

Specialists in precision



Founded by
Yamotsu
Ifuku in the

early 1970s, Ifuku Precision Co. Ltd. in Kobe has developed special expertise in the machining of "tricky" materials - including the turning of cemented carbide, the EDM die-sinking of titanium turbine wheels and grinding and EDMing of parts in multi-layer materials for rocket engine housings. Today, it employs 16 people in the production of precision products and prototypes. Milling, grinding, turning, wire and die-sinking EDM are all in the company's programme.

Automatic wire EDM cell

Compression wheels for oil pumps, on the other hand, are a volume product - 10,000 per month! However, there are no long series, just a large number of variants. Production involves high-speed milling and, to a limited extent, wire EDM. It all takes place in a climate-controlled room that has 20 sensors monitoring the temperature.

Ifuku Precision has always taken an innovative approach and System 3R reference systems have been an integral part of their operations. Small series production entails a lot of retooling and the parts are worked on in a variety of machines. Every minute of



Motohiko Ifuku, President:
"The VDP system is superb."

retooling time that can be changed into machining time has a large impact on productivity.

The company's President, Motohiko Ifuku, says: "We installed our first automatic production cell last spring. One of the six Fanuc wire EDM machines has been equipped with an 8 position WorkPal Compact, with each pallet carrying four workpieces. Additionally, instead of the normal 5 kg wire reel, the machine has been given a 15 kg reel. Since the installation of the robot, the machine's operating hours have increased almost 300 percent per month! We know because the entire process is monitored 24 hours a day by a webcam!"

'Horses for courses' - GPS 240, Macro and VDP

"This year, we also equipped our high-speed milling machines with the GPS 240 pallet system," continues Motohiko Ifuku. "We started cautiously with a single machine but as the results were so good, within a couple of months we installed the system on all the machines."

The work table of a Matsuura 600VF has been given two GPS 240s while a Matsuura 800 Ternary CNC Mill & Grind has been

equipped with both GPS 240 and VDP. Motohiko Ifuku explains: "We are totally focused on the production of precision products - however there can be different degrees of precision. GPS 240 is our base level moving through Macro for greater precision and VDP for extreme precision. An

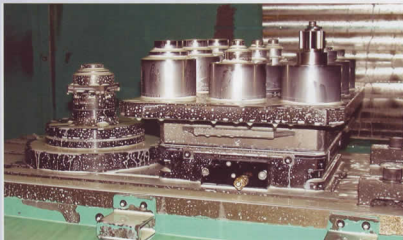


Prepared GPS 240 pallets ready for rapid introduction into the high-speed milling machines.

example of the latter is an 0.1 mm thick aluminium part machined to an accuracy of 0.003 mm which really does require the superb VDP system."



WorkPal Compact has increased monthly machine hours by 300 percent.



VDP and GPS 240 on the work table of a Matsuura 800 Ternary CNC Mill & Grind.