

# Tools

## Shear (push)



## Wire hooks (pull/peel)

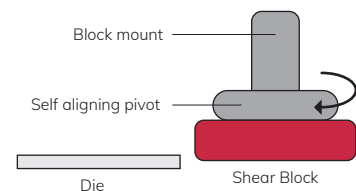
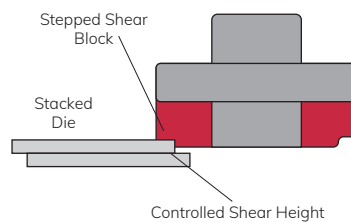
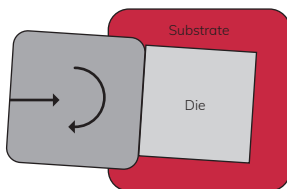


These and other tools for scratch, hardness, lead fatigue, stud pull, calibration tool, ribbon pull, cut tool. Besides a wide range of standard test tools, we design custom solutions to fulfill all test requirements.

## Self-aligning shear tool

A patented tool to shear large or stacked dies, as the strength of the bond is in proportion to the area of the die, but the area available to apply the shear load is limited.

A vacuum mount holds a soft material shear block in place and rotates slightly (self-alignment). Surface irregularities between the edge of the die and the tooltip result in multiple smaller points of contact. The soft material of the shear block deforms at these points. This deformation considerably reduces the high contact stresses that would cause the die to fail.



# Tweezers

Working with extremely small bonds requires a high level of accuracy. With xyztec USB tweezers, you can fully control the gripping force and the opening and closing position.

The gripping jaws (tweezers with tips) are driven by a built-in closed loop 3-phase brushless microdrive to accurately open or close. The jaw actuators incorporate a strain gauge to precisely measure and control the gripping force. Besides a range of standard tips, we design custom tips to suit many different applications. You can house up to 6 different tweezers in the RMU.



## Electric (USB)

- Programmable and traceable opening position and closing force
- Programmable landing force
- Programmable force maintain

## Mechanical

- Forces up to 100 kgf
- For special applications

## Pneumatic

- Opening with air
- Controlable by software

### ELECTRIC (USB) TWEEZERS

Maximum clamping force (kgf)	7
Adjustable clamping force (kgf)	0-7
Average closing time (sec)	1
Adjustable LED brightness (%)	0-100
Rotation stroke (°)	±90
Maximum opening stroke (mm)	1.2
Easy exchange of tips	Yes

### MECHANICAL AND PNEUMATIC

Maximum clamping force (kgf)	100
Adjustable clamping force (kgf)	50
Rotation stroke (°)	±90
Maximum opening stroke (mm)	3

Please contact us for more information and options for your factory. Specifications are subject to change without prior notice.



## CBP Jaw Cleaner

The solder that builds up in the cavity of the Cold Bump Pull (CBP) jaw reduces the gripping efficiency. This contactless cavity cleaner melts the solder with a high temperature and high-pressure air jet and then blows it into a fine matrix where it is absorbed.