



Newsletter: Axis accuracy of $\pm 1\mu\text{m}$: essential for automatic bond testing

31 July 2015

Although a well-established technology the majority of bond tests are deficient. The reason stems from the evolution of a manual machine into an automatic one. In a manual tester the operator aligns the test tool to the bond. This requires fine control of small movements but not ultimate accuracy. Many of these systems rely on rotary encoders fixed to their drive motors. This does an adequate job of positioning the motor but backlash and hysteresis in gearboxes, lead screws and linear guides induce very significant errors. Errors of $\pm 50\mu\text{m}$ are common. The **XYZTEC Condor Sigma** platforms all use **linear encoders** and have a positioning accuracy of $\pm 1\mu\text{m}$.



The **Sigma** direct drive motor and linear encoder ensure $\pm 1\mu\text{m}$ accuracy.

It works on your sample too!

If you are interested in a live demonstration of the **Condor Sigma** on your sample or perhaps for more bond testing inspiration, **contact us today!**

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Bond testers

- Condor *Sigma*
- Condor *Sigma Lite*
- Condor *Sigma W12*
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Aiming to improve understanding of bond testing in the industry, XYZTEC organizes **seminars** to present and disseminate knowledge in a straightforward format. [Click here to find out more about bond testing seminars.](#)

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