



TRACE LABORATORIES, INC.

Your confidence in Trace, your customers' confidence in you.

[Environmental
Stress Screening
HALT/HASS](#)

[Chemical,
Contamination &
Failure Analysis](#)

[Automation,
Fabrication &
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[Printed Circuit
Certifications &
Qualifications](#)

[SLA &
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Prototyping](#)

[Vibration,
Thermal, &
Shock](#)

Trace Labs News and Events

June 15, 2009

CPSC Approves Trace Labs for Toy Testing



Trace personnel performing XRF Testing of Children's Product

The Consumer Product Safety Commission (CPSC) recently granted approval to Trace Labs application to become a Conformity Assessment Body and third party testing laboratory for the certification of children's products for lead content, lead in paint, lead in jewelry and to meet the small parts regulations for choking hazards. Federal legislation enacted in 2008 requires third party testing for all consumer products intended for use by children twelve years of age and younger. The focus of the CPSC approval is to evaluate the lead and phthalate content used in the manufacturer of these products.

"Our goal is to provide an economical and timely solution for meeting these new requirements and regulations," said Stephen Keller, Director of Consumer Product Testing for Trace Labs.

Upon the completion of the testing program, manufacturers will be provided with a report enabling them to complete the 'Certificate of Compliance' required by the CPSC.

The limit on the amount of lead used in children's products will get progressively more strict over the course of three years. As of February 10, 2009, the total lead content and the lead in paint in these products are not allowed to exceed 0.06% or 600 parts per million (ppm). On August 14, 2009, this limit is reduced to 300 ppm and eventually reduced to a target of 100 ppm on August 14, 2011. Lead in paint is set to reduce to 90 ppm from 600 ppm on August 14, 2009. Products exceeding the limit will be banned from importation and sale. To read more about lead testing in toys....[click here...](#) Or, to discuss this article with Stephen Keller, you can call him at 410-229-4373 [or email him by clicking here.](#)

Going Green Pays Off With Faster Thermal Ramp Rates

Trace Laboratories has recently installed 180 feet of vacuum-insulated (VIP) liquid nitrogen (LN₂) piping for connection to Thermal Shock, Temperature Cycling and HALT chambers. This upgrade, at Trace's Chicago facility, allows for a more efficient use of liquid nitrogen, reducing waste and delivering consistently sharp temperature transitions. The VIP was manufactured by Chart Industries, the world's leading cryogenic equipment supplier (www.chart-ind.com).

With the upgrade to Chart's VIP we can achieve extreme cooling rates in excess of 10 degrees Celsius per second in a single zone chamber. Temperature stability has also increased, due to the elimination of gas and two-phase flow in the pipe system, to support tight tolerance dwells, enhancing various profiles including MIL, RTCA, SAE, and IEC standards.

"Chart's vacuum insulated pipe improves the efficiency of the liquid nitrogen distribution system by 15-20 times as compared to foam insulated copper lines." Said Jim Weiler, General Manager, Bulk Gas Products, Chart Industries.

To read more about this upgrade and how it can help you, [click here...](#) Or, to discuss this article with Chris Finch, you can call him at 1-847-934-5300 [or email him by clicking here.](#)

Did you know?

That Trace Labs fabricates automation and test fixture solutions for some of the world's largest companies. Based on Programmable Logic Circuits or running on PCs, these fully automated solutions speed up production, save on employee costs, and ensure consistent testing and manufacturing of complex industrial, commercial, and consumer products. Contact us to find out how we can make your operation easier, cheaper, and with improved quality. To read more about these capabilities [click here...](#)



Trace Labs can help you make sure that your customer will
Hear No Evil, See No Evil, or Speak No Evil
about your product...

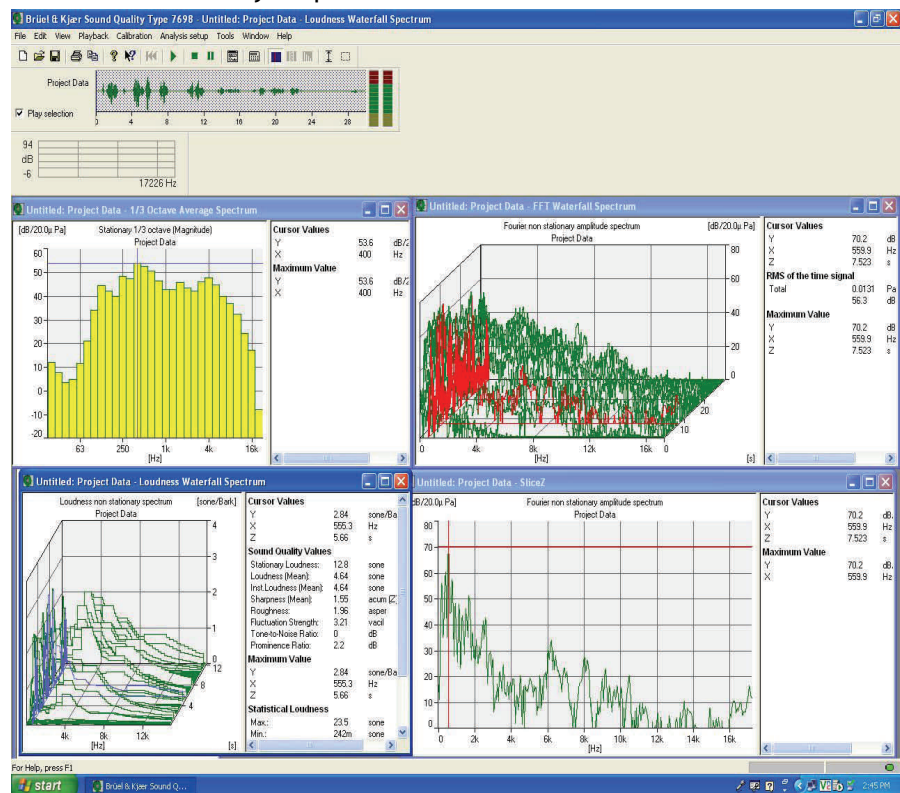
Hear No Evil (Power Level and Sound Quality Product Control)

Want to hear, and quantify, what your product sounds like? We can provide you with CD or DVD recording of your product's performance. Trace Laboratories can now offer Sound Testing that can help you market your product, or meet industrial guidelines. Utilizing state of the art sound equipment, chambers, and software Trace Laboratories is able to perform a wide range of sound testing. Isolated by our 1700 cubic foot semi-anechoic sound chamber, your product can be tested for Rotation Noise, Vibration Noise, Product Performance Noise, and Sound Quality. Test results can be provided in dB level, Max db, LEQ, 1/3 Octave, 1/1 Octave, FFT, and Sones.

Rotational noise can be tested at various speeds over multiple set distances allowing flexibility for real world simulation. Squeak and Rattle assessments can be performed using Vibrational Noise analysis with swept sine, stepped sine, or random profiles at fixed or varied accelerations. Entire time spectrum analysis can be provided utilizing averaged, waterfall, or contour graphs.

Sound quality testing can be performed by Zwicker analysis based on 1/3 octave or FFT with results provided in a time based graphical representation, three dimensional and spectral reports. We can also perform Jury analysis utilizing D.A.T. recordings.

Don't know what your product needs to sound like, or how to test it, our team of Engineers can help you determine the best way to prove out your product. To learn more about Trace Labs sound testing capabilities [click here...](#) Or you can call Dave Cameron at 1-217-617-4306.



Sound Testing Control Software measuring multiple parameters...

Speak No Evil (Automated Assembly And Test Equipment)

Are you shipping the highest quality product at the lowest price possible? In today's economy customers are not only looking for a quality product, but at an affordable price. Utilizing Trace Laboratories to build quality into your assembly process can help cut the high price quality spills, customer returns, and even lost customers.

By automating repetitive tasks you will be able eliminate errors that come from human error, operator fatigue, and training issues, while decreasing your cycle time. It can also allow you to add runtime without increasing, and in many cases even decreasing, your labor costs.

Simple assembly that doesn't require automation, 100% verify your product through a Trace Laboratory End Of Line (EOL) Tester, custom designed and built to meet your products needs. While your competitors continue "business as usual", increase your market share by ensuring that your customer never sees a bad product. Trace offers tactile force/travel, torque, electrical, pressure, sound, software verification, and even more. Whether your technology is state of the art, or a blast from the past, Trace Laboratories has the Engineers and Experience to help make sure your customers come back happy every time.

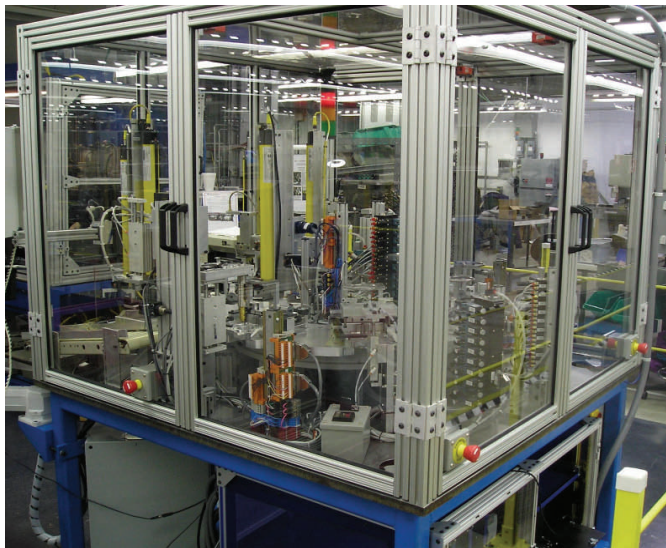
Working with your team, we can design, build, and deliver the system that you need. To learn more about Trace Labs automated assembly and test equipment development capabilities [click here...](#) Or you can call Dave Cameron at 1-217-617-4306.

See No Evil (Vision Quality Systems)

Having problems controlling your product or process, but you don't have the budget for the high end Vision and Scanning system you need? Trace Laboratories, Carthage, IL. is able to interface our low cost, high end, vision system to your current assembly or test station. Using our custom hardware and software solution, we are able to provide customers the performance they need, at the price they can afford. Trace Laboratories Vision Systems are able to perform color recognition, graphical inspections, pattern/geometry recognition, 1D and 2D barcode scanning, label reading, optical character recognition, and sheen recognition (grease, flux, plating, solder masks, etc.), just to name a few.

Our low cost, high powered solution will interface with either PC or PLC control systems, and can easily be incorporated into existing applications. With real time feedback, you can be confident that you have the correct product controls in place at all times.

For additional information on Trace Laboratories vision and scanning solutions [click here...](#) Or you can call Dave Cameron at 1-217-617-4306.



OSHA Compliant Automated Test Fixture

Visit us at www.tracelabs.com or call 410-584-9099 for more information on these topics.