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# Tyson responds to North American cutting tool market through TEC Tooling

By Jerry Cook

In 1997, Tyson Tool Company Ltd., Toronto, ON realized that, in order to better serve the North American tooling market and be more responsive to its customers, the company needed to have an increased domestic presence, specifically a manufacturing presence.

"If your company is European-owned and your market is only one part of the bigger picture, they might not always have the time to really respond quickly to customer needs.

"Despite modern technology, there is still a certain timeline until you get a response for the customer here," says Daniel Cossarin, general manager with TEC Tooling Corp., Mississauga, ON.

Tyson has been the exclusive Canadian distributor for Germany-based Widia's line of cutting tools since the early 1980s. The Widia line remains at the heart of Tyson's lineup of products today.

Continues Cossarin, "The other problem was that these were metric sized products. At the time, Widia didn't have a comprehensive line of Imperial sized products. Subsequently, they developed an Imperial sized line of product for North America and decided to start manufacturing here."

As a result, Tyson established TEC Tooling in 1997 as its Canadian manufacturing division. Cossarin was also recently appointed marketing manager for Tyson Tool ([tysontool.com](http://tysontool.com)).

TEC, which has nine employees, was initially established to produce a standard range of indexable milling tools built around the Widia line that Tyson then distributed.

However, Cossarin says that the scope of TEC's business has grown over the years. Today, in addition to supplying Tyson with tooling, TEC also supplies private label tooling and provides custom specialty tooling for customers.

TEC manufactures over 300 standard tooling products for Tyson and an additional 100 private label products. "It varies from month-to-month but on average we manufacture 80% standard tools compared to 20% special tools," says Cossarin.

The company manufactures tooling ranging in size from 1/2 in. diameter up to 10 in. diameter. TEC's products are used in a variety of industries including automotive, aerospace, mold and die, medical, and more. TEC is ISO 9001:2000 registered.

Standard tools are made from a custom pre-hardened tool steel which has been developed by TEC Tooling. The high purity and good homogeneity of the steel achieves the

optimum balance between high impact strength and good ductility.

"We developed our own specification (for the material). The material is made and pre-hardened for us. The benefit of having the material pre-hardened is that there is no concerns about distortion of any type. You are left with a very consistent, uniform type of steel," notes Cossarin.

Depending on the end-use application, the steel will be pre-hardened and sometimes also nitrided up to the high 50s Rc. All shanks and internal bores are precision ground and there is 100% inspection of all products.

According to Cossarin, TEC uses the latest CAD and CAM software for tool design and programming including Solid Edge and Mastercam.



In order to better serve the North American tooling market and be more responsive to its customers, Tyson Tool opened Mississauga, ON-based TEC Tooling in 1997.

TEC offers a range of machining capabilities including five-axis CNC machining, CNC turning, CNC cylindrical grinding, and more. The firm has a number of machines including two five-axis machining centers, a CNC turning center, a CNC cylindrical grinder, and a variety of conventional equipment.

Establishing a domestic manufacturing facility has provided numerous benefits for Tyson Tool, Cossarin says. "It has worked out wonderfully. For instance, on the sales side, our customers can have quotations and answers delivered to them the same day and get the tooling into the customer's facility within weeks."



# Cutting Tools Products

"To have control over your own manufacturing is key. That way you're not held to any (outside) supplier," he explains. "If any application issues arise, we can speak directly to the customer without having to go through additional channels."

In fact, TEC Tooling uses its manufacturing facility as a showcase for customers. "A lot of our customers come through our facility and get to see how the tools are made and they know that it is a quality product from a local source," he notes.

In addition, Cossarin says that TEC is continuing to introduce new products and programs to enhance its service to customers.

"Our products are continuing to diversify. Historically, we just produced milling products. Now, we are getting more into turning and drilling," he notes.

As well, the firm recently introduced the QuickTool program for customers. Under the QuickTool program, a customer selects the tool style and overall dimensions from a selection of milling cutters, selects the mounting types and the insert. QuickTool then delivers a tooling solution within three weeks using standard inserts. "Because we have all of the pocket geometries and programs built into our parts libraries, we can draw from that and manipulate it much more quickly than if we had to reverse engineer and create a new tool," he says.

Adds Cossarin, "As a result, in some cases, the customer will have an application in which they like the insert they are using and know how it performs but suddenly they might need a different angle on the insert or a different reach.

"With QuickTool, we can create that tool and deliver it within three weeks which is very competitive for the industry."

Business continues to be steady, adds Cossarin. "Our special tooling side of the business is growing primarily because the awareness of TEC is growing in the marketplace."

Customers, notes Cossarin, continue to depend on cutting tool manufacturers to provide them with products to improve productivity and versatility.

"For the most part, customers are looking for ways to maximize operations. For example, in one tool, you might have multiple operations such as drilling, chamfer, facing, and counter boring all in one pass.

"You have to find a balance in terms of supplying products that not only provide maximum metal removal but at the same time achieve the surface finish that is required," he says.

"To meet the increased demand for production, often standard catalogued tooling will not adequately do the job. TEC Tooling can provide an engineered solution to meet those demands."