

Excellent sales potential in data display instrumentation and devices is related to the demand for automated process control systems. Analogue recording and indicating devices and analogue panel meters will be in significant demand. Although most of the Australian industries using that type of equipment appear to prefer analogue, digital equipment and interfacers are becoming more popular.

A potential for Canadian supplies also exists for gas and oil pipeline automation and monitoring, coal mine mechanization, urban transportation controls and computerization, pulp and paper mills, steel rolling mills, automation of agricultural vehicles and implements, and sewage and water treatment plants. The main opportunity lies in the high degree of skills and experience vested in Canadian companies in such fields as software development, design and systems integration and special hardware for computer or microprocessor-based industrial process control and automation systems.

b) The Canadian Industry

Sixty-seven per cent of the Canadian market for process instrumentation, which was valued at \$325 million in 1978, was supplied by Canadian-based firms. One hundred and thirty-eight companies, employing 5,300 persons, have been identified as active in that market, and, of those about 71 per cent are Canadian owned. Most of the Canadian-owned firms supply components and software subsystems to larger instrumentation and systems companies or to industrial users. On the other hand, several companies provide total systems development, supplemented by varying capabilities in the manufacture, assembly, installation and servicing of the instrumentation.

Canadian-based companies also exported \$45 million in 1978, which represented 17 per cent of their total production value. Slightly more than half of those exports were provided by subsidiaries of large multinational corporations. Although there is evidence of some product mandating by the MNC's, it appears that subsidiaries have limited their export efforts for the most part to projects financed by CIDA or EDC, where they are effectively in a preferred position vis-à-vis their parent firms.

Canadian-owned firms, by contrast, are more actively export oriented, and that is particularly true for the broader-capability Canadian firms, whose export sales approximate 50 per cent of their total production. In general those companies are highly competent in the design and integration of control and automation system. Their