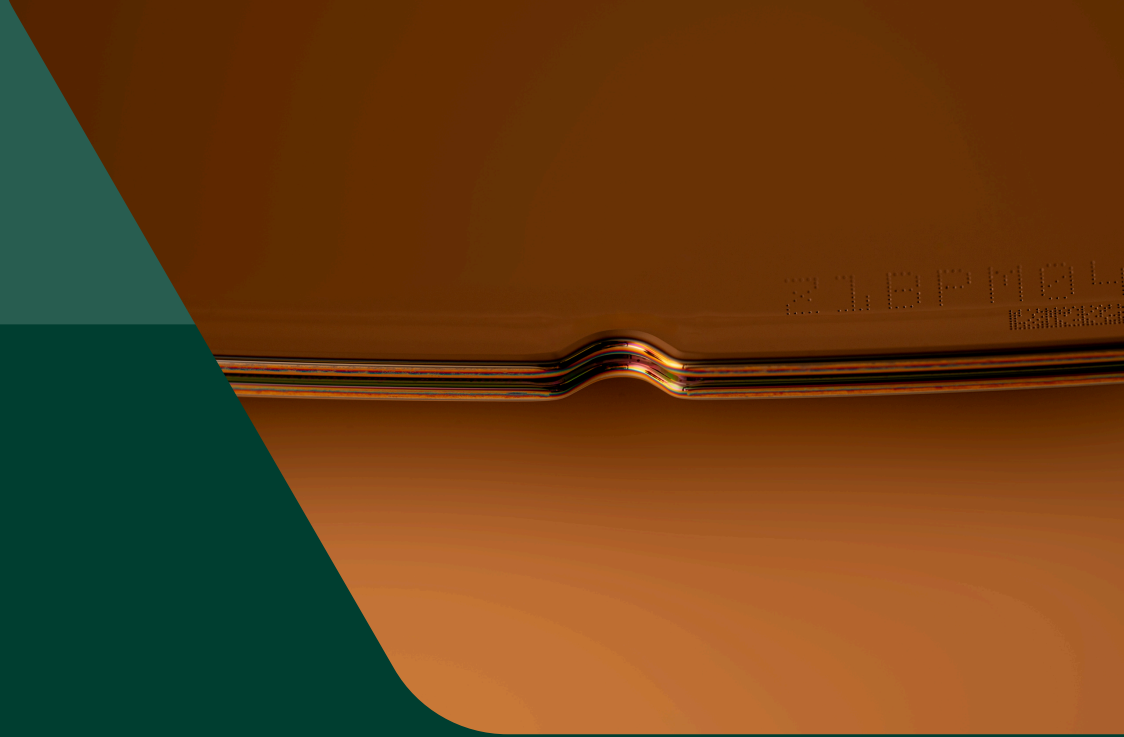

SB8 Gen2

Growing Innovation

SUSS

Universal bonding solution

The semi-automated SB8 Gen2 is SUSS's state-of-the-art universal wafer bonding system that handles wafers up to 200 mm and supports various substrate types and sizes. Variable machine configurations are serving all kinds of different process requirements and cost of ownership demands.

Easy to scale and supporting a wide range of bonding technologies, the SB8 Gen2 is a flexible platform designed for various applications and process environments. Its application areas include packaging as well as structuring processes in MEMS, LED, advanced packaging, 2.5D integration, and 3D integration. With its process versatility the SB8 Gen2 permits an easy switch from R&D to pilot production and finally volume manufacturing. In all scopes of application the SB8 Gen2 stands for superior process stability and high throughput capability.

Individual Spacer Actuation (SSR)

Wide temperature control range from 30 °C to 500 °C

Bond forces ranging from 300 N to 20 kN

We are committed to driving the next chapter of innovation and growth in the advanced backend together.

SB8 Gen2
Highlights

Designed for seamless transitions from R&D to pilot lines to full-scale production.

Interchangeable Bond tooling, enabling rapid adjustments for different wafer sizes and bonding processes.

With a footprint of 0.6 m x 1.2 m, the SB8 Gen2 is exceptionally space-efficient.

Precision control system and pneumatic bond force generation ensure reliable results across all bonding processes.

Pressure range in bond chamber from 5 x 10^{-5} mbar to 3 bar abs.

SB8 Gen2
Technical data

General	
Substrate Size	up to 200 mm wafers
Dimensions (WxDxH)	1200 mm x 627 mm x 1600 mm
Weight	340 kg
Graphical User Interface	MS Windows based operating system unlimited storage of recipes Flat panel display with key and trackball

Bond Force	
Maximum Bond Force	20 kN
Bond Force Repeatability	± 2 %

Temperature Management	
Heater Design	Independent resistive SiN top and bottom heater with active air cooling
Maximum Temperature	Up to 500 °C
Temperature Uniformity	± 1.5 %
Temperature Repeatability	± 3 °C
Maximum Heating Rate	Up to 30 K/min (with ramping function)
Maximum Cooling Rate	Up to 25 K/min (with ramping function)

Media Supply	
Vacuum	< 100 mbar absolute
Compressed Air	6 -10 bar (CDA)
Nitrogen	7 - 7.5 bar
Power Requirements	380 - 400 VAC / 20 A / 50 Hz 200 - 208 VAC / 25 A / 60 Hz
Exhaust	10.6 cfm

Process Chamber	
Minimum Pressure	5 x 10^{-5} mbar after 5 min pump-down
Maximum Pressure	2 bar overpressure (3 bar absolute)
Chamber Design	Electro-polished class 1 stainless steel bond chamber with gate valve

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Visit **www.suss.com/locations** to find our nearest company representative or contact us directly:

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