

ROLLS-ROYCE plc

COMBUSTIONS

Expires: October 31, 2010



Subscriber Holding
Nadcap User Compliance and Audit Program
(NUCAP)
Certificate & Scope of Approval



January 12, 2010

Jon Biddulph
Rolls-Royce plc- Combustion
PO Box 31
Elton Road ELT 18
Derby DE24 8BJ
UNITED KINGDOM

Dear Mr. Biddulph:

Your facility has been approved for NUCAP. Please note that your NUCAP certificate is valid until **October 31, 2010**. Accordingly, we have enclosed your certificate(s) of approval, your scope of approval, and logo sheet.

Please note that if any changes occur within your company (i.e., ownership, key managerial staff, equipment, company name, quality manager, address, etc.) that may affect your capability or scope of approved activities, you are required to notify PRI Staff by completing the "Notification of Change/Request for Revised Certification" form located in [eAuditNet.com/Resources/Public Documents/General Documents](http://eAuditNet.com/Resources/Public/Documents/General Documents), immediately.

We would like to congratulate you on your achievement in meeting the stringent requirements of NUCAP Approval.

If you have any questions concerning the NUCAP Process, please contact PRI Headquarters at (724)772-8660.

Sincerely,

A handwritten signature in black ink that reads "Lisa Shultz". The signature is fluid and cursive, with the first and last names clearly legible.

Lisa Shultz
Prime Support Engineer
Industry Managed Programs, Research & Development

LS/emm
Enclosures
Certificate(s)
Scope of Approval
Logo Sheet



In accordance with Program Document PD3000, to the revision in effect at the time of the audit, this certificate is granted and awarded by the authority of the Nadcap Users Compliance and Audit Program (NUCAP) Management Council to:

Rolls Royce plc Combustion
at
See Attached Supplement

They have demonstrated conformance and are awarded approval for specific services, listed in the Scope of Approval, as listed in www.pri-network.org on the Approved User's Listing (AUL), to the revision in effect at the time of the audit for:

***Chemical Processing, Coatings, Heat Treating, Nonconventional Machining,
Nondestructive Testing, and Welding***

*Expiration Date: October 31, 2010
Certificate Number: 134056
Issue Date: January 13, 2010*

A handwritten signature in black ink, appearing to read "W. G. Wagner".

William G. Wagner, Vice President and General Manager



SCOPE OF APPROVAL NUCAP

Approval Date: January 12, 2010
Expiration Date: October 31, 2010

Audit #128274
Certificate #128274-A

ROLLS-ROYCE PLC COMBUSTION

Hucknall
Watnall Road, Hucknall Nottingham NG15 6EU
UNITED KINGDOM

**Chemical Processing, Coatings, Heat Treating,
Nonconventional Machining, Non-Destructive Testing, and Welding**

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

Chemical Processing (AC7108) – Audit #131447

- AC7108 - Chemical Cleaning: Acid, Alkaline, Titanium (Acid, Alkaline), Ultrasonic
- AC7108/1 - Paint/Dry Film Coatings: Customer Specification
- AC7108/2 - Etching: Local (Swab), Pre-Penetrant, Customer Specification

Coatings (AC7109) – Audit #131449

- AC7109/1 - Thermal Spray:
 - Plasma Thermal Spray
- AC7109/5 - Coating Evaluation Laboratory Practices:
 - Hardness: Rockwell
 - Metallography
 - Thickness: Metallographic

Heat Treating (AC7102) – Audit #131450

- AC7102 - Aluminum Alloys - AC7102/2 must also be selected
 - Brazing - AC7102/1 must also be selected
 - Nickel and Cobalt Alloys: Customer Specification
 - Stainless and PH Stainless Steels – Customer Specification
 - Titanium Alloys: (No Water Quench), Customer Specification
 - Vacuum Heat Treating: Customer Specification
- AC7102/1 - Vacuum Furnace Brazing

Approval Date: January 12, 2010
Expiration Date: October 31, 2010

Audit #123347
Certificate #123347-A

Heat Treating (AC7102) – Audit #131450 (Cont'd.)

- AC7102/2 - Aluminum Heat Treating
Aluminum Alloys: (Stress Relieve and/or Age Only), Customer Specification
- AC7102S - Supplemental Audit Criteria for Heat Treating
U3 – Rolls-Royce plc
- AC7102/5 - Hardness:
(M3) Vickers Hardness

Nonconventional Machining (AC7116) – Audit #131451

- AC7116/3 - Electrical Discharge Machining (EDM): Fast Hole, Sinker
- AC7116/4 - Laser Beam Machining (LBM): Cutting, Drilling

Non-Destructive Testing (AC7114 / AC7114 S) – Audit #131453

AC7114S Rev D - Supplemental Audit Criteria for Nadcap NonDestructive (NDT) Suppliers Accreditation Program Audit Criteria

- S-U3 Rolls-Royce PLC
- AC7114/1 - Liquid Penetrant
- AC7114/1S - S-U3 Rolls-Royce plc
- AC7114/2 - Magnetic Particle
- AC7114/2S - S-U3 Rolls-Royce plc
- AC7114/4 - Radiography
- AC7114/4S - S-U3 Rolls-Royce plc

Welding (AC7110) – Audit #131452

- AC7110/3 - Electron Beam Welding:
Baseline (All Audits)
- AC7110/4 - Resistance Welding:
Baseline (All Audits)
Supplement C – Micro Spot Welding (Additional Requirements)
Supplement G – Chisel Testing (Additional Requirements)
Seam Welding
Spot Welding
- AC7110/5 - Fusion Welding:
Baseline (All Audits)
Supplement C – Automatic / Semi-automatic (Additional Requirements)
Supplement D – Titanium (Additional Requirements)
Supplement F – Filler Materials (Additional Requirements)
Supplement G – Processes Using Gas (For Example GTAW, PAW) (Additional Requirements)
Supplement J – Tack Welding (Additional Requirements)
Supplement M – Filler Material Approved Sources (Additional Requirements)
Supplement N – Gas Contamination at Point of Use (Additional Requirements)

Approval Date: January 12, 2010
Expiration Date: October 31, 2010

Audit #123347
Certificate #123347-A

Welding (AC7110) – Audit #131452 (Cont'd.)

AC7110/12 - Welder/Welding Operator Qualification:
Baseline (All Audits)
Supplement A – Qualification of Titanium Welders (Additional Requirements)

AC7110/13 - Metallographic Evaluation of Welds:
Supplement A - Evaluation of Welder / Welding Operator Qualifications
Supplement B – Evaluation of Fusion Welds
Supplement C – Evaluation of Electron Beam / Laser Welds
Supplement D – Evaluation of Resistance Welds

Approval Date: January 12, 2010
Expiration Date: October 31, 2010

Audit #123347
Certificate #123347-A

**ROLLS-ROYCE PLC
COMBUSTION**

**Bristol
Gypsy Patch Lane PO BOX 3 Bristol
UNITED KINGDOM**

**Chemical Processing, Heat Treating,
Nonconventional Machining, Non-Destructive Testing, and Welding**

Chemical Processing (AC7108) – Audit #131910

AC7108 Rev C - Nadcap Audit Criteria for Chemical Processing (to be used on or BEFORE 3-Oct-09)

Etch (AC7108/2 MUST ALSO BE SELECTED)

Paint/Dry Film (AC7108/1 MUST ALSO BE SELECTED)

AC7108/1 Rev A - Nadcap Audit Criteria for Painting & Dry Film Coatings (1)

Paint - Other

Paint/Dry Film Coatings-Other

AC7108/2 Rev A - Nadcap Audit Criteria for Etch Processes (Blue Etch Anodize, Local, Macrostructure, Nital, Pre-Penetrant, Temper) (to be used on or BEFORE 13-Mar-10)

Etching - Other

Nital Etch

Heat Treating (AC7102) – Audit #131911

AC7102 Rev E - Nadcap Audit Criteria for Heat Treating

Brazing - AC7102/1 must also be selected

Nickel and Cobalt Alloys (Age, Anneal, & Stress Relieve) (to be used on or BEFORE 30-Jan-2010)

Nickel and Cobalt Alloys- Customer Specs

Steels (Normalize, Anneal, Stress Relieve, or Temper) (to be used on or BEFORE 30-Jan-2010)

Steels- Customer Specs

Vacuum Heat Treating- Customer Specs

AC7102S Rev A - Nadcap Supplemental Audit Criteria for Heat Treating (to be used on or BEFORE 30-Jan-2010)

U3 - Rolls-Royce PLC

AC7102/1 Rev D - Nadcap Audit Criteria for Brazing

Vacuum Furnace Brazing (to be used on or BEFORE 30-Jan-2010)

AC7102/5 - Nadcap Audit Criteria for Hardness Testing for Heat Treating

(M3)Vickers Hardness

Nonconventional Machining (AC7116) – Audit #131909

AC7116/3 - Electrical Discharge Machining (EDM): Fast Hole, Sinker

Non-Destructive Testing (AC7114 / AC7114 S) – Audit #131977

AC7114 Rev C - Nadcap NonDestructive Testing (NDT) Suppliers Accreditation Program Audit Criteria

AC7114S Rev D - Supplemental Audit Criteria for Nadcap NonDestructive (NDT) Suppliers Accreditation Program Audit Criteria
S-U3 Rolls-Royce PLC

AC7114/1 Rev C - Nadcap Audit Criteria for NonDestructive Testing Facility Penetrant Survey

AC7114/1S Rev D - Supplemental Audit Criteria for Nadcap Audit Criteria for NonDestructive Testing Facility Penetrant Survey
S-U3 Rolls-Royce PLC

AC7114/2 Rev C - Nadcap Audit Criteria for NonDestructive Testing Magnetic Particle Survey

AC7114/2S Rev D - Supplemental Audit Criteria for Nadcap Audit Criteria for NonDestructive Testing Magnetic Particle Survey
S-U3 Rolls-Royce PLC

AC7114/4 Rev C - Nadcap Audit Criteria for NonDestructive Testing Facility Film Radiography Survey

AC7114/4S Rev D - Supplemental Audit Criteria for Nadcap Audit Criteria for NonDestructive Testing Facility Film Radiography Survey
S-U3 Rolls-Royce PLC

Welding (AC7110) – Audit #131912

AC7110 Rev D - Nadcap Audit Criteria for Welding/Brazing

AC7110/3 Rev E - Nadcap Audit Criteria for Electron Beam Welding
Baseline (All audits)

Supplement D - Verification of Defect Removal (Additional requirements)

AC7110/4 Rev E - Nadcap Audit Criteria for Resistance Welding (Spot, Seam, Projection)

Baseline (All audits)

Seam Welding

Spot Welding

Supplement C - Micro Spot Welding (Additional requirements)

Supplement G - Chisel Testing (Additional requirements)

Approval Date: January 12, 2010
Expiration Date: October 31, 2010

Audit #123347
Certificate #123347-A

Welding (AC7110) – Audit #131912 (Cont'd.)

AC7110/5 Rev E - Nadcap Audit Criteria for Fusion Welding

- Baseline (All audits)
- Supplement C - Automatic / Semi-automatic (Additional requirements)
- Supplement D - Titanium (Additional requirements)
- Supplement F - Filler Materials (Additional requirements)
- Supplement G - Processes using Gas (For example GTAW, PAW)
(Additional requirements)
- Supplement J - Tack Welding (Additional requirements)
- Supplement K - Verification of Defect Removal (Additional requirements)
- Supplement M - Filler Material Approved Sources (Additional requirements)
- Supplement N - Gas Contamination at Point of Use (Additional requirements)

AC7110/12 Rev A - Nadcap Audit Criteria for Welder/Welding Operator Qualification

- Baseline (All audits)
- Supplement A - Qualification of titanium welders (Additional requirements)

AC7110/13 - Nadcap Audit Criteria for Metallurgical Evaluation of Welds

- Supplement A - Evaluation of Welder / Welding Operator Qualifications
- Supplement B - Evaluation of Fusion Welds
- Supplement C - Evaluation of Electron Beam / Laser Welds
- Supplement D - Evaluation of Resistance Welds