

Selective Soldering

A Growing Wave Soldering Alternative



Selective Soldering is a method of soldering components to a printed circuit board in a way that is faster than hand soldering and consumes less solder than traditional wave soldering. It is becoming known within the industry as **one of the most effective soldering methods available**, and its usage continues to increase as assemblers transition away from other costlier soldering methods. Indium Corporation manufactures a number of products well suited for Selective Soldering applications.

Product Offering Review

No-Clean Fluxes		
Rosin-Containing		
Common Name	Solids Content	Comments
WF-9948	3.26%	Low solids formula that will result in low residues post-soldering.
WF-9945	5.77%	Provides low residue and good solderability; a middle ground between WF-9948 and 3545.
3545	11.25%	Best for heavy/thick assemblies. Provides good solderability. Higher solids content results in more residue post-soldering. Also available as a flux pen, FP-500.
Rosin-Free		
WF-9958	4.99%	Low residue formula—lower thermal stability compared to rosin-containing options. Has good solderability.

General notes: • Increased solids = higher thermal stability (better for thicker boards)
• Lower solids = lower residues and better pin test probability (cosmetics)

Water-Soluble Fluxes (listed by activity level, lowest to highest)		
Common Name	Solids Content	Comments
1082	14.46%	Halogen/halide-free.
1098	10.33%	Halide-containing, higher activity.

Product notes: • Cleaning for both products can be delayed for up to 48 hours.
• Both products have been tested by Pillarhouse and showed no corrosion.

VOC-Free Fluxes (listed by activity level, lowest to highest)		
Common Name	Solids Content	Comments
WF-7745	4.22%	Halogen/halide-free.

General notes: • Will require longer preheating (same as wave soldering), can make it harder to use depending on the equipment.



Solid Wire

Solid Wire for Selective Soldering	Common Alloys			
	Indalloy®291	Sn995	SAC305	
Common Diameters	0.078"/1.98mm	WIREOT-500178	WIREOT-54335	WIREOT-53338
	0.118"/3.00mm	WIREOT-500093	WIREOT-52855	WIREOT-52418
	0.125"/3.18mm	WIREOT-500245	WIREOT-53442	WIREOT-52441

All available on 5lb spools.
ERSA Spools are available.



Contact our expert: rmckerrow@indium.com
Learn more: www.indium.com/flux-cored-wire

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