

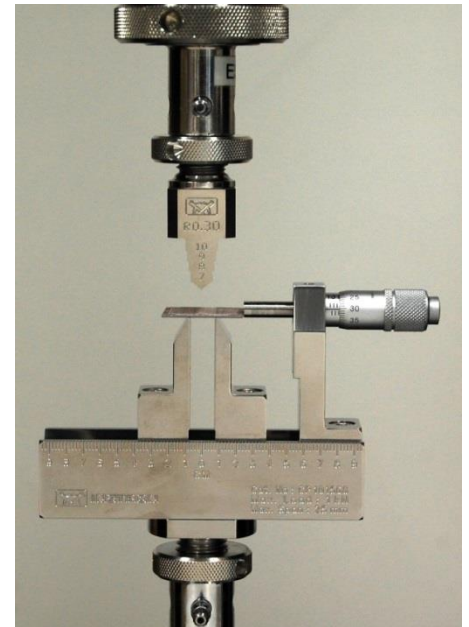
Test fixtures for small chip/die crack strength evaluations | CP101568, CP117370

Description

With the development of the wafer thinning technology, the demand for the thin silicon chip (die) and packaging has become increasingly high in recent years. However, the thinner the chip (die), the higher the cracking possibility of die during the manufacturing and handling process. Instron® Singapore ESG has developed two high precision Micro 3-point bend fixtures to SEMI G86-0303 for measurement and evaluation of the chip (die) strength.

Features

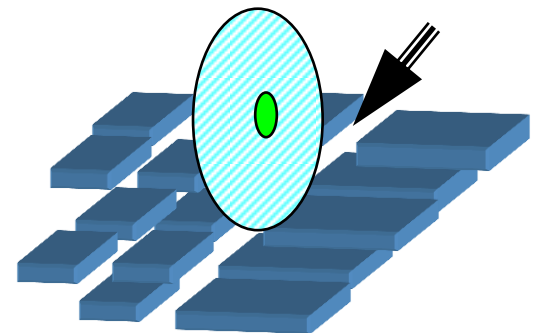
- Conforms to SEMI G86-0303.
- Designed to provide easy setup with self-centering and integral span gauging to ensure that specimen loading will take place at the exact centre of miniature chips (die).
- Range of precise supporting span setting: 3 – 10mm (1mm in steps).
- Able to maintain high parallelism accuracy of anvils in a span range up to 25mm (CP101568).
- A separate micro-meter head (CP101568 only) with precision bottom V-shaped mounting bracket slide is designed for accurate adjustment of specimen lateral position in the X direction.
- A high precision block is provided for angular alignment assistance between upper and lower anvils.



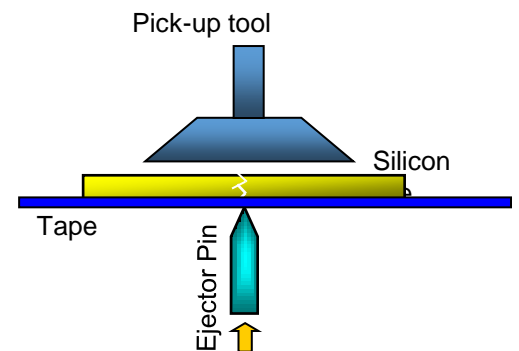
CP101568 Micro 3-point Chip Bend fixture to SEMI G86-0303

Specifications

		CP101568	CP117370
Maximum Load	kN	1	1
	lbf	225	225
Upper Anvil Radius	mm	0.3	0.3
Lower Anvil Radii	mm	0.3	0.3
Anvil Width	mm	20	20
Anvil Hardness		>60HRC	>60HRC
Precise Supporting Span	mm	3-10	3-10
Maximum Support Span	mm	25	10
Temperature	° C	Ambient	Ambient
Upper Interface		Type Om	Type Om
Lower Interface		Type Om	Type Om
Lateral Micro-meter		Yes	N. A.



Silicon Wafer Dicing Process



Chip (die) Pick and Place Process

www.instron.com

Applications

- Silicon chip (die) strength evaluations.
- Grinding quality evaluations during wafer thinning process.
- Dicing sawing (cutting) process quality evaluations.
- Die (chip) attach process quality evaluations.
- Die (chip) Pickup process quality evaluations