PROCEDURE FOR XYLAN COATING

Rev	Reason of Change	Date	Prepared By	Reviewed By	Approved By	Status
0	Initial Release	05-04-2022	Pankaj	Alok	KCR	Released

Summary:

This specification defines the requirements for XYLAN coating of approved iron and steel parts

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1.0 SCOPE

1.1 This specification defines the requirements for XYLAN coating of approved iron and steel parts.

1.2 This specification applies when the "as coated[1]" properties of the coating are acceptable.

2.0 DESCRIPTION AND GENERAL REQUIREMENTS

2.1 Vendor processes and quality procedures must be approved by the Quality Assurance Department.

2.2 All parts must be coated as specified on the engineering drawings.

3.0 PREPARATION OF PARI S BY ENGRAVE PRIOR TO COATING:

3.1 All parts shall be inspected to assure suitability for coating. Edges must be properly deburred.

3.2 Parts shall be kept dry and shipped in an approved manner to prevent damage to critical surfaces.

4.0 VENDOR COATING REQUIREMENTS:

4.1 All parts shall be pre-inspected for coating suitability.

4.2 Parts shall be cleaned, degreased, coated, and rinsed in the approved manner. The process shall not impair the surface finish of ring grooves, threads and critically machined surfaces.

5.0 PRETREATMENT

TREATMENT: Take the fasteners as quickly as possible to prevent any flash rusting. The process starts with an alkaline wash, then a water rinse, then the phosphating itself a proper conversion coat with XYLAN (XYLAN 1424 for red and XYLAN 1070 for blue) gives 1500 hours in ASTM B117 salt fog with less than 15% red rust, then another water rinse followed by a rinse in deionized water and the drying of the fasteners. The ideal phosphate is micro crystalline heat stable with a deposition weight of 1500 milligrams per square foot or 15 to 20 grams per square meter.

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6.0 COATING

Be coated within 2 hours of phosphating: first preheat the parts to 100 to 120 Degrees Fahrenheit. Apply one coat of XYLAN (XYLAN 1424 for Red and XYLAN 1070 for Blue) between 15 and 20 microns to the exposed surface. Cure immediately at 400 degrees Fahrenheit that means the temperature of the part itself not just the oven, cool the parts to 100 to 120 degrees Fahrenheit rotating them to expose the uncoated areas, spray again at 15 to 20 microns and cure the parts exactly as before.

FLASH - OFF CONDITION OPTIMUM CURE	3-5 MIN. AT 25-50'C (8(>-l20*F)
SCHEDULE MINIMUM CURE	20 MIN. AT 205*C <400°F)
TEMPERATURE MAXIMUM CURE	15 MIN. AT 205"C (400*F)
TREMPERATURE	5 MIN. AT 275"C (525"F)

7.0 TESTING

7.1 Test for quality: first 50 rubs with a rag soaked in MEK. No substrate should be visible although some discoloration of the rag is tine. Check to make sure the dry film has reached 15 to 20 microns. Check adhesion with the standard crosshatch test or with the scrape of a knife, no substrate should show through perfect now (XYLAN 1424 for red and XYLAN 1070 for blue) is ready to go to work.

7.2 Visually inspect all parts for coating uniformity.

7.3 Color - Red (From XYLAN 1424) or Blue (From XYLAN1070)

7.4 Appearance - Low to medium gloss

7.5 Finish - Dry

7.6 Coaling Thickness - 15-20 microns

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