

# TIP TALK

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0800 808 477

## IPAD MINI WINNER, BRUCE TOUGHEY



The winner of our last iPad mini competition was Bruce Toughey at Enztec. If you want to get the chance to win one of your own you need to head over to our new Facebook page, like it,

and the winner will be randomly chosen from all the new likes from 2013. The winner will be announced on Facebook on April 26. Head over to [www.facebook.com/iscar.pacific.nz](http://www.facebook.com/iscar.pacific.nz) now.

## TANG GRIP STYLE FACE GROOVING



Rigid clamping in a tangentially oriented pocket. Tools available from 25mm to 500mm diameter range in 3mm to 4mm width. Tool holders available are either single or double ended blades. Machine at very high feed rates and interrupted cuts, and you still get an excellent surface finish.

### Features of Tang Grip:

- No insert movement on retracting due to tangential clamping
- Same insert can be used for both right and left hand tools
- SUMO TEC grade IC808 provides excellent performance on a wide range of materials and cutting conditions
- Free, unobstructed chip flow - there is no upper jaw as with other clamping systems

Face grooving? Think ISCAR Tang Grip!

## CAMEX INVESTS IN A SPINNER-U620 FROM ICNC

CAMEX is a reputable and thriving injection mold maker and precision engineering business based on Auckland's North Shore, owned by Graham Render and Simon Chan. CAMEX has provided high quality tooling and CNC services to some of New Zealand's largest plastic companies, since 1995.

Building on their philosophy that quality machines make quality products, CAMEX recently invested in a brand new SPINNER U-620. The SPINNER was the first 5-axis machining centre they had invested in and was picked based on several key factors. One factor was iCNC's relationship with Iscar Pacific, resulting in CAMEX making Iscar Pacific their preferred tooling supplier.

"Our search for a machine started over four years ago when we looked into purchasing a 5-axis machining centre. After examining machines from multiple suppliers both in New Zealand and Australia we decided to leave it as the price of purchasing a 5-axis was too high.

We put the machine on the back burner until recently when one of our original machines broke down.



"we got exactly what we needed, affordable 5-Axis with European quality"

Once we realised that this wasn't going to be an easy fix we were recommended to Craig McGill at iCNC. iCNC offered us fantastic value for money for what we wanted to do and we got exactly what

we needed, an affordable 5-axis with European quality.

Availability was a key issue and iCNC had what we wanted in stock, which was a real bonus considering we needed the machine ASAP! So it really was a case of right time, right place, right price.

The install and integration of the SPINNER U-620 has been faultless. Craig had the machine in and running within our time frame and his service has been impeccable. The machine hasn't skipped a beat and the Siemens controller along with the NX 5-axis CAM is a user friendly combination.

Overall we are extremely pleased with the deal we got and the service we have received from iCNC. The 5-axis machine has improved productivity, accuracy and allowed us to do difficult jobs quicker.

We are firm believers that you have to move with technology to remain competitive in today's market place. Since our upgrade we feel like 5-axis machining has taken us to the next level." – Graham Render, CAMEX.

Contact Craig McGill today for more information on 0800 85 87 84 or visit [www.icnc.co.nz](http://www.icnc.co.nz)



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# PENTA IQ GRIP, THE NEW 5 CUTTING EDGE INSERT

A few years ago ISCAR introduced PentaCut, the five cutting edge grooving insert. The purpose of such a tool was to lower the cutting edge cost. While it became a very successful insert for grooving, it was limited by depth and the only way around it was to make a larger insert, until now!

The PENTA IQ GRIP is the latest release from ISCAR. It still has five cutting edges per insert, but by intelligently re-thinking the whole system ISCAR has designed an insert that's unique clamping design allows a much deeper groove for the same size insert.

You can now part up to 40mm diameter and groove up to 20mm deep, while maintaining the lower cost per edge.

- Same depth of cut compared to two edged inserts but with lower cost per edge.
- Double the depth of cut compared to three or more edged inserts.
- Unbelievable stability, creating a huge increase in tool life.
- The best straightness for parting of any other parting grooving system.
- Amazing surface finish due to high stability of the clamping.

The tools are available in 20mm and 25mm, and 2mm and 3mm wide parting at this stage, but the clever design will mean as the range is expanded these tools can replace all the options you need to carry now in external grooving.



New generation PENTA IQ GRIP insert.



First generation PentaCut insert.

# FACE MILLING, WHAT DO WE

We want a positive cutter with a reasonable depth of cut, with more than four cutting edges to keep the cost down and we want it to be strong.

This was a big ask until ISCAR came up with the **DOVE IQ** face mill; **Dove** because the inserts are locked into place with a dove tail and **IQ** because somehow they have managed to get eight positive cutting edges on a strong double sided insert.

This design is so clever that we believe this will become the first choice of all 45° face milling.

The **DOVE IQ** face mills feature a high-positive cutting edge inclination that contributes greatly to a soft cut and smooth entry and exit from the component being machined.

The inserts feature reinforced cutting edges, wiper flats for high surface finish and unique rake face. This design is so clever that we believe this will become the first choice of all 45° face milling.



*...reinforced cutting edges, wiper flats for high surface finish and unique rake face.*



## ASK YOURSELF THIS...

You should ask yourself two questions "do I intend to be in business in 10 years time", and "what am I doing to make sure I am?". Our last newsletter raised the subject of machining strategies as a way of making improvements to the cost of machining for non-production environments.

We all know if we machine the same part over and over again we can measure changes in tool cost and cycle time if we try something different. This isn't easy in one off or small batches "did that new tool work any better or not?" How would we know? This leads to just doing the same thing over and over again, machining things the same way because we can't measure any change we make. The job doesn't run long enough?

*"can I improve the way we do business?"*

Machining strategies treats each machining function as a science. At ISCAR we ignore the variation of the jobs and group together the function i.e. shoulder milling, tapping etc., the material and machine and say to you "if you're doing this function, on this machine, in this material, then use this tool at these speeds and feeds. Are you doing this now? But have you optimized it? The most important idea for your business is "can I improve on the way we are working now?"

We recently spoke to some New Zealand companies who asked us this questions, and this is what they achieved.

### Switched from tapping to thread milling

- Slashed machining costs.
- No more broken taps needing sparking out.
- Reduced rejection rate across all jobs.
- Improved job cost.

### Changed their drilling methods.

- Killed their high drilling cost.
- The problem job, and all other subsequent jobs, run more reliably.

### Quadrupled their tool life.

- Stopped buying their turning inserts on price.
- Boosted parts/hour due to machine not stopping.
- Slashed machine costs by running 3 times higher cutting speed.
- Put a big smile on the face of the operator and an even bigger one on the accountant.

All you have to do is ask yourself "do I want to be in business in 10 years' time?".

If that's a "yes" then you need to talk to us at ISCAR about machining strategies.



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