

This finding might seem to be at odds with Mexico's recorded exports of about US \$2 million worth of numerically-controlled (NC) metalworking machine tools in 1993. Industry observers point out that machinery is sometimes tested in Mexico and then returned to the vendor. Also, some used pieces of equipment are re-exported as trade-ins on new machines. Both cases are recorded in the export statistics.

Most industrial automation equipment suppliers have Mexican subsidiaries and can provide support with a combination of local and imported resources. There are also a number of well-developed service firms in Mexico that offer systems design, maintenance, training and consulting services.

PLASTICS MANUFACTURING MACHINERY

Plastics is one of Mexico's most dynamic industries. For more than a decade, its growth has consistently outperformed the gross domestic product (GDP). In spite of this progress, the use of plastics in Mexico is far below the levels of developed countries. Plastics consumption per capita rose steadily from 6 kilograms in 1980 to 26 kilograms in 1994. But this is still far below the 90 kilograms per capita in Canada and the United States. This suggests sustained market growth, as Mexico gradually catches up with the rest of North America in substituting plastics for traditional materials. Per capita consumption is projected to reach 30 kilograms by the year 2000.

The plastics industry, like other Mexican industries, is under great pressure to modernize. Computer assisted design and manufacturing (CAD/CAM) techniques have gained wide acceptance as a result. CAD is used to design parts and tools and CAM is used to program computerized numerically-controlled (NC) machine tools to produce moulds.

The use of computer assisted engineering (CAE) is also spreading in the plastics industry. CAE is used to simulate the injection moulding and cooling processes in order to optimize the production process and to control shrinkage and warpage.

Equipment used by the plastics industry includes blow, injection and extrusion machinery, and moulds and dies used in the process of transforming plastic resins into final products.