

FACTORY VISIT

Futaba of Japan are one of the names in the radio control modelling hobby. Geoff Driver has been taking a closer look at this manufacturing giant

Most long established companies start from humble beginnings. In the UK many of the once-famous car companies started as bicycle manufacturers and some of the countries largest supermarkets started as market stalls. As companies expand so does their product range, eventually the product that started it all just fades into obscurity.

In the 1/10th world, some of the big names have had some unlikely beginnings. *Tamiya* started life as a small time bus company and timber yard. Some companies of course start out as they intend to continue.

This was the case with *Futaba*, the world's largest radio control manufacturer. They started by specialising in electronics. No bicycle manufacturing or dolls-house production for them. Most people imagine that as one of the world's largest R/C manufacturers, this is the company's only interest. Nothing could be further from the truth. In fact R/C represents only about a 10th of *Futaba's* business.

Prior to the last war most of Japan's technology was imported from the USA. After the war Japan began rebuilding its industry and many manufactured goods were copies of European or American

products. Even so *Futaba* recognised even in those early days the value of investing money in research, this philosophy has been maintained up to the present.

The *Futaba* company was established on the 3rd of February 1948 to produce electronic valves. (Those were the things that came before the transistor). This was a time when hobbies such as radio control were far from most peoples minds as industries all over the world struggled to produce the goods of necessity.

Over the following years, as times became easier, radio control did take some hesitant steps. The systems produced were in the main single-channel using miniature valves. Radio control was to be found mainly in aircraft and boats as cars had not been developed to any great extent.

The control was known as 'bang-bang' systems. This meant that the signal was either on or off, none of the finesse of proportional control. In aircraft and boats this involved either full left or full right rudder using clockwork or rubber band mechanisms. If that sounds a bit hit-and-miss the radio gear was none too reliable either with valves failing, batteries going flat and so on.

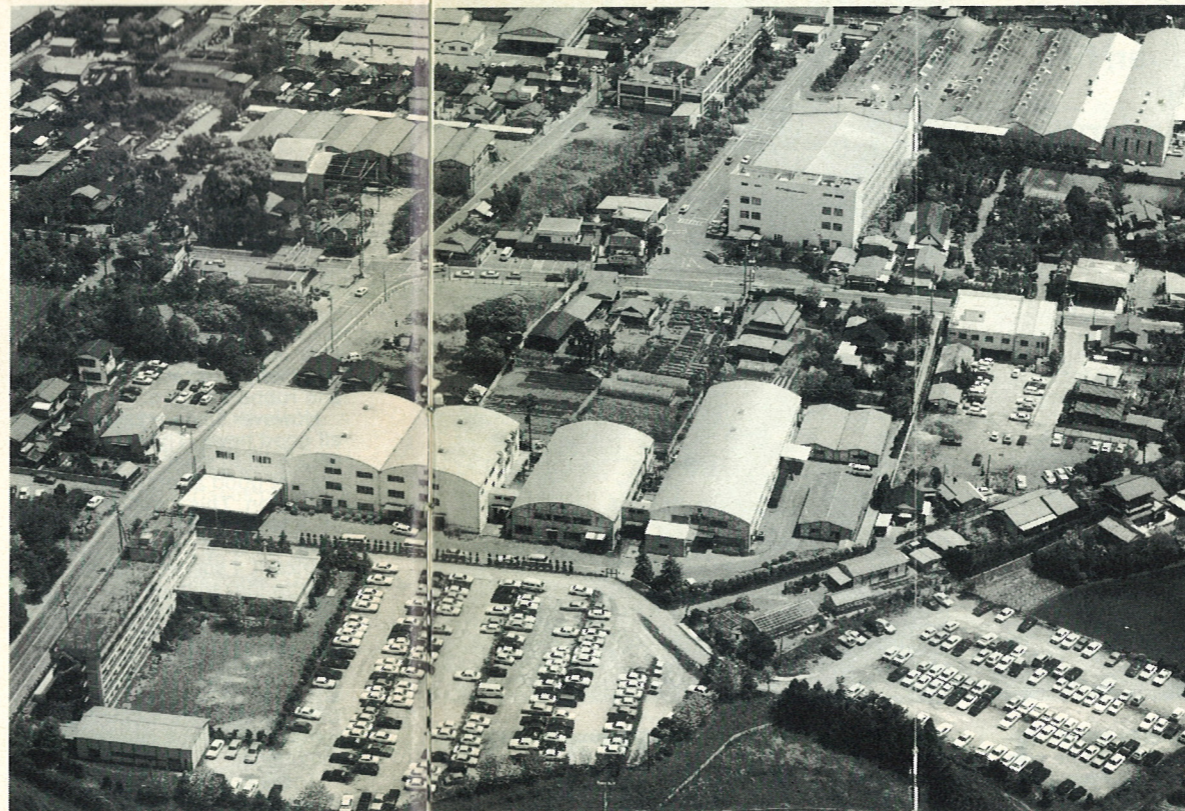
Futaba was doing quite nicely

thank-you making electronic valves but by the early 1960's the company appreciated that diversification was all important, to coin a phrase, they decided NOT to keep all their eggs in one basket.

Very early on the company discovered that the machinery to make their products was either not entirely satisfactory or not readily available. *Futaba* set about manufacturing their own production equipment. The success achieved in designing and producing their own machinery gave them the confidence to diversify.

The company prospered and in 1961 opened a sales office in the electronics capital of Japan, Tokyo's Akihabara district. It was in 1962 that *Futaba* started manufacturing R/C transmitters and receivers. At the same time, they started a division to produce not only injection-moulded plastic parts, but also the dies and machinery to do this work. All of this expertise helped with the production of the valves that the company were still making at the time.

Within a few years the range of products had expanded to include press tools. There was, by this time an extensive range of skills within the company covering electronic and mechanical design and manufacture.



1968 saw a significant move into the world of digital displays. This, although not perhaps apparent to the modelling world has subsequently provided *Futaba* with some pretty impressive business.

However with a firm toe-hold in the R/C market the company did not stand idly by, just selling the old-fashioned single-channel radio control gear. Instead *Futaba* continued with the development of R/C systems and by 1969 introduced their first proportional radio control equipment.

Other activities were also beginning to move with computer keyboards, switches and die-casting operations getting off the ground. Within three years *Futaba* had moved into precision location machinery for machine tools and opened factories in Taiwan and Korea, another factory appeared in Korea the following year. At

the same time an office was opened in the USA followed two years later by a factory in Hong Kong.

With all this commercial activity going on, the technical side had not been letting the grass grow under their feet. In 1981 advanced graphic displays appeared and in 1983 the latest leap for the modeller appeared with *Futaba's* PCM system. During this same year the company opened a fully automatic keyboard manufacturing plant.

Flat screen displays continued to advance with *Futaba* units being used in the world's largest TV screen at the Japanese Expo 85 exhibition. Today it is *Futaba* displays used on the dashboards of cars made by *Chrysler* and *Toyota*. Keyboards and display tubes used on computers made by companies such as *Hitachi*. The digital displays are to be found on TVs, Video machines,

Hi-Fi equipment and cash tills all over the world. Machine tool equipment can make use of *Futaba* precision locating electronics, and they make the dies for producing plastic parts as diverse as telephones, video cassettes and plastic bottles.

The company now employs over 2,000 personnel, they have five factories in Japan, 14 branch offices in Japan, branch offices in USA, Germany, Hong Kong, Taiwan, Korea and agents around the rest of the world.

Opposite page bottom left and right; hand assembly of all Futaba radio control equipment. Final testing of transmitters. Above: aerial view of Futaba head office, R&D and main Japanese factory. Right: electronic instrument panels in use in various makes of cars. Below: R/C parts production and mainly automatic PC board manufacture.

