 3D Printing Solutions

Oli Vibrators Pty Ltd
Omron Electronics

Phoenix Wrapping Australasia Ltd

Powerbox Pacific Ltd

ReCoila Hose & Cord Reels

Roadrunner Manufacturing NZ Ltd Rockwell Automation N.Z. Ltd

Southern Institute of Technology

**Technical Forgings** 

#### **Engines**

ALS Tribology
Concrete Pumping Equipment NZ Ltd
Elliott Scott Ltd
Southern Institute of Technology

#### **Gear motors**

ASTO NZ
Elliott Scott Ltd
EQM Industrial
Hydraulic Wholesalers Ltd
Omron Electronics
SAECOWilson
Southern Engineering Services

#### Gearboxes

ALS Tribology Concrete Pumping Equipment NZ Ltd ebm-papst A&NZ

EQM Industrial

Hydraulic Wholesalers Ltd
NSK New Zealand Limited
Southern Engineering Services

#### Generators

Denis Cunningham Ltd
Elliott Scott Ltd
Phoenix Wrapping Australasia Ltd
POWERGEN Group Ltd

#### **Heat exchangers**

Aurora Process Solutions Shape NZ Limited

#### Hydaulics

ALS Tribology

Appointments Recruitment Specialists Ltd ASTO NZ

CC Hydraulics Ltd

Concrete Pumping Equipment NZ Ltd

Control Devices

Hydraulic Wholesalers Ltd ReCoila Hose & Cord Reels Simpro Handling Equipment Ltd

Southern Institute of Technology

#### **Pneumatic equipment**

ATS Pneumatics Autoline Industrial Automation Equipment (N.Z.) Ltd Boge Compressors Australia Compressed Air Maintenance Elliott Scott Ltd Industrial Maintenance Group NZ Ltd Oli Vibrators Pty Ltd Omron Electronics Phoenix Wrapping Australasia Ltd ReCoila Hose & Cord Reels Southern Institute of Technology **Technical Forgings** 

#### Solar

Treadway Ltd

LINAK New Zealand Ltd NHP Electrical Engineering Products (NZ) Ltd Phoenix Wrapping Australasia Ltd Powerbox Pacific Ltd

NSK New Zealand Limited Phoenix Wrapping Australasia Ltd

#### **Services**

#### Calibration

Absolute Vacuum Services Limited Air New Zealand Calibration Services Furotec Ltd National Instruments TechRentals NZ Ltd

#### Calibration services

Absolute Vacuum Services Limited Air New Zealand Calibration Services Aurora Process Solutions Eurotec Ltd National Instruments SICK Ptv Ltd

#### Concrete enhancement

Sika N7 Ltd

#### **Concrete refurbishment**

Sika NZ Ltd

#### **Engineering recruitment**

Appointments Recruitment Specialists Ltd NZ Welding School Omron Electronics

#### **Engineering services**

Ajax Productions Ltd Appointments Recruitment Specialists Ltd apt Group

Calmac Engineering Ltd

CC Hydraulics Ltd

Cigweld

Colourgrip Surfacing Ltd

Control Devices

Cranequip Engineering Ltd

Custom Cutting Formes Ltd

Denis Cunningham Ltd

Design Energy Ltd Ducare NZ Ltd

ebm-papst A&NZ

EMEX - Engineering, Machinery &

Electronics Exhibition

Gallagher Contract Manufacturing GEA Westfalia Separator New Zealand Ltd IES

**Invert Robotics** 

Go to the **NZ Engineering News** website

www.engineeringnews.co.nz



Maintenance Engineering Services Ltd Metal Monster Ltd Nightside Test Design Ltd North Hydraulics Ltd Objective 3D - 3D Printing Solutions

Oli Vibrators Pty Ltd

Omron Electronics Page Macrae Engineering

Phoenix Wrapping Australasia Ltd

Powerbox Pacific Ltd

Production Turned Parts Ltd

RasterTech New Zealand

ReCoila Hose & Cord Reels

Roadrunner Manufacturing NZ Ltd

Rockwell Automation N.Z. Ltd

Shape NZ Limited

Southern Engineering Services

Southern Institute of Technology

Stevenson Engineering Ltd

Tauranga Engineering Industries Limited

Technical Forgings

The Boltholder Ltd

#### **Engineers**

Ajax Productions Ltd

Appointments Recruitment Specialists Ltd

Chemz Ltd

Control Devices

Design Energy Ltd

Ducare NZ Ltd

ebm-papst A&NZ

edenfx HSE Recruitment

Enercon

**ESL Industries Limited** 

Gallagher Contract Manufacturing

Hydraulic Wholesalers Ltd

JWB Group

Maintenance Engineering Services Ltd

New Zealand Duct & Flex

N7 Welding School

Objective 3D - 3D Printing Solutions

Oli Vibrators Pty Ltd

Perry Grating

Prescott Engineering Ltd

ReCoila Hose & Cord Reels

Roadrunner Manufacturing NZ Ltd

Rockwell Automation N.Z. Ltd

Rose Engineering Ltd

Salesoft CAD Solutions Ltd

Shape NZ Limited

Stevenson Engineering Ltd

Tauranga Engineering Industries Limited

**Technical Forgings** 

#### **Fabricating**

Ajax Productions Ltd

Appointments Recruitment Specialists Ltd

**ATS Pneumatics** 

Calmac Engineering Ltd

Ciaweld

Ducare NZ Ltd

**ESL Industries Limited** Global Stainless Ltd

IFS

Industrial Maintenance Group NZ Ltd Mace Engineering Ltd

Maintenance Engineering Services Ltd NZ Welding School

Objective 3D – 3D Printing Solutions

Oli Vibrators Pty Ltd

Page Macrae Engineering

Perry Grating

ReCoila Hose & Cord Reels

Roadrunner Manufacturing NZ Ltd

Rose Engineering Ltd

Shape NZ Limited

Southern Institute of Technology

Sprockets NZ - Precision Manufacturing Stevenson Engineering Ltd

#### **Fastner manufacturers**

Prolan

The Boltholder Ltd

#### **Fitting and Turning**

Ajax Productions Ltd

Appointments Recruitment Specialists Ltd

Calmac Engineering Ltd

Eric Paton Ltd

Gallagher Contract Manufacturing

JWB Group

Mace Engineering Ltd

Maintenance Engineering Services Ltd

North Hydraulics Ltd

NZ Welding School

Objective 3D – 3D Printing Solutions

Production Turned Parts Ltd

ReCoila Hose & Cord Reels

Rose Engineering Ltd

Stevenson Engineering Ltd

Tauranga Engineering Industries Limited

#### **Flooring**

Sika NZ Ltd

#### **Industrial maintenance engineers**

**AES Waterblasters** 

Appointments Recruitment Specialists Ltd

apt Group Chemz Ltd

Cigweld

Control Devices

Ducare NZ Ltd

EMEX - Engineering, Machinery &

**Electronics Exhibition** Hydraulic Wholesalers Ltd

IES

Industrial Maintenance Group NZ Ltd

**Invert Robotics** 

Maintenance Engineering Services Ltd

New Zealand Duct & Flex

North Hydraulics Ltd

Page Macrae Engineering

Phoenix Wrapping Australasia Ltd

ReCoila Hose & Cord Reels Rockwell Automation N.Z. Ltd.

Stevenson Engineering Ltd.

Tauranga Engineering Industries Limited

#### Injection moulding

Appointments Recruitment Specialists Ltd Gallagher Contract Manufacturing Objective 3D – 3D Printing Solutions Scion

#### Inspection services

apt Group Autobend Ltd – Auckland Invert Robotics NZ Welding School

SAECOWilson

Stevenson Engineering Ltd

#### **Machinery manufacturers**

**Aurora Process Solutions** 

Boge Compressors Australia

Denis Cunningham Ltd

Design Energy Ltd

EMEX – Engineering, Machinery & Electronics Exhibition

North Hydraulics Ltd

Objective 3D – 3D Printing Solutions

Oli Vibrators Pty Ltd

Phoenix Wrapping Australasia Ltd

Rockwell Automation N.Z. Ltd Simpro Handling Equipment Ltd

#### **Machinery repairs**

ALS Tribology

Treadway Ltd

Calmac Engineering Ltd

Carr New Zealand Limited

Compressed Air Maintenance Control Devices

Denis Cunningham Ltd

Eric Paton Ltd Hydraulic Wholesalers Ltd

iCNC Ltd

Industrial Maintenance Group NZ Ltd JWB Group

Maintenance Engineering Services Ltd



Metal Monster Ltd North Hydraulics Ltd

NZ Welding School Objective 3D – 3D Printing Solutions

Oli Vibrators Pty Ltd

Phoenix Wrapping Australasia Ltd ReCoila Hose & Cord Reels

Southern Engineering Services

Stevenson Engineering Ltd Tauranga Engineering Industries Limited

# W & R Jack Ltd ("Jacks")

Machining

Ajax Productions Ltd

Appointments Recruitment Specialists Ltd

Custom Cutting Formes Ltd

Ducare NZ Ltd

Eric Paton Ltd Gallagher Contract Manufacturing

JWB Group Mace Engineering Ltd

Maintenance Engineering Services Ltd

North Hydraulics Ltd Production Turned Parts Ltd

ReCoila Hose & Cord Reels

Rose Engineering Ltd

The Boltholder Ltd

Shape NZ Limited Sprockets NZ – Precision Manufacturing

Stevenson Engineering Ltd

Tauranga Engineering Industries Limited

# **Maintenance & management**

Appointments Recruitment Specialists Ltd apt Group

Aurora Process Solutions

Colourgrip Surfacing Ltd Cranequip Engineering Ltd EMEX – Engineering, Machinery & **Electronics Exhibition** Hastings Rubber Stamps Industrial Maintenance Group NZ Ltd Invert Robotics

New Zealand Duct & Flex

Oli Vibrators Ptv I td

Rockwell Automation N.Z. Ltd Stevenson Engineering Ltd

#### **Manufacturing engineers**

Ajax Productions Ltd Appointments Recruitment Specialists Ltd CADPRO Systems Ltd Calmac Engineering Ltd Ciaweld

Control Devices

Custom Cutting Formes Ltd

Ducare NZ Ltd

edenfx HSF Recruitment

Eric Paton Ltd

ESL Industries Limited

Global Stainless Ltd

JWB Group

Mace Engineering Ltd

Objective 3D - 3D Printing Solutions

Oli Vibrators Pty Ltd

Omron Flectronics

Page Macrae Engineering

Prescott Engineering Ltd

Production Turned Parts Ltd

ReCoila Hose & Cord Reels

Roadrunner Manufacturing NZ Ltd

Rockwell Automation N.Z. Ltd

Shape NZ Limited

Simpro Handling Equipment Ltd

Tauranga Engineering Industries Limited

**Technical Forgings** 

#### Marine & automotive sealing and bonding

Sika NZ Ltd

#### **Mechanical Engineering - Fans**

ebm-papst A&NZ New Zealand Duct & Flex Oli Vibrators Pty Ltd

#### **Mould making services**

Appointments Recruitment Specialists Ltd Gallagher Contract Manufacturing IWB Group

Mace Engineering Ltd Objective 3D - 3D Printing Solutions

#### **Plant installation**

**Aurora Process Solutions** Calmac Engineering Ltd Colourgrip Surfacing Ltd Denis Cunningham Ltd Maintenance Engineering Services Ltd



Oli Vibrators Pty Ltd Omron Electronics Page Macrae Engineering Phoenix Wrapping Australasia Ltd Prolan

ReCoila Hose & Cord Reels Roadrunner Manufacturing NZ Ltd Stevenson Engineering Ltd W & R Jack Ltd ("Jacks")

#### Precision machining

Ajax Productions Ltd

Appointments Recruitment Specialists Ltd Control Devices

Fric Paton Ltd

Gallagher Contract Manufacturing

IWB Group

Mace Engineering Ltd

Objective 3D – 3D Printing Solutions

Production Turned Parts Ltd

ReCoila Hose & Cord Reels

Roadrunner Manufacturing NZ Ltd

Shape NZ Limited

Stevenson Engineering Ltd Tauranga Engineering Industries Limited

Pressing

Ajax Productions Ltd

Carac Couplings

Custom Cutting Formes Ltd

Global Stainless Ltd

Objective 3D - 3D Printing Solutions

Shape NZ Limited

**Technical Forgings** 

#### **Prototypes**

Appointments Recruitment Specialists Ltd

#### **Prototype manufacturing**

Control Devices

Custom Cutting Formes Ltd

ebm-papst A&NZ

Eric Paton Ltd

Gallagher Contract Manufacturing

Objective 3D – 3D Printing Solutions

Production Turned Parts Ltd

ReCoila Hose & Cord Reels

Roadrunner Manufacturing NZ Ltd

Shape NZ Limited

Tasman Machinery Ltd

**Technical Forgings** 

#### Roofina

Sika NZ Ltd

#### Sandblasting

Boge Compressors Australia

Ducare NZ Ltd

Gallagher Contract Manufacturing

Gilsen Ltd

#### Sealing & bonding

Sika NZ Ltd

#### Seismic strengthening

Sika NZ Ltd

#### **Sheetmetal**

Appointments Recruitment Specialists Ltd Calmac Engineering Ltd Denis Cunningham Ltd

**ESL Industries Limited** 

Global Stainless Ltd

Maintenance Engineering Services Ltd

NZ Welding School

ReCoila Hose & Cord Reels

Roadrunner Manufacturing NZ Ltd

Shape NZ Limited

#### Stainless steel production

Autobend Ltd – Auckland

Calmac Engineering Ltd Dixon Manufacturing Ltd

Ducare N7 Ltd

Global Stainless Ltd

Page Macrae Engineering

Perry Grating

ReCoila Hose & Cord Reels

Roadrunner Manufacturing NZ Ltd

Shape N7 Limited

The Boltholder Ltd

#### Testina

Air New Zealand Calibration Services

**ALS Tribology** 

apt Group

Baskiville.Com Ltd

ebm-papst A&NZ

Magnetic Solutions (NZ) Ltd

National Instruments

Nightside Test Design Ltd

NZ Welding School

Southern Institute of Technology

#### **Turning**

ReCoila Hose & Cord Reels

#### **Turning & milling**

Ajax Productions Ltd

Appointments Recruitment Specialists Ltd

Eric Paton Ltd

Gallagher Contract Manufacturing

JWB Group

Mace Engineering Ltd

Maintenance Engineering Services Ltd

North Hydraulics Ltd Production Turned Parts Ltd

Rose Engineering Ltd

Shape NZ Limited

Stevenson Engineering Ltd Tauranga Engineering Industries Limited

#### Waterproofing

Sika NZ Ltd

#### Welding

Ajax Productions Ltd

Appointments Recruitment Specialists Ltd

Autobend Ltd – Christchurch

Boge Compressors Australia

Carac Couplings

Carr New Zealand Limited

Cranequip Engineering Ltd

Denis Cunningham Ltd Dixon Manufacturing Ltd

Ducare NZ Ltd IFS

Mace Engineering Ltd

Maintenance Engineering Services Ltd

Multi-Mia (NZ)

New Zealand Duct & Flex

North Hydraulics Ltd

NZ Welding School Page Macrae Engineering

Roadrunner Manufacturing NZ Ltd

Rose Engineering Ltd

Shape NZ Limited

Southern Institute of Technology Sprockets NZ - Precision Manufacturing

Stevenson Engineering Ltd

#### Workshop

#### **Abrasive blasting**

ASTO NZ

Boge Compressors Australia

Ducare NZ Ltd

Gilsen Ltd

**Technical Forgings** 

#### Air compressors

ALS Tribology

ATS Pneumatics Autoline Industrial

Boge Compressors Australia

Compressed Air Maintenance

Elliott Scott Ltd

Industrial Maintenance Group NZ Ltd

ReCoila Hose & Cord Reels

#### Air filters

**ATS Pneumatics** 

Autoline Industrial

Automation Equipment (N.Z.) Ltd

Baskiville Com Ltd

Boge Compressors Australia

Compressed Air Maintenance Hydraulic Wholesalers Ltd

#### Air supply systems

ATS Pneumatics

Autoline Industrial

Boge Compressors Australia Carr New Zealand Limited

EMEX - Engineering, Machinery & Electronics Exhibition

#### Eurotec Ltd Rockwell Automation N.Z. Ltd

Anti vibration mountings

#### Oli Vibrators Pty Ltd **Augers**

**Alarms** 

**Aurora Process Solutions Automated welding systems** 

Cigweld Denis Cunningham Ltd

NZ Welding School

#### SWP N7 Ltd

**Bearings** Automation Equipment (N.Z.) Ltd

Concrete Pumping Equipment NZ Ltd

**EQM** Industrial NSK New Zealand Limited

#### SAFCOWilson Southern Engineering Services

**Belts & belting** 

Autoline Industrial **B&H** Distribution Ltd

SAECOWilson

**Blowers** Absolute Vacuum Services Limited Automation Equipment (N.Z.) Ltd

Carr New Zealand Limited

Southern Engineering Services

Compressed Air Maintenance ebm-papst A&NZ

Multi-Mig (NZ)

Brazing Denis Cunningham Ltd

#### Weldwell New Zealand **Bushes**

Southern Engineering Services Sprockets NZ – Precision Manufacturing

#### **Chain sprockets**

**EQM** Industrial

Annual 2014 www.engineeringnews.co.nz

SAECOWilson

Southern Engineering Services Sprockets NZ – Precision Manufacturing

#### **Communication equipment**

EMEX – Engineering, Machinery & Electronics Exhibition Rockwell Automation N.Z. Ltd

#### **Compressors & equipment**

Autoline Industrial **B&H** Distribution Ltd Boge Compressors Australia Compressed Air Maintenance Concrete Pumping Equipment NZ Ltd EMEX - Engineering, Machinery & Electronics Exhibition

#### Connectors

Connection Technologies Ltd

#### **Engineering supplies**

**B&H** Distribution Ltd

Carbidenz

Carr New Zealand Limited

Chemz Ltd

Denis Cunningham Ltd

Drills, Taps & Dies Ltd

EMEX – Engineering, Machinery &

Electronics Exhibition

Galco NZ Ltd

Magnetic Solutions (NZ) Ltd

Powerbox Pacific Ltd

ReCoila Hose & Cord Reels

SAFCOWilson

Southern Engineering Services

Southern Institute of Technology

SWP NZ Ltd

Technical Forgings

The Boltholder Ltd

Weldwell New Zealand

#### Forklifts & forklift equipment

Colourgrip Surfacing Ltd

**Control Devices** 

EMEX – Engineering, Machinery &

**Flectronics Exhibition** 

ReCoila Hose & Cord Reels

Simpro Handling Equipment Ltd

Treadway Ltd

#### **Hand power tools**

AFS Waterblasters

**B&H** Distribution Ltd

Drills, Taps & Dies Ltd

SAECOWilson

**Technical Forgings** 

#### **Nuts & bolts**

**B&H** Distribution Ltd

Galco NZ Ltd

Prescott Engineering Ltd

**Technical Forgings** 

The Boltholder Ltd

#### Oils & grease

Absolute Vacuum Services Limited

**ALS Tribology** 

**B&H** Distribution Ltd

Chemz Ltd

Prolan

ReCoila Hose & Cord Reels

SAECOWilson

Southern Engineering Services

Absolute Vacuum Services Limited

**AES Waterblasters** 

Compressed Air Maintenance

Concrete Pumping Equipment NZ Ltd

Control Devices

Cranequip Engineering Ltd

ebm-papst A&NZ

Hydra-Cell Pumps Limited

ReCoila Hose & Cord Reels

Southern Engineering Services

White International New Zealand Ltd

#### Pumps & valves

Absolute Vacuum Services Limited

AFS Waterblasters

Autoline Industrial

CC Hydraulics Ltd

Cranequip Engineering Ltd

Hydra-Cell Pumps Limited

Hydraulic Wholesalers Ltd LINAK New Zealand Ltd

Prolan

Technical Forgings

#### Screws

**B&H** Distribution Ltd Technical Forgings The Boltholder Ltd

#### Seals

SAECOWilson

Southern Engineering Services

#### **TIG** welding equipment

Ciaweld

Denis Cunningham Ltd

Dixon Manufacturing Ltd

Multi-Mia (NZ)

NZ Welding School

Roadrunner Manufacturing NZ Ltd

Weldwell New Zealand

**AES Waterblasters** 

**ATS Pneumatics** Autoline Industrial Automation Equipment (N.Z.) Ltd Hydra-Cell Pumps Limited LINAK New Zealand Ltd

#### **Welding equipment**

Boge Compressors Australia

Carr New Zealand Limited

Cigweld

Denis Cunningham Ltd

Dixon Manufacturing Ltd

EMEX - Engineering, Machinery &

**Electronics Exhibition** 

Metal Monster Ltd

Multi-Mig (NZ)

New Zealand Duct & Flex



NZ Welding School ReCoila Hose & Cord Reels Roadrunner Manufacturing NZ Ltd SAECOWilson

#### Weldwell New Zealand **Workshop tools**

AFS Waterblasters

**B&H** Distribution Ltd

Carr New Zealand Limited

Dixon Manufacturing Ltd

Drills, Taps & Dies Ltd

Hastings Rubber Stamps

Weldwell New Zealand White International New Zealand Ltd

# Keith is here to help Keith Falloon has been the sales manager of NZ Engineering News magazine for more than 10 years. He knows the industry and the people. Call him to discuss your advertising needs 0800 503 305 or kfalloon@hayleymedia.com

**3M Personal Protective Equipment** 

3M Personal Safety Division

5 axis 3D rotary waterjet cutter

Carac Couplings

**Agie Charmillers** Tasman Machinery

**Air NZ Calibration Services** 

Air New Zealand Calibration Services

**Aiax Metal Pressing** 

Ajax Productions Ltd

**Allen-Bradley** 

NHP Electrical Engineering Products (NZ) Ltd

Rockwell Automation N.Z. Ltd

Aoki

Tasman Machinery

**Aotea Machinery Limited** 

Aotea Machinery Limited

**Appointments Recruitment Specialists Ltd** 

Appointments Recruitment Specialists Ltd

**ASTO** 

ASTO N7

**ATS Pneumatics** 

ATS Pneumatics

Aurora

Aurora Process Solutions

**Autobend Ltd** 

Autobend Ltd – Auckland Autobend Ltd – Christchurch

Autodesk

CADPRO Systems Ltd

Salesoft CAD Solutions Ltd

**Autoline Industrial** Autoline Industrial

**B&H Trade Supplies** 

**B&H** Distribution Ltd

B&J

Eurotec Ltd

**BIANCO** 

White International New Zealand Ltd

Blastquip

Blastquip

**Boge Compressors** 

Boge Compressors Australia

**Brevini Power Transmission/Brevini** 

Fluid Power Brevini NZ Ltd

Calmac

Calmac Engineering Ltd

Camfil

Camfil New Zealand

Carbidenz

Carbidenz

Carel

Eurotec Ltd

**Chemz Ltd** 

Chemz Ltd

Cigweld Cigweld

**Clyth MacLeod Business Sales** 

Clyth MacLeod Ltd – Business Sales

CNP

White International New Zealand Ltd

**Colourgrip Surfacing Ltd** Colourgrip Surfacing Ltd.

**Condition Monitoring Solutions & All-test Pro Motor Diagnostics** 

apt Group

Cubic

NHP Electrical Engineering Products (NZ) Ltd

**Cutting Formes** 

Custom Cutting Formes Ltd

DAB

White International New Zealand Ltd Datasensor

Automation Equipment (N.Z.) Ltd **DBasix** 

Automation Equipment (N.Z.) Ltd

**Denis Cunningham Ltd** 

Denis Cunningham Ltd

**Digital Light Solutions** 

Digital Light Solutions

**Dixon Marine Products** 

Dixon Manufacturing Ltd Dri-Air

Tasman Machinery

Drille

Drills, Taps & Dies Ltd

**Engineering Specialist Coatings** 

DUCARE N7 ITD

**Dumpmaster** 

Simpro Handling Equipment

Duplomatic

North Hydraulics Ltds

Dustex

**Dust Extraction Systems Ltd** 

Dynisco

Tasman Machinery

**ebm-papst** ebm-papst A&NZ

Edwards

**Electronics** 

Baskiville.Com Ltd

**Elliott Ebara Group** 

Elliott Scott Ltd

EMEX – Engineering, Machinery & Electronics Exhibition

**Enercon** 

Enercon

Cranequip Engineering Ltd

Gallagher Gallagher Contract Manufacturing

Gilsen

**Godex Barcode Printers** 

GWS

White International New Zealand Ltd

Hafco

MachineryHouse PTY NZ Ltd Harting

Connection Technologies Ltd

**HOMAG** 

**Hydra-Cell** Hydra-Cell Pumps Limited

**Hydraulic Wholesalers** 

Hydraulic Wholesalers Ltd.

Igus

Automation Equipment (N.Z.) Ltd

Interroll

Automation Equipment (N.Z.) Ltd

James Walker New Zealand Ltd

Limited

Jonassen Industrial Projects Limited

Karcher

Karcher Ltd

**LINAK New Zealand** LINAK New Zealand Ltd

MAC3

**Eurotec Ltd** 

**MACE Engineering Ltd** 

Mace Engineering Ltd **Magnetic Solutions NZ Ltd** 

Magnetic Solutions (NZ) Ltd Manning

MCL

Modular Conveyors Ltd

**Metal Monster Ltd** 

Metal Monster Ltd

Metal Spray Suppliers NZ Itd

Mez Technik

Galco Nz Ltd

MSA

Eurotec Ltd

**Multi-Mig Quality Welding** 

**Products** 

Multi-Mig (NZ)

**Multiple Brands** 

Southern Engineering Services

Munck

Cranequip Engineering Ltd

**National Instruments** 

Muratec

Reform Automation

National Instruments

NHP

NHP Electrical Engineering Products (NZ) Ltd

Nordson XALOY

Tasman Machinery **NSK New Zealand** 

NSK New Zealand Limited

NZ Duct&Flex New Zealand Duct&Flex

**NZ Welding School** 

NZ Welding School OLI

Oli Vibrators Pty Ltd

**OMAX and MAXIEM Abrasive Waterjet Systems** 

Roadrunner Manufacturing NZ Ltd

Omron Omron Flectronics

**Page Macrae Engineering** 

Page Macrae Engineering **Permark Dawar Markit** 

Permark Industries Limited Plazmax

CNC Engineering Solutions Ltd **Pneumax** 

Automation Equipment (N.Z.) Ltd

**Power Supplies** Powerbox Pacific Ltd

**Powerful HILTON industrial** vacuum cleaners – Dust Eater @ WMAD 1100 ranges

Hilton Industrial Vacuums & Engineering Ltd.

POWERGEN POWERGEN Group Ltd

**PowerSave Light** 

PowerSave Light Company (2012) Ltd

**Precision and General Engineering** 

Eric Paton Ltd **Precision Engineering & Product** 

Design JWB Group

**Prescott Engineering** Prescott Engineering Ltd

**Production Turned Parts Ltd** Production Turned Parts Ltd.

**Prolan lanolin lubricants** 

**Putzmeister** 

Concrete Pumping Equipment NZ Ltd

Prolan

Absolute Vacuum Services Limited **Quick Turnaround Machining** 

Tauranga Engineering Industries Limited **Raster Tech** 

RasterTech New Zealand

ReCoila Hose & Cord Reels **RedEye 3D Printed Parts Service** Objective 3D – 3D Printing Solutions

**Recoila Hose and Cord reels** 

**Rose Engineering Ltd** Rose Engineering Ltd

SAECOWilson SAECOWilson

Ermaksan **Revolution Precision Machinery** 

Samsung-Mitsubishi-Akira-

Schmalz

Automation Equipment (N.Z.) Ltd

Schneider Electric

Scion

Scion

**Shape NZ** Shape NZ Limited

SICK Pty Ltd

apt Group

ST1

Sika NZ Ltd

**Simpro Handling Equipment** 

Southern Institute of Technology -

Trade Scales Limited Woosung

Absolute Vacuum Services Limited **WorkZone Anti Fatigue Mats** 

Cranequip Engineering Ltd **YCM** 

iCNC Ltd

Tasman Machinery

www.engineeringnews.co.nz

**Ducare NZ Ltd - Innovative** 

edenfx HSE

edenfx HSE Recruitment

Absolute Vacuum Services Limited

Friatec

Gilsen Ltd

W & R Jack Ltd ("Jacks")

**Jonassen Industrial Projects** 

Eurotec Ltd

**Metal Spray Suppliers NZ Ltd** 

Schneider Flectric

SICK Pty Ltd

Sika NZ Ltd

Simpro Handling Equipment Ltd

**Home of Zero Fees Scheme** Southern Institute of Technology **SPM Instrument** 

Annual 2014

Omron Electronics **Stevenson Engineering** 

Stevenson Engineering Ltd

**Stratasys 3D Printer Sales** 

**STM Gearboxes & Electric Motors FOM Industrial** 

Tasman Machinery Objective 3D – 3D Printing Solutions **Stratasys Objet Fortus Dimension** 

uPrint Mojo Tasman Machinery Ltd **Sumitomo Demag** 

Tasman Machinery **Taps & Dies Ltd** Drills, Taps & Dies Ltd

**TechRentals NZ Ltd** TechRentals NZ Ltd Telstar

Absolute Vacuum Services Limited Terasaki NHP Electrical Engineering

**Test Engineering Solutions** 

**TESLA** White International New Zealand Ltd

Nightside Test Design Ltd

Products (NZ) Ltd

Testo **Eurotec Ltd** 

**Tool-Temp** Tasman Machinery

**Trafag** Eurotec Ltd

**TREVI** 

**Treadway** Treadway Ltd

White International New Zealand Ltd

**Trotec Laser** Trotec Laser

Varian

WearCheck

Absolute Vacuum Services Limited Verlinde

Cranequip Engineering Ltd

ALS Tribology Weforma

**Westfalia Separators** GEA Westfalia Separator New Zealand Ltd Whitebird Weighing Equipment

Automation Equipment (N.Z.) Ltd

Matting Systems 2011 Ltd Xtek

Yushin

White International New Zealand Ltd

**FEATURES** 

# Installers galore in Apia

Finding installers to assist in the installation of a new filter at the site of Samoa's biggest privately owned company, Apia Concrete Products, was no issue for Neal England, NZ Duct & Flex's engineering manager last month. Apia Concrete, established over 40 years ago, was able to provide a full rugby team of helpers when work was carried to reduce the concrete dust produced during mixing and loading of their 80-unit cement truck fleet.



Vernon Wetzell, son of Apia Concrete founder Fred Wetzell, says they had the worst problems as the cement bags were cut open and added to the hopper – which feeds the cement and fill to the mixer trucks. Staff were getting exposed to the cement dust and for a "family" company that modular duct system for more than 20 years wasn't acceptable.

With many of the 70-plus staff being with the company for more than 30 years, everyone wanted to help with the install work; and the modular filter and matching fan that normally takes two to three days to be installed was standing in just hours.

Vernon had approached Geoff Ebdon at NZ Duct & Flex for advice. Mr Ebdon, who has working experience in the Pacific Islands, recommended a modular filter, available 'off the shelf' in the Auckland warehouse because the filter needs no maintenance (just a change of bags every few years) and is ideal to cope with the rigours of life in the cyclone-prone Pacific, where technical knowledge, spare parts and specialist servicing are not easily available or are expensive. These filters have no moving parts, apart from the impeller in the fan motor so are ideal for a location like Samoa. This simple operation, coupled with Lip Lock® ducting which is easy to quickly clip together, meant the whole thing was up and operating in just more than two days. In a rugby mad country, the fast install was no surprise to Apia Concrete staff preparing to watch the All Blacks on the Saturday night.

Mr England and Alex Tauvala'au from NZ Duct & Flex, travelled to oversee the installation, once the goods had been shipped.

"Due to the flexibility of our Lip Lock® duct-

ing system we are able to 'guesstimate' the whole job from a couple of photographs. ship everything up to Apia a couple of weeks prior and hop on a plane to put it all together," Mr England explains.

Mr Tauvala'au, who has been selling the (originally as the Speedlock brand), was familiar with the differences in organising such an install in Apia rather than Auckland. Fred was present at all times. From his stage where he can see the whole Apia Concrete complex, he made the call for a hoist to arrive at the appropriate time, no pre-booking required.

Vernon confirmed that the system is working well and staff have immediately noticed

"Modular filters are the perfect solution for small to medium companies with dust issues. They are rugged, easy to install and can be expanded to cope with increased demand. Simply remove the end panel, add a module and then bolt the end on again,"

"Unless you are running your operation 24/7 you often don't need a more advanced but complex filter. Compressed air pulse filters are excellent if you need constant usage but are more expensive, require production of compressed air and are often far more demanding in terms of servicing and operating costs. If you have the space (modular filters do take up more room), a simple modular filter, correctly specified in terms of dust and air volume can be quickly and economically installed, making a difference to your employee's working environment in days".

# Absolutely anything you need for **Dust and Fume Extraction**











**European** Quality Widest Range

In-stock for overnight delivery





Freephone 0508 NZ DUCT (0508 69 38 28)

> 13F Saleyards Road, Otahuhu, Auckland Ph: 09 276 8020 Fax: 09 276 8070

www.nzduct.co.nz

**Annual 2014** 



# ROLLING & CURVING SOLUTIONS





#### RM1270x90

- 1270 x 2.5mm capacity
- SAE 1050 (CK45) forged steel rolls
  Brake motor for precision bending

- 2550 x 2.5mm capacity
- SAE 1050 (CK45) forged steel rolls
  Brake motor for precision bending
- 2550x 6mm capacity
- SAE 1050 (CK45) forged steel rolls
   Hydraulic movement of back roll & bottom roll

# HYDRAULIC NC PLATE CURVING ROLLS



















#### 4R HSS NO 30-280

- 3100 x 12mm capacity
- 7 Axis NC control panel
- •SAE 1050 (CK45) certificated hardened forged steel rolls with high tensile strength
- Bottom pinching roll with hydraulic positioning (top and down movement) • Two lateral rolls with double pinch pyramid action with balancing system
- Top roll is driven by a hydraulic motor coupled to the planetary gear box
  Digital displays are provided for locating & setting of roll positions
  Hydraulic drop end for ease of cylinder removal
  Induction hardened rolls are of high tensile carbon steel forgings

- 3 metre overhead gantry support with rollers
  Left & right hydraulic lateral material supports



Specifications & Prices are subject to change without notification.



Unit D/38 Highbrook Dr, East Tamaki Ph: (09) 2717 234