

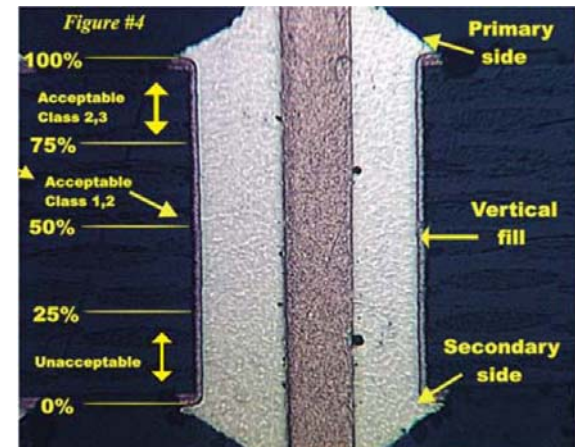
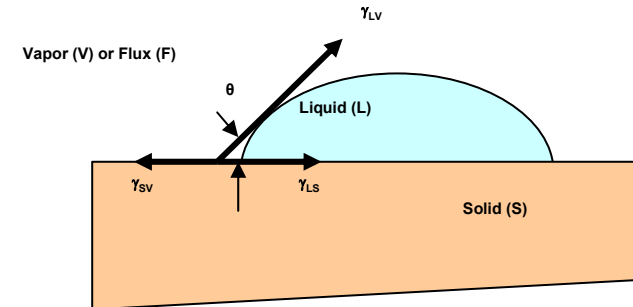
# SACX™ Alloy

Hole Fill comparison  
with SN100C and  
SAC305

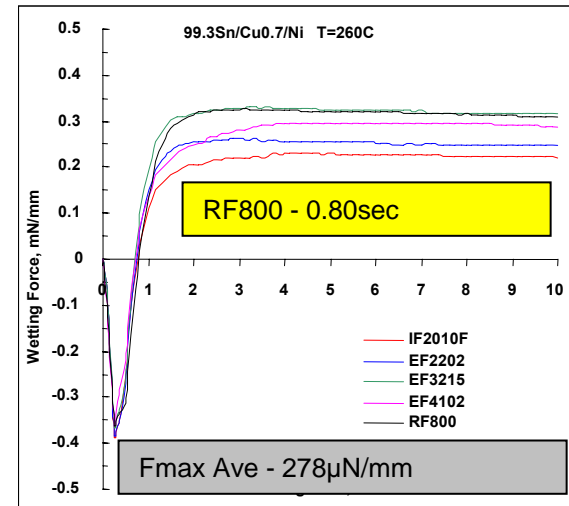
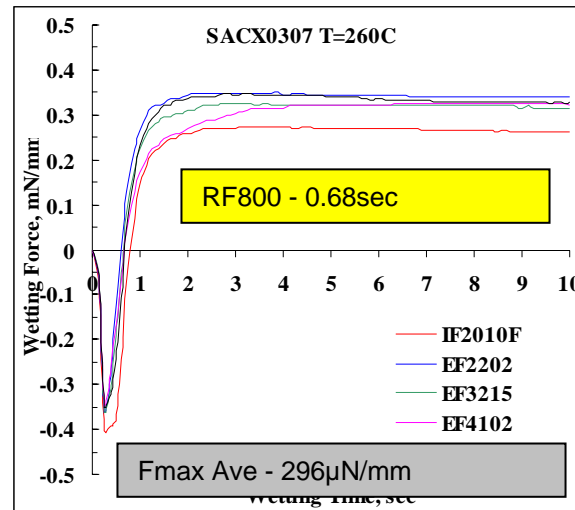
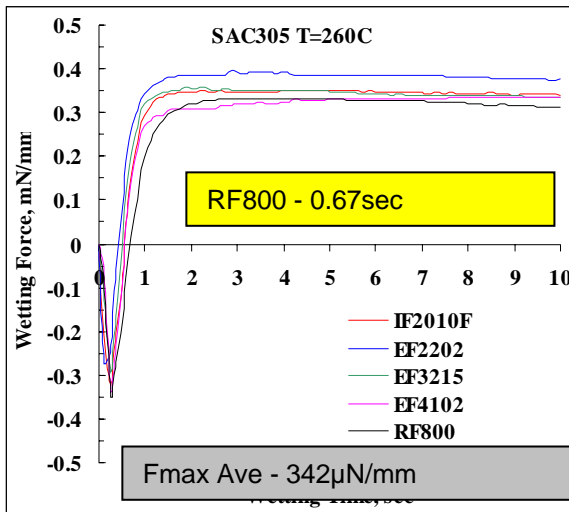


# Hole Fill

- Hole Fill is strongly correlated with the wetting performance of the alloy/flux/finish combination.
- When wetting speed and force are high we should expect better hole fill - all other parameters being equal.
- Comparison of wetting balance test results are a strong indicator of hole fill capability.



# Hole Fill



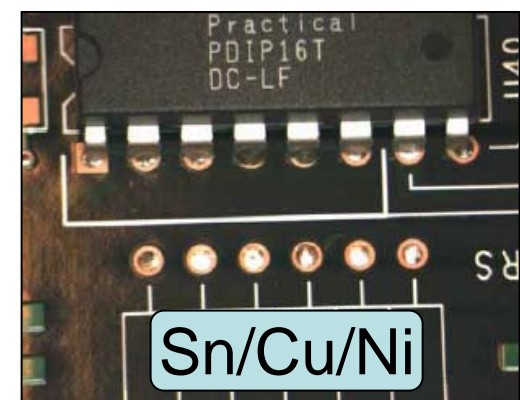
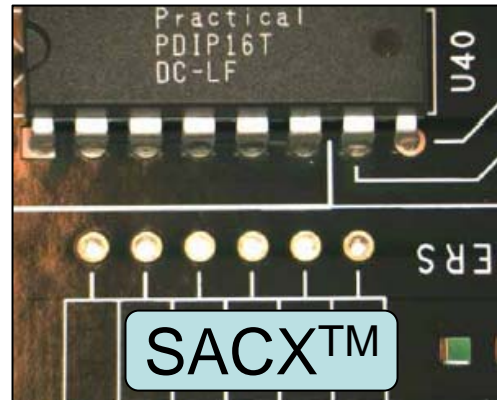
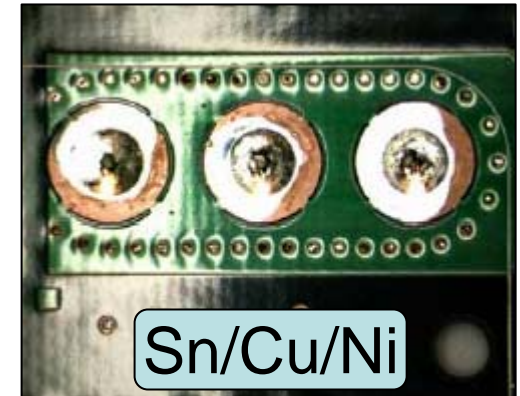
- Using Alpha RF800 flux (leading alcohol based flux) the wetting speed of SACX™ is the same as SAC305.
- SACX™ has a wetting speed **18%** faster than SN100C when using Alpha RF800 flux.

# Hole Fill - SACX v's Sn/Cu/Ni



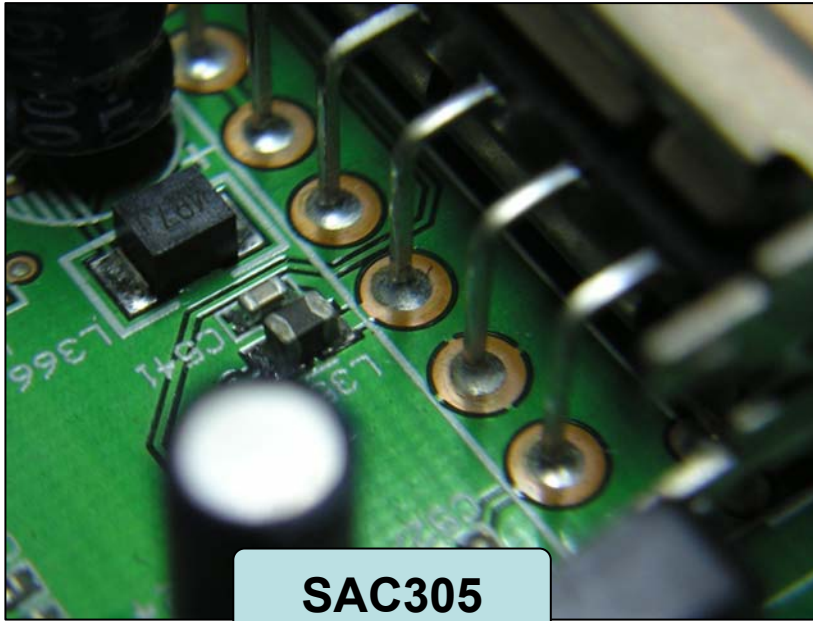
- Head to Head test. Customer test board
- Alloy Temp : 260°C
- Contact Time : 3.3sec
- Wave : Soltec Smart wave
- Atmosphere : Air
- Pad Finish : CuOSP

- **Result :Hole Fill for SACX™ better than SN100C**

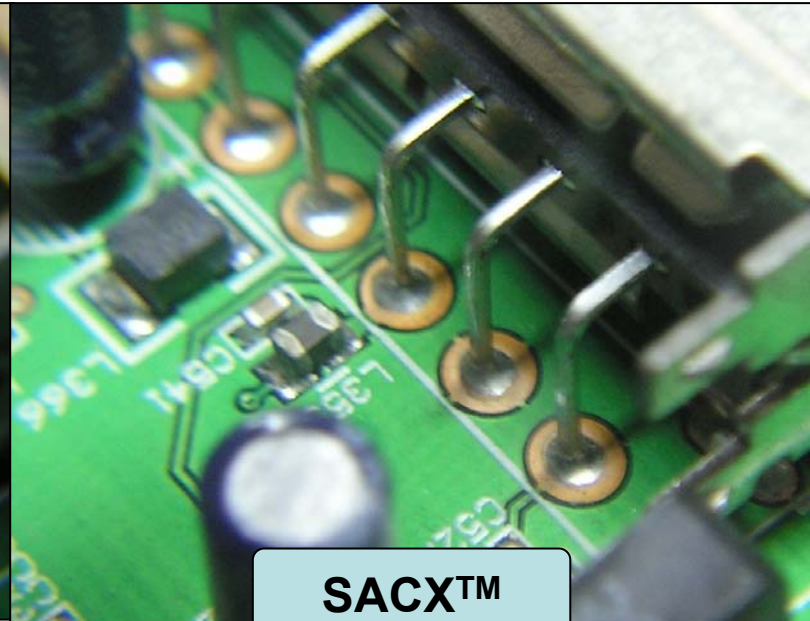


SACX™ Better hole-fill performance

# Hole Fill SACX v's SAC305



**SAC305**



**SACX™**

- LCD TV Chassis- one prior reflow.
- CuOSP pad finish
- Conveyor 120cm/min
- Temperature 260°C
- Top Side 120°C, Bottom Side 164 °C
- Flux – Water based Rosin Free ORM0
- Soltec Delta – N<sub>2</sub> on wave only

- **Hole fill with SACX™ equivalent to SAC305**

# Conclusion

- Wetting performance and hole fill are strongly correlated.
- SACX™ has a better hole fill performance than SN100C – the fundamental wetting properties dictate this result.
- SACX™ can deliver the same hole fill performance as SAC305.

