



LOCTITE®

SIGNIFICANT REDUCTION IN SCRAP USING LOCTITE® INSTANT COMPONENT BONDING SOLUTION

LOCTITE® **454™** INSTANT COMPONENT BONDING SOLUTION

LOCTITE® **4902™** INSTANT COMPONENT BONDING SOLUTION



Henkel Adhesive Technologies



Customer Challenge

A manufacturer was experiencing up to a 35% scrap rate assembling bluetooth headsets. Most bond failures occurred within an hour after components were assembled but some occurred after the headsets were shipped. These delayed failures were especially concerning because it would affect customer perception of the brand and would increase warranty costs.

Henkel Solution

The LOCTITE® Technical Sales Engineer worked with the manufacturer to identify the root cause of the failures and review the materials, assembly process and performance requirements. They determined that using different adhesives for the two joints would optimize the assembly process and headset performance. They selected LOCTITE® 4902™ Instant Adhesive to bond the perimeter of the headset for its rapid cure speed and bond durability; and LOCTITE® 454™ Instant Adhesive to bond the headset tip because the gel fills gaps and cures in seconds.

Validation testing confirmed these adhesives exceeded drop test, thermal cycling, pull test and humidity aging requirements. These fast-curing high performance adhesives resolved the scrap and warranty issues and enhanced the assembly process.

Benefits

- New adhesives exceed testing requirements for production
- Lower overall scrap rates
- Resolved product warranty issues
- Enhanced assembly process

