

Ball-Attach Fluxes

The ball-attach process can be considered a trivial step when creating a BGA or similar package, but the final soldering step can be rather complex. There are several variables that impact the final ball-attach performance from a number of assembly processes carried out before that. These processes can be a key factor in the final yield of the BGA.



WS-446HF
#1 go-to flux for ball-attach and flip-chip

WS-823
The best all-around ball-attach flux with superior cleaning

WS-829*
The high tack, printable ball-attach flux, suitable for Mini and MicroLED assembly

*not one-step

SINGLE



No pre-cleaning



Save time

SIMPLE



Ensure strong joints



Cut costs

CLEAN



Room temp. water



No residue

PROVEN BY THE NUMBERS

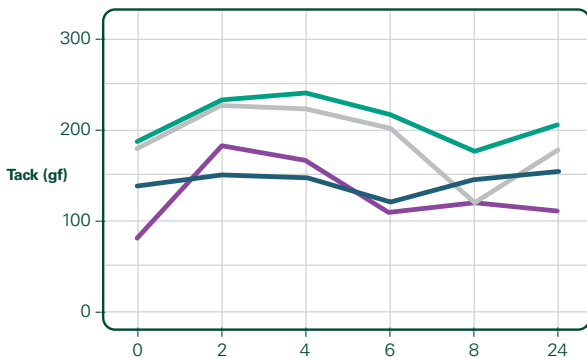
5 The number of top OSATS by revenue using our fluxes

44%

Improvement in wetting on oxidized copper substrates

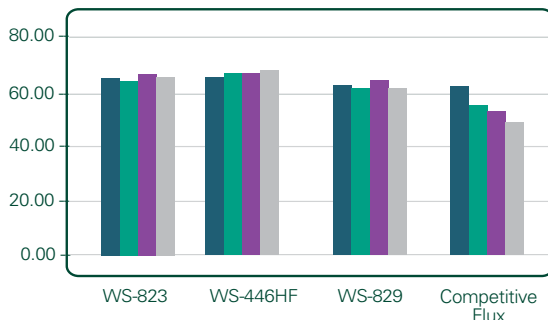
\$3,000/gallon

Per gallon cost saved from eliminating cleaning solution from processes



High and Consistent Tackiness Performance

Our fluxes provide no missing ball defects with high and consistent tackiness



Strong and Consistent Wetting Performance

Our fluxes are proven to solder well even to highly oxidized pad metallizations

From One Engineer To Another® Learn more: www.indium.com

All of Indium Corporation's solder paste and preform manufacturing facilities are IATF 16949:2016 certified. Indium Corporation is an ISO 9001:2015 registered company.

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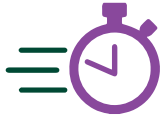
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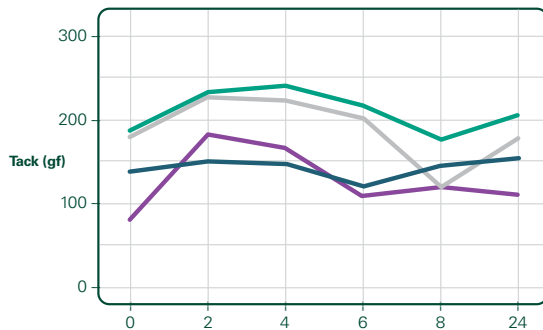
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● WS-446HF
● WS-823
● Competitive Flux A
● Competitive Flux B

High and Consistent Tackiness Performance

Our fluxes provide no missing ball defects with high and consistent tackiness



● Fresh Cu
● 2x Oxidized Cu
● 4x Oxidized Cu
● Fresh Cu OSP

Strong and Consistent Wetting Performance

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