

J-Finish is just getting started

We are taking the J-Finish from **GOLD** to

PLATINUM

The Platinum J-Finish is a 3 step process as defined below.

1. Zinc Plate Per ASTM B633 FE/Zn12 TYPE II, SC3 Severe, (minimum thickness 0.0005")
2. Trivalent Clear Chromate (RoHS and ELV compliant)
3. Sealer



The "PLATINUM J-FINISH" shall meet the following specifications.

| PLATINUM J-FINISH SPECIFICATIONS | |
|---------------------------------------|---|
| 1. Coating Thickness | Minimum .00050" on significant surface. |
| 2. Appearance | There shall be no evidence of blisters, peeling, pinholes, pits or rough surface on parts. |
| 3. Adhesion Requirements | There shall be no defects such as peeling, blisters or cracking after heating coated parts to $300 \pm 10^\circ \text{C}$ for 30 ± 5 minutes and quenching in water at 15°C to 25°C . |
| 4. Corrosion Resistance ASTM B 117 | Part shall show no evidence of white corrosion after 96-hour exposure. Part shall show no evidence of red rust after 500-hour exposure. |

Why Change?

The motivation for the change was to have a RoHS/ELV compliant finish. While this initiative has been in place since 2003, the trivalent equivalent available until today has not been satisfactory. Recent advances in the trivalent coating have made this a clear change for the better.

Team JVI is happy to answer any questions you may have.
Please call, email, or request a presentation.



Your Connection Connection

7131 North Ridgeway Avenue • Lincolnwood, IL 60712 USA
847/675-1560 • Fax 847/675-0083 • 1-800-742-8127 • <http://www.jvi-inc.com>





Test Report No. 6 UPDATE

The JVI Gold J-Finish has been updated to a Platinum J-Finish per the specifications below.

The Platinum J-Finish is a 3 step process as defined below.

1. Zinc Plate Per ASTM B633 FE/Zn12 TYPE II, SC3 Severe, (minimum thickness 0.0005")
2. Trivalent Clear Chromate (RoHS and ELV compliant)
3. Sealer

The "PLATINUM J-FINISH" shall meet the following specifications.

| PLATINUM J-FINISH SPECIFICATIONS | | |
|----------------------------------|------------------------------------|---|
| 1. | Coating Thickness | Minimum .00050" on significant surface. |
| 2. | Appearance | There shall be no evidence of blisters, peeling, pinholes, pits or rough surface on parts. |
| 3. | Adhesion Requirements | There shall be no defects such as peeling, blisters or cracking after heating coated parts to $300 \pm 10^{\circ}$ C for 30 ± 5 minutes and quenching in water at 15° C to 25° C. |
| 4. | Corrosion Resistance ASTM B 117 | Part shall show no evidence of white corrosion after 96-hour exposure. Part shall show no evidence of red rust after 500-hour exposure. |

Salt spray testing in accordance with Test Report 6 have been conducted and the results included with this update. The Platinum J-Finish passed all testing the previous gold J-Finish has been subjected to.

The motivation for the change was to have a RoHS/ELV compliant finish, a finish that does not require a hexavalent chromium. While this initiative has been in place since 2003, the trivalent equivalent available until today has not been satisfactory. Recent advances in the trivalent coating have made this a clear change for the better.

Please consider Test Report No. 6 to serve as reference only and consider the latest certificates of compliance to replace Test Report No. 6 for all specification and submittal purposes.

Please contact team JVI with any questions.

info@jvi-inc.com
847-675-1560
1-800-742-8127 (toll free)
www.jvi-inc.com



Coatings 85 Ltd.

6995 Davand Drive, Mississauga, Ontario L5T 1L5
 Tel: (905) 564-1711 Fax: (905) 564-2819

CERTIFICATE OF COMPLIANCE

| | | | |
|------------------------|---|-----------------------------|--------------------------------------|
| Customer: | A.B.M. Tool & Die Co. Ltd | Processing Location: | Coatings 85 Ltd. |
| Part Number: | Sample parts | Specification: | ASTM-B633-FE/ZN12 TYPE11+SEAL |
| Type of Finish: | Electroplated Zinc Clear Trivalent +Seal | | |
| Processing Date | August 24,2015 | Prepared Date: | September 25, 15 |

Actual Parts processed to the above specification have been tested with results as detailed below.

| TEST PERFORMED | RESULT | SPECIFICATION |
|--|---|--|
| 1. <u>Coating Thickness</u> ASTM-B633-FE/ZN12 TYPE11+SEAL Actual parts tested | .00057 .00060 .00059 | Minimum .00050 on significant surface. |
| 2. <u>Appearance</u> ASTM-B633-FE/ZN12 TYPE11+SEAL Actual parts tested | No evidence of blisters, peeling, pinholes, pits or rough surface on parts. | There shall be no evidence of blisters, peeling, pinholes, pits or rough surface on parts. |
| 3. <u>Adhesion Requirements</u> ASTM-B633-FE/ZN12 TYPE11+SEAL Actual part tested | No evidence of peeling, blisters or cracking after heating coated parts to 300 ± 10° C for 30 ± 5 minutes and quenching in water at 15° C to 25° C. | There shall be no defects such as peeling, blisters or cracking after heating coated parts to 300 ± 10° C for 30 ± 5 minutes and quenching in water at 15° C to 25° C. |
| 4. <u>Corrosion Resistance – Neutral</u> ASTM-B633-FE/ZN12 TYPE11+SEAL 3 Actual parts tested | Passed | Part shall show no evidence of white corrosion after 96-hour exposure. |
| | Passed | Part shall show no evidence of red rust after 500-hour exposure. |

Clifford Allen
 Q.C. Supervisor



JAGEMANN PLATING CO.

PH: 920 / 682-6883 • FAX: 682-8003 • 1324 SO. 26th ST. • P.O. BOX 1447 • MANITOWOC, WI 54221-1447

LABORATORY CONTROL • ELECTRO PLATING • METAL FINISHING

ISO 9001:2008 CERTIFIED

In-House Test

Process Verification: Zinc Trivalent Clear Chromate Plate .0005 Minimum Thickness, With Sealer (Rack Process)

| | | | |
|----------------------------------|--|-------------------------|----------------------------|
| Date: | 11/16/2015 | Your Ref # : | 25DL/Zincroshield |
| Subject: | Salt Spray Test | Part # : | Sample |
| | | Inspection Date: | 10/26/2015 - 11/16/2015 |
| Plating Specification: | Zinc Trivalent Clear Chromate Plate .0005 Minimum Thickness With Sealer 1010 Material Pin | | |
| Actual Plating Thickness: | .00051 - .00062 | | |

Salt Spray Test Results (ASTM B 117)

| Hours Of Exposure | Visual Observations | Test Requirements | Pass/Fail |
|-------------------|---|--|-----------|
| 120 | After 120 hours of exposure to the below described test conditions, the parts were removed from the test chamber, rinsed with de-ionized water, dried with filtered dry compressed air and inspected. The surface of the test sample shows no visible white rust products in the concern area. After 500 hours of exposure to the below described test conditions, the parts were removed from the test chamber, rinsed with de-ionized water, dried with filtered dry compressed air and inspected. The surface of the test sample shows visible white rust, no visible red rust products. | We were requested to salt fog test the parts according to American Society for Testing and Materials (ASTM) B 117 for 500 hours. | PASS |

| | |
|---------------------------|--|
| Solution | 5 % NaCl |
| Chamber Temperature | 95 ± 1 ° F |
| Specific Gravity @ 95 ° F | 1.025 to 1.040 |
| PH Of Collected Solution | 6.5 to 7.2 |
| Average Collection Rate | 1 – 2 ml/hr./80 cm ² surf. area |

It is our policy to retain samples for a minimum of 10 days from the report date, after which time they may be discarded. The data herein represents only the item(s) testes. This report shall not be reproduced except in full, without prior written permission of Jagemann Plating Company.

Electronic document
Original Contains Signature
Signed: _____
John R. Nelesen
Quality Assurance Manager