

# CONDOR

## High Speed Impact Bondtesting

*The high speed impact test and the fatigue test are becoming very important tests to determine the actual strength of the bond.*

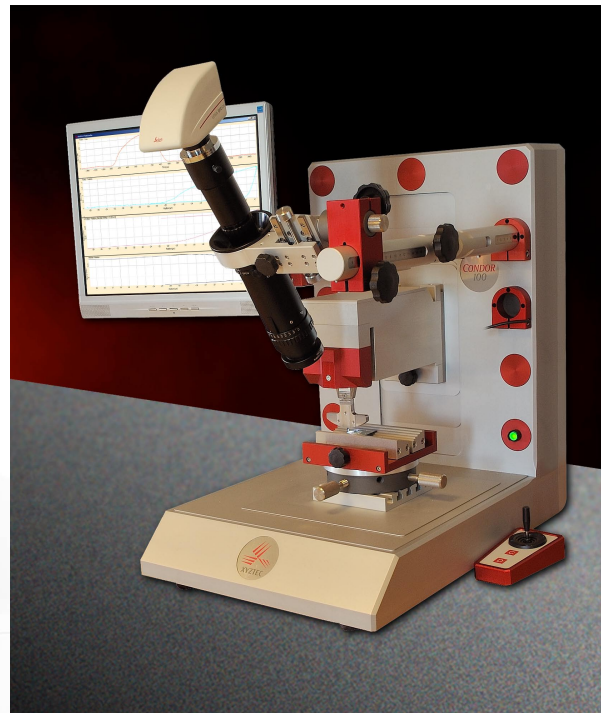
*Due to the use of Pb free solder the risk on interfacial brittle fracture failures has become higher.*

*By using a high speed or fatigue test it is possible to determine the brittleness of the bond interface.*

*The Impact Measurement Unit is compatible with all installed XYZTEC bondtesters to perform high speed testing.*

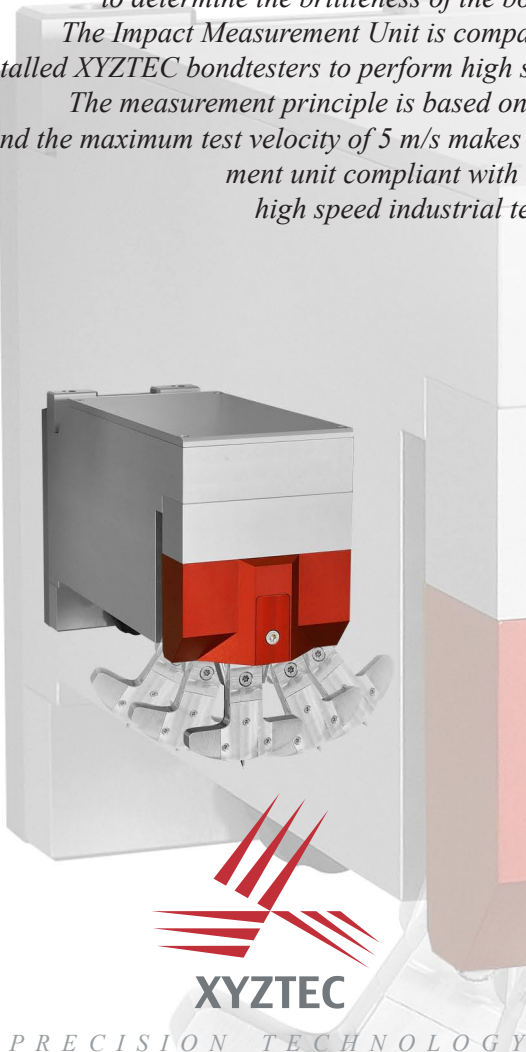
*The measurement principle is based on a pendulum.*

*This and the maximum test velocity of 5 m/s makes the measurement unit compliant with all important high speed industrial test standards.*



### Features for the Impact Measurement Unit (IMU):

- Original production parts like in-line substrates, lead frames or wafers can be tested without modification or preparation. It is not necessary to clear non-test items. This results in a short preparation time for test samples.
- Non destructive impact test and fatigue test are supported.
- Controlled added torque allows maximum velocity of 5 m/s.
- Automatic load and release of the pendulum.
- Test cycle time of ~10 seconds to support high units per hour.
- Multiple balls can be tested during one test sequence.
- Total BGA impact test can be performed by using a Grid Array Tool.
- Specially designed for a production environment. Maximum safety for the operator. No dangerous high velocity moving parts like work holder, driving belt or motor. No debris of solder balls can fall between moving parts.
- Solder balls can be collected after the test for further analysis.
- Accurate and reproducible impact velocity.
- Rigid test setup, with minimal deflection.
- Impact testing during automation is supported.
- Measurement results are: impact velocity, impact energy, absorbed energy and number of cycles.
- No influence of frictions, vibration and fluctuating motor velocity.
- The pendulum is a proven design based on Izod and Charpy test methods.
- Supports the following industrial standards:  
JEDEC: JESD22-B104, -B110, -B111 and -B117,  
ISO: 179, 180, 6603, 7765, and 8256,  
ASTM: D256, D1822, D3763 and D4812.  
Please contact us to check compliance to other standards.



**XYZTEC**

PRECISION TECHNOLOGY

**XYZTEC BV**

J.F. Kennedylaan 14-B

5981 XC Panningen, The Netherlands

Tel.: +31-77-3060920, Fax: +31-77-3060919

E-mail: sales@xyztec.com, Website: www.xyztec.com

For more information, visit our website: [www.xyztec.com](http://www.xyztec.com).

