



Fully automated bond tester

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 - Article: Why test bonds?
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- How to test bonds
 - How to: Cold Bump Pull
 - Cold Bump Pull objectives and jaw size
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 - Cold Bump Pull setting up and doing a test #1
 - Cold Bump Pull setting up and doing a test #2
 - Cold Bump Pull tweezers and test sequence recap
 - Cold Bump Pull test force, cleaning and jedec

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Bond testers

- Condor *Sigma*
- Condor *Sigma Lite*
- Condor *Sigma W12*
- Condor *150HF*

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- How to: Wire Pull
 - Wire Pull Tool design and quality
 - Wire Pull Alignment
 - Wire Pull Loop height measurement and work holder
 - Wire Pull Variants: vector pull, gull wing leads
 - Wire Pull Test method settings
 - Wire Pull Failure modes
 - Wire Pull Force calculations
 - MIL-STD-883 2011.9 bond strength (bond pull test)
 - MIL-STD-883 2023.7 nondestructive bond pull
 - MIL-STD-883 2023.7 Appendix A
 - MIL-STD-883 2004.7 lead integrity
 - MIL-STD-883 2004.7 A - Tension
 - MIL-STD-883 2004.7 A1 Lead braze integrity
 - MIL-STD-883 2004.7 B1 Bending stress
 - MIL-STD-883 2004.7 B2 Lead fatigue
 - MIL-STD-883 2004.7 C1 Lead torque
 - MIL-STD-883 2004.7 C2 Stud torque
 - MIL-STD-883 2004.7 D Solder pad adhesion
 - MIL-STD-883 2004.7 E Lead plating integrity
 - MIL-STD-883 2024.2 Lid torque glass-frit-sealed
 - MIL-STD-883 2019.9 Die shear strength
 - MIL-STD-883 2031.1 Flip chip pull off test
 - How to: Tweezer Pull
 - Tweezer Pull Tweezer Design
 - Tweezer Pull Alignment and Failure Modes
 - Tweezer Pull Ribbon Pull and Peel
 - Tweezer Pull Copper Pillar
 - Tweezer Pull Stud Pull and Pick and Place
 - External sources
 - Semiconductor alliances
 - Semiconductor engineering
 - Process control
- Careers (looking for: .NET Developer)
 - Case studies and references
 - Danfoss
 - Fully automated wafer testing
 - Heraeus rates XYZTEC as excellent supplier
 - Large heater stage on Condor Sigma W12
 - Research partners
 - Contact us
 - Search

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News

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 - [Successful ESTC Conference in Dresden, Germany](#)
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 - [Condor Sigma W12 at Semicon Korea](#)
 - [Condor Sigma stars in Audi Tech Day video](#)
 - [Raysun to represent XYZTEC in China](#)
 - [Award for First Technology China](#)
 - [XYZTEC granted subsidy for further accuracy improvements](#)
 - [Presentation at CSPT 2017 by Bob Sykes](#)
 - [Condor Sigma in São Paulo, Brazil](#)
 - [Fully automatic lead frame tester introduced at SMT Hybrid Packaging](#)
 - [Semicon Penang 2017 successful](#)
 - [Pizza and Go cart racing at K1 Speed in Northern CA](#)
 - [Visit us at Semicon China](#)
 - [Job opening for Junior Mechanical Design Engineer \[closed\]](#)
 - [Successful seminar in Russia with Sovtest](#)
 - [Market leading Condor Sigma bond tester at TPCA Taiwan](#)
 - [Automation features draw attention at Semicon Taiwan 2016](#)
 - [HTMG represents XYZTEC in South America](#)
 - [Bob Sykes speaks at China Semiconductor Packaging Test Symposium \(CSPT\) \[UPDATED\]](#)
 - [Purchase wire hooks, shear tools, tweezer tips by PayPal](#)
 - [SMT 2016 all about automation](#)
 - [Annual sales and service event in Bangkok big success](#)
 - [Come visit us at Semicon China](#)
 - [HiSOL new distributor in Japan](#)
 - [Cellphone display LCD driver IC testing](#)
 - [ISO-Dynamique and Axend represent XYZTEC in Malaysia, Singapore, Thailand, Indonesia and Vietnam](#)
 - [Wire detect functionality popular at Productronica](#)
 - [How to: Cold Bump Pull](#)
 - [Condor Sigma draws attention at Semicon Taiwan](#)
 - [Exciting sales and service meeting in Bangkok](#)

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- Bond Test Measurement Accuracy
- Condor Sigma software now available in Vietnamese
- Automatic wire detection draws attention at SMT 2015
- SST joins XYZTEC in Taiwan and mainland China
- More on loop height testing
- BaiTech to represent XYZTEC in Southern California, Tijuana Mexico
- Copper pillar testing
- Subscribe to the XYZTEC newsletter
- Increase your knowledge about bond testing and visit a bond testing seminar
- Successful distributor training during XYZTEC week
- Highlighted: Condor Sigma W12 for 300mm wafer testing
- XYZTEC shows full automation on the Condor Sigma at the SMT 2014 in Nürnberg
- Advances in tweezer pull testing
- Maestro payment method accepted in webshop
- XYZTEC launches webshop for consumables
- ODEOM new distributor for Turkey
- Condor Sigma attracts attention at Productronica
- XYZTEC Sales Director Dirk Schade joins the IMAPS board
- Antycip Technologies new distributor for France, Spain, Portugal and North Africa
- Busy IMAPS show in Orlando, Florida
- Creep test
- SMD shear test
- Spring rigidity test
- New Condor Sigma videos available
- Condor Sigma celebrated at Red Dot Gala
- Visit us at PCIM Asia in Shanghai
- A bond tester that can grow with your company
- Condor Sigma wins Red Dot design award 2013
- Condor Sigma draws attention at Semicon China
- Condor Sigma Vision solutions
- 3H Corporation new distributor in Korea
- Heraeus: XYZTEC class A supplier
- Crockett Southwest new XYZTEC sales partner in Texas, Oklahoma, Louisiana and Arkansas
- GIO Award for Condor Sigma
- Alternative Testing Methods for Electronic Assemblies
- USB Tweezers: a unique electrically actuated micro grippers solution
- NW Test Solutions to represent XYZTEC in Pacific Northwest
- Condor Sigma nominated for European Aluminium Award 2012
- Visit us at Semicon Taiwan 2012 in Taipei
- New uni-axial bending test for ultra-thin die
- Busy first show for Tom Haley
- XYZTEC welcomes new sales manager for United States and Canada

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- Condor Sigma at Dutch Technology Week 2012
- Condor Sigma attracts attention on ECTC 2012
- High interest in self-alignment tool on Fraunhofer Technology Day
- Introduction of Sigma at Semicon Korea
- Condor Sigma in Japan
- Interelec Electronics AG switches to XYZTEC
- Successful seminar at Tianjin University on Packaging High-temperature Electronics
- Condor Sigma: Performance and Flexibility
- New test method for mechanical strength evaluation of solar cell solder joints
- Case studies: Danfoss, flexibility and deep access
- Fully automated LED wafer testing
- Employees donate to Japan relief effort
- XYZTEC participates in Solar Module Value Chain for International BIPV Concepts
- XYZTEC proudly presents its Korean website
- Aubert Dupont speaks at IEEE CPMT 2010
- XYZTEC launches new website
- Charity event for RETT syndrome big success
- Technical Informer: USB Tweezers
- XYZTEC introduces Condor EZ: the next generation in bond testing
- Technical Informer: Solar Cell Ribbon Peel Testing
- Bob Sykes joins XYZTEC

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- Twitter @bondtesters
- Weibo XYZTEC????
- YouTube bondtesters
- Facebook @XYZTEC
- LinkedIn
- Google+
- Newsletter
 - The Science of Bond Testing
 - Is Fully Automatic Bond Testing Possible?
 - Advances in Thin, 3D and MEMS Die Bond Strength Testing
 - Shear testing copper pillar
 - Fracture strength of thin wafers and die
 - Centralized database for enhanced security and SPC options
 - Full Automation with Improved Pattern Recognition, Fiducial Marks Analysis, Wire Detect and Failure Mode Analysis
 - Coating and film testing
 - Latest software release enables automatic grading
 - Vision enhanced materials testing
 - XYZTEC makes lid pull easy
 - Condor Sigma W12 with large heater stage

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- How to: Wire Pull
- Get 10% off your next tools order
- Pull testing bumped wafers
- SMD gull wing leads testing
- Automation: matrix bond testing made easy
- Fully integrated solution for automated wafer testing
- In bond testing, size does matter
- XYZTEC goes from strength to strength
- Automatic wire detect
- Highly reproducible stud pull tests are possible
- What is the quality of your coatings?
- Loading samples has never been so easy
- Axis accuracy of $\pm 1\mu\text{m}$: essential for automatic bond testing
- Increase your bondtesting throughput
- USB Tweezers
- Analyze not only forces but also distances on your product
- Technology leader XYZTEC raises the bar in bond testing once again with new software release
- Why all bond testers should have an RMU
- Copper pillar testing
- Is process verification important to your business?
- Fully automated bond tester
- Ideal solution for 300mm (12 inch) wafer testing

Condor Sigma

- Condor Sigma Lite
- Condor Sigma W12
- Condor Sigma MAG
- Automation
- Ergonomics
- Revolving (RMU) and single heads (PMU, SMU)
 - Sensor modules
- Tweezers
 - CBP Jaw Cleaner
- Work holders
- Software / Vision
 - Vision
- Calibration
- Specifications

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Condor 150HF

- Ergonomics
- Revolving Measurement Unit (RMU)
 - Comparison with single heads
- Pull & Push Measurement Unit
- Shear Measurement Unit
- Impact Measurement Unit
- Tweezers
- Work holders
- Software
- Specifications
- Condor EZ, 70, 100, 150, 250

Test types

- Bending testing
- Cavity shear testing
- Cold Bump Pull (CBP) testing
- Connector Test testing
- Copper pillar testing
- Creep test testing
- Die shear testing
- Fatigue testing
- Gold ball shear and Solder ball shear testing
- High speed impact testing
- keypad testing
- Lead integrity / Micro torsion test testing
- Lid pull testing
- Lid torque testing
- Loop height test testing
- Overhanging die testing
- Passivation layer gold ball shear testing
- Probe test testing
- Ribbon peel testing
- Ribbon pull testing
- Scratch test / coating test testing
- SMD Gull Wing Leads testing
- SMD shear testing
- Spring rigidity testing
- Stud pull testing
- Total Ball Shear (TBS) / Zone shear testing

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- Tweezer pull testing
- Vector pull testing
- Wedge shear testing
- Wire pull testing

Markets & solutions

- Aerospace
- Automotive
- Hybrid and substrate
- LED
- Medical devices
- PCB assembly
- Power devices
- Research & Development
- Semiconductor
- Solar

Sales & support

- North and South America
- Europe, Middle East, Africa
- Greater China
- Japan
- Asia, Pacific

Downloads

- XYZTEC software
- External software
- Manuals
- Grading library
- Brochures and flyers
- Articles and papers
- Press releases

Events

- Bond testing seminars
- Requests
 - Semicon Korea 2019

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- IMAPS Device Packaging USA 2019
- Semicon China 2019
- IMAPS Frühjahrsseminar 2019
- CAM-Workshop and Technology Exhibition
- Expo Electronica Russia 2019
- SMT Hybrid Packaging Germany 2019
- Space Tech Conference USA 2019
- ECTC Las Vegas 2019 (IEEE 69th)
- IMS Boston 2019
- IMAPS SIP USA 2019
- CIOE China 2019
- EMPC Italy 2019
- Semicon Taiwan 2019
- IMAPS USA 2019
- Productronica Germany 2019

Shop

- Sigma wire hooks
- Sigma shear tools
- Sigma sleeves
- Classic wire hooks
- Classic shear tools
- Classic sleeves
- USB Tweezers tips
 - Checkout



About XYZTEC

- Our team
- Patents
- Simac group

News

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28 Dec
21 Nov
15 Nov

20 Sep

29 Aug
11 Jul
05 Jun
20 Apr

18 Apr
16 Mar

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