

The VFD technology in use in Futaba is very advanced. The company's latest design is the front luminous vacuum fluorescent display which employs thin film technology. The company also has developed a flat VFD capable of displaying high resolution graphics. This development is seen by the company as having portable computer applications. The use of VFD in automobile applications is also seen by Futaba as a growing product area.

In other areas, Futaba is involved with the development and manufacture of machine tools, dies and mold bases. It also produces radio control equipment and pulse scale digital readout systems. The corporation also has a research and development centre tasked with advanced technology research and development of new products. This centre works in conjunction with the engineering departments in each plant which are responsible for applied work such as developing manufacturing systems, production plants and equipment. This approach seems to be working well. The automation in the keyboard and tooling departments was impressive. The equipment was high volume and was outfitted with special tooling that was produced in-house, emphasizing Futaba's self-reliance. The keyboard line uses a battery of pre-loaded, single function machines provided with fault sensors (e.g., limit switches) and signal lights. Operators are used basically to correct "fail" conditions and restart machines on "red lights". Machines were configured in mutually independent groups to prevent the spread of downtime across the entire line. The degree of automation permits one shift resourcing for three shift machinery operation. Preventative maintenance programs are in place. The electronics assembly operation did use some imported equipment from the U.S. (e.g., inserters and sequencers). Of note, however, was the fact that the plants were running well below their capacity.

Futaba's overall objective is development and application of its own technologies. It is looking now to expand production and increase sales overseas, while building a world-wide service network to support sales. It has subsidiaries in the United States, Hong Kong and Germany. None of the North American companies, however, are involved in manufacturing, even though 40 per cent of the company's products are manufactured outside Japan.