Producing quality, a precept for JESA

Enjoying international success while respecting typical Swiss values, JESA, a specialist in personalised solutions for precision ball bearings and products containing engineering polymers, has for more than 45 years made quality, innovation and precision its guiding principles.

JESA continues to invest in production equipment, combining high technology with modern techniques, in order to achieve its mission of high quality and meet the special and demanding needs of its clients. Two new items of equipment recently joined its range of machinery.

Fine honing and superfinish

With a focus on new and demanding markets, especially the requirement for high precision, JESA now offers accuracy classes up to ABEC 9. To achieve this, the ball bearing specialist has acquired machinery for fine honing the surfaces of bearings and the superfinish of the outside diameter.

The fine-honing procedure is a method for correcting surfaces and obtaining optimal alignment of parts. Material is removed at high cutting speeds over a wide contact surface. During this process, the part undergoes reduced loads in order to obtain excellence in terms of surface quality, flatness and parallelism of the machined surfaces. Diametrical dispersion is also improved, providing a considerable increase in the stability of the reaming process and ball bearing raceways, while reducing waste. The investments JESA has made represents an efficiency benefit for the entire process because the speed of production is also increased. (image 1)

JESA quality requirements also extend to increasing the accuracy of the outside diameter. The ball bearing specialist has therefore acquired a new, super finishing centreless machine which halves the radial tolerance range of the external diameter. JESA is proud to be able to achieve such quality in terms of circularity, cylindricity, shape and surface finish, as well as in the aesthetic appearance indispensable in some sectors of industry. (image 2)

Produce quality and not control it

These technologies have proven their benefits in areas such as spindle bearings, vacuum pumps, precision positioning systems, robotics and electric motors. These recent investments bring numerous benefits, both technical and aesthetic. In fact, they allow JESA to attain its ambitions of very high precision. But a change of paradigm was needed. At JESA, quality is not controlled, it is produced.

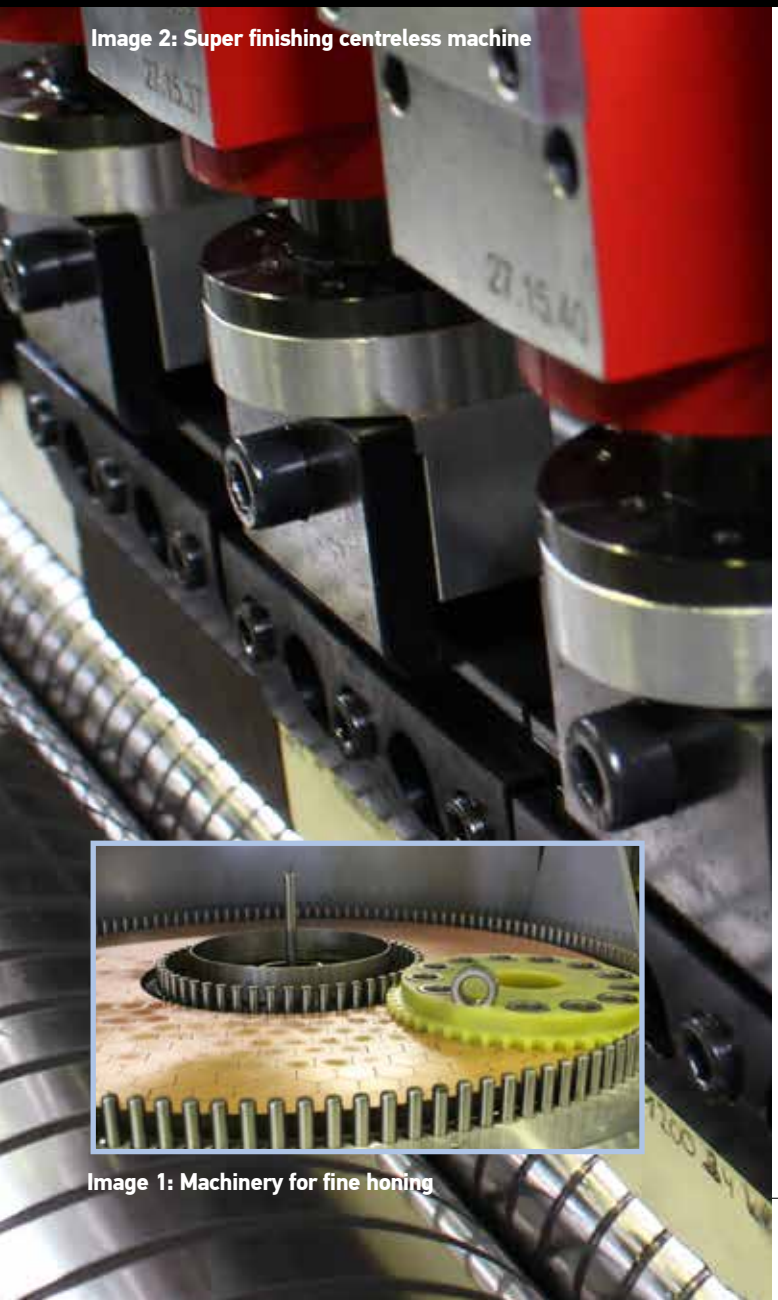

Image 2: Super finishing centreless machine

Image 1: Machinery for fine honing