

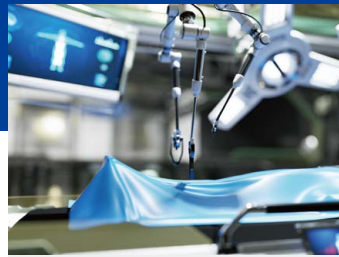
LASER PLASTIC WELDING



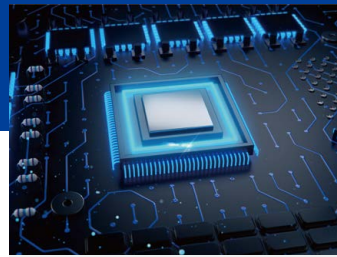
Industries



Mobility



Medicine



Electronics



Personal Care

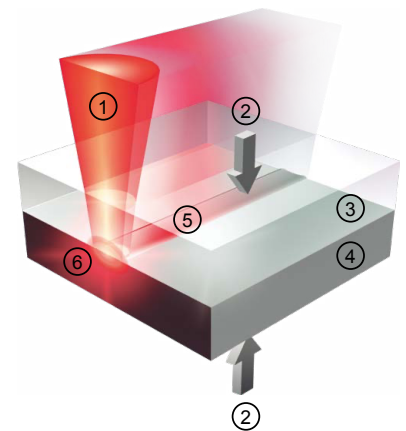
Laser Welding Principles

- Through transmission laser welding
- 2-micron welding

Note: 2-micron laser welding uses a different principle than 1-micron welding and is ideal for clear-to-clear plastics and transparent textiles.

- High precision, flexible welds
- No wear and tear on tooling
- Minimum thermal stress
- Emission-free
- Particulate-free

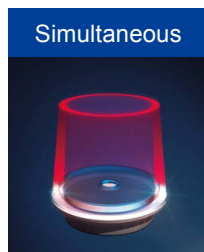
- ① Laser beam
- ② Joining pressure
- ③ Transparent joining partner
- ④ Absorbing joining partner
- ⑤ Weld seam
- ⑥ Heat affected zone



Concept



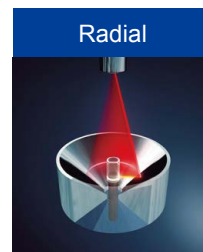
Contour



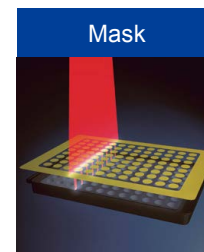
Simultaneous



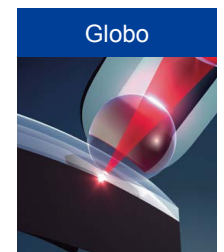
Quasi Simultaneous



Radial



Mask



Globo



Spot Optic



Ring Optic



Scanner Optic



Radial Optic



LineBeam



Globo Optic

Laser Systems



BASIC M

A modular building block system for integration



NOVOLAS TTS

Turnkey tabletop system



NOVOLAS WS-AT

Turnkey workstation

- Excellent weldability when laser transmission is present
- Good weldability when laser transmission is present
- Weldability is possible but should be verified through trial runs