

Unique advanced system

The second agreement involves \$30.9 million in grants for building ten prototype rotary-powered CL-227 Sentinel drones, two ground stations and six payload packages. Production is scheduled to start in 1988.

The CL-227 Sentinel drone can be remotely piloted from a ground station by radio signals or it can fly a pre-set course. Measuring only 1.64 metres, the air vehicle can take off and land vertically, fly in any direction, hover in flight and reach an altitude of more than 3 000 metres. It can stay aloft for up to three hours, has a very low noise level and low radar signature.

The sensor package on the CL-227 is different from that on the CL-289. The Sentinel uses thermal imaging and carries a laser designator which illuminates targets on the ground, thereby enabling aircraft or artillery to "home in" for an attack on the laser signal.

The medium-range system can be used for such military missions as monitoring troop movements on a battlefield, lining up targets or aiding in anti-submarine warfare.

Quasi-military applications might include border patrols, coast guard patrols and



The CL-227 Sentinel can be used in many military and commercial surveillance operations.

anti-smuggling patrols.

The CL-227 also has commercial applications. One recognized civilian task is the patrolling of power lines for hydro-electric

companies, which is now done by helicopters, often under risky and dangerous conditions. It can also be used on ice patrols for ships in the Arctic or in ice-infested waters.

Boiler maker seeks to boost exports to US

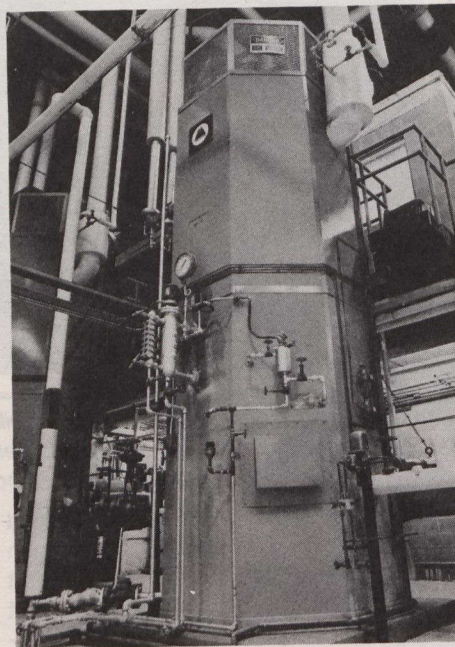
A leading Canadian boiler manufacturer, Volcano Inc., based in Saint-Hyacinthe, Quebec, is taking steps to expand its markets in the United States.

While all of Volcano's 1984 sales were made in Canada, the company has recently taken steps to sell products of its own design abroad by establishing a network of agents in the US.

Licence agreements which will terminate between 1986 and 1989, have been concluded with Zurn Industries Inc. of Erie, Pennsylvania for large capacity monobloc steam boilers and economizers; with the International Boiler Works Company of East Stroudsburg, Pennsylvania for high temperature thermal fluid or hot water Lamont boilers; with Wellons Inc. of Sherwood, Oregon for hog boilers and wood dryers; and with Hydro Steam Industries Inc. of Alexandria, Virginia for electrode boilers.

Specialization

Volcano began to manufacture coal and oil-fired heating systems and domestic furnaces in the 1930s. Since then, services and products have increased to include the design, manufacture, installation and maintenance of industrial and commercial steam, thermal liquid or hot water boilers fired by oil, electricity, natural gas, coal, recovery gases,



An electric boiler with electrodes is one of many products manufactured and sold by Volcano Inc.

wood wastes and other fuels. The company now manufactures the most complete range of monobloc boilers in Canada.

Often designed and manufactured to meet the specific needs of a client, the boilers and related equipment range in price from

\$5 000 to \$3 million. The thermal capacity of the boilers varies between one million and 250 million BTU per hour.

The market for industrial and commercial boilers changed greatly in the past few years and Volcano has been able to adapt to meet new demands by improving existing products or designing new ones. Volcano was one of the first businesses in Canada in the area of fire tube boilers. New types of boiler systems that can be fired by hog fuel with a very high moisture content, have been developed. The product line has also been increased with the development of incinerator systems, gas and oil burners, wood dryers and other related equipment.

For the past three years, the conversion of oil-fired systems to natural gas or electricity has also been an important part of the company's business.

Sales which are mainly to the pulp and paper industry, the lumber industry, the oil industry, the food industry and the institutional sector have reflected the adaptability of the company. Approximately 75 per cent of 1984 sales were of products introduced in the past five years.

The company's sales have also grown significantly from \$20.4 million in 1980 to \$37.2 million in 1984. During the first six months of 1985, sales totalled \$15.12 million, compared with \$12.44 million for the corresponding period of the preceding year.