

MCE LASERS

Precision Alignment



MCE Lasers, based in Melbourne Australia, has over the last 29 years developed a strong market niche for high-precision laser systems used in alignment across a spectrum of industries. The company continues to develop laser systems for the agricultural, mining, and civil engineering industries, and has refined precise laser alignment systems for harsh operating environments.<P>



With a diverse product portfolio across a number of international industrial centres, this proprietary limited company headquartered in Melbourne Australia began as a three-person operation servicing metrological systems and other laser products. Monochromatic Engineering Pty Ltd, trading as MCE Lasers, was started in 1980 by the present author, who trained as an engineer in Zagreb, Croatia and in America. I rapidly saw opportunity in transitioning the company from service provider in the limited metrological industry to meeting the growing industry demand for precise alignment across a range of industries.

Cornerstone

The flexible and high-performance nature of laser technology became the cornerstone of the company's success in meeting these needs. Most of MCE Lasers' activities can be done in-house, in one of the company's two factories; one used as a machining shop (mechanical), and the other for electronics, optical work and research & development projects. The factories have a combined total floor area of 1,300m². Distribution of MCE products and customer-service is handled by twelve Australia-wide representatives and a range of distributors across Europe, Asia and the Americas.

Meeting Needs

While I've heard the familiar refrain 'lasers are a solution looking for a problem, the success of MCE Lasers has been built on the close relationship with our clients to determine their whole project alignment needs, and seeking to deliver a range of efficiencies in the project with the one laser system. Our mission is to produce innovative laser technology to meet the precision alignment needs of industry. The company's main business consists of designing laser systems based on client specifications and manufacturing select products. Key examples include long-range land levelling lasers, slope indicators, inclinometer systems, and explosion-proof lasers used for underground mining.

Close Ties

I am joined as managing director by a leadership team at MCE Lasers led by sales manager Daniel Ramondetta, which in turn relies on close ties with managers of the company's distributor arms. As a medium-sized firm with twenty staff members, we retain a strong focus on research and development, drawing on expertise covering optoelectronics and Radio Frequency Identification (RFID) across Australia, on a project basis.

New Products

MCE Lasers has recently developed a laser-guided automatic underground drilling and precision alignment system. Newly available electronic and optical components have allowed this product to evolve to suit customer needs. We are constantly evaluating the latest components available to use in our products to give them a leading edge.

Partnerships

The target market consists of end users with specialised alignment needs, and distributor companies with a range of end-point-of-sale options. A number of partnerships have been developed over the last twenty years with companies such as Novatron Machine Control Systems (Finland) and Theis Feinwerktechnik (Germany). The company has for the majority of its existence sought to retain an Australian made and manufactured brand. However, the ongoing integration of global supply chains has rendered this impossible with some products; for example, the low-cost lasers. The company retains strict quality control on imported components for its laser systems.

Changing Technology

As regards the future state of the laser-alignment industry, technology advances in photonics, RFID, hardware and even battery life will allow a range of advances in the durability, robustness and application of these precise instruments. According to sales director Ramondetta: 'Due to technology changes we have already updated many products, including our laser-guided underground precision drilling products, giving us never before seen accuracy ratings.'

Financial Crisis

The firm's turnover remained stable through the 1990s and has experienced year-on-year growth of 5% to 10% over the last decade. The global financial crisis has of course resulted in a significant downturn in a variety of industries. In Australia, the top three hundred companies listed on the stock exchange have fallen by more than 50% since the start of the crisis. As a medium-sized firm, MCE Lasers has retained a competitive advantage by being able to respond faster to economic conditions than competitors. This led to protection of the firm's turnover base during the recession of the early 1990s in Australia. With the current government spending programme focused on infrastructure developments, the firm expects no overall shift in turnover; it does, however, anticipate a shift in the mix of products sold to market.

Scaling Up

Lower sales are expected on low-profit building lasers that traditionally attract small building operations, and higher sales in systems that integrate a number of uses for medium- to large-size firms. Given high incentives and building projects announced by state and federal government, the market in Australia will remain strong, with infrastructure spending accelerating. Over the past six months MCE Lasers has scaled research and development spending up rather than down. In addition, the company is hoping to bring to market new products in the building and civil industries, such as a new series of Rotec laser levels and Laserguide machine-control receivers, which will be displayed for the first time at Bauma 2010 in Munich, Germany.