

TIP TALK

DECEMBER 2014

www.iscar.co.nz

0800 808 477



COOL STUFF COMING

FLAT HEAD HOLES WITH NO PRE-DRILLING



FCP SUMOCHAM FLAT HEADS were designed for drilling steel and cast iron components, to provide a nearly flat bottom in the hole, which is required in a variety of applications with NO PRE-DRILLING!

- The new FCP drill heads can be mounted on any SUMOCHAM drill featuring the appropriate pocket size.
- The recommended cutting conditions for the FCP drilling heads are the same as those recommended for ICP drilling heads.
- The FCP drilling heads are made from IC908 TiAIN PVD coated grade.

From 8mm to 25mm in 0.1mm steps if required.

Check out FCP FLAT HEADS in action by scanning this QR code:



FAST-FEED MILLING

Fast-feed milling focuses on removing as much material as possible in the shortest amount of time. It's a process that has been around for a while, and can open doors to more lucrative business opportunities.

If applied properly, fast-feed milling can create favourable results. For those willing to take the leap, **the process offers amazing productivity, nearly triple the metal removal rate of conventional methods, and increases tool life.**

However, there are several things you must know in order to make fast-feed milling successfully work for you.

One of the reasons that **FAST FEED CUTTERS** work so well is because their cutting forces are directed at the machine spindle in the axial direction to create balance. **So keep them engaged as much as possible across the full diameter or less than half the insert width.** If you use the same cutter and only engage it 50 or 60 percent of the diameter, you will experience push and increased vibrations because the cut is unbalanced.

To avoid unrealistic demands on the cutting tool, use Intelligent programming. For example, when you are in a cavity and come to a corner, change direction using a smooth transition to reduce the angle of engagement. A good rule of thumb is to program an arc that is 50 percent larger than the cutter diameter. If using a 50mm cutter, program a 75mm diameter arc. Programming an arc in pocket corners reduces the angle of engagement and avoids overloading the cutter.

Iscar offer a huge range of **FAST FEED INSERTS** that will fit all your existing milling cutters. **To view, head to the Iscar Electronic Catalogue online and search 'Fast Feed' by 'Family'.**



Get what you really want this Christmas from

Internal Grooving Bars
Collet Chucks
Toolholder & Inserts Deals
\$3 WNMG Inserts



\$5 CNMG Inserts
\$5 DCMT Inserts
\$7 APKT Inserts
Milling Cutters & Inserts

So You're Machining Stainless Steel?

Take the challenge! Run Iscar's new M3M chip-breaker in SUMOTEC grade IC6025 against whatever you are using now, and if it doesn't outperform, then the cream doughnuts are on us!

The M3M chip-breaker with IC6025 tough substrate (with MTCVD Al₂O₃ and TiCN coating) is just what you need for reliable stainless steel machining at high feeds and unfavourable conditions, at medium cutting speed.

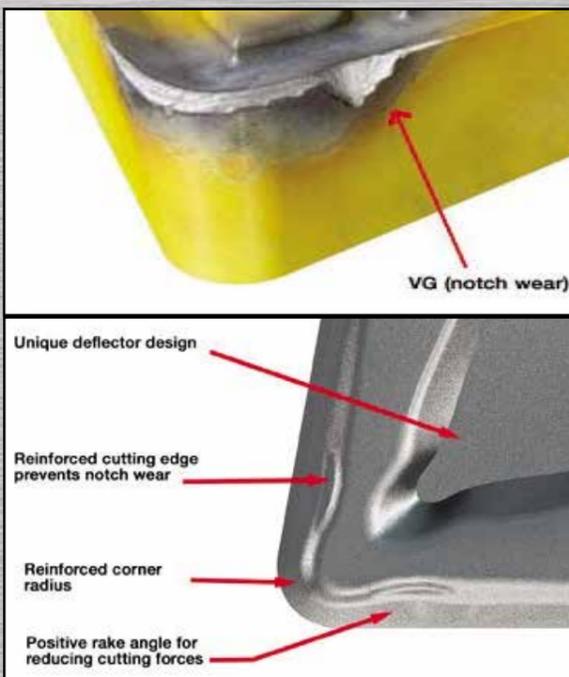
The M3M chipformer was designed with geometric features that improves tool life, due to a reinforced cutting edge at the area where VG (notch) wear tends to occur when machining stainless steel, causing poor surface finish and risk of edge breakage.

The M3M chip-breaker has positive rake angles to allow smooth cutting, and to reduce the cutting forces by 5% to 10%, thus reducing the wear, and increasing the tool life dramatically. The machining area is depth of cut from 1mm up to 5mm, and feed from 0.15 up to 0.6.

Available in CNMG, TNMG, and WNMG styles.



TAKE THE CHALLENGE!



Iscar's Holiday Hours

Tuesday the 23rd of December is the final day Iscar Plus will be open before the Christmas break.

We will be opening our doors again on Monday the 5th of January, but as usual, if you require urgent assistance or tooling, please call 0800 80 84 77 and our staff will be able to help.

We can send stock any day the couriers are working.



LIKE us on Facebook!
Facebook.com/ISCAR.PACIFIC.NZ



ISCAR PLUS UNVEILED

Iscar Pacific has unveiled a new logo that reflects the services it offers to customers. The new logo encapsulates the range of brands, as well as the knowledge and service provided by the company.

- **Plus Service:** We provide 24/7 technical advice. We also deliver tools to you when you need it, with same-day delivery to customers in Auckland, or overnight delivery for the rest of the country.

The Power Of Four

Iscar Plus has four major world-renowned brands that it is proud to offer to customers: Iscar, Tungaloy, Taegutec, and Ingersoll. The range of tooling solutions provided by these four brands means we can meet customers' needs, whatever they may be, with the best tooling available in the industry.

Plus What?

- **Plus Range:** We are committed to stock in NZ. Iscar Plus has the largest range of brands than any other carbide tooling company in New Zealand. We have the widest range of physical stock right here in our warehouse: **if you laid it all end-to-end it would reach Singapore!**
- **Plus Knowledge:** Our sales people are qualified mechanical engineers all from machine shop backgrounds, and experts in their fields. In this way Iscar guarantees you the best tooling advice for your job.



Seeing Is Believing

MILLSHRED P290 LINE



The MILLSHRED P290 line features 90° serrated or ribbed milling inserts. The serrations reduce the cutting forces, which make the cutters extremely productive at high overhangs.

There are three choices of inserts for when you need either a strong cutting edge, positive cutting edge, or a straight edge for finishing.

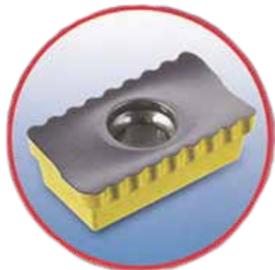
They can be mounted in long-edge cutters for deep cavity work, or in face mills and end mills with single rows of inserts for when you have long overhand arbors and want to shred the swarf.

FEATURES

- All tools have internal coolant holes
- Suitable for all materials
- FW for strong serrated inserts
- FWE for positive serrated inserts
- HL for finish sharp straight cutting edge

Tool Adaptation Options

- End mill -Weldon
- Face mill - Arbor
- Flex fit
- End mill extended flute
- Shell mill extended flute



Put their performance to the test for yourself!

New Heads For SUMOCHAM For Trouble-Free Machining!

12 x Diameter with no Pilot Hole!

Most broken tools come from drilling operations where the tool is working with no clearance, no room for swarf evacuation, and is difficult to keep running true, especially at higher feeds.

By introducing a revolutionary drilling head geometry now you can drill up to 12 x diameter, with no pilot hole, no hand on the feed-stop button, and with your eyes closed!

Iscar is expanding the SUMOCHAM drilling head options, with a new head geometry that features concave cutting edges, which substantially enhances the self-centering capability of the drill.

The new HCP-IQ drilling heads enable using up to 12 x D long drills without the need for a pilot hole operation.

The new drilling heads are available in 8 to 25.7mm diameters, in 0.5mm increments.

By eliminating the need for a pilot hole, the new drilling heads shorten machining cycle time, and the number of tools required for the drilling operation which means you are machining more profitably.



Powertool Racing: Can You Help?

Iscar Plus and Grabatool are bringing Powertool Racing to the South Island in 2015 for the first time, and we need your help!

We're looking for a space to set up and run our Powertool Race with:

- Around 44m of open area
- Accessible by car and truck
- Parking for entrants and attendees
- Power

We bring everything with us, so you don't have to do a thing!

If you can help, please email marketing@iscar.co.nz, or call 0800 80 84 77.

12 Days of Christmas

We asked our staff what the ideal Christmas gift would be in the tooling industry, and this is what they said:

- 12 BT40 Speed-Up Heads spinning
- 11 Solid Carbide EC-H4M End Mills Milling
- 10 ISCAR cars a-driving
- 9 Lathes a-turning
- 8 Salesmen selling
- 7 days we're open
- 6 Draftsmen drafting
- 5 o'clock beers
- 4 YCM FP100A
- 3PKT Milling
- 2 Dove Tail Cutters
- And a 5-Axis SPINNER machine.

This is the best our staff can come up with; clearly they need a holiday. Merry Christmas and a Happy New Year from everyone at Iscar Plus!

The secret to enjoying a good wine:

1. Open the bottle to allow it to breathe.
2. If it does not look like it's breathing, give it mouth-to-mouth.



Charities we proudly supported in 2014

