

< FA System Case Examples >

Case Example 1. Country: Japan

Fully automated processing line for producing turbo parts for automobiles. Tomita proposed a production line configuration calculated from the monthly production and operating hours.

Tomita delivered an automated line made up of a materials stocker, three 5-axis NC lathes, cleaning units, instruments, four horizontal machining centers, and a dedicated diagonal-hole drilling machine. The entire line was connected with loaders and suspended multiple-joint robots.

The lathes were distributed among different processes, and the machining centers used special jigs that allowed them to execute all machining with a single chuck.

Case Example 2. Country: Japan

Tomita proposed an automated assembly line for panels (8x2.5 meters) that had been mostly assembled by hand. The total length of the line was 51 meters. Holes were automatically drilled, the panels were automatically riveted together and work pieces were transported to the next process on a conveyor belt. The final product was assembled into a box-like shape.

Case Example 3. Country: U.S.A.

Based on work piece diagrams provided by the customer, Tomita proposed a fully automated processing line that combined lathes and specialized machines.

Tomita was responsible for the entire process from selection of a manufacturer, deciding specifications, making payments, handling export procedures, and to receipt and inspection.

Case Example 4. Country: U.S.A.

Based on work piece diagrams, Tomita delivered three production lines doing everything from selection of the manufacturers to full turnkey delivery. The three lines were for the machining of rocker shaft holders, cam shaft holders and fuel pump cases that would be built into cylinder heads in an automobile engine parts factory. The lines were fully automated machining lines that incorporated input of materials, machining processes (using 15 general-purpose machining centers), cleaning units and unloading units, all of which were connected by robots.

Case Example 5. Country: U.S.A.

The automatic transmission for a new automobile model required modifications of existing machinery to make the new transmission. Tomita provided full support from shipment of parts to assigning a supervisor, local construction and process control.

Case Example 6. Country: Canada

In a joint venture with a local manufacturer and engineering company, Tomita installed a work piece conveyor line.

Tomita was involved in modifying the welding line for a model change, and the sales, witnessing and receipt and inspection of a laser welding machine for tailored blanks.

Case Example 7. Countries: China, Mexico

Tomita delivered dedicated automobile engine part lines to China and Mexico that included combinations of assembly, stamping, cleaning and measuring. Tomita provided full support until receipt and inspection of the lines.

Case Example 8. Country: Thailand

In Thailand, Tomita delivered a case manufacturing line and an assembly line for compressors to be used for home and business-use air conditioners. The total length of each line was about 50 meters. Tomita organized the products from several manufacturers and completed setting up the lines locally.