

Manufacturers of high purity equipment

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## STANDARD PROCEDURE FOR PASSIVATION OF STAINLESS STEEL & HASTELLOY COMPONENTS

### SCOPE

This procedure details the method for passivation of stainless steel & hastelloy components. Passivation removes ferrous material from the surface of stainless steels and restores the surface passive layer.

### METHOD

1. On initial inspection examine all surfaces, checking for scratches or damage. If damage is evident, please contact the customer immediately.
2. Wash with high pressure water (0-150 bar) to remove any grease or residue etc if required.
3. Immerse in Passivation solution at 22°C temperature for a suitable time period (minimum 30 minutes).
4. Wash with cold high pressure water to remove all passivation solution.
5. Final rinse in hot (60°C) de-ionised water for 10-20 minutes.
6. Dry all surfaces
7. Inspect components to ensure customer standards have been achieved.
8. Package in accordance with customer specifications suitable for delivery. If possible, please return or recycle any packaging materials used.
9. In the instances where product is required back urgently and therefore wet, the components will be labelled as wet and should be handled with gloves. We will check the components with litmus paper prior to shipment, but cannot because of the complexity of some of the components absolutely guarantee that all acid residue is removed and therefore needs to be handled with more caution. We will also require a signature from our customers' "goods in" acknowledging and accepting that the product has been delivered wet.

### Notes:

The usage of PPE is mandatory (Rubber Boots, Rubber Gloves, Rubber Apron, Eye Protection) and work staff are to have a complete knowledge of acids being used and the actions to take in case of an emergency. Operators need to avoid contact of acids with skin or eyes and avoid breathing mists.

Passivation solution is 30% Nitric Acid (60% Strength)/70% De-ionised Water.

All operators working outside core hours should be left with clear instructions regarding the product they are processing and should also be supervised by a staff member who is competent with inspection duties.

This procedure is compliant with ASTM A967 & AMS2700