

INFRASTAKE® / INFRAView™
HARNESSING INFRARED ENERGY

 **EXTOL** INC
IDEAS - ACTIONS - RESULTS

INFRASTAKE® / INFRAVIEW™

HARNESSING INFRARED ENERGY

Focused infrared energy is at the core of this revolutionary process. This tightly controlled, low-impact technology is applied to component staking and specific zone-area heating for forming or material embedding applications. This patented, refreshing technology has a proven track record in applications ranging from large automotive interior trim assemblies to delicate medical device and PC board retention assemblies. With low energy consumption, quick cycle times and robust, consistent results, it's no wonder this process has been widely accepted and specified in demanding applications.

InfraStake®

Key Features

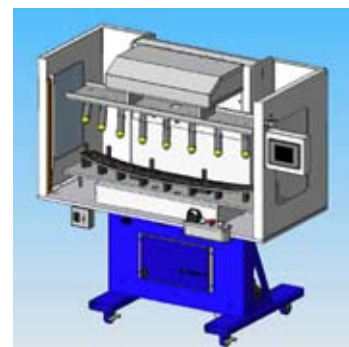
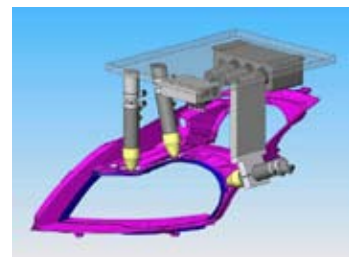
- A non-invasive, low impact staking technology – heat is generated only in the boss
- Minimal power and air consumption – dramatically more efficient than traditional heat-staking methods
- Integrated pneumatic punch actuator
- No heat guards required – InfraStake® modules maintain low operating temperatures
- Rugged anodized aluminum body
- "Instant-On" Infrared light source eliminates the need for expensive preheat cycle and inefficient heater elements.
- Custom designed punch profile to fit your application
- Punch stays cool (positioned above the Infrared focal point during the heat cycle) and draws heat out of the formed stake
- Patented light reflector/concentrator configuration provides precise radial heating of the stud
- Concentrator face provides part clamping to ensure a tight assembly
- Because light is the medium for energy transfer, the InfraStake process is not susceptible to changes in ambient conditions



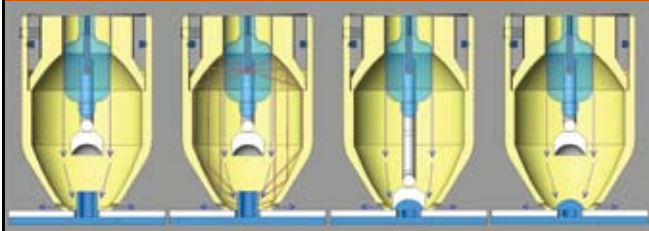
InfraView™

Power Supply & Control Systems

- Safe, low voltage (12V) power to the modules from an InfraView PS or PSC Series 120v or 240v power supply
- Control Levels:
 - PS: Used with customer-provided PLC and interface
 - PSC: Integrated PLC and Extol Color Interface
- Discrete output signal per channel to alert for lamp current monitoring faults
- 19" rack-mount style chassis
- Calibrated and conditioned power output per channel for reliable and repeatable lamp performance
- Power up to 24 heads simultaneously with our standard models. Custom systems are available for larger and more complex applications.



The InfraStake® Sequence



- 1 Clamp
- 2 Heat
- 3 Stake and Cool
- 4 Retract Punch



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