

Unique Products due to many In-house Developments

Also in this issue, we introduce a machine tool manufacturer who successfully uses the products of Blum-Novotest GmbH. We were fortunate enough to have the opportunity to interview Mr Yuji Kaneko, Chairman of the Board of the Japanese Enterprise, Sodick Co., Ltd.

The globally active company of Sodick Co., Ltd. is a manufacturer of eroding machines as well as HSC machine tools. As one would expect from a Japanese company, they are committed to the highest quality standards and have top technical expertise at their disposal. Therefore, Sodick does not only develop its machine concept itself, but also many components other enterprises would purchase.

The company name says it all

The name "Sodick" comprises the corporate philosophy of "creativity (sozo), performance (jikko) and endeavour/effort (kuro, kokufuku)". Ever since the company's foundation, it has been the basis of all corporate activities and has been dedicated to customers. Over time, this attitude has been very fruitful contributing to the creation of several innovative products such as EDM machines, HSC machine tools as well as injection moulding machines.



Yuji Kaneko, President and Representative Director of Sodick Co., Ltd.



When developing new tools, Sodick has always considered the customer's wishes and has mastered every challenge it has faced so far. The strength of the company is the fact that it develops and produces components such as NC-control, linear motors and PLCs itself. This high degree of vertical integration results in unique products that are not easy to imitate.

Use of cutting-edge technologies

As well as EDM machines, HSC machines represent another core competency of the company. In this area, several innovative technologies were introduced which we would like to present briefly below:

Linear motor technology: Linear motors and motion controllers they developed and produced themselves facilitated very fast, highly accelerated and precise movements. The linear motors work contact-free and have excellent technical properties.

CFRP at the head piece: In order to realise a weight reduction at the drive, and thus immensely improve the motion performance, CFRP (Carbon Fibre Reinforced Plastic) was used at the head piece. This brought a weight reduction of 41 % over the previous cast design while the precision remained unchanged.

Interview: Successful cooperation

Blum-Novotest: You primarily associate EDM machines with the name Sodick. However, you also have great expertise in the field of HSC machining centres. What are the benefits of your machines?

Mr Kaneko: Our machines run on a linear motor technology which we have been maintaining and developing for many years. This technology is not only characterised by high speed, precision and good response behaviour, but also by good maintenance properties, since it works without contact.

Blum-Novotest: You have been using our products since your first generation of machining centres, haven't you?

Mr. Kaneko: Not only do we use them, we also consider them from the onset in development. It is always our objective to develop high-precision machining centres. However, these kinds of machines require a measuring system allowing extremely small diameter tools of the machine to be monitored and measured without any contact.

Blum-Novotest: More and more of your machines are unmanned. What part do the contact-free measuring systems of BLUM play in this?

Mr. Kaneko: We attach great importance to the realisation of continuous processing through automatic workpiece and tool changers. And particularly during unmanned operation, tools have to be automated and monitored under rotational speed. Currently, there is no better solution for this than your laser measuring systems for contact-free tool measurement and breakage detection.

Blum-Novotest: What do you do better than others?

Mr. Kaneko: We have always gone different ways from our competitors. It is not only the machine head concept but we also develop and manufacture many components ourselves, for instance. BLUM has supported us since the very first machine generation and, therefore, understands our philosophy. We are very pleased with this. They developed special laser systems to meet our requirements for smaller and smaller tool diameters.

Blum-Novotest: What is the current highlight of your product range?

Mr. Kaneko: We have introduced a combined processing centre with an entirely new machine concept. It unites the technologies of 3D-printing and chipping in one machine. This is an entirely new machine generation developed with the objective of producing faster, more precisely and more simply. We presented it to the public at the last JIMTOF.

JAPAN

