Sodick
preparing for future EDM demands

SODICK PREPARES FOR HIGH DEMAND

Originally born as 'Mold and Die' tool, Electric Discharge Machining, which today encompasses wire, sinker and hole machining, has, over the last 15 years, developed into the process of choice for many part production applications. The aerospace, medical, oil drilling and precision engineering industries have all utilized the benefits of what is a 'non-contact' machining process to enhance their production methods. In fact, production applications now account for well over 50% of the EDM machines sold every year in North America. Another growth market for EDM machines is the manufacture of micro and nano size parts. The future will see the continued miniaturizing of many components, especially in the medical and electronics industries. It is anticipated that this new 'nano' production demand will account for over 30% of EDM machines sold in 15-20 years' time.

At Sodick, we recognize that machine and technology development are the key factors in successfully meeting the challenges of the future. The current core technology competences of Sodick establish the platform for the future machines:

Dave Thomas
President Sodick Inc.

LINEAR MOTOR DRIVES

The advantages are already well documented: no wear, no backlash, faster response, maintenance free, high precision, improved longevity, etc. All Sodick EDM machines have linear motors as standard and now come with a 10 year positioning guarantee.

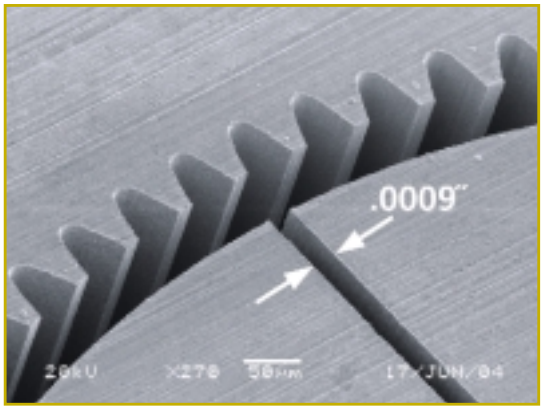
Whether the application is a production part that has a tolerance of +/- .0003' or a 'nano' part with features of .0005' and a tolerance of +/- .00005', linear motors are the best solution. It is difficult to imagine that any EDM manufacturer would still be fitting ball-screws to their machines in 5 years' time.

Sodick's AE-05 EDM is designed with a ceramic body, air bearing sliders, and linear motor drives resulting in micro precision cutting accuracy

CERAMIC COMPONENTS

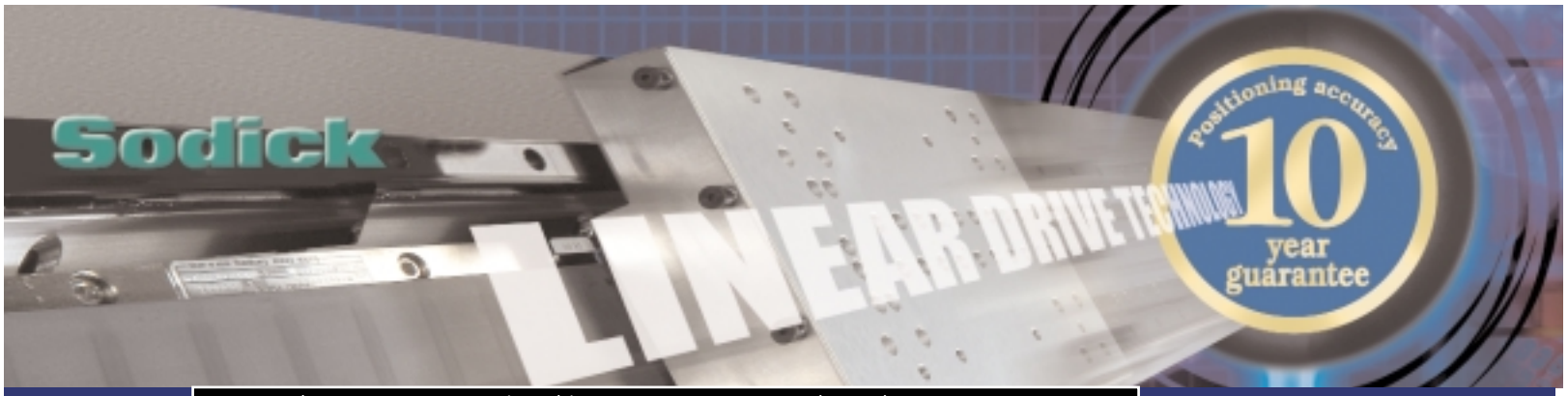
In mold, die and part production repeatability is vital to establish a stable process. In EDM machines it is essential that the critical parts (tables, upper and lower arms, ram quills, etc.) of the machine structure are kept thermally stable to achieve this. On all Sodick machines these components are manufactured in ceramic which gives absolute thermal stability and is corrosion- free. Sodick developed its own ceramic know-how and manufacturing capability in order to conquer the thermal stability challenge. The Sodick AE 05 (nano EDM) and EXC 100L (nano WEDM) are constructed entirely from Ceramic. These models are capable of machining part features smaller than .0002 and holding the compatible tolerances for this size of part. Without the ceramic structure this would not be possible.

The ceramic and linear motor developments are just two examples of how Sodick has gained a technology lead over its competitors. Over 15,000 Sodick linear motor machines have now been delivered, all incorporating the advanced ceramic structures. These two key technologies that are already implemented, proven and standard on Sodick EDM machines today will be essential in overcoming the application and performance demands of the future. At Sodick, we are ready to meet the challenges of the future and our mission is to provide products and services that allow our customers to benefit and succeed. Please contact us to find out how you can profit from a partnership with Sodick.



The cross section of this micro die is only .020" wide. It was machined on the EXC100L wire EDM using .0008" diameter wire.

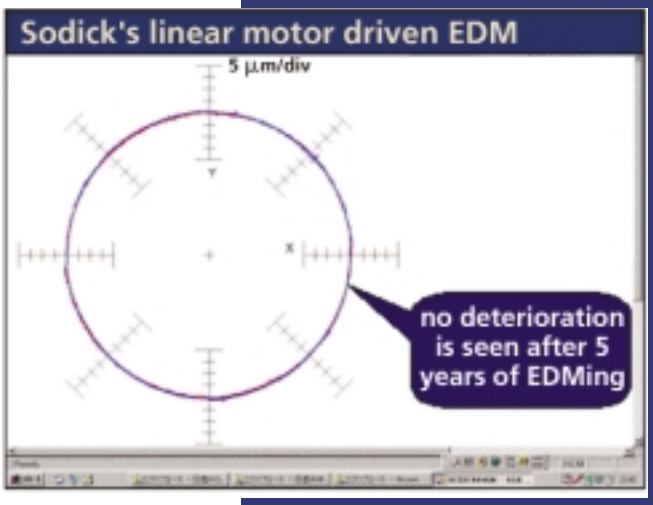
For more information call 1-888-639-2325 or e-mail info@sodick.com. *Visit us at www.sodick.com*



The masters in linear EDM technology

Sodick announces the Industry's first...

Sodick is pleased to announce the industry's first "10 Year Machine Positioning Guarantee" for all new Sodick linear motor driven EDM machines. This guarantee is possible because there are no 'ball screws' and therefore no progressive wear or backlash problems on Sodick's linear motor EDM machines. Global competition has demanded higher-speed and higher-precision manufacturing. Shops need to operate the machines around the clock, resulting in increased ball-screw wear. A set of replacement ball screws, with labor can cost over $20,000 after only 5 years of use. In comparison, Sodick's technology and the new 10 Year Guarantee offer significant machining advantages to our customers.



Over time, ball screw drives will wear creating scrapped parts. The ball screw drives can cost up to $20,000 to replace. Sodick's linear motor drives eliminate ball screws and will never wear.

Our 10-year linear-motor drive positioning guarantee is the longest in the machine tool industry. Sodick's ISO900 certified manufacturing facilities are used to produce Sodick's linear motor drives. Since 1998, Sodick's trouble-free linear-motors have secured its position as the best in machining accuracy.

In 2006, Sodick also reached the milestone of producing their 15,000 linear motor EDM machine, a technology that delivers machining performance, precision and extended machine longevity.

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