Modernizing Mexico's Manufacturing Industry

The need to modernize or perish is expected to lead to a quick recovery for industrial automation products, in spite of Mexico's economic crisis.

Advanced manufacturing technologies (AMTs) are computer-controlled or microelectronics-based products and systems used in the design, scheduling, production, storage and distribution of manufactured products. They include "hard" technologies such as computer aided design (CAD), numerically controlled (NC) machine tools and robotics as well as "soft" technologies such as concurrent engineering and just-in-time (JIT) production. In Mexico, these technologies are referred to as "industrial automation" and they are in growing demand.

These technologies are mostly new to Mexico, but they are in growing demand. This is largely because of policies of trade liberalization, privatization and deregulation that the Mexican government has pursued over the last several years. Demand is all the stronger because Mexico has little investment in the previous generation of technology that might inhibit modernization. For example, in 1992 Mexico was estimated to have only about 15 computers for every 1,000 inhabitants. This compares with 150 in Canada and 250 in the United States at that time.

According to some estimates, the AMT market in Mexico has been growing at an annual rate of 25 percent over the past few years. This suggests major opportunities for Canadian providers of advanced manufacturing technology. Nonetheless, a scarcity of capital and the devalued peso will be important constraints on the growth of this market in the short term.

The Mexican manufacturing sector developed in a highly-protected environment. Government policies aggressively promoted import displacement. The economy was highly regulated, and a variety of other policies combined to discourage domestic competition. The result was an industrial structure characterized by a very large number of small family-controlled firms, combined with a group of much larger state-owned factories. Both types of producer were focused on the domestic market and were highly inefficient. Product distribution was handled by a complex network of intermediaries, and there was very little integration between producers.

Beginning in the late 1980s, the government began to reverse the industrial policies that created this structure. Mexico became a full member of the General Agreement on Tariffs and Trade (GATT) in 1988, and in the years that followed a wide variety of non-tariff barriers to trade were dismantled. In particular, in 1990, the "decrees" that formerly prevented the importation of most computer products were rescinded. The system of import permits was abandoned, and