COST SAVINGS

Flux-cored solder wire for tip wear reduction

**SOLDERING TIP WEAR REDUCER**

# TipSave N eCore

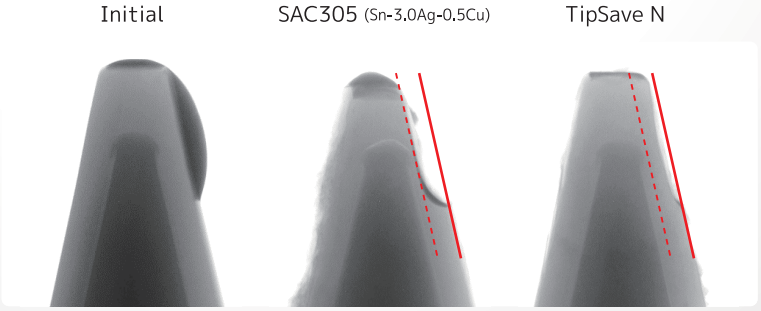

## Soldering Iron Tip Wear Reduced by 3X

TipSave N is a new alloy with enhanced soldering tip wear reduction. Reducing soldering tip wear solves many issues, including tip purchasing costs, downtime due to tip replacement, and inconsistent solder joint quality. Also, its excellent soldering workability provides a bright, smooth finish.

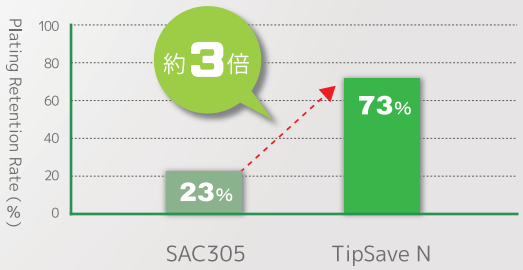
- Silver Free
- Lead Free
- General Purpose
- Reduced Point Corrosion
- Fast Melting Rate
- Good Continuous Soldering
- Reduced Flux Spattering

## Soldering Tip Wear Reduction Effect

Comparative verification through 12,000 joints



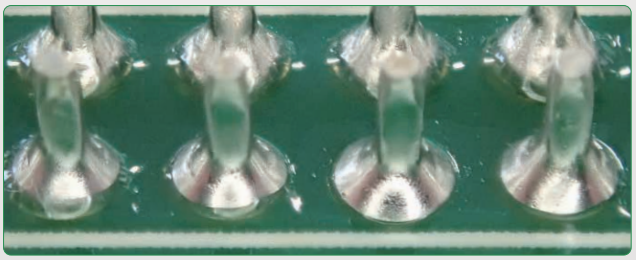

■ 12,000 joints at a tip temperature of 400℃




## Evaluation of Solderability

Evaluation results by drag-soldering with the use of automatic machine

■ TipSave N on-board evaluation ( Top fillet )



■ TipSave N on-board evaluation ( Back fillet )

Soldering tip temperature: 380℃ Pull speed: 8.3 mm/s

Confirmation that TipSave N has enhanced solderability with verification by drag point-to-point soldering on a through-hole connector.

※All data and photos in the above were obtained under specific conditions.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eCore

## Properties

| Items | | TipSave N (030) | TipSave N (031) | Test Specification |
|---|---|---|---|---|
| Alloy Composition | | Sn-Cu-Ni system | Sn-Cu-Ni system | — |
| Melting Point (℃) | | 227-229 | 227-229 | — |
| Flux Content (mass %) | | 3.0 | 3.0 | JIS Z 3197 8.1.2 |
| Halide Content (mass%) | | 0.00 | ≦0.2 | JIS Z 3197 8.1.4.2.1 |
| Copper Plate Corrosion | | Pass | Pass | JIS Z 3197 8.4.1 |
| Copper Mirror Corrosion | | Pass | Pass | JIS Z 3197 8.4.2 |
| Dryness Test | | Pass | Pass | JIS Z 3197 8.5.1 |
| Insulation Resistance ※1 (Ω) | 168hr | ≧$1.0\times10^{9}$ | ≧$1.0\times10^{10}$ | JIS Z 3197 8.5.3 |
| Electromigration ※2 | 1000hr | Pass | Pass | JIS Z 3197 8.5.4 |
| Spread Factor (%) | | ≧80 | ≧80 | 380℃ / 5 seconds ※3 |

※1 Surface Insulation Resistance : Test conditions 85℃ 85% RH 168hr
※2 Electromigtation : Test conditions 85℃ 85% RH 1000hr
※3 Coiled samples melted at 380℃ on an oxidized copper plate for 5 seconds.

We recommend using a soldering iron with high heat capacity t