



Sandvik Hyperion – Barcelona, Spain

Z-Mike Measurement System Enables Renown Applied Materials and Tools Provider to Become the World Leader in Punch and Die Production



Results

- ▶ Highly accurate, reliable die and punch measurements
- ▶ Automated gauging process
- ▶ Increased competitiveness and productivity

The Z-Mike 1104HP system is in a 10° tilt position to keep the ring during ID measurement in a safe and stable position.

Sandvik Hyperion is a leading global provider of innovative cemented carbide, diamond and cubic boron nitride solutions. The company's products, services and applications development expertise enable customers to improve business performance with effective and wear-resistant tools, applications and components in hard and super-hard materials.

Can Tooling an Important Market

As part of its solutions offering, Sandvik Hyperion provides tailored can tooling for a wide range of can manufacturing. Its material development process, following a streamlined six-step approach, yields a unique composition of cemented carbide for can tooling, making it ideal for forming and stamping in can making. No product is delivered unless it meets Sandvik Hyperion's exacting quality standards.

Getting the Competitive Edge

In order to anticipate the new and future demands of the canmaking industry, Sandvik Hyperion searched for a highly accurate and reliable measurement system that was fully automated and could provide metrological traceability. Sandvik Hyperion tested many competitive economical offerings, but in the end it turned to Z-Mike Lasermesstechnik GmbH, a value-added distributor of Beta LaserMike products, to help with their unique measurement requirement. Z-Mike Lasermesstechnik GmbH has more than 30 years' experience in delivering precision non-contact measurement solutions for metrology to international manufacturers.

CASE STUDY

The Z-Mike Solution

Sandvik Hyperion chose the Beta LaserMike Z-Mike PrecisionScan 1104HP bench-top laser micrometer. It is the most precise laser gauging system in the world that has a measurement range up to 115 mm in diameter. This high-performance version produced in Germany has an MPE (Maximum Permissible Error) of ± 0.0006 mm (± 0.000024 in) – which is mainly achieved due to the outstanding Z-Mike optomechanical design and the use of high-performance gauge pins. The Z-Mike 1104HP gauge enables Sandvik Hyperion to obtain the highest possible accuracy with tolerances to ± 2 μ m when measuring punch and die ring products. Measurements are traceable to national standards via DAkkS Competence Center of Carl Zeiss, Germany.

A motor-driven slide with centers that open and close pneumatically provides hands-free measurement of the heavy carbide punch. A custom-developed software package by Z-Mike Lasermesstechnik controls the measurement system.

The operator places either the punch or die onto the fixture, then selects the proper program and library and presses start. The motorized slide automatically positions the part, takes the measurement and continues on to the next location. When measuring the punch or die, the slide moves the center of the product across the scanner to capture the measurement.

Success Story for Sandvik Hyperion

Sandvik Hyperion has been very pleased with the performance, high-quality results and competitive advantages provided by the Z-Mike 1104HP gauge that it now has now 3 systems at the Barcelona facility to measure its punch and die products.

NDC Technologies is represented in over 60 countries worldwide. www.ndc.com

a **spectris** company

NDC Americas

Tel: +1 937 233 9935

Email: sales@betalasermike.com

NDC United Kingdom

Tel: +44 1621 852244

Email: sales@betalasermike.com

NDC China

Tel: +86 21 6113 3617

Email: sales@betalasermike.com

NDC SE Asia

Tel: +65 91994120

Email: sales@betalasermike.com

NDC India

Tel: +91 124 2789507

Email: sales@betalasermike.com

Z-Mike Lasermesstechnik GmbH
Steinschoenauer Strasse 4c
64823 Gross-Umstadt, Germany
www.z-mike.de



In line with its policy of continuous improvement, NDC reserves the right to revise or replace its products or services without prior notice. The information contained in this document may not represent the latest specification and is for indicative purposes only.

Document Number: C&T-CS-SYST-Sandvik_Spain-Case Study-EN-2018FEB05
Date of Issue: February 2018
© NDC Technologies 2018

Making Light Work