



This certificate is granted and awarded by the authority of the Nadcap Management Council to:

Vac-Met, A Solar Atmospheres Company

*56462 Precision Drive
Chesterfield, MI 48051
United States*

This certificate demonstrates conformance and recognition of accreditation for specific services, as listed in www.eAuditNet.com on the Qualified Manufacturers List (QML), to the revision in effect at the time of the audit for:

Heat Treating

Certificate Number: 27458231025
Expiration Date: 28 February 2025
Accreditation Length: 12 Months

Jay Solomond
Executive Vice President & Chief Operating Officer

SCOPE OF ACCREDITATION

Heat Treating

Vac-Met, A Solar Atmospheres Company
56462 Precision Drive
Chesterfield, MI 48051

This certificate expiration is updated based on periodic audits. The current expiration date and scope of accreditation are listed at: www.eAuditNet.com - Online QML (Qualified Manufacturer Listing).

In recognition of the successful completion of the PRI evaluation process, accreditation is granted to this facility to perform the following:

AC7000 Rev A - AUDIT CRITERIA FOR NADCAP ACCREDITATION

AC7101/4 Rev F - Nadcap Audit Criteria for Materials Testing Laboratories-Metallography & Microindentation Hardness (to be used on audits on/after 14 August 2016)*** If the Auditee holds any MTL accreditation, then this checklist must be done as part of an MTL audit

(L0) Metallography Evaluation

Industry Spec – Other L0

(L1) Microindentation (Interior)

Industry Spec – Other L1

(L10) Near Surface Examinations – Carburization/Decarburization

(L11) Grain Size

(L2) Near Surface Examinations – Alloy Depletion

(L5) Near Surface Examinations – Microindentation (Surface Case Depth)

Industry Spec – Other L5

(L5X) Near Surface Examinations – Microindentation (Surface) (Chord Method ARP1820)

(L7) Near Surface Examinations – IGA, IGO

(L8) Near Surface Examinations – Alpha Case: Wrought Titanium

AC7102 Rev K - Nadcap Audit Criteria for Heat Treating Baseline (AC7102/S and AC7102/8 must also be selected) (to be used on audits on or after 15-Aug-2021)

Brazing – AC7102/1 must also be selected

Nickel and Cobalt Alloys – Industry Specs – Check any applicable boxes

Industry Spec – Other – Nickel and Cobalt Alloys

Nickel and Cobalt Alloys– Customer Specs

Stainless Steels, Austenitic – Customer Specs

Stainless Steels, Austenitic – Industry Specs – Check any applicable boxes

Industry Spec – Other – Stainless Steels, Austenitic

Stainless Steels, Martensitic – Customer Specs

Stainless Steels, Martensitic – Industry Specs – Check any applicable boxes

Industry Spec – Other – Stainless Steels, Martensitic
Stainless Steels, Precipitation Hardening – Customer Specs
Stainless Steels, Precipitation Hardening – Industry Specs – Check any applicable boxes
Industry Spec – Other – Stainless Steels, Precipitation Hardening
Steels – Customer Specs
Steels – Industry Specs – Check any applicable boxes
Industry Spec – Other – Steels
Stress Relieve – Customer Specs
Stress Relieve – Industry Specs – Check any applicable boxes
Industry Spec – Other – Stress Relieve
Titanium Alloys – Customer Specs
Titanium Alloys – Industry Specs – Check any applicable boxes
Industry Spec – Other – Titanium Alloys
Vacuum Heat Treating – Customer Specs
Vacuum Heat Treating – Industry Specs – Check any applicable boxes
Industry Spec – Other – Vacuum Heat Treating

AC7102S Rev K - Nadcap Supplemental Audit Criteria for Heat Treating (to be used on audits on/AFTER 12-Nov-2023)

U1 Honeywell Aerospace
U10 GE Aviation
U11 The Boeing Company
U18 Collins Aerospace (Hamilton Sundstrand)
U3 Rolls–Royce

AC7102/1 Rev F - Nadcap Audit Criteria for Heat Treating - Brazing (to be used on audits on/after 10 July 2016)

Vacuum Brazing – Customer Specs
Vacuum Brazing – Industry Specs – Check any applicable boxes
Industry Spec – Other

AC7102/5 Rev F - Nadcap Audit Criteria for Heat Treating - Hardness and/or Conductivity Testing (to be used on audits on/AFTER 30-Apr-2023)

Hardness – Rockwell – Check any applicable boxes
Industry Spec – Other

AC7102/8 Rev B - Nadcap Audit Criteria for Heat Treating Pyrometry (to be used on audits on/AFTER 27-Aug-2023)

Pyrometry – Customer Specs
Pyrometry – Industry Specs – Check any applicable boxes
AMS2750

Merit

Merit



This certificate is granted and awarded by the authority of the Nadcap Management Council to:

Vac-Met, A Solar Atmospheres Company

*7236 Murthum
Warren, MI 48092
United States*

This certificate demonstrates conformance and recognition of accreditation for specific services, as listed in www.eAuditNet.com on the Qualified Manufacturers List (QML), to the revision in effect at the time of the audit for:

Heat Treating

Certificate Number: 3422207350
Expiration Date: 30 November 2024
Accreditation Length: 24 Months

Jay Solomond
Executive Vice President & Chief Operating Officer

Performance Review Institute (PRI) | 161 Thorn Hill Road | Warrendale, PA 15086-7527

Merit

Merit

SCOPE OF ACCREDITATION

Heat Treating

Vac-Met, A Solar Atmospheres Company
7236 Murthum
Warren, MI 48092

This certificate expiration is updated based on periodic audits. The current expiration date and scope of accreditation are listed at: www.eAuditNet.com - Online QML (Qualified Manufacturer Listing).

In recognition of the successful completion of the PRI evaluation process, accreditation is granted to this facility to perform the following:

AC7000 - AUDIT CRITERIA FOR NADCAP ACCREDITATION

AC7101/4 Rev F - Nadcap Audit Criteria for Materials Testing Laboratories-Metallography & Microindentation Hardness (to be used on audits on/after 14 August 2016)* If the Auditee holds any MTL accreditation, then this checklist must be done as part of an MTL audit**

- (L1) Microindentation (Interior)
- (L5) Near Surface Examinations – Microindentation (Surface Case Depth)
- (L5X) Near Surface Examinations – Microindentation (Surface) (Chord Method ARP1820)
- (L7) Near Surface Examinations – IGA, IGO
- (L8) Near Surface Examinations – Alpha Case: Wrought Titanium

AC7102 Rev K - Nadcap Audit Criteria for Heat Treating Baseline (AC7102/S and AC7102/8 must also be selected) (to be used on audits on or after 15-Aug-2021)

- Brazing – AC7102/1 must also be selected
- Nickel and Cobalt Alloys – Industry Specs – Check any applicable boxes
- Nickel and Cobalt Alloys – Customer Specs
- Stainless Steels, Austenitic – Customer Specs
- Stainless Steels, Austenitic – Industry Specs – Check any applicable boxes
- Stainless Steels, Martensitic – Customer Specs
- Stainless Steels, Martensitic – Industry Specs – Check any applicable boxes
- Stainless Steels, Precipitation Hardening – Customer Specs
- Stainless Steels, Precipitation Hardening – Industry Specs – Check any applicable boxes
- Steels – Customer Specs
- Steels – Industry Specs – Check any applicable boxes
- Stress Relieve – Customer Specs
- Stress Relieve – Industry Specs – Check any applicable boxes
- Industry Spec – Other – Stress Relieve
- Titanium Alloys – Customer Specs
- Titanium Alloys – Industry Specs – Check any applicable boxes

Vacuum Heat Treating – Customer Specs

Vacuum Heat Treating – Industry Specs – Check any applicable boxes

AC7102S Rev J - Nadcap Supplemental Audit Criteria for Heat Treating (to be used on audits on/after 31 May 2020)

U10 GE Aviation

U11 The Boeing Company

U3 Rolls–Royce

AC7102/1 Rev F - Nadcap Audit Criteria for Heat Treating - Brazing (to be used on audits on/after 10 July 2016)

Vacuum Brazing – Customer Specs

Vacuum Brazing – Industry Specs – Check any applicable boxes

AC7102/5 Rev E - Nadcap Audit Criteria for Heat Treating - Hardness and/or Conductivity Testing (to be used on on/after 5 May 2019)

Hardness – Portable – Check any applicable boxes

Hardness – Rockwell – Check any applicable boxes

AC7102/8 Rev A - Nadcap Audit Criteria for Heat Treating Pyrometry (to be used on audits on/after 15-Aug-2021)

Pyrometry – Industry Specs – Check any applicable boxes

AMS2750

Merit



Merit

This certificate is granted and awarded by the authority of the Nadcap Management Council to:

Vac-Met, A Solar Atmospheres Company

**31531 Groesbeck Hwy
Fraser, MI 48026
United States**

This certificate demonstrates conformance and recognition of accreditation for specific services, as listed in www.eAuditNet.com on the Qualified Manufacturers List (QML), to the revision in effect at the time of the audit for:

Heat Treating

Certificate Number: 7821207351
Expiration Date: 30 November 2024
Accreditation Length: 24 Months

Jay Solomond
Executive Vice President & Chief Operating Officer

Performance Review Institute (PRI) | 161 Thorn Hill Road | Warrendale, PA 15086-7527

Merit

Merit

SCOPE OF ACCREDITATION

Heat Treating

Vac-Met, A Solar Atmospheres Company
31531 Groesbeck Hwy
Fraser, MI 48026

This certificate expiration is updated based on periodic audits. The current expiration date and scope of accreditation are listed at: www.eAuditNet.com - Online QML (Qualified Manufacturer Listing).

In recognition of the successful completion of the PRI evaluation process, accreditation is granted to this facility to perform the following:

AC7000 - AUDIT CRITERIA FOR NADCAP ACCREDITATION

AC7102 Rev K - Nadcap Audit Criteria for Heat Treating Baseline (AC7102/S and AC7102/8 must also be selected) (to be used on audits on or after 15-Aug-2021)

Brazing – AC7102/1 must also be selected

Nickel and Cobalt Alloys – Industry Specs – Check any applicable boxes

Nickel and Cobalt Alloys – Customer Specs

Stainless Steels, Austenitic – Customer Specs

Stainless Steels, Austenitic – Industry Specs – Check any applicable boxes

Stainless Steels, Martensitic – Customer Specs

Stainless Steels, Martensitic – Industry Specs – Check any applicable boxes

Stainless Steels, Precipitation Hardening – Customer Specs

Stainless Steels, Precipitation Hardening – Industry Specs – Check any applicable boxes

Steels – Customer Specs

Steels – Industry Specs – Check any applicable boxes

Stress Relieve – Industry Specs – Check any applicable boxes

Titanium Alloys – Customer Specs

Titanium Alloys – Industry Specs – Check any applicable boxes

Vacuum Heat Treating – Customer Specs

Vacuum Heat Treating – Industry Specs – Check any applicable boxes

AC7102S Rev J - Nadcap Supplemental Audit Criteria for Heat Treating (to be used on audits on/after 31 May 2020)

U10 GE Aviation

U11 The Boeing Company

U3 Rolls-Royce

AC7102/1 Rev F - Nadcap Audit Criteria for Heat Treating - Brazing (to be used on audits on/after 10 July 2016)

Vacuum Brazing – Customer Specs

Vacuum Brazing – Industry Specs – Check any applicable boxes

AC7102/8 Rev A - Nadcap Audit Criteria for Heat Treating Pyrometry (to be used on audits on/after 15-Aug-2021)

Pyrometry – Customer Specs

Pyrometry – Industry Specs – Check any applicable boxes

AMS2750