



Invest in
CANADA

German manufacturer Dieffenbacher expands in Windsor, Ontario

The North American subsidiary of Dieffenbacher, a global leader in manufacturing



Peter McCormack

processes and machinery, continues to expand its facility in Windsor, Ontario. Dieffenbacher develops and manufactures machine presses and production systems for the wood-panel, automotive and components industries. In 2008, Dieffenbacher North America invested \$8 million to boost production capacity at the Windsor plant; in 2009, the company will install a \$4 million boring drill. The expansion positions the company to take advantage of anticipated growth in the clean-energy sector.

First established in Germany in 1833, Dieffenbacher now operates manufacturing facilities in that country, along with Canada, China and the Czech Republic. The company opened its first facility in the Windsor area in 1983 and in 1998, it built a new plant in the city's east-end automotive-manufacturing centre. The 2008 investment

added a series of computer-controlled and gun-drill machining centres, and is expected to boost employment to approximately 65 full-time workers.

"Windsor is an ideal location for us, for a number of reasons," says Peter McCormack, Sales Manager for Dieffenbacher North America. "As a major manufacturing centre, there's highly skilled workforce, for instance, and we're close to many of our major clients and partners. Its location on

the border with the United States is also an advantage for us. Setting up here is a strategic decision that our company has not regretted."

New materials, new processes

The Windsor plant will also acquire the technology needed to fill the rapidly growing demand for long-fibre reinforced thermoplastics (LFT). Lightweight and exceptionally strong, LFT is an ideal material for a wide range of products, particularly automotive components such as underbody panels, wheel covers, carriers, and instrument panels. Ford recently announced that the 2010 Taurus and Fusion will feature front-end modules made of LFT.

"LFT is much lighter than metal and will lead to lighter, more fuel-efficient automobiles," says McCormack. "About 75 per

cent of a vehicle's fuel consumption is related to its weight. Automobile manufacturers recognize LFT as part of the solution to the challenge of boosting fuel efficiency."

Rooted in research and development

To produce LFT, Dieffenbacher uses a unique and highly efficient method known as LFT-D. Developed in partnership with Germany's Fraunhofer Institute – known as the pioneer of the MP3 player – LFT-D reflects Dieffenbacher's commitment to research and development (R&D).

"The company invests approximately five percent of its gross sales into R&D," says McCormack. "This is the main reason that we've been able to stay well ahead of the competition."

McCormack believes that another contributor to Dieffenbacher's success is the company's capacity to adapt research done in a laboratory into industrial processes and machines that can manufacture marketable products cost-effectively.

"It's crucial to consider not only how much investment it takes to develop a product or process, but also the price it would eventually sell at and how many you'll need to sell to cover production costs, recoup the initial investment and finance the innovative work needed to create the next one," McCormack says. "I call it the piece-price



performance cost ratio; and given that we specialize in production equipment and processes, these calculations must always inform our investment decisions. They certainly influenced the company to expand here in Windsor."

Dieffenbacher poised for further growth

There's no doubt that the company has made a string of sound decisions. While Dieffenbacher may not be a familiar brand, most people in Canada, the United States and Europe own products manufactured with a machine or process created by the company.

"Nearly all of the metal sinks sold in North America are made using one of our machines, for instance," says McCormack. "Our machines also make about 70 percent of North America's particleboard, a basic construction material."

Once manufacturers fully appreciate the advantages of LFT and LFT-D (see sidebar), McCormack believes that the Windsor plant will see another wave of growth.

"The properties of LFT make it advantageous for a wide range of applications beyond automobiles," he says. "Consider, for instance, the renewable-energy sector; companies that manufacture solar panels and wind turbines, for instance, would also benefit from a robust, lightweight and recyclable material like LFT."

With the demand for solar and wind power projected to grow significantly – in part aided by

government initiatives such as Ontario's Green Energy Act – Dieffenbacher's investments in Windsor could well usher in another period of growth for the company.



Machining at Dieffenbacher North America

Windsor plant to produce innovative LFT-D machinery

Dieffenbacher's Windsor plant produces the machines needed for a proprietary, highly efficient production process known as LFT-D. The process combines an innovative compounding methodology with compression moulding. Unlike injection-molding processes, LFT-D prevents warping and doesn't create knit lines – a major problem, particularly for large panels. Versatility is another advantage of LFT-D; although glass fibre is often used as raw material, the process can

also employ organic fibres. LFT-D can also be adapted to employ such methods as gas-assist and in-mould decoration.

Previously, Dieffenbacher satisfied global demand for LFT-D equipment (such as compounding and compression-moulding machinery) through its German facilities. Soon, however, the Windsor plant will be used to fill LFT-D orders from all clients in Canada, the United States and Mexico.

To learn more about investment opportunities in Canada, consult: www.investincanada.com