# SINTER BONDER

Exceeding standard die bond capabilities

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INFOTECH automation

# INFOTECH SINTER BONDER

**The sinter bonder fulfills die attach requirements for power electronics exceeding standard die bonder capabilities.** Our highly flexible die bonder used to meet various production demands from laboratory (batch processing) to series production as fully automated inline system. The highly flexible die bonder is equipped with sintering process specific components out of Infotech`s component matrix. Heated bond head with high force capabilities, substrate pre-heater and heater station with integrated force measurement, DTF feeder and more are part of the Infotech sinter bonder.

**Direct bonding and tacking of sinter parts**

**Automatic DTF feeding**

**Laboratory and production machines**

# SINTER BONDER

**System features Cell and Desktop**

- Two heated bond heads (optional three)
- Process heat profiles up to 300 °C
- Bond force capabilities up to 300 N (optional 500 N)
- Two standard assembly heads with interposer to transfer die from cold to heated bond head
- Heated substrate centering station with manual tilt adjustment and integrated force sensing table
- Heated substrate centering station up to 250 °C with integrated pre-heat station (optional 300 °C)
- Supports DTF process (Die Transfer Film - Alpha Assembly Solutions) from 4x4" waffle pack carrier size, Jedec carrier size or direct from wafer frames
- Heated substrate holder plate with manual tilt adjustment and integrated force sensing table
- Heated substrate holder surface 100 x 100 mm, with temperature up to 250 °C
- Supports DTF process (Die Transfer Film – Alpha Assembly Solutions) from 4x4“ waffle pack carrier size
- Optional Time/pressure- or micro screw dispensing system

**Sinter paste or DTF processing**

- Load and pre-heat substrate
- Dice recognition on wafer / waffle pack (ink dot, alignment) using vision
- Pickup dice from wafer / waffle pack
- Transfer film onto lower side of dice with force feedback (DTF process)
- Die alignment and quality check of sinter material on dice using lower vision
- Tack dice onto heated substrate using active force control bond process

**Infotech Die Attach Sinter Bonder advantages for large thin dies**

- The wafer foil can be stretched, which allows the wafer and die to always have the same plane
- There is no physical stress to the single dies during the lift up process form the blue foil
- Supporting thinned wafers (Tayko-Wafer) allows large thin die processing
- Includes a wafer rotation table aligning the dies parallel to the eject needles
- 8" or 12" Wafer configuration (8", 6", 5", 4") including eject head changer (3 eject heads)

# SINTER BONDER – DESKTOP

**The desktop sinter bonder dedicated to pre-sinter- and sinter applications with wide open application range for manual, semi automated or fully automated operations.**
**The lab solutions to develop pre-sinter processes with production equivalent process peripherals – for initial series production where the process parameters can be merged into the final production line solution.**

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## get in touch

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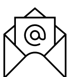

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