

Bonding Solutions for Medical Imaging Cameras

Opportunity

A medical imaging equipment manufacturer in the U.S. wanted to increase the speed for assembly of internal imaging components to increase production output. A faster curing optical grade silicone is needed that meets all production and quality requirements.

Substrates: Quartz || Optical Glass

Challenges

- Long 72 hour cure time slows production output and creates WIP backlog of equipment
- High cost imaging equipment shelved in the WIP area delays shipments and increases product costs
- Extensive testing required to develop customer confidence to switch from current silicone

Solutions

Product(s) used: [Loctite 5655](#), [Loctite 7555CL Primer](#)

Components

The crystal block of the photo tube assembly requires priming with [Loctite 7555 CL Primer](#). A lint free cloth pad is used to apply the product.

Dispense and Cure

[Loctite 5655](#) silicone is then hand dispensed on crystal block and the photo tube is positioned on the crystal. Product cure is completed in only 6 hours.

Outcome

Overall production costs are lowered by shortening assembly time by 66 hours. The company now ship millions of dollars in inventory daily which was previously isolated in WIP for 3 days.



Benefits

- Six hour cure of [Loctite 5655](#) permits continuous part flow through manufacturing and eliminates WIP
- Streamlining the manufacturing process reduces productions costs and improves ship times
- Henkel Engineering supports validation testing to confirm product optical qualities and production benefits