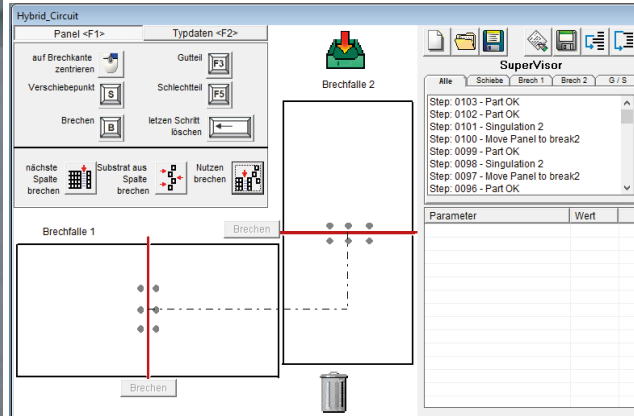
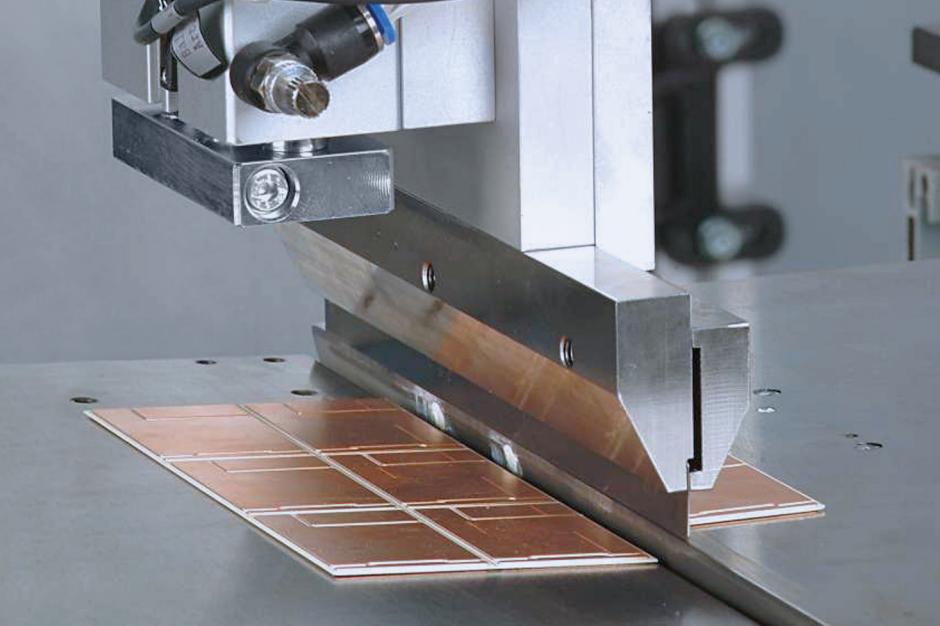




baumann  
**break | box**

THE AUTOMATION FOR  
CERAMIC SUBSTRATE  
SINGULATION



baumann  
**break | box**

As an automation and robotics specialist, baumann offers ceramic substrate singulation and assembly solutions.

The latest baumann development revolutionizes the singulation of hybrids. Based on intensive research together with market leading manufacturers of substrate ceramics now high reject costs, conchoidal fractures and special type related systems belong to history.

The patented baumann breakbox singulates laser scribed and scored DBC, LTCC, Thick Film Hybrids, HTCC type ceramic panels et al.

The handling and singulation is unique. A robot moves new panels in the singulation position without any fixation or mechanical stopper.

The innovative and fault-tolerant singulation method reduces the breaking forces by software driven kinematics to a minimum.

Another highlight is the easy to use configuration of new panel types. Within minutes a new panel type is stored with its design parameters in the software library and can directly be used for a type exchange without any mechanical retrofitting.

The baumann breakbox is available as a standalone or inline cell. A variety of options simplifies the integration in assembly lines.

Look and see the quality and the range of functions of the singulation method. You can test the singulation quality also for your own ceramic substrates in our technical laboratory.

**Technical Data**

Hybrid panel size	4" x 4" - 9" x 8"
Substrate thickness	0,25 – 1mm
Single substrate size	≥ 5 mm x 5 mm
Substrate types	DBC, LTCC, DSH, HTCC u.a.
Cycle time single substrate	3,5 - 5 sec
Component distance to soring/laser scribing	> 0,2 – 0,5 mm

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