



## WORK INSTRUCTION

### Passivation Process

REVISION: 00

PROCEDURE NO.: WI-8.2.4.56

DATE EFFECTIVE: 04/01/21

1. Check PH of passivation tank solution with the provided meter, PH should be 1.8-2.2
  - a. If lower than 1.8, add water to tank
  - b. If higher than 2.2, add citric acid
2. Place pieces into cleaning solution for a minimum of ten minutes
3. Remove pieces from cleaning solution and dunk in water rinse tank
4. Place pieces into passivation solution for a minimum of twenty minutes
5. Remove pieces from passivation solution and dunk in second water rinse tank
6. Test 1-2 pieces with a copper sulfate test kit to ensure the pieces were passivated correctly (should show no discoloration)
  - a. If discoloration is present, check the PH level again and repeat steps 4-6
7. Record the passivation information on the spec
8. Scan passivation process into Details Input program

#### Notes:

- Reference document: ASTM A967-13
- Cleaning solution to be any type of cutting fluid (Citrisurf Kleer Kleen 4000 for example), monitored at Tempco's discretion
- Water rinse tanks to have a solids content of less than 200 ppm, monitored at Tempco's discretion
- Passivation solution to be a mixture of water and citric acid (Currently using Citrisurf 2050), monitored at Tempco's discretion



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**REVISION HISTORY**

REVISION LEVEL	DATE OF REVISION	SECTIONS	DESCRIPTION OF CHANGE
00	04/01/21	All	Initial release

**AUTHORIZATION**

POSITION	HELD BY	AUTHORIZATION SIGNATURE OR INITIALS
Prepared By: Director of Manufacturing Operations	Ananda Palanichamy	
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