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

M.S. Aerospace

13928 Balboa Blvd.
Sylmar, CA 91342
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:

Chemical Processing

Certificate Number: 3484171149
Expiration Date: 31 October 2019

Joseph G. Pinto
Executive Vice President and Chief Operating Officer

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

M.S. Aerospace

13928 Balboa Blvd.
Sylmar, CA 91342
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: 3484186613
Expiration Date: 30 April 2021

Michael J. Hayward
Vice President and Chief Operating Officer

SCOPE OF ACCREDITATION

Chemical Processing

M.S. Aerospace
13928 Balboa Blvd.
Sylmar, CA 91342

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:

AC7108 Rev H - Nadcap Audit Criteria for Chemical Processing (to be used on audits on/after 5 June 2016)

General Cleaning and Pre–Cleaning
- Alkaline Cleaning (If Titanium Alkaline Cleaning is also carried out then please check Chemical Cleaning – Titanium Cleaning – Alkaline" also)
- Titanium Cleaning – Alkaline
  - Other Titanium Cleaning Alkaline
- Ultrasonic Cleaning

Ovens Used for Thermal Treatments at a Set Point above 250°F

Ovens for Thermal Treatments with a set point at or below 250ºF (121ºC) or for Miscellaneous Heating Processes, e.g. Part Drying.

AC7108/1 Rev C - Nadcap Audit Criteria for Painting & Dry Film Coatings (to be used on audits on/after 5 June 2016)

Dry Film Lubricant Coatings
- Other

AC7108/4 Rev B - Nadcap Audit Criteria for Solution Analysis and Testing in Support of Chemical Processing to AC7108 (To Be Used On Audits Conducted On Or After June 5, 2016)

Solution Analysis In Support of AC7108

Testing Performed Internally In Support of the Chemical Process Accreditation
- B06 – Water Immersion / Humidity Testing In Support of AC7108
- B10 – Adhesion Testing (Adhesion Tape Testing) In Support of AC7108
- B11 – Adhesion Testing (Scratch and Chisel Test) In Support of AC7108
- B14 – Conductivity Testing In Support of AC7108

B16 – Coating Thickness Measurement In Support of AC7108

AC7108/12 - Nadcap Audit Criteria for Acid Cleaning, Descaling, Passivation and Electropolishing (to be used on audits on/after 5 June 2016)

Passivation

Other Passivation

AC7108/15 - Nadcap Audit Criteria for Pre-Penetrant Etch

Immersion Pre penetrant Etch

SCOPE OF ACCREDITATION

Heat Treating

M.S. Aerospace
13928 Balboa Blvd.
Sylmar, CA 91342

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:

AC7102 Rev J - Nadcap Audit Criteria for Heat Treating Baseline (AC7102/S and AC7102/8 must also be selected) (to be used on audits on/after 3 December 2017)

Nickel and Cobalt Alloys – Industry Specs – Check any applicable boxes
  Industry Spec – Other
Nickel and Cobalt Alloys– Customer Specs
Stainless Steels, Austenitic – Industry Specs – Check any applicable boxes
  Industry Spec – Other
Stainless Steels, Austenitic– Customer Specs
Stainless Steels, Martensitic – Customer Specs
Stainless Steels, Martensitic – Industry Specs – Check any applicable boxes
  Industry Spec – Other
Stainless Steels, Precipitation Hardening – Customer Specs
Stainless Steels, Precipitation Hardening – Industry Specs – Check any applicable boxes
  Industry Spec – Other
Steels – Industry Specs – Check any applicable boxes
  Industry Spec – Other
Titanium Alloys – Customer Specs
Titanium Alloys – Industry Specs – Check any applicable boxes
  Industry Spec – Other
Vacuum Heat Treating – Customer Specs
Vacuum Heat Treating – Industry Specs – Check any applicable boxes

AC7102S Rev H - Nadcap Supplemental Audit Criteria for Heat Treating (to be used on audits on before 7 April, 2019)

U14 SAFRAN Group
U18 United Technologies Corp. – Hamilton Sundstrand
U3 Rolls–Royce PLC
U7 MTU Aero Engines GmbH

AC7102/8 - Nadcap Audit Criteria for Heat Treating Pyrometry

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

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

M.S. Aerospace

13928 Balboa Blvd.
Sylmar, CA 91342
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:

Materials Testing

Certificate Number: 3484177991
Expiration Date: 31 October 2019

Joseph G. Pinto
Executive Vice President and Chief Operating Officer

SCOPE OF ACCREDITATION

Materials Testing

M.S. Aerospace
13928 Balboa Blvd.
Sylmar, CA 91342

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:

AC7101/1 Rev F - Nadcap Audit Criteria for Materials Testing Laboratories – General Requirements for All Laboratories (to be used on/after 14 Sept 2014)

AC7101/3 Rev C - Nadcap Audit Criteria for Materials Test Laboratories – Mechanical Testing (to be used on/after 28 August, 2011)
(A) Room Temperature Tensile
(B) Elevated Temperature Tensile
(C) Stress Rupture

AC7101/4 Rev E - Nadcap Audit Criteria for Materials Test Laboratories – Metallography and Microindentation Hardness (to be used on/after 30 November 2014)
(L0) Metallographic Evaluation
(XL) Macro Examination

AC7101/7 Rev D - Nadcap Audit Criteria for Materials Test Laboratories – Mechanical Testing Specimen Preparation (to be used on audits on/after 15 May 2016)
(Z) Standard Specimen Machining

AC7101/11 Rev C - Nadcap Audit Criteria for Materials Test Laboratories – Fastener Testing (to be used on audits on/after 25 October 2015)
(10) Stress Rupture
(11) Fatigue
(13) Shear Strength – Double Shear
(18) Tensile Test – Elevated TempTensile

(31) Torque – Locking, Torque–Out
(40L10) Metallography – Decarburization / Carburization
(40L2) Metallography – Alloy Depletion
(40L25) Metallography – Grain Size
(40L3) Metallography – Oxidation / Corrosion
(40L7) Metallography – IGA / IGO
(40L8) Metallography –Alpha Case: Wrought Titanium
(5) Stress Durability – External Threads
(6–L5) Hardness – Microindentation Hardness
(6–M2) Hardness – Rockwell
(8–A) Tensile Test – Axial Tensile
(8–P) Tensile Test – Proof Load (nuts / screws)
(8–W) Tensile Test – Wedge Tensile
(QF) Corrosion – Copper Sulfate

ISO/IEC - Currently accredited by an ILAC approved source

Lab Type - Lab Type
Captive

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

M.S. Aerospace

13928 Balboa Blvd.
Sylmar, CA 91342
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:

NonDestructive Testing

Certificate Number: 3484178741
Expiration Date: 30 April 2020

Joseph G. Pinto
Executive Vice President and Chief Operating Officer

SCOPE OF ACCREDITATION

Materials Testing

M.S. Aerospace
13928 Balboa Blvd.
Sylmar, CA 91342

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:

AC7101/1 Rev F - Nadcap Audit Criteria for Materials Testing Laboratories – General Requirements for All Laboratories (to be used on/after 14 Sept 2014)

AC7101/3 Rev C - Nadcap Audit Criteria for Materials Test Laboratories – Mechanical Testing (to be used on/after 28 August, 2011)
(A) Room Temperature Tensile
(B) Elevated Temperature Tensile
(C) Stress Rupture

AC7101/4 Rev E - Nadcap Audit Criteria for Materials Test Laboratories – Metallography and Microindentation Hardness (to be used on/after 30 November 2014)
(L0) Metallographic Evaluation
(XL) Macro Examination

AC7101/7 Rev D - Nadcap Audit Criteria for Materials Test Laboratories – Mechanical Testing Specimen Preparation (to be used on audits on/after 15 May 2016)
(Z) Standard Specimen Machining

AC7101/11 Rev C - Nadcap Audit Criteria for Materials Test Laboratories – Fastener Testing (to be used on audits on/after 25 October 2015)
(10) Stress Rupture
(11) Fatigue
(13) Shear Strength – Double Shear
(18) Tensile Test – Elevated TempTensile

(31) Torque – Locking, Torque–Out
(40L10) Metallography – Decarburization / Carburization
(40L2) Metallography – Alloy Depletion
(40L25) Metallography – Grain Size
(40L3) Metallography – Oxidation / Corrosion
(40L7) Metallography – IGA / IGO
(40L8) Metallography –Alpha Case: Wrought Titanium
(5) Stress Durability – External Threads
(6–L5) Hardness – Microindentation Hardness
(6–M2) Hardness – Rockwell
(8–A) Tensile Test – Axial Tensile
(8–P) Tensile Test – Proof Load (nuts / screws)
(8–W) Tensile Test – Wedge Tensile
(QF) Corrosion – Copper Sulfate

ISO/IEC - Currently accredited by an ILAC approved source

Lab Type - Lab Type
Captive