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How Canadian  
automotive suppliers are  
**SURVIVING  
THE SLOWDOWN**

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## Global trade drives innovation

How do Canadian automotive companies compete with low labour costs in foreign countries given an increasingly global competitive environment? Focus on what you do well. Improve, improve, improve.

Initially, the Canada-US free trade agreement (FTA) forced the Canadian automotive industry to sharpen its pencil and compete with our neighbours immediately south of the border. In 1994, the North American Free Trade Agreement (NAFTA) forced Canada to start competing with Mexican companies, which have lower overhead costs.

As the heads of nations met at the Summit of the Americas in April, it became apparent that by 2005, our hemisphere could be one trade zone.

So how will the Canadian automotive industry compete with foreign nations? Labour costs in places like Mexico and Brazil are much lower than in Canada. And it's unlikely that the decline of the Canadian dollar to all-time lows will be sufficient to maintain our competitive advantage.

The key for Canadian companies is to concentrate on manufacturing more high-tech and complex parts. Also, gains from productivity improvements could help keep those parts at cost-competitive prices. Domestic manufacturers are already doing this.

### HIGH-TECH PARTS

Automotive subcontractors in particular are developing an expertise in manufacturing difficult components to feed fuel systems, anti-lock braking systems (ABS) and powertrain

markets, for example. To manufacture fuel systems parts makers are developing expertise in "match grinding" for the body and nozzle pairs. Parts manufacturers are developing expertise in using grinding tools to maintain tight sealing surfaces for ABS systems. Challenging transmission components with shafts requiring OD grinding and housings requiring universal grinding are pushing machine tool suppliers to consider peel grinding and combination hard turning and grinding solutions.

### COMBINING PROCESSES

By exploring this kind of combination of processes parts makers can increase their productivity and improve the quality of their parts.

**By taking a highly automated approach, almost every advantage a foreign competitor offers is minimized.**

Hard turning and grinding in a single machine is one of the fastest growing processes in Europe and this trend is fast approaching Canadian shores.

Machine tool manufacturers are coming out with machine tools that hard turn, grind, inspect, and even superfinish chucked workpieces in a single clamping. Even the loading in such systems is accomplished under automated conditions.

This approach to part processing will take Canadian manufacturers to the next stage in the increasingly competitive global marketplace. Job shops will now have fewer safety

considerations, typically incurred with part handling from process-to-process. Work-in-process is also eliminated because parts flow into the work cells in a raw state and come out as finished components.

### AUTOMATION

The first concern most end-users have with this highly automated approach is changeover from process-to-process. This is minimized in such systems because parts remain in the same chuck from turning to grinding to inspection. Only the chuck jaw diameter setting and the cutting tools or grinding wheels themselves need adjustments to suit the application. By taking a highly automated approach, almost every advantage a foreign competitor

offers is minimized. The only thing standing between this technology and job shops is capital and the right application.

Is Canada going to compete in a new Hemispherical Trade Zone? Who knows. Will we need to compete globally? Absolutely. The only way we will succeed is by keeping abreast of the latest technological developments to improve our manufacturing processes.

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