



PTL employee working on gas panels in LPCVD system.

mercially viable boron nitride process in the world. This system is now used to manufacture X-ray masks.

The company also pioneered processes to deposit thin films on 125-millimetre and 150-millimetre wafers, and has successfully marketed the equipment for these processes.

Wafer service for 200-millimetre wafers is also being offered. This work requires the continual modification of quartzware systems to provide efficient delivery of reactant gases to the wafer surface. In addition, research and development work is proceeding on the gas panels and control systems to improve delivery of gases to the process tube. Much of this work has led to improvements already incorporated in the firm's marketed systems.

In 1983, Process Technology also developed a

robotic wafer loading system with soft-landing capability. This system is now in commercial production.

Products interrelated

The company's high-technology semiconductor products and processing equipment are considered to be among the best in the world. They include low-pressure and atmospheric gas panels; source cabinets; gas cabinets; specialised quartzware for use in LPCVD systems; complete systems for the deposition of thin films on silicon wafers; and silicon wafers pre-coated with thin films.

All the elements in the product line are interrelated and are often sold together as a total system. Systems and processes are also custom designed for special process applications.

Vickers reaps the benefit of locating in Canada

Among the UK companies that have run up successes in Canada is Vickers PLC. It bought Vickers Instruments Canada Inc (VICI) at the beginning of 1985 from the US corporation, Bausch & Lomb.

When VICI was offered for sale, Vickers Instruments (UK) identified that the scanning electron microscope manufactured and developed by VICI directly complemented its own newly developed line width measurement systems, since both were aimed at the same semiconductor market sector. VICI, at that time, had already made a significant impact on the North American semiconductor market despite its limited sales resource, while Vickers Instruments was still endeavouring to break in.

Strategically, therefore, the acquisition provided a key opportunity for Vickers Instruments to promote its own product through the contacts already made by VICI; in turn, its worldwide sales and marketing structure would be able to expose the VICI product to previously unexplored marketplaces.

Here's how Allan Dickinson, president of Vickers Instruments North American operations describes his company's experience in Canada.

With the rapid growth the company is experiencing, it is becoming apparent that a larger facility is essential. Consequently, plans are in hand to extend the existing plant by some 50%.

Ottawa has long been titled 'Silicon Valley of the North', because of the number of high-tech industries located there. As a result, there is an abundant supply of high-calibre, technically qualified personnel in the vicinity. This avoids costly recruiting and relocation expenses when new employees are required. Also, the research and development department is able to keep up-to-date with the changing facets of technology.

In general, Canada has a great deal to offer an employer, particularly when compared to its neighbour, the US. Wage and salary expectations are considerably lower than in the high-tech areas of the US, and property prices remain way below the footage values of the California/Massachu-

setts high-tech regions.

Canada also offers state education and health care, thus adhering to a social structure comparable to that of the UK.

Ottawa itself is the headquarters of the National Research Council of Canada, an organisation that actively encourages development and research through the awarding of specific grants — a factor that greatly contributed to the initial success of VICI.

The Canadian government is a strong advocate of growth and development, and so provides financial backing to suitable Canadian-based businesses. For example, partial grants are available to assist in the promotion of Canadian products abroad.

As well as providing assistance on the home front, the Canadian government offers financial support to foreign organisations expanding into Canada — which highlights the importance that the country places on foreign investment.

However, the greatest benefit to companies, particularly those of UK origin, is firstly, the unique relationships Canada enjoys with both the UK and the US; and secondly, the fact that the Canadian way of life has many similarities to that of the UK.

Consequently, UK companies can relocate key management personnel without the burden of educating such employees in a new way of life.

From an administrative angle, it is far easier for a company to set up a Canadian facility than to open a US division, since the staunch backing of the Canadian government — both through financial loans and immigration practices — is so strong in support of such ventures.

Also, import/export procedures from Canada to the US are far more favourable than those experienced directly from the UK.

Therefore, simply by virtue of its proximity, Canada provides a gateway for foreign investors to reap the benefits of the North American marketplace without incurring the expense associated with an American operation. ☺



Canada provides a number of gateways for investors.