



CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

Chromalloy-ECOE
3999 RCA Blvd.
Palm Beach Gardens FL 33410

has been assessed by ANAB
and meets the requirements of international standard

ISO/IEC 17025:2005

while demonstrating technical competence in the field of

TESTING

Refer to the accompanying Scope of Accreditation for information regarding the types of tests to which this accreditation applies.

AT-1851

Certificate Number



ANAB Approval

Certificate Valid: 03/13/2018-03/19/2020
Version No. 004 Issued: 03/13/2018



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Chromalloy-ECOE

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TESTING

Valid to: **March 19, 2020**

Certificate Number: **AT-1851**

Mechanical


Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Rockwell Hardness	ASTM E18	All base materials / coatings	Macro hardness tester
Knoop and Vickers Hardness	ASTM E384	All base materials / coatings	Micro hardness tester
Grain Size	ASTM E112, ASTM E1382	All base materials	Optical Light Microscope Image Analysis Software
Coating Thickness	ASTM B487	All coatings	Optical Light Microscope Image Analysis Software
Failure Analysis	ASM Metal Handbook, 9 th Ed., Vol 11 Scope Listed Methods	All engine components	All metallurgy lab equipment
Preparation of Metallographic Specimens	ASTM E3	All engine components	Mounting presses Grinding/Polishing stations Etching hood
Inclusion Content	ASTM E45, E1245	All engine components	Optical Light Microscope
Graphite in Cast Iron	ASTM A247	Cast Iron Products	Optical Light Microscope
Elemental Analysis by Energy Dispersive Spectroscopy	ASTM E1508	All base materials/coatings	Scanning Electron Microscope Energy Dispersive Spectroscopy
Digital Microscope Photomicroscopy	Photometric Methods	All Components	Digital Microscope
Optical Light Photomicroscopy	ASTM E883	All base materials / coatings	Optical Light Microscope
SEM Photomicroscopy	Photometric Methods	All Components	Scanning Electron Microscope
Modal Analysis ³	Customer Specified Method	All Engine / Turbine Components	Dynamic Signal Analyzer Laser Vibrometer

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
High Cycle Fatigue	Customer Specified Method	All Engine / Turbine Blades	Fatigue Shaker Furnace Laser Disp. Sensor
CMM	Customer Drawings & CMM Software	All Engine / Turbine Components	CMM
Length, Diameter, Location	Customer Drawings & Tesa Software	All Engine / Turbine Components	Height Gage
Optical Scanning ¹	Customer Drawings & Scanner Software	All Engine / Turbine Components	Optical Scanner
Component Weight	Standard Method	All Engine / Turbine Components	Scales
Surface Roughness	ISO 1562	All Engine / Turbine Components	Surface Roughness Gauge
Airflow Testing ¹	Customer Agreed-Upon Method	All Engine / Turbine Components	Commercial Flow Benches

Note:

1. These tests are available as field services.
2. Customers may request method modification and/or acceptance criteria other than those specified by the standards. In these cases, the test methods will be followed using the customer specified modifications and criteria. Notation of the deviations will be made on the test reports.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. AT-1851.



Vice President

