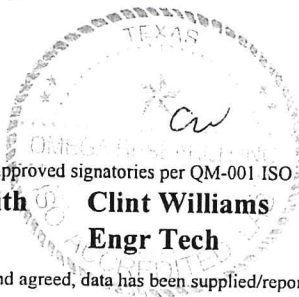


"Specialists in Embrittlement Testing"

Date: March 15 2023
To: SIFCO OH
5708 Schaaf Road
INDEPENDENCE, OH 44131
Test Report: 23-77902
Reference P.O.: PO00009524
Test: NOTCH TENSILE HYDROGEN EMBRITTLEMENT
Sample Identification: SAMPLES A, B, C, D:
Job / SN: SOLUTION 2023 BATCH 2302169
Process: BRUSH CADMIUM PLATE
PO Specification: MIL-STD-865E, AMS 2451/4E, PS13113F
Test Method Scope: ASTM F519-18
Receive Date: Mar 06, 2023
Test Start Date: Mar 06, 2023
Test End Date: Mar 15, 2023
Sample Lot: 79H **Mfg.:** GREEN
Notched Ultimate Tensile Load: 9245 **Units:** LBS
Test Load: 6934 **Units:** LBS
Results: Conforms

The above identified notched tensile samples were subjected to a 200-hour sustained load test at a load of 75% of the Notch Ultimate Tensile Load (NUTL). Results above are applicable to submitted purchase order specifications. Additionally, results apply to the samples as received. Variances as applicable are noted at bottom right of report:

Report Revision: 1
Revision Description: 1 - Original



APPROVED
S 3/16/23

Testing performed under direct supervision of approved signatories per QM-001 ISO 17025 Quality Manual PARA 7.8.

Jeremy Riley **Deborah Smith** **Clint Williams**
Ops Mgr **Quality Mgr** **Engr Tech**

Decision Rule: Per previously communicated and agreed, data has been supplied/reported as observed without accounting for measurement uncertainty.

Report invalid unless color seal present. Page 1 of 1



"Specialists in Embrittlement Testing"

Date: March 15 2023

To: **SIFCO OH**
5708 Schaaf Road
INDEPENDENCE, OH 44131

Test Report: 23-77902

Reference P.O.: PO00009524
S/N 0180P, 0181P

Test: **NOTCH TENSILE HYDROGEN EMBRITTLEMENT**

Sample Identification: SAMPLES A, B:

Job / SN: SOLUTION 2023 BATCH 2302169

Process: BRUSH CADMIUM PLATE 1A2

PO Specification: BAC 5854M, BAC 5144

Test Method Scope: ASTM F519-18

Receive Date: Mar 06, 2023
Test Start Date: Mar 06, 2023
Test End Date: Mar 15, 2023

Sample Lot: P
Notched Ultimate Tensile Load: 15860
Test Load: 11895

Mfg.: ONAMAC
Units: LBS
Units: LBS

Results: Conforms

The above identified notched tensile samples were subjected to a 200-hour sustained load test at a load of 75% of the Notch Ultimate Tensile Load (NUTL). Results above are applicable to submitted purchase order specifications. Additionally, results apply to the samples as received. Variances as applicable are noted at bottom right of report:

Report Revision: 1	Revision Description: 1 - Original	One sample was metallographically cross-sectioned longitudinally across the notch and evaluated at 80-100X magnification for complete plating coverage of the notch. Conforms. Photo attached Samples Loaded on individual frames.
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Testing performed under direct supervision of approved signatories per QM-001 ISO 17025 Quality Manual PARA 7.8.

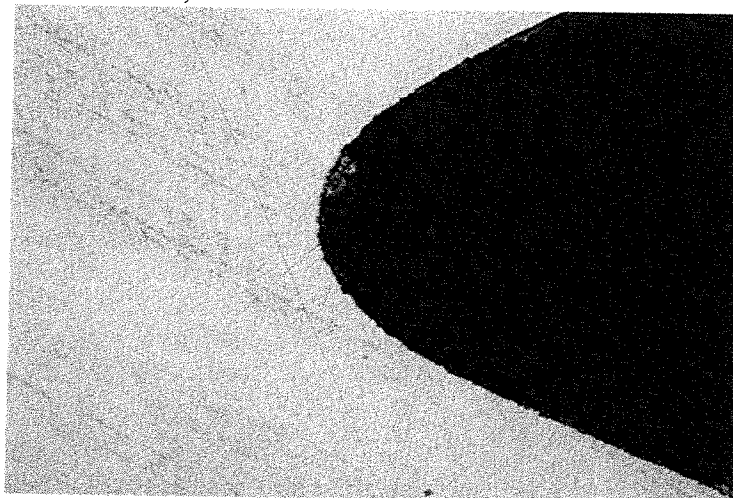
Jeremy Riley Ops Mgr	Deborah Smith Quality Mgr	Clint Williams Engr Tech
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APPROVED
DS 3/16/23

Decision Rule: Per previously communicated and agreed, data has been supplied/reported as observed without accounting for measurement uncertainty.
Report invalid unless color seal present. Page 1 of 1

"Specialists in Embrittlement Testing"

Date: March 15 2023
To: **SIFCO OH**
5708 Schaaf Road
INDEPENDENCE, OH 44131
Test Report: 23-77902
Reference P.O.: PO00009524
S/N 0181P
Test: **PHOTOMICROGRAPH**
Sample Identification: SAMPLE A:
Process: BRUSH CADMIUM PLATE 1A2
PO Specification: BAC 5854M, BAC 5144
Test Method Scope: ASTM E3-11(2017)
Receive Date: Mar 06, 2023



Report Revision:

1

Revision Description:

1 - Original

Testing performed under direct supervision of approved signatories per QM-001 ISO 17025 Quality Manual PARA 7.8.

Jeremy Riley **Deborah Smith** **Clint Williams**
Ops Mgr **Quality Mgr** **Engr Tech**

Decision Rule: Per previously communicated and agreed, data has been supplied/reported as observed without accounting for measurement uncertainty.

Report invalid unless color seal present. Page 1 of 1

