

IMR TEST LABS

A Curtiss-Wright Business Unit
www.imrtest.com

131 Woodsedge Drive
Lansing, NY 14882
T: 1.607.533.7000 | F: 1.607.533.9210

TEST REPORT

February 24, 2021

IMR Report Number 202101966M

Malcolm MacDougall
Servometer
501 Little Falls Road
Cedar Grove, NJ 07009

SUMMARY

cc Joe Madonna

One sample was received for chemical analysis.

The results are below.

PO Number
SVP210602

CHEMISTRY

Date Received
February 18, 2021

Description
Weldable Nickel
Type 2W

Reference Date
February 2021

Element	Sample
Ni Alloy	99.98
Ni ¹	96.21
S ²	0.013

¹Determined by difference.

²Determined by combustion-infrared absorbance.

Results in weight percent unless otherwise indicated.

Method(s): CAP-017R (ICP-AES) and ASTM E 1019-18 (Comb./IGF)



Reviewed by

Jeremy Bean
Chemist

Reviewed by

Pete Lockard
Supervisor Chemistry Department

All procedures were performed in accordance with the IMR Quality Manual, current revision, and related procedures; and the PWA MCL Manual F-23 and related procedures. The information contained in this test report represents only the material tested and may not be reproduced, except in full, without the written approval of IMR Test Labs ("IMR"). IMR maintains a quality system in compliance with the ISO/IEC 17025 and is accredited by A2LA, certificates #1140.01 and #1140.02. IMR will perform all testing in good faith using the proper procedures, trained personnel, and equipment to accomplish the testing required. Conformance will be based on results without measurement uncertainty applied, unless otherwise requested by the customer. IMR's liability to the customer or any third party is limited at all times to the amount charged for the services provided. All test samples will be retained for a minimum of 3 months and may be destroyed thereafter, unless otherwise specified by the customer. The recording of false, fictitious, or fraudulent statements or entries on this document may be punished as a felony under federal statutes. IMR Test Labs is a GEAE S-400 approved lab (Supplier Code 69805).

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TEST REPORT

February 24, 2021

Malcolm MacDougall
Servometer
501 Little Falls Road
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cc Joe Madonna

PO Number
SVP210602

Date Received
February 18, 2021

Description
Weldable Nickel
Type 2W

Reference Date
February 2021

IMR Report Number 202101966C

SUMMARY

Two samples were received for tensile testing.

The results are below.

TENSILE PROPERTIES – ROOM TEMPERATURE¹

	Tensile Strength (ksi)	Yield Strength (ksi)	Elongation (%)
Sample	178	145	2.4

¹Average of two replicates

The width of the samples was 0.37 inches; gauge length was 2.00 inches. Yield strength was determined by the 0.2% offset method. Crosshead speed was 0.01 in./min. to yield and 0.1 in./min. to fracture. Method(s): ASTM E 8-16a



Reviewed by

Molly Adams
Engineer, Assoc.

Reviewed by

Matt LePage
Operations Project Manager

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February 24, 2021

Malcolm MacDougall
Servometer
501 Little Falls Road
Cedar Grove, NJ 07009

cc Joe Madonna

PO Number
SVP210602

Date Received
February 18, 2021

Description
Weldable Nickel
Type 2W

Reference Date
February 2021

TEST REPORT

IMR Report Number 202101966G

SUMMARY

One sample was received for micro-hardness testing.

The results are below.

MICRO-HARDNESS

	HV ₁₀₀ ¹
Sample	419

¹Average of three readings.
Method(s): ASTM E 384-17



Reviewed by

Cheryl Downey



Cheryl Downey
Senior Metallurgical Specialist

Reviewed by

Travis Willhard

Travis Willhard
Metallurgical Engineer

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