

# SIFCO Process® Procedure

## Cadmium LHE® 5070 or 2023 per

### SIFCO Process® Manual, MIL-STD 865 & AMS2451

<b>Base Material:</b> Stainless Steel 400 Series Includes 15-5PH Steel, 17-4PH Steel		<b>Area Plated:</b> Rectangle: (L X W) =A  Circle: (0.785 X D <sup>2</sup> ) =A  OD or ID: (3.14 X D X L) =A			<b>Deposit to be Applied:</b> CADMIUM 5070 or 2023	
<b>Thickness Required:</b> Industry Standard 0.0001" – 0.0008"					<b>Type Required:</b> <u>CHECK ONE:</u> ___ TYPE I (No Conversion Coating) ___ TYPE II (Conversion Coating)	
<b>Solution Supply:</b> DIP		Amp-Hr = Factor x Area x Thickness  70 x _____ x _____ = _____ Amp-Hr			<b>Estimated Plating Amp:</b> N/A	
Step	Operation	Material	Volts	Polarity	Visual Test - What you are looking for:	
1	Clean with quick drying solvent					
2	Mask, if required					
3	Electroclean	1010/4100	10 - 20 Volts	Forward		
4	Rinse	Clean Tap Water	---	---	No water breaks after rinse	
5	Prewet & Etch	1024/4250	8 – 15 Volts	Reverse	Uniformed, light -gray etched surface on low carbon materials. Color of solution in cover should be blue green. Light to heavy black smut is developed on surface of high carbon materials. Prewetting improves uniformity of etch.	
6	Rinse	Clean Tap Water	---	---	----	
7	Prewet & Desmut	1023 or 4350	15 – 20 Volts	Reverse	Removal of black smut. Surface will not become any lighter in color.	
8	Rinse	Clean Tap Water	---	---	----	
9	Prewet & Activate	1021/4200	12 – 20 Volts	Forward	None	
	NO RINSE					
10	Prewet & Preplate	Nickel 2080/5600	8 – 15 Volts	Forward	Uniform Nickel color	
11	Rinse	Clean Tap Water	---	---	----	
12	Reset AH's To Zero					
13	Prewet & Plate	Cadmium 2023 or 5070	6-12 Volts	Forward	Continue plating, until Amp Hours are passed for required thickness.	
14	Rinse & Dry					
15	If conversion coating is required (Type II), proceed to step 16					
16	Brush, swab or dip part with 3002 or 5005 Chromic Conversion Coating (Approximately 15 to 60 seconds)					
17	Rinse & Dry. Do not wipe dry.					

Procedures for this sheet are found on the Technical Data Sheet for 5070 or 2023 Cadmium  
Lower voltages may be required if working very small surface area.

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