



Industry News from our Labs Expert

Whether you're looking to follow up on a field inspection or test a consumer product before it hits the shelves, Industrial Inspection & Analysis is at your service. We have grown to become one of the largest and most trusted providers of lab services in North America. From the automotive and aerospace industries to pharmaceutical, military and more, our laboratory testing methods are used daily to make the world around us as safe as it can be.

Non-destructive examination (NDE) is one of the areas where we shine the brightest. This newsletter highlights some of the NDE techniques, technologies and team members that set IIA apart. Read about one of our more unique offerings, [helium leak testing](#), as well as our innovative [ARMUT® technology](#), which can only be found at IIA. You'll also meet [Juergen Bloch](#), a respected industry leader who readily shares his expertise in the art and science of nondestructive testing.

With decades of laboratory experience, we understand the challenges you face, and we've developed and perfected testing technologies to help you overcome those challenges. You'll walk away with high-quality data and actionable reports. Unlike other labs, you can talk directly to the technical team that performed your testing if you have questions. As a full-service company, IIA has the expertise to turn test results into solutions that work for you.

Sincerely,

A handwritten signature in black ink, appearing to be the initials "JB" or similar, written in a cursive style.

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Join Us - Trade Shows

We're excited to get back to meeting safely face-to-face. You can find us at the upcoming shows.

January 5-8

[CES](#)

Las Vegas, NV

January 10-12

[MUG](#)

Booth #313

Orlando, FL

Rising to the Challenge with Helium Leak Testing

We all know the party doesn't start until helium balloons are in hand. But helium also plays a serious role in ensuring structural integrity.

That helium-filled balloon sinks to the floor after a few days — not because it sprung a leak, but because it diffuses through the balloon materials (and any solids) three times faster than air. Our labs harness this unique quality to perform an unusual form of testing.



Helium is the most stable of all the elements, making this a safe and accurate form of testing. And because helium is inert, it will not react with other elements during testing.

Our labs are among the few in the U.S. to offer an array of helium testing methods to meet your unique needs, including inside-out, outside-in, bomb and hood. Our expert technicians can identify even miniscule leaks using helium leak testing.

From aerospace to pharmaceutical, clients in an array of industries turn to IIA for helium leak and other specialized testing. Our St. Louis lab is currently conducting helium leak testing on Inconel tube assemblies, which play a critical role in nuclear submarine engine cooling systems. Call IIA to find out how helium testing can work for you.

Product Life Cycle Support

At IIA Lab Services, we support the entire product life cycle: concept and design, prototyping, testing, quality and through production.

From 3D modeling to part-to-CAD comparisons, we supply the inspections and analyses you need to keep projects moving — on time and within budget.

[View a short video to learn how our product life cycle support can make your job easier.](#)



Customer Kudos on CT Scan Services



When Drink Cirkul – manufacturer of an innovative bottle that produces flavored water with every sip — needed to quickly evaluate part geometry, IIA’s 3D scanning capabilities caught their eye.

Data capture with 3D scanning is fast, flexible, and highly accurate — and well within our wheelhouse at IIA. With multiple scanning platforms, the technique can be used on virtually any component, from microscopic medical devices to fighter jets. In the case of Drink Cirkul, we used CT scans to assess threads and critical features on a bottle spout.

Unlike traditional metrology, a CT scan can capture 100% of internal geometry. Data is displayed in a user-friendly, 3D format featuring a color gradient scale that makes it easy to see exactly where a part is out of compliance — and potentially why. The data display also makes scan-to-CAD comparisons almost effortless.

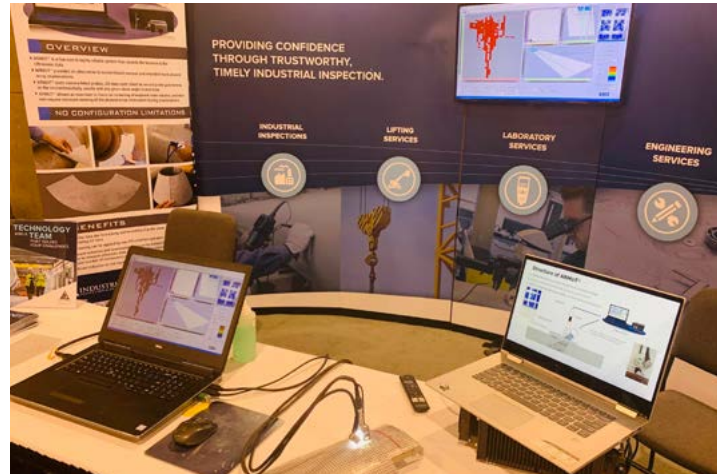
From preliminary discussions to the final report, our IIA team listened carefully to what the customer needed to ensure a smooth inspection process from start to finish.

Drink Cirkul was extremely pleased with our services, giving IIA the highest score on all key categories in our customer survey: accuracy, turnaround time, communication and value.

“...I was extremely impressed with the speed and efficiency of the CT scan procedure we had done-- there was barely any need for back-and-forth emailing between me and the IIA/QC Group representative that I contacted, and we even received the final report slightly ahead of schedule,” says Caroline DeBrotta, who has already recommended IIA to her colleagues at Drink Cirkul headquarters. “The [data] file we received imported well into our CAD software (Onshape) and allowed us to create a great part evaluation for our toolmakers. The color heatmap comparison images also provided a great visual representation of the deviations between the part we had CT scanned and our CAD model!”

[See how scanning can be used in your industry.](#) IIA also offers mobile 3D scanning capabilities for on-site, real-time analysis that can help manufacturers avoid or minimize a line shutdown.

The ARMUT® Advantage



Looking for an alternative to conventional manual and encoded track phased array examinations? Attendees at the recent ASNT Show in Phoenix, AZ saw how our patented Absolute Recordable Manual Ultrasonic Testing, or ARMUT®, is a low cost and highly reliable system that records the location of the defect and the ultrasonic data.

ARMUT uses camera-fitted probes and 2D data code sheet to record circumferential, axial location and probe skew simultaneously to produce high-quality data of complex geometry.

[Learn how our proprietary ARMUT technology](#) brings together the best of both manual and automated ultrasonic testing to better serve you.

At Your Service: Juergen Bloch

Story-worthy service starts with talented team members like Juergen Bloch, Non-Destructive Testing Department Technical Manager at our St. Louis lab. Juergen enjoys using his nearly four decades of experience in non-destructive testing to help clients and train a new generation of technicians.

[Learn more about Juergen](#) and some of his most fascinating projects — including a space station gig and a unique x-ray assignment to uncover the secrets of a painting once owned by Charles Lindberg.



Let's Connect

We want to hear from you! Let us know about your latest challenges and how we can help you with our patented lab equipment. Whether you have a quick technical question or need urgent assistance, we're here for you. Call us at **(866) 514-4937** or complete our online form and we'll get back to you within 24 hours.

Be sure to follow us on [LinkedIn](#) to learn about the latest tools and techniques we're using to solve our clients' problems and make the world safer.

If you found something helpful in this newsletter, feel free to share it with a colleague or customer.