



LOCTITE®

ULTRA-PERFORMANCE LOCTITE® INSTANT ADHESIVE IMPROVES PRODUCTIVITY & QUALITY IN ASSEMBLY OF SECURITY SOLUTIONS

LOCTITE® **402™**
INSTANT COMPONENT BONDING SOLUTION



Henkel Adhesive Technologies



Customer Challenge

A leading manufacturer of various security solutions was challenged with a long and complex assembly process as well as aesthetic defects that required rework. The process to assemble their line of security safes or lockers needed to be optimized. The components of lockers/safes were spot welded and then required grinding to smooth and level out any of the spot welds. Any divots caused by the welding then needed to be filled in and refinished to a smooth surface. The assemblies then underwent a painting and drying process at temperatures of 80-120°C. Approximately 3% of the painted assemblies required rework due to surface imperfections resulting from the welding and refinishing processes.

Henkel Solution

Team LOCTITE® recommended LOCTITE® 402™ for the application. With its maximum heat-aging resistance temperature of 135°C, LOCTITE® 402™ satisfied the 80-120°C paint/dry processes. The substrate versatility ensured high bond strengths to the range of materials while the use of the adhesive also allowed for even stress distribution of the bonded components. The one-part adhesive simplified the assembly process prior to finishing to just one step. As a result of using LOCTITE® 402™, the product had improved reliability with a higher temperature resistance. The security company was able to reduce overall cost with rework reduction and improved overall aesthetics of the finished safes/lockers.

Benefits

- Improves reliability with higher temperature resistance for paint/dry processes
- Reduces overall cost with rework reduction from 3% to 0%
- Increases productivity with rapid fixture speed and one-step process
- Improves overall aesthetics of finished safes/lockers

