

TIP TALK

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www.iscar.co.nz

0800 808 477

Why did Buckley buy a YCM?

Buckley Systems Ltd had a unique problem: they had to drill thousands of holes that were 1.5mm in diameter, up to 135mm x depth.

None of their current machines were capable, so they turned to iCNC and Iscar Plus who did it for them using a combination of drills supplied by Iscar Plus and a YCM NXV1020A Mill from iCNC.

So why did Buckley Systems buy a YCM NXV1020A to perform this job?

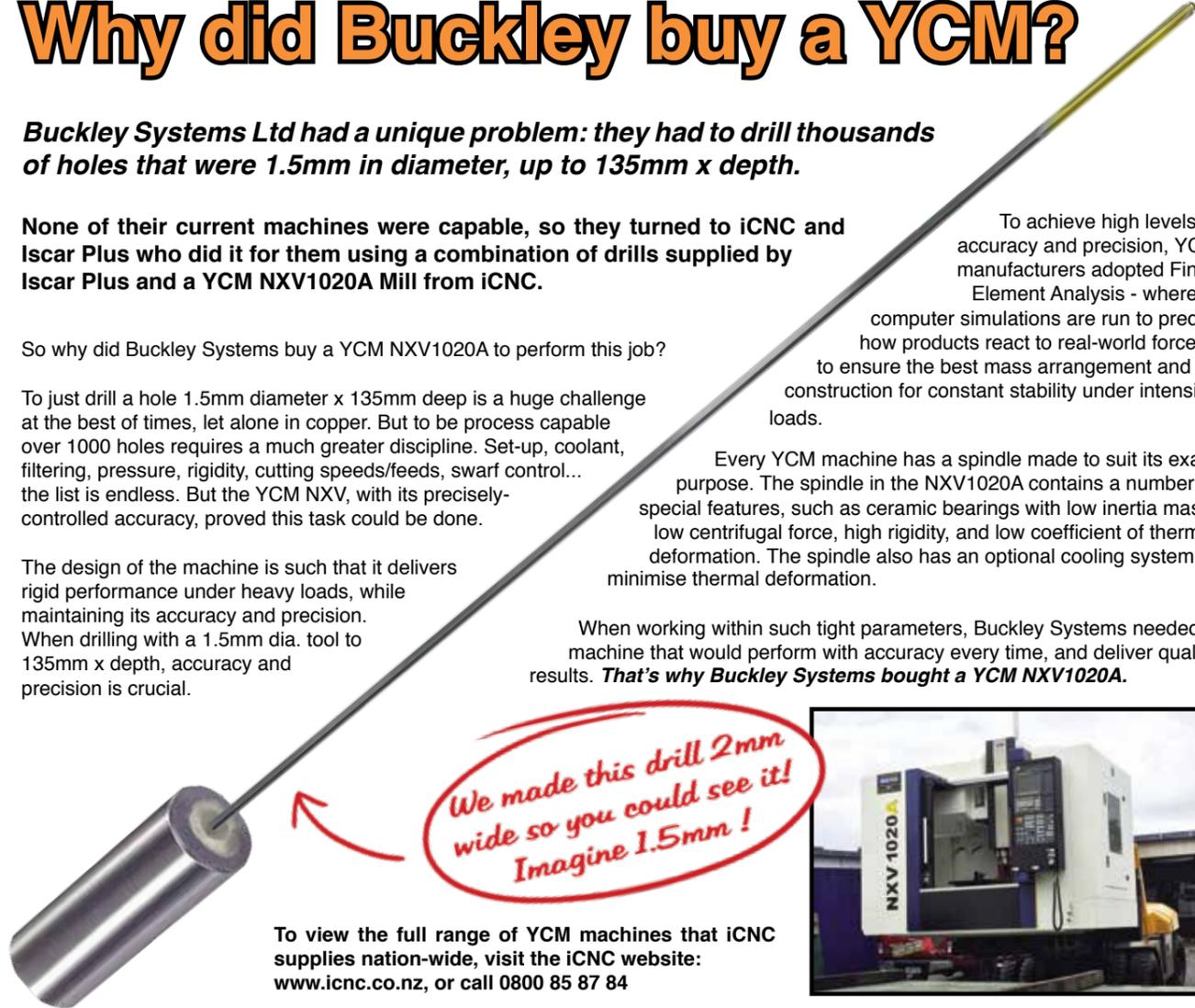
To just drill a hole 1.5mm diameter x 135mm deep is a huge challenge at the best of times, let alone in copper. But to be process capable over 1000 holes requires a much greater discipline. Set-up, coolant, filtering, pressure, rigidity, cutting speeds/feeds, swarf control... the list is endless. But the YCM NXV, with its precisely-controlled accuracy, proved this task could be done.

The design of the machine is such that it delivers rigid performance under heavy loads, while maintaining its accuracy and precision. When drilling with a 1.5mm dia. tool to 135mm x depth, accuracy and precision is crucial.

To achieve high levels of accuracy and precision, YCM manufacturers adopted Finite Element Analysis - whereby computer simulations are run to predict how products react to real-world forces - to ensure the best mass arrangement and rib construction for constant stability under intensive loads.

Every YCM machine has a spindle made to suit its exact purpose. The spindle in the NXV1020A contains a number of special features, such as ceramic bearings with low inertia mass, low centrifugal force, high rigidity, and low coefficient of thermal deformation. The spindle also has an optional cooling system to minimise thermal deformation.

When working within such tight parameters, Buckley Systems needed a machine that would perform with accuracy every time, and deliver quality results. **That's why Buckley Systems bought a YCM NXV1020A.**



To view the full range of YCM machines that iCNC supplies nation-wide, visit the iCNC website: www.icnc.co.nz, or call 0800 85 87 84



Keeping it Cool with JET-CUT

THE BEST PARTING SYSTEM

The Iscar JET-CUT Parting System delivers coolant direct to the cutting edge of tools to reduce cutting time, improve machining process reliability, and prolong tool life.

Delivering coolant direct to the cutting edge

Metal-removal generates heat which can affect the size, shape, and finish of the cut, when the heat reaches excessive levels.

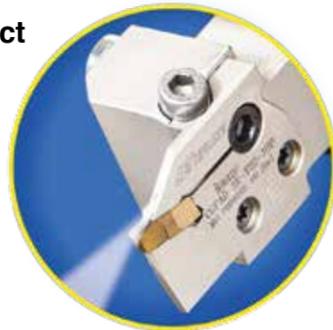
Injecting coolant directly to the cutting site reduces excess heat by two-thirds.

Iscar's JET-CUT parting tools with Through-Coolant provide the following advantages:

- Shorter machining time
- Increased tool life
- Improved chip control
- Effective cooling of cutting edge
- Higher cutting speeds

Increase your workshop's efficiency when you switch to Iscar's JET-CUT Parting System.

Talk to your Iscar rep about JET-CUT today



HUGE range of discounted stock from Iscar Plus at



ONE INSERT FOR ALL YOUR TURNING

Minimise your inventory while increasing your performance with the new ONESOLUTION turning inserts.

Iscar's new ONESOLUTION chipbreakers combine the abilities of multiple chipbreakers into one. Now you can complete the job from start to finish with just one insert!

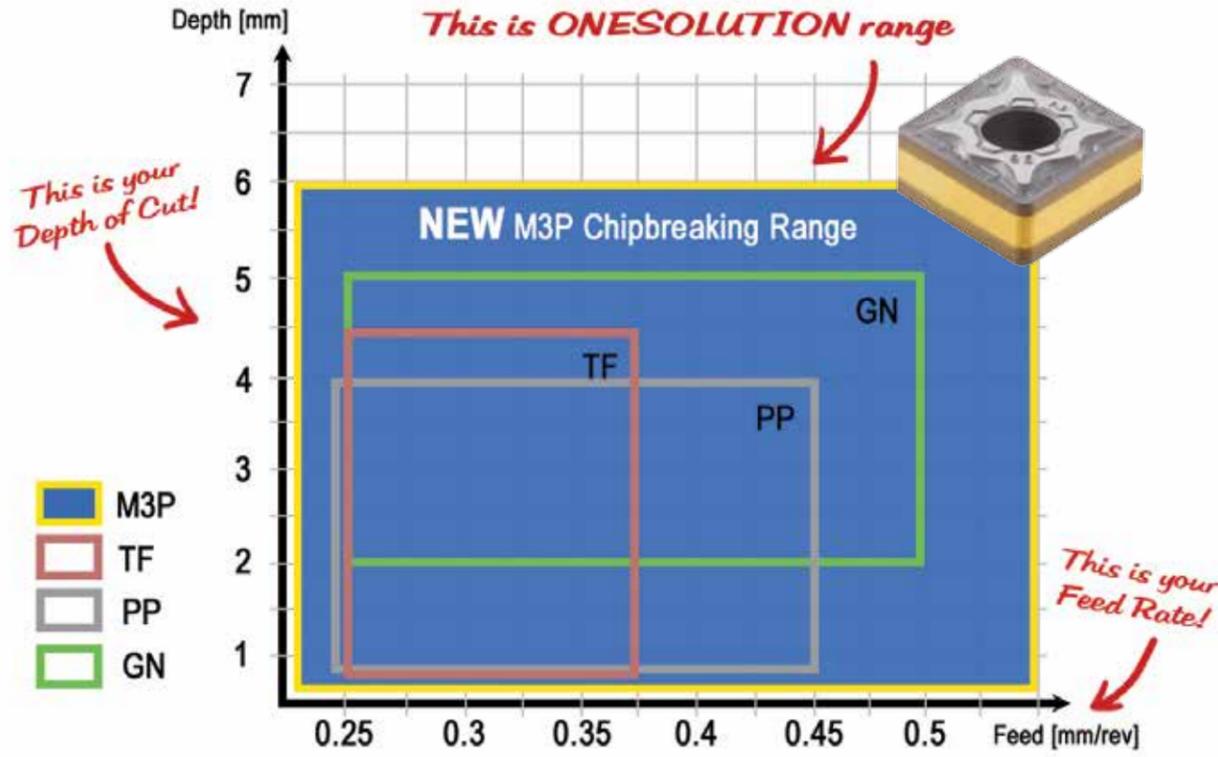
The new inserts from Iscar have greater range than any other on the market, and all you have to do is simply choose the depth of cut and the feed rate you want.

ONESOLUTION inserts are available for General Purpose, Roughing, and Finishing, and come in most ISO-shapes.

Save your workshop time and money by making the switch to ONESOLUTION turning inserts.

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The Relentless Drive for Perfection

An interview with ISCAR CEO, Jacob Harpaz -B. Schultz, ETMM



To ensure survival in today's marketplace, it is important for companies to gain and maintain a competitive advantage in their target markets. Jacob Harpaz, President of the IMC Group and CEO of Iscar, Israel, explains how the company remains competitive.

Innovation and Creativity

"I believe it is important to think outside the box, to look further and try not to think of the obvious things...We are always developing new products that have not been on the market before - like new carbide grades or a new chipbreaker - while at the same time looking for the industry's bottlenecks. We invest a lot of money to develop products outside the box. We [have] developed products that were not even suitable for existing machine tools; but we worked closely with machine tool builders who then adjusted the machine and software accordingly.

Reinvesting in Iscar

We are constantly folding our money back into the company, and invest about 5 to 6% of our total revenue in R&D; you will not find many companies doing this. When we acquired some of the companies currently in the IMC Group, they were copying tools or re-engineering existing product lines.

I stopped that because I want to come up with something new all the time. We are very much R&D-oriented and also have an aggressive marketing strategy. That combination, together with a unique company culture, is our key to success.

Iscar's Company Ethos

We want to be good at what we do. We want our customers to be loyal to us and rely on our product line, to understand that they can count on us. That we will continuously upgrade our product line to the latest technology to enable them to achieve cost reductions and be more productive than their competitors.

It is a partnership. We are our customers' partner; it is an ongoing relationship.

I would say that 50% of our sales are based on those relationships - the rest is product performance, price, and delivery. Our customers know that they can rely on us, call us 24/7, and that we will help them with their problems."

Our Lathe Made the Cut!

Roberts Engineering in Christchurch wanted to buy a new lathe, and high quality of the machine was a requirement, having had problems in the past with previous investments.

They turned to iCNC to supply a lathe that surpassed the rest in quality and reliability, with the end result being a new YCM GT300MB installed in their workshop.

With their high accuracy, good pricing, and great service, the YCM lathes are rivals to their Japanese counterparts. Whilst Japanese machines are Roberts Engineering's first and preferred choice, the GT300MB turned out to be "...the first Taiwanese machine we



bought that works straight out of the box...", according to Simon Gallop, CNC operator at Roberts Engineering with 22 years' experience.

iCNC teamed up with Iscar Plus to supply the tooling for Roberts Engineering's new lathe. As New Zealand's top tooling supplier, Iscar Plus would not waste its time and reputation on poor machines, which stands as extra reassurance that the YCM GT300MB is a quality machine.

WEIGHT

Weighing in at a solid 6.95 tonnes, the GT300MB lathe provided a

stable base on which Roberts Engineering could perform medium to large jobs. Its weight also gave it the heft to take on large workloads while minimising vibration and excess tool movement, and maintaining crucial accuracy.



ACCURACY

The GT300MB was built with oversized hardened and ground box ways, ballscrews, and bearings, to enhance the axial and radial cutting rigidity, as well as a heavy-duty spindle design and durable hydraulic chuck. High rigidity is important for maintaining accuracy, as it minimises excess tool movement.

SET-UP

Switching between jobs was found to be swift and painless, as the configuration of the lathe allowed for easy set-up: "...we can take this [current job] off in 20 minutes and do something else," said Simon.

Efficient machining is important, as business profitability relies on products moving out in a timely manner. Therefore, the faster tools and jobs can be swapped out, the faster work can be completed, and the sooner products will be ready for the customer.

A new CNC machine is a significant investment for any workshop to make. Roberts Engineering set their sights on quality and performance, and got it all in the YCM GT300MB.

iCNC, in partnership with Iscar Plus, is proud to supply high-quality YCM lathes and more to the New Zealand market.

To view the range of machines available, visit www.icnc.co.nz or call 0800 85 87 84 today.



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CHAMDRILL LINE

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DRILLS



YOU MAKE THE
CUTTING WORLD
GO ROUND

2016's Hierarchy of Needs



A Need for Speed



A policeman pulls over a carload of elderly women doing 22 miles per hour on the motorway. The woman says, "Officer, what's the problem? I wasn't speeding."

"Ma'am," the policeman replies, "You weren't speeding, but you should know that driving slower than the speed limit can also be a danger to other drivers."

"Slower than the speed limit? No sir, I was doing the speed limit, exactly 22 miles per hour!" the old woman says a bit proudly.

The policeman, trying to contain a chuckle, explains to her that "22" is the route number, not the speed limit. A bit embarrassed, the woman thanked the policeman for pointing out her error.

"But before I let you go, Ma'am, I have to ask...Is everyone in this car ok? These women seem awfully shaken and they haven't said anything this whole time," the policeman asks.

"Oh they'll be alright in a minute," the old woman replies, "We just got off Route 142."

Charities we proudly supported in 2015

