Features Active
Cooling with Dual
Chamber Technology

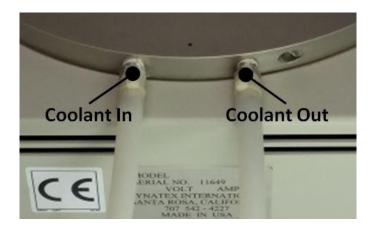
DXB-880 Wafer Bonder

Full Automation with Single Button Operation

DXB-880 Automated Void Free Wafer Bonder

The automation introduced in the DXB-880 ensures a repeatable, robust process. The user is able to program each process node individually and with extreme precision. The system can be programmed with the desired temperature, pressure, and duration for each step in the sequence. The display shows the status of the bonding sequence as it progresses. The program is stored in local memory for easy access and simple operation, and can be password protected to prevent accidental changes.





Active Cooling

Active cooling is facilitated by the addition of a coolant channel directly in the heater base. Cooling takes place between 6 to 10 minutes in a typical application. The image on the left shows the DXB-880's active cooling connections.

Applications of the DXB-880 Wafer Bonder

- Wafer Thinning

- Wafer Dicing
- Metal Plating

- Deep Reaction Ion Etch
- Any Other Temporary Wafer Bonding Process

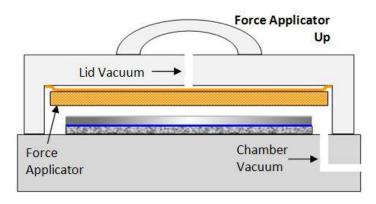


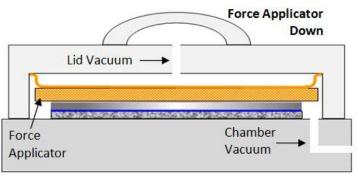
Dual Chamber Operation

For more controlled bonding processes, the dual chamber feature provides the best in control, precision and flexibility.

The bonding pressure is controlled with extreme precision by adjusting the differential pressure in the two chambers. This allows the wafer to come up to temperature without trapping air in the bondline.

Once the wafer is at temperature the force applicator can be lowered by reducing the vacuum in the lid. The differential between the two pressures provides the bonding pressure to the wafer.





DXB-880 Specifications

Bonding Chamber Size: 11 inches (279 mm) Diameter

• *Temperature Range*: 100-356° F (40-180° C)

Cycle Time Range: 1 min – 10 hours

Power Required:

DXB-880-01 100/120 VAC 10 amps 50/60 Hz DXB-880-02 220/240 VAC 5 amps 50/60 Hz

• Vacuum Required: Two Independent Isolated Vacuum Supplies at 25 in Hg

Coolant: Water (12 liters per minute, 40 psi)

• Environmental: 60-80° F(15-27° C), 0-95 % Humidity (non-condensing)

Dimensions:

Height	26 in (660 mm)
Width	14.7 in (373 mm)
Depth	21.2 in (538 mm)
Chuck	11.25 in (285 mm)

