

next level bonding solutions



Rework of LED dies

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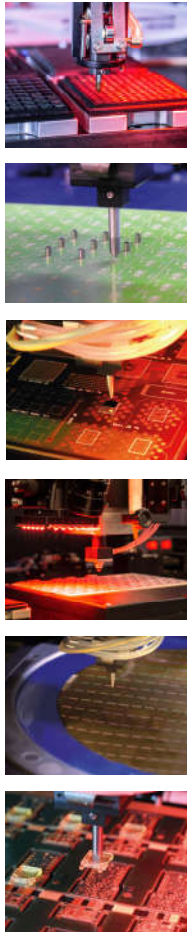


Facts

- Unmatched performance in several bonding technologies
- Enhanced version of the proven T-6000-L series
- A fully all-purpose system
- Granite gantry for more precise bonding down to 2,5 μm
- Grow from manual to fully automated process
- Customized bonding solutions

Benefits

- Modular machine concept
- Easy switch from automatic to manual mode
- One machine, unlimited bonding processes
- High mix, low to medium volume
- Numerous customer specific options addable at any time
- Ongoing machine instruction by our engineers
- Free number of Automatic tool change
- Automatic tool change with heatable bond tool



Rework of LED dies

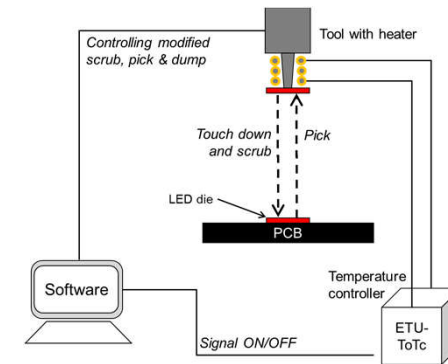


Process:

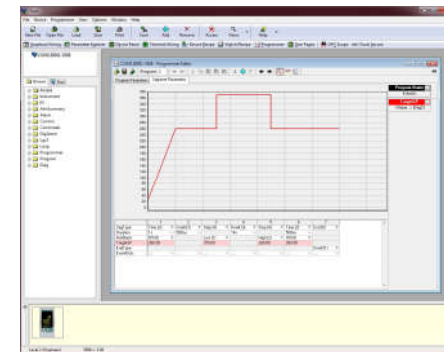
The debonding process are performed by using scrubbing function, which has been modified in such a way that it breaks the adhesion between the LED die and the solder by using the heater temperature. After the LED die is separated from the solder, the tool pick the die using vacuum and then dump in the dump bin location.

Debonding sequence:

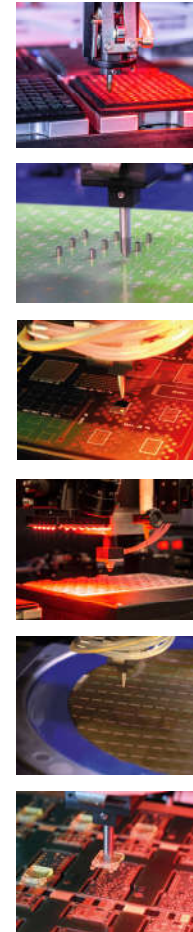
1. The bond head will travel to an LED die and locate it by using the PR software.
2. The peak temperature of the tool heating start and the tool goes to the located LED die to make touch-down contact for 5 s.
3. Automatically, the scrubbing function starts for few cycles with a duration of 3 s.
4. Automatically, the tool picks the LED die and dumps it in the dump bin location.



Schematic of debonding



Temperature Profile



Rework of LED dies

Results:

Figure 3 shows a location where a LED die was debonded and picked by using heat and scrub. The neighbour LED dies are not touched or damaged.

Summary:

LED dies can be easily and successfully removed with a Tresky Automation system in Rework configuration without damaging neighbour LED dies and affecting the solder and ist surrounding.

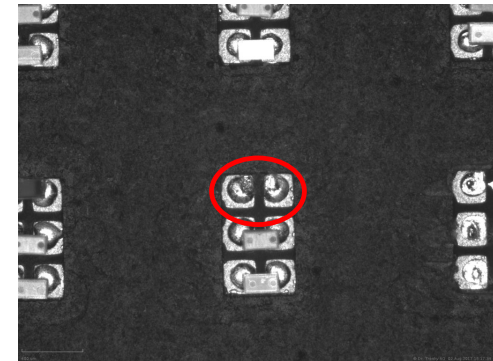
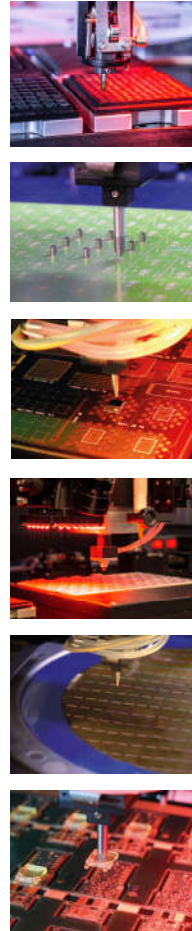
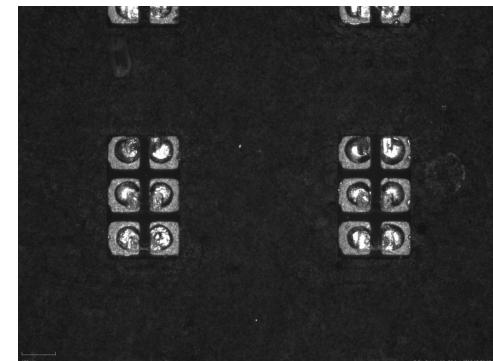


Figure 3



Contact us



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