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LRI Oil Tools Inc. Canadian Innovation Award for New Technology

A culture of innovation among owners and staff drives the continuous development and application of new technology that has made Edmonton-based LRI Oil Tools Inc. a leader in advanced material cutting processes. Experience and knowledge of both laser cutting and machine tool development have enabled LRI to become an expert systems integrator, applying technologies to solve manufacturing problems. LRI has taken an innovative approach not only to technology, but also to the customer, supplier and competitor relationships.

LRI Oil Tools manufactures perforating guns and sub-assemblies for the oil and gas completions industry, and contracts work in metal cutting. It has developed two custom rotary industrial laser cutting systems, and two spot facing machines that are recognized as the best technology available, and LRI has exported both product and machinery internationally. Its world-class manufacturing line of perforating guns has the highest efficiency of any in North America.

Six years ago, Elmer and Ian Brooker, a father-son team, performed extensive research into the business potential of using laser cutting machines for industrial applications. Satisfied with the results of this study, they embarked on a new business venture to apply private risk capital to innovative technologies. This resulted in the opening of the first fully integrated and computerized advanced material cutting shop in Western Canada, featuring state-of-the-art laser and water-jet industrial cutting systems, and a specialized laser cutter designed and built on-site. The innovation in technology of the custom rotary laser system, as well as its customer service commitment, established Laser Ray Inc. as a world leader in its field.

As Laser Ray evolved, it identified the need to change from a job shop to a manufacturing facility. As part of the transformation, the company name became LRI Oil Tools Inc.

The business change included the installation of specialized machine tools, as well as the doubling of floor space to 24,000 square feet. LRI staff design-built custom equipment to meet the needs of this new production line. They also applied their innovative thinking to determine the most effective layout of the expanded facilities, through a company-wide survey. The result was not only high production-efficiencies, but improvements to material handling systems. Current production capacity is 100 guns a day, compared to 60 a day as the previous standard.

Levering its strengths as a leader in the production of laser cut tubes, LRI undertook the development of a new laser rotary cutter. This two-year process included the application of the latest technology in direct drive motion systems, computer controls and handling systems. As of June 2002, this system is in the production line and is promising to change the way business is done in the industry. LRI is also developing a new spot facing machine to increase productivity and product quality.

Looking to the future, LRI Oil Tools Inc. is creating a company structure that will support ongoing innovation, and working with the University of Alberta and the Northern Alberta Institute of Technology to take advantage of local talent and to advance the technology. Innovation in the application of new technology clearly provides a foundation for its continued success.