



FCT- 3K BLUE PASSIVATION

FCT-3K Blue passivation is a totally new trivalent high corrosion resistant blue passivation for zinc and zinc alloys which provides several outstanding features.

1. The corrosion resistance of zinc plated components passivated with FCT 3k blue passivation far exceeds 100- 150 hrs neutral salt spray.
2. The chromating solution and chromate film are entirely free from hexavalent chromium, other toxic and carcinogenic ingredients.
3. Stress relief baking after chromating does adversely affect the corrosion resistance
4. Chromating is done with conventional equipments and methods

Operating conditions

	RANGE	OPTIMUM
Concentration	130-160ml/li	150ml/li
p ^H	1.8-2.2	1.9
Temperature	25-40°c	30°c
Dipping time	30-80sec	60sec

N.B: In case p^H of the solution is not within the specified range, adjust p^H. Generally nitric acid @ 0.5-1ml/li required for reducing the p^H However for rising p^H caustic soda solution may be used.

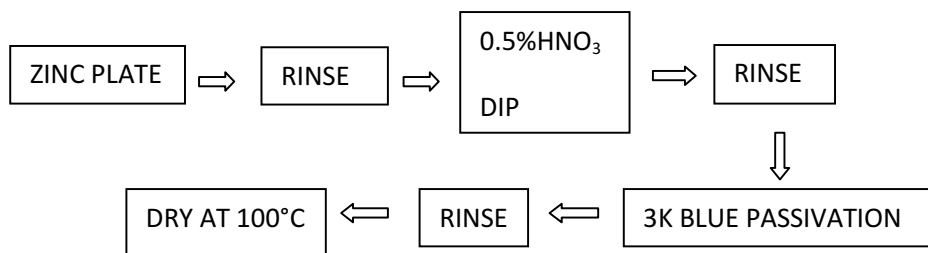
POST TREATMENT

After passivation and thorough washing, the components must be dried at 100°C for 5-10 minutes using either centrifugal drier or hot air oven desired result.

MAKE UP PROCEDURE

1. Fill the passivate tank three quarter full with soft water.
2. Add required quantity of 3k- blue passivation while stirring
3. Fill the tank to the operating level with water.
4. Check the p^H and adjust using nitric acid /caustic soda solution

PROCESS SEQUENCE:



CONTROL

Maintenance of the process may be accomplished through regular addition of 3k blue passivation .in some barrel plating operation the type of zinc bath used and the quality of rinsing may require more frequent addition of nitric acid.

CONSUMPTION

Based on our study, generally the approximate consumption of 3k blue passition 500 ft²area of components considering that there is no drag out loss. However .in actual practice above figures may vary depending upon the drag out loss, components shape and .handling; and hence it should be taken only as a guideline.

TROUBLE SHOOTING

FAULT	REASON	REMEDY
Hazy deposit	p ^H out of range Agitation of part is too intense	Adjust of p ^H to 1.8-2.2 Reduce agitation Reduce air agitation
Color tone too yellow	Air agitation is too strong p ^H - value too high	Adjust p ^H value to 1.8-2.2 with nitric acid.
Dark spot within low current density range	Co- deposition of foreign metals in zinc coating	Purification of zinc bath
Spots on acid zinc plated articles	Passive zinc coating	Activate zinc coating properly in diluted nitric acid prior to passivation
Expected corrosion protection not achieved	Fe content > 80mg/lit Cu > 1mg/lit Pb > 1mg/lit Zn > 1mg/lit	High p ^H treatment Stop copper source Stop lead source. prepare new make-up Discard solution patly. Use of ion exchanger recommended

Caution

The product may be cause burn to skin and eyes and may also damage the respiratory system. Wear protective clothing, safety goggles and face mask when handling the material. In case of contact, flush the exposed areas with clean cold water. in case of injury, consult a physician.

“The above information is given in good faith and is based on our experience but no condition or warranty is to be implied.”