



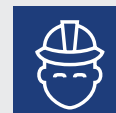
## APPLICATION SPOTLIGHT—Manufacturing



Improve  
Reliability



Reduce  
Costs



Improve  
Safety

# ADHESIVES AND SEALANTS INSPECTION

## THERMAL IMAGING ENSURES QUALITY AND ELIMINATES "BREAKS" IN GLUE BEAD PROCESS

### THE CUSTOMER'S CHALLENGE

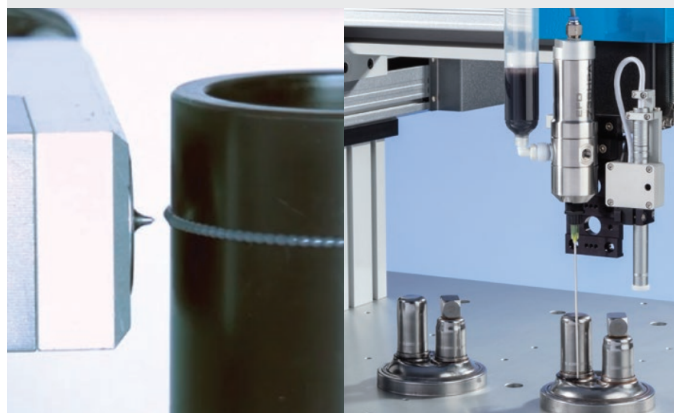
Bead volume and placement accuracy is critical to achieve the desired structural integrity and sealing performance. Glue beads can fall off body panels after application and breaks in continuous dispensing can occur, creating gaps in the adhesive and placement in the wrong locations. The biggest inspection challenge for visible-light camera technology is the enormous variety of adhesive materials and the ability to "see" the varieties in numerous lighting conditions. In some applications, visible-light cameras and robotics are used to fully inspect larger parts, which adds cost and maintenance to the system's upkeep.

### THE SOLUTIONS

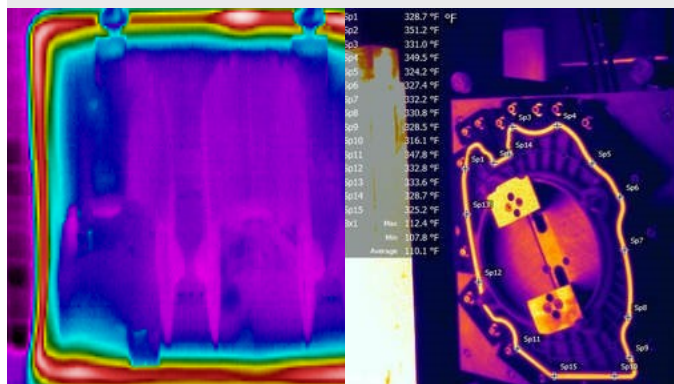
Reducing cycle times for these high-volume production lines is critical to maintain a consistent flow through the process. Thermal imaging technology makes this possible. A thermal imager or an IR temperature sensor, such as the FLIR A315, can help users easily determine whether the glue bead has been applied properly, has gaps, and is within the required temperature limits. Glue bead presence and coverage can then be verified from a glue dispense robot.

### THE RESULTS

With thermal imaging technology, manufacturers can maintain optimal production-line performance. The thermal data allows users to evaluate and optimize the heating process. Reach maintenance, quality, and cycle-time goals, including: monitoring glue dispense for clogged heads and inconsistent or lack of coverage; maintaining even coverage of glue dispense for quality assurance; and saving time spent on glue coverage inspections or initiating clean and reapply protocol by operators when fault events occur.



*A thermal imager or an IR temperature sensor can help users easily determine whether the glue bead has been applied properly, has gaps, and is within the allowable temperature limits.*



*Thermal imaging data allows manufacturers to evaluate and optimize the heating process to reach maintenance, quality, and cycle-time goals.*



FLIR A315

For more information about FLIR in manufacturing or to schedule a product demonstration visit:

[www.flir.com/manufacturing/process-monitoring](http://www.flir.com/manufacturing/process-monitoring)

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