

Certificate of Conformance
SIFCO Process Solution

The solution identified below has been tested under controlled conditions and found to meet SIFCO Applied Surface Concepts specifications and Quality Assurance standards. This product does not contain, nor has it been contaminated with metallic mercury or mercury compounds. SIFCO ASC, LLC is a mercury free facility.

This product is free from all foreign materials that could result in foreign object damage to the equipment or process.

Capability of Meeting Specifications

SIFCO Process electroplates, when properly selected and applied, will meet the requirements of: AMS2451D, MIL-STD-2197A (SH), MIL-STD-865E and DPS9.89-1

Product Code	5644
Product Description	Nickel High-Speed, LHE®
Batch Number	2108160

Test Requirement	Actual Value
pH	7.79 @ 20°C
Specific Gravity	1.171 @ 20°C
Metal Content	50.86 g/l
Solution Appearance	Blue Green
Date of Manufacture	August 11, 2021
HE Certification Pass Date	August 21, 2021 Report #21-70799
Recommended Shelf Life	August 11, 2025



Quality Systems Engineer

08/30/2021

Date

"Specialists in Embrittlement Testing"

Date: August 23 2021
To: **SIFCO OH**
5708 Schaaf Road
INDEPENDENCE, OH 44131
Test Report: 21-70799
Reference P.O.: PO00007835
S/N 1,2,3,4
Test: **NOTCH TENSILE HYDROGEN EMBRITTLEMENT**
Sample Identification: SAMPLES A, B, C, D:
Job / SN: SOLUTION CODE 5644 BATCH 2108160
Process: BRUSH NICKEL
PO Specification: DPS 9.89-1, ASTM F519
Test Method Scope: ASTM F519-18
Receive Date: Aug 13, 2021
Test Start Date: Aug 13, 2021
Test End Date: Aug 21, 2021
Sample Lot: 46G, 46G, 46G, 48E
Notched Ultimate Tensile Load: 9272, 9272, 9272, 9206
Test Load: 6954, 6954, 6954, 6905
Mfg: GREEN
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

APPROVED
gmb 8/30/2021



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

Jeremy Riley **Joshua Cox** **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