



Stud pull with self aligning plate

Stud pull test

- High strength adhesive experience for the most challenging die pull applications
- Self aligning studs to prevent die peel
- Sensor accuracy $\pm 0.075\%$
- Test at elevated temperatures up to 500°C
- In accordance with MIL STD 883 (methods 2011.9 destructive bond pull test and 2031.1 flip chip pull off test)
- Highly reproducible stud pull tests are possible

[Video not included in PDF: [click here to view online](#)]



Highly reproducible stud pull tests are possible

Highly reproducible stud pull tests are possible

© 1999-2019 XYZTEC BV

XYZTEC Netherlands

J.F. Kennedylaan 14-B
5981 XC Panningen
Netherlands ([map / route](#))
Tel: +31-77-3060920
Fax: +31-77-3060919
sales@xyztec.com
support@xyztec.com

Other offices

- Germany
- Taiwan
- Thailand
- United Kingdom
- USA: California
- USA: Massachusetts
- [Distributors](#)

Bond testers

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

This is page 1/3
Click [here](#) for the [web version](#).

Technology leader in bond testing worldwide



The stud pull test is based on the principle that an adhesive connection is made with the carrier (or object to be tested) by using a glue that is stronger than the bond that needs to be tested.

The **Condor Sigma** can be provided with a **micro dispenser** that can dispense very small drops of glue (micro liter amounts) very accurately and is cured with UV light. Combined with a **USB Tweezer** and special tips that look like the inverse of a mushroom, a glass stud can be taken from a magazine fully automatically and placed with a predefined pressure on the surface with the glue. [Click here to read all about this solution.](#)

Stud pull for exotic applications

Stud pull test on key pad

Alternative test for thin die attach

The stud pull test is used to test bonded dies or pins pressed in FR4 boards. For die attach, the sample is clamped in a work holder and a stud is glued on the part to be tested. The stud is then pulled by a tweezer or other specially designed tooling. Depending on the stud pull application, XYZTEC can offer solutions from a few grams up to 500kgf. We also offer a manual tweezer that can test up to 40kgf and an optional camera system is available to record and analyze failure mode.

See also: lid pull test by mechanical grip method

As an alternative to stud pull, XYZTEC developed the **lid pull test by mechanical grip method**. This approach eliminates the need for disposable metal block/studs and adhesives. Thus it is quicker, safer for operators and avoids clean room contamination. [Click here to read more about lid pull.](#)

Contact us

Did we catch your attention? Please [contact us](#) for more information, to request a demonstration or a quotation.

Relevant products

- [Condor Sigma](#)
- [Condor Sigma Lite](#)
- [Revolving Measurement Unit](#)
- [Sensors](#)
- [Tweezers](#)
- [Vision](#)
- [Software](#)
- [Calibration](#)
- [Condor Classic](#)

© 1999-2019 XYZTEC BV

XYZTEC Netherlands

J.F. Kennedylaan 14-B
5981 XC Panningen
Netherlands ([map / route](#))
Tel: +31-77-3060920
Fax: +31-77-3060919
sales@xyztec.com
support@xyztec.com

Other offices

- Germany
- Taiwan
- Thailand
- United Kingdom
- USA: California
- USA: Massachusetts
- [Distributors](#)

Bond testers

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

This is page 2/3
[Click here](#) for the [web version](#).

Technology leader in bond testing worldwide



- Condor 150HF
- Work holders

Special applications

Please [contact us](#) if you have any questions or special bond testing requirements.

Condor Sigma brochure

Click [here](#) to download the [Condor Sigma brochure](#), the [Condor Sigma W12 brochure](#) or the [Condor Sigma Lite brochure](#) or the [Condor Sigma Vision brochure \(PDF\)](#).

Representatives

To find your local representative, please select a region:

- Americas
- Europe, Middle East, Africa
- Greater China
- Japan
- Asia / Pacific



Click [here](#) to access the XYZTEC consumables webshop

XYZTEC Netherlands

J.F. Kennedylaan 14-B
5981 XC Panningen
Netherlands ([map](#) / [route](#))
Tel: +31-77-3060920
Fax: +31-77-3060919
sales@xyztec.com
support@xyztec.com

Other offices

- Germany
- Taiwan
- Thailand
- United Kingdom
- USA: California
- USA: Massachusetts
- [Distributors](#)

Bond testers

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

This is page 3/3
Click [here](#) for the [web version](#).