



## MANUFACTURING NEEDS A **STRONG & HEALTHY ENGINEERING SECTOR** TO SUPPORT IT.



Doug Burt, Managing Director and Owner of Eric Paton Ltd.

Returning to work after an enjoyable Christmas break, I read with interest the lead article in the December 2010/ January 2011 issue of NZ Manufacturer magazine.

The article was captioned "We can catch Australia - by manufacturing our way to success" and is reproduced on the next page with the magazine's kind permission.

The article appealed because it supports my strong belief that our manufacturing sector is a

key component in building a strong and healthy economy. Quite rightly, the emphasis in manufacturing is placed on potential export earnings, but I believe that the other side of the coin, which is import substitution, deserves the same level of recognition.

While Eric Paton Ltd manufactures a range of wood working cutters and heads for the domestic and international markets, our primary focus is on providing a general and precision engineering service to manufacturers. Within our company, it is this service that generates import substitution, through the refurbishment of machinery and the manufacturing of replacement parts.

Last year we ran the advertisement shown on the right to emphasise the savings in both time and money that can potentially be gained by manufacturers if they use the services we offer, rather than follow the more obvious path of ordering replacement OEM parts.

If manufacturing in New Zealand is to rebuild and play its part in lifting our standard of living, a strong and healthy engineering sector will be required to support it. For Paton's, 2010 was like the general economy - patchy, with a gradual improvement and I believe 2011 will see a continuation of the same. The situation would improve if more manufacturers took advantage of the time and cost savings that can often be achieved with the local sourcing of machinery replacement parts and refurbishment. This would result in a healthy engineering support structure for local manufacturers and help restore a more sustainable balance of payments situation for the country.



### CHALLENGE US

**Original Part**



**Price: \$1,923.46**  
(Excl. GST)

**Delivery: 2 months**

**Eric Paton Part**



**Price: \$700.00**  
(Excl. GST)

**Delivery: 3 days**

This is an actual example of the saving in both cost and time that we recently achieved for a customer.

The machine part was manufactured from scratch and exceeds the quality of the original part.

*If it's a metal machine part you require - any part - give us the challenge to manufacture it to specification and save you money and time.*

**Ph: 09 579 1139**

# WE CAN CATCH AUSTRALIA

## - BY MANUFACTURING OUR WAY TO SUCCESS.

**By Catherine Beard, Executive Director, Manufacturing, BusinessNZ**

There is only one way we will catch Australia in wage rates and standard of living, and that is by growing our manufacturing sector.

Various reports have concluded productivity in New Zealand is low compared to other developed countries and while that is true as an average across the whole economy, it is not true in the manufacturing sector.

Professor Paul Callaghan from Victoria University has calculated what we need to produce per employee to catch up with Australia and manufacturing is clearly miles ahead of any other sector. By his calculation we need to exceed \$143,000 of revenue per employee. Manufacturing revenue per employee is \$240,000 (total manufacturing) or \$250,000 (manufactured exports).

Fonterra comes in at \$550,000 revenue per employee and Fisher and Paykel healthcare comes in at \$400,000. This is clearly the way to go, we need more manufacturers with high productivity and we need them to grow their business.

While tourism is a high export earner for the country and is very important, its productivity per employee is relatively low. Tourism's economic contribution divided by the number of full time employees is \$77,814 revenue per employee, well below the \$143,000 we need to catch Australia.

It is well known that in order to have a better standard of living, the most important factor is our productivity. Productivity, some economists say, is not everything, but is nearly everything. Productivity does not mean working harder, it means working smarter. Making and exporting higher value, higher profit goods and services, per hour worked. I include services in the definition of manufacturing, because modern manufacturers are increasingly adding services into their business offering.

Take Tait Electronics as an example. They don't just manufacture and sell hand held communication devices for police and other emergency services; they also provide all the necessary installation, training and back up support for the equipment.

Manufacturing is increasingly highly skilled and more highly paid as a result. Modern manufacturers employ people with PHD's, product and package design skills, information communication and technology skills, engineering skills, marketing skills, intellectual property skills, database skills and the list goes on. When I travel the country, manufacturers tell me one of the biggest constraints to their growth is being able to find and employ enough skilled people.

This message is echoed in a recently released report by Deloitte, Global Manufacturing Competitiveness Index 2010. CEO's of manufacturing companies from around the world were surveyed on what were the most important contributors to their manufacturing competitiveness and top of the list overall was "talent driven innovation". In other words, no matter what country you are manufacturing in talent was seen as a key competitive advantage, unless you were in South America where it ranked second behind "quality of physical infrastructure" which is clearly a weakness for that part of the world.

The Deloitte report points out that the competitiveness of a country's manufacturing sector is critical to its long term economic prosperity and growth, and indeed if you look around the world, there is no country that has a high standard of living that does not have a strong and competitive manufacturing capability. The Deloitte report notes that a globally competitive manufacturing sector creates a sustainable economic ecosystem, encourages domestic and foreign investment and improves a country's balance of payments. It creates good jobs, not just within the sector, but spilling over into areas such as financial services, infrastructure development and maintenance, customer support, logistics, information systems, healthcare, education and training and real estate.

A strong manufacturing sector boosts a country's intellectual capital and innovativeness, underwriting research and development, pushing the technological envelope and driving growth in demand for highly skilled workers and scientists.

There have been many high profile leaders in New Zealand in past years predict that manufacturing is a sunset industry, that we can't compete with China and that the new economy will be a weightless services economy. They were wrong thankfully, since as the Deloitte report points out, economies built primarily on services will be second tier. Manufacturing is the biggest employer in the Auckland region and the second largest employer in the country, and contributes to around 50% of our exports.

It is time we all got behind manufacturing and celebrated it for the success story it is and put some thought into how we get this sector to double in size? The Deloitte report points out manufacturers cannot go it alone and governments must play their part by developing policy and national manufacturing strategies that are collaborative, integrated, focused and effective. Public policy that has had a positive impact on other countries manufacturing competitiveness has included a focus on science, technology and innovation, technology transfer and adoption, intellectual property protection, having a skilled well educated workforce and a cohesive national policy on manufacturing competitiveness.

# RECENT WORK



Gearbox Repair - Before



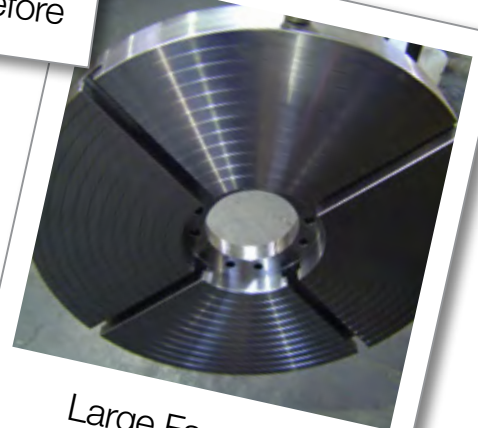
Gearbox Repair - After



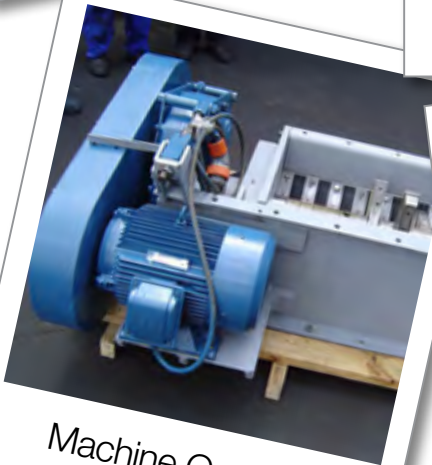
Impellers



Fingerjoint Cutters



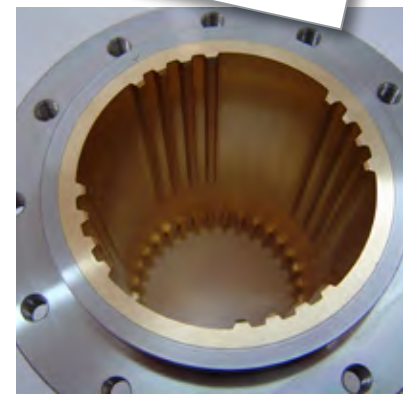
Large Faceplate



Machine Overhaul



Large Splined Shaft



Splined Hub



Feed Roller



Cutterheads



Boat Fittings

## THE MARKET IS LIFTING



Gavin Davies - Woodworking Manager/Sales Engineer

After a couple of relatively quiet years, the second half of 2010 showed increased demand for the EPL range of woodworking cutters & heads. There is strong evidence that this lift will continue into 2011 both in the domestic and export markets.

Contributing to the lift, has been the extension of the EPL EP6 Range, with the addition of 10 and 12 pocket heads. These have been developed to give faster feed rates on the latest finger jointing machines. The 10 pocket heads are 25% faster than 8 pocket heads and the 12 pocket heads 50% faster.

Another recent development contributing to sales is the the adoption of the EPL 4mm finger joint cutter by a number of companies operating horizontal finger jointing machines.

These cutters are generally used where additional strength is required in selected applications. The development of this market is particularly pleasing as it has been previously dominated by American suppliers.

All EPL finger joint cutters are now available with titanium nitride hardening which decreases wear rates by 50%, reducing down time due to sharpening and also reducing costs per metre rates.



The 12 pocket EP6 finger jointer increases feed rates by 50% over 8 pocket units.



The EPL 4mm finger jointer has broken the American monopoly on horizontal finger jointers in New Zealand.

EPL finger joint knives attracted a lot of interest at WOOD MANUFACTURING 2010 held at in Rotorua and Melbourne.



The show is Australasia's most comprehensive independent review of the latest technology to improve operating and financial performance.

- Service
- Quality
- Expertise
- Technical Advice

### PARTS

New, Replacement and Repair. Machine Building, Repair and Reconditioning. Machining including CNC.

### OPERATIONS

#### TURNING

CNC  
Centre Lathes

#### GRINDING

Cylindrical  
Surface  
Form (Surface & Cyl.)  
Tool & Cutter  
Worm & Threads

#### GEAR CUTTING

Shaping or Hobbing  
Bevels, straight and crowned  
Spur, Helical and Sprockets  
Racks  
Worm and Wormwheel  
Internal and Splines  
Production Hobbing

#### MILLING

Horizontal & Vertical  
Horizontal Boring  
Spiral Milling  
Splines etc.

#### CNC MACHINING

Vertical Machining Centre  
Turning  
Surface and Form Grinding  
Mastercam Programming  
Jig Boring

#### MISC

Slotting and Internal Splines  
Bandsawing

#### SUPPORTING SERVICES

Quotations  
Drawing  
Design  
Inspection