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Is this the end of the joy ride?

What lies ahead for Canadian automakers?

Maureen Kempston Darkes

General Motors' GM speaks on improving productivity

Heroic effort bonds hearts in NYC

Our skilled tradesworkers help at Ground Zero

BY JOHN D. MANLEY

TECHTALK



Capability vs. capacity

The era of car manufacturing in Quebec is slated to end next year, with the closing of General Motors Corp.'s Ste. Thérèse facility. Why? Overcapacity. It's one of several trends that have emerged in the manufacturing sector over the last year. In the current manufacturing climate, capability, rather than capacity, is becoming the key to survival.

Shop owners who added excess capacity, anticipating the economic engine would keep chugging along, may be challenged to find sufficient work to fill this increased capacity, especially in the wake of terrorist attacks in the U.S.

This is particularly true in the chipmaking industry where many shop owners invested in lower-end, lowertolerance machining centres and lathes. The issue is that many shops invested in similar technologies with similar capabilities, rather than developing new processes or carving out specialty markets. Manufacturers who invested in advanced processes, like grinding or honing with superior tolerance or tremendous complexity, are likely to excel with their specialty services. They've clearly added capability to their business models.

CONSOLIDATION

One way shops are adding capability to their business models is through consolidation. Shops are merging to form regional and international metalworking powerhouses. For instance, in Guelph, Ont., RME Inc. recently acquired Guelph Precision Tool & Cutter Grinding. The two companies were competing cutter grinding houses. The merger

makes RME Inc. the largest Canadian user of CNC cutter grinders. The company now has the capability to manufacture, regrind and coat a wide range of cutting tools. In speaking to the owners of both companies, it became apparent that the merger was designed not only to better service the local marketplace, but also to tackle the North American market more competitively. It will be interesting to see if similar consolidation takes place in other regions of the country.

GROWING MARKETS

Several growing industry sectors are likely to fuel specialty job shops. The biggest one is probably the tries with advanced capabilities that include automated taper generation, out-of-round grinding and thread grinding in a single machine.

There are a large number of tool and cutter grinding shops spanning Canada, with only a limited number having invested in five-axis tool and cutter grinding. Houses that have made this investment now have the capability to service S-Point drills, G-drills, Trepan and porting tools. Their ability to provide these specialty services will likely lead to continued growth.

Surface grinding shops have also made technological advances with the addition of creep-feed grinding, which is often geared toward manufacturers of aeronautical and land-

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power generation industry. Other potential markets include the aerospace, bearing, fuel injector, and hydroforming industries. Each of these sectors requires sophisticated parts, made to the tightest possible tolerances. Even though the aerospace industry is experiencing a short-term setback related to the World Trade Center attacks, it will be forced to meet the otherwise increasing demand for global travel.

HIGH TOLERANCE AND COMPLEXITY

Canadian job shops are adding capability to chase these new opportunities in several ways.

Cylindrical grinding shops are now better equipped to handle the stringent demands of these indusbased turbines. Creep-feed grinders, equipped with turbine-disk or roll-form dressers, are able to service turbine-blade root-form manufacturing and vane profiling. Finally, this is feasible at the job shop level.

As tragedies unfold and markets respond, ultimately, manufacturers' capabilities, and not their capacity, will reign. These capabilities will take many forms, including increased tolerances, complexity, and the ability to provide regional service. Is your shop ready to respond to these increased demands?

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