

# IIA EXPANDS ITS EXPERTISE, FAST TURN-AROUND TIMES, AND UNCOMPROMISED QUALITY INTO THE MEDICAL DEVICE ARENA

#### IIA is one of the most well-known and trusted names in the inspection, testing, and lab services industries.

Seeking out and acquiring the best-of-the-best across North America means we are consistently able to expand our already robust range of experts and vast service offerings. Now, IIA is available to assist manufacturers and engineers in the Medical Device industry by offering Inspection, Testing, and Failure Analysis for Classes I, II, and III. Our consistent focus on expanding services and increasing geographical reach allows our customers easy access to faster, more accurate, and more reliable services.



Partner with
IIA Lab Services
for cost-containment,
reliability, accuracy, and
faster turn-around times.

# HOW WE ELIMINATED OVER 90% OF CARCINOGENIC MATERIAL WITHIN 30 MINUTES.

## A Story from Our St. Louis Lab

IIA's Chemistry Lab was involved with the pioneering stages of ozone products and methodology used to eliminate carcinogens from apparel of first responders. These garments absorb carcinogenic material from fires, spills, accidents, etc. The prevailing practice was to launder these garments. But, laundering them didn't remove heavy molecular weight organic materials.

IIA Lab Services utilized a proprietary ozone chamber to oxidize the contaminants. Our methodology included testing swatches of contaminated fabric by exposing it to customized ozone cycles and extracting and analyzing its residue. Our ozone chamber method was effective at eliminating over 90% of carcinogenic material within 30 minutes.

This proprietary process is now commercialized as cab units effective at eliminating carcinogens in the breathable air surrounding first responders.



#### CHEMICAL ANALYSIS

- Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES)
- Optical Emission Spectroscopy (OES)
- X-Ray Fluorescence Spectroscopy (XRF, PMI)
- Pyrolysis Gas Chromatography Mass Spectroscopy (PyGC/MS)
- Fourier Transform Infrared Spectroscopy (FTIR)
- Thermographic Analysis (TGA)
- Differential Scanning Calorimetry (DSC)
- Nickel Ion Release Testing
- Particulate Testing
- Phthalates and Latex
- CPSIA/CPSC Heavy Metals



### **METALLURGICAL TESTING**

- Failure Analysis
- Scanning Electron Microscopy (SEM)
- Energy Dispersive Spectroscopy (EDS)
- Coating/Plating Thickness and Evaluations
- Microstructure Analysis
- Grain Size
- Microhardness
- Immersion Corrosion Evaluations
- Surface Roughness Measurement



# WIRELESS & TELECOMMUNICATION EMC/EMI TESTING

- EMF/RF Exposure & SAR testing
- Electrical/Product Safety Testing
- ISO/IEC 17065: 2012 Accredited Product Certification Body for U.S. FCC, ISED Canada, MIC Japan, IMDA Singapore. Notified/Approved Body (NB/AB1177) for the EU Radio Equipment and EMC Directives and the United Kingdom Radio Equipment and EMC Regulations.



#### **MECHANICAL TESTING**

- Tension Testing (Tensile, Yield, Elongation, Reduction of Area, Modulus, Stain Hardening Exponent)
- Compression Testing
- Shear Testing
- Hardness (Rockwell, Brinell, Vickers, Durometer, Pencil, Leeb)
- Impact Testing (Charpy, Izod, Gardner)
- Tear Strength
- Flexural Properties





# ENGINEERING SUPPORT SERVICES

- CT & Laser Scanning
- Part to CAD Comparison
- 3D Dimensional Inspection
- Geometry Recreation (Reverse Engineering)



#### **DIMENSIONAL INSPECTION**

- First Article Inspection
- Capability Studies
- Supplier Validation (3rd Party Inspection)
- Mold & Fixture Evaluation

ISO/IEC 17025: 2017 accredited for testing activities under the scope of the U.S. FDA ASCA Pilot Program

#### **SPECIFICATIONS**

Basic Safety and Essential Performance of Medical Electrical Equipment, Medical Electrical Systems, and Laboratory Medical Equipment.

We are pleased to offer our expertise and can work closely with you on FCC or ISED communications regarding product certification. We have a deep understanding of the testing and inspection industry, and our experts are adept at knowing which modalities to utilize in order to provide a fast, viable, and high-quality solution to your challenge.

IIA Lab Services conducts CMM training on PCDMIS and Calypso, and we also offer training on the use of FARO laser scanners.

#### **CORE VALUES**

Our Core Values reflect the foundation of our commitment to customers, which is to always remain responsible, trustworthy, and transparent. We will always align with integrity and make decisions with the best interests of our customers, our employees, and the public at large in mind.

IIA's state-of-the-art laboratories and National reach, coupled with decades of experience in delivering accurate, reliable, and quality results faster than the competition, means we are consistently exceeding expectations for customers. Our capabilities include Reverse Engineering, Comparative CAD Analysis, Dimensional Metrology, Laser & CT Scanning, Chemical Testing, Mechanical Testing, Metallurgical Testing, Non-Destructive Testing, and more. Our labs also have EMI, EMC, and Calibration capabilities, and we serve all customers from start-ups to small organizations to large, well-established MDMs.

## Do You Need To Talk To An Expert?

Let us provide your company with all of your lab needs for the future. **Contact us at 844-982-0747 or visit us at industrial-ia.com** 

