

Analytical Research and Testing Laboratories (ARTL) Certifies To AS9100C / ISO 9001:2008

"Southwest Turbine Inc. (STI) is a manufacturer of aircraft turbine engine parts and has been associated with ARTL since their first day in business. Our decision to use ARTL for our materials testing is based on trust, professionalism, accuracy, and execution. STI's engineering designs, process improvements, failure analysis, as well as warranty consideration



are based on the accuracy, integrity, and comprehensiveness of ARTL's analysis and reports. ARTL has consistently demonstrated a true customer satisfaction policy, technical proficiency, and outstanding lab capabilities." — Stephen R. Yeary; President & CEO, Southwest Turbine Inc.



Analytical Research and Testing Laboratories (ARTL), a materials testing lab, is pleased to announce that it certified to AS9100C / ISO9001: 2008! The company was founded by Keith Bailey, a degreed Materials Science Engineer.

Keith says, "I have 15 years of experience with aerospace component analyses and failure analyses. Our services are utilized by manufacturing companies in the aerospace, construction, automotive and semiconductor industries as well as for litigation and insurance technical support."

ARTL has state of the art equipment and testing capabilities, including;

 $\sqrt{}$ Optical Emission Spectroscopy (OES) for base alloy elemental analysis of aluminum, copper, iron, nickel, titanium, and cobalt base alloys

 \forall Rockwell/Superficial Hardness Testing for heat treatment verification, presence of a hardened case...

 $\sqrt{}$ Micro Hardness Testing (Knoop/Vickers) for analysis of platings, coatings, small parts, welds, decarburization and case depth

 $\sqrt{}$ Optical Microscopy Evaluation for IGA, MMR, porosity, coating thickness, grain size, material form, microstructural analysis, re-cast layer evaluation...

 $\sqrt{}$ Scanning Electron Microscope (SEM) with energy dispersive X-Ray (EDX) spectroscopy for fractography/failure mode determination, microstructural analysis (gamma prime, casting defects), coating analysis, particle/shaving elemental analysis, corrosion product analysis...

 $\sqrt{}$ Fourier Transform (FTIR) spectroscopy for polymer, adhesive and liquid analysis

 $\sqrt{\text{Reverse engineering and material consultation}}$

√Weld Certification

√ Failure Analysis

ARTL opened for business 5 years ago, in 2011. Keith says, "We compete with large testing labs that do analysis, and our customers come to ARTL because they not only value our credentials and expertise, but they often prefer to work with a small company that provides a higher level of customer service." He continued, "With our low overhead, we can do the testing much more cost effectively and with better turn-around than a large entity can offer."

Keith says that ARTL is very conveniently located in Phoenix, close to the airport even though many of ARTL's customers reside throughout the United States. Keith says, "We want to grow our Arizona customer base, and our centrally located lab allows Phoenix based companies the convenience to come to the lab if/when necessary."

Late last year, Keith made the decision to certify ARTL to AS9100C / ISO 9001:2008. Keith says, "I was talking to a colleague in the industry, and he so highly recommended Bretta Kelly, owner of BMSC, for consultation to help us to achieve this milestone." Keith says that his colleague's endorsement of Bretta was so strong that he didn't interview other consultants for the ISO process.

"Bretta and her colleague Debbie Hart know the AS9100/ISO certification process so well. We spent





several hours each week from the time I contracted with them, which was at the beginning of the year." He continued, "We certified early in April, and we had, in the words of the Auditors, 'No minors', 'No majors', and we didn't even have 'Observations'."

Bretta says, "ARTL is well prepared for the future ISO requirements - in the upcoming AS9100D / ISO 9001:2015 Standards, we expect that there will be requirements for material testing. The requirements for Process to validate test reports for raw material used in critical items is slated to be added back into the AS9100D Standard in section 8.0."

What's next for ATRL? Keith says the company is already planning for NADCAP certification, which they expect to complete this year. Keith says that he will use BMSC's service for the NADCAP Accreditation.

To learn more about how ARTL can help with all of your aerospace component and failure analyses, contact them at 602-393-8158, email Keith at kbailey@artl-llc.com or visit their website at www.artl-llc.com

To learn how BMSC can help your company to prepare for ISO9001/ AS9100 certifications or for NADCAP Accreditation, contact Bretta Kelly at 602-445-9400 or visit www.BusinessMSC. com. Bretta invites you to contact her to learn more about their templated systems and workshops she offers covering the requirements of the newly released Standards (AS9100D and ISO 9001:2015).