

# Automated tool management increases productivity

Transitioning to an automated tool management system has changed Barrow Engineering's way of engineering and is a cornerstone of the company's success.



Stirling-Smith says. "Today, our annual turnover amounts to \$5m, and the company is constantly growing."

The reason for his success, he explains, is constant investments in the latest technology as well as his open door policy, making everyone of his 26 staff part of the team. "I don't see myself as a boss, I see myself as one of the team players – and we have a very high retention rate as our staff love to come to work and stand behind our company goals."

Since Mr Stirling-Smith bought his first CNC machine in 2000, he has invested in a new CNC operated machine tool every year, but adds that all the machinery was useless without two things: staff to run it and the right tooling. And the right tooling for Barrow Engineering comes from Iscar, supplying tips, drills and HSK tools. "Tooling technology has come such a long way," Mr Stirling-Smith says. "It is more accurate and we do a lot of medical and defence work

BY BARBARA SCHULZ

When producing a large number of complex, high-value-added parts in a competitive environment, processes have to be continually examined and optimised. Barrow Engineering, Peakhurst, NSW, knows this first-hand. The company specialises in precision-machined components and subassemblies serving diverse markets such as mining, safety equipment, electrical, medical and the defence industry.

"When I took the company over from my dad in 1997, Barrow Engineering operated with an annual turnover of \$600,000" Managing Director Craig



Barrow Engineering's Managing Director Craig Stirling-Smith, Production Manager George and Iscar's Rod Hansen (from left to right) with the Matrix tool management system which now controls the company's complete inventory.

where high-end tolerances are crucial. Rod Hansen from Iscar comes out once a week and we discuss machining procedures and how the correct tooling could help us improve productivity.”

“Having the latest tools has changed our way of engineering,” Mr Stirling-Smith continues. “We are more competitive and by working hand in hand with Iscar and our other suppliers and customers we managed to achieve the amazing growth we are enjoying.”

Recently the company discovered that cost savings can present themselves in some surprising ways. Transitioning to Iscar’s automated tool management system Matrix enabled the manufacturer to increase productivity and reduce costs. “We would spend about \$120,000 a year on tips and drills,” Mr Stirling-Smith says. “Now we only spend approximately \$80,000 a year on consumables which is a huge saving – and this doesn’t even include the time we save by reduced machine down-times and operators not having to look for the right tips and drills anymore.”

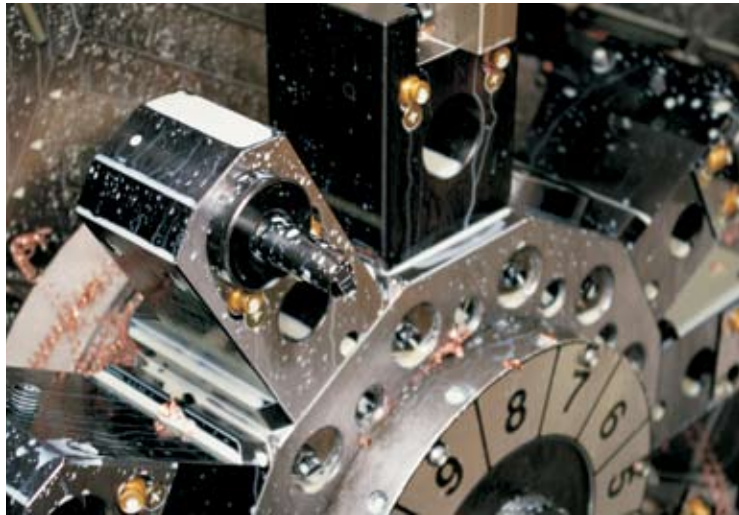
Matrix is a total management system to control inventory, streamline purchasing and drive down costs.

It combines an automated tool dispenser with Matrix-TM, a management software, which can be customised for each workshop. Access to an item stored in Matrix’s locked bins is electronically controlled by the management software according to pre-defined authorisations.

“Every staff member has his or her own password to log onto the system, so we know what tips and how many they used when. The system is especially useful for our night shift because they can help themselves,” Mr Stirling-Smith explains. “Thanks to the automated order system we never run out of stock because the material is ordered automatically via the internet. I do not even think about tips anymore!”

Moreover, the operators cannot use the wrong tips for a certain job anymore since Barrow introduced job cards with bar codes for all the different jobs. “Our operators take the job card, go to the Matrix, scan in the bar code and the system automatically opens the right drawer with the right tip for the respective part to be machined.”

Barrow Engineering continuously decreases their tooling costs – and Iscar’s Rod Hansen knows that there is huge potential for savings in every workshop.



Having the latest tools and technology fosters continuous growth.

Photos: Schulz

<b>Company:</b>	Iscar Australia Pty Ltd, Chester Hill, NSW
<b>Customer:</b>	Barrow Engineering Pty Ltd, Peakhurst, NSW
<b>Technology:</b>	Automated tool management
<b>Benefits:</b>	Reduced tool stock levels with cost savings of about 35%, reduced machine down-times, increased productivity

“Especially small companies very often don’t realise how much money they are wasting by looking for tips, running out of stock or pour the dollars down the drain by not using the tips to the full extend,” he says. “It costs companies an absolute fortune not knowing where the tips are or not having them in stock. We approach our customers, look at their manufacturing procedures, make a study and show them what savings we can achieve. Iscar does not offer the cheapest tools but we can put the finished product out cheaper, quicker and better, improving the whole machining process.”

### Managing all inventory

Australia saw the first Matrix installed in June 2006 and Barrow Engineering is the first NSW company to benefit from the automatic tool manager. Since the software can be customised for each workshop, Matrix not only manages tips and drills, but also all other inventory the manufacturer needs, whether it is gloves, safety-glasses or HSK tooling in other cabinets.

“The idea to manage all our other inventory with the same system came from our staff,” Mr Stirling-Smith says. “After initial resistance to the new system and two or three months of training, our operators and production managers learned to appreciate Matrix and do not want to work without it anymore. They can set up the job and do it.”

Standard and customised usage reports show each dispense transaction and inventory levels are adjusted appropriately. “The software has a comprehensive range of standard reports, however, for transactions, stock, orders and usage reports, the user can design and customise the report by filtering and grouping fields to display the information he wants to see,” Mr Hansen explains. “This report can then be displayed in report format or graphically. By this method the number of reports is almost unlimited.”

Working with Iscar has changed Barrow’s way of doing business. “Although we may have been paying a few cents less per insert, we were also buying more inserts than necessary,” Mr Stirling-Smith says. By a more efficient way of stock keeping Barrow Engineering dropped its stock level from 30,000 to 18,000. “It has been and continues to be a very successful partnership with Iscar. With China at our doorstep, Australian manufacturers need to work together and use high-end machines and tools instead of fighting over peanuts. Every little bit helps to make your business stronger – and Australian manufacturing will remain competitive with a positive attitude and a supportive network behind it.”

Barrow Engineering Pty Ltd  
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