



Services & Capabilities



The face of certainty

in a **complex** | **built** | **evolving** | **customer centric** world

Envista Forensics is the global leader in providing comprehensive consulting and forensic engineering services. Our identity is rooted in our strength in investigation and conveys our comprehensive capabilities as a global, multi-disciplinary, and highly skilled consulting partner with a vast client portfolio, from insurance and legal professionals, to owners and developers, to risk managers, and third-party administrators.

Our experts and engineers collaborate with some of the top minds in the industry, from all backgrounds and specialties, to meet our clients' needs no matter the size or location of the incident or loss.

Our goal is to provide clients with certainty when they need it the most.

400+
PROFESSIONALS

20

OFFICES

Australia

Canada

Denmark

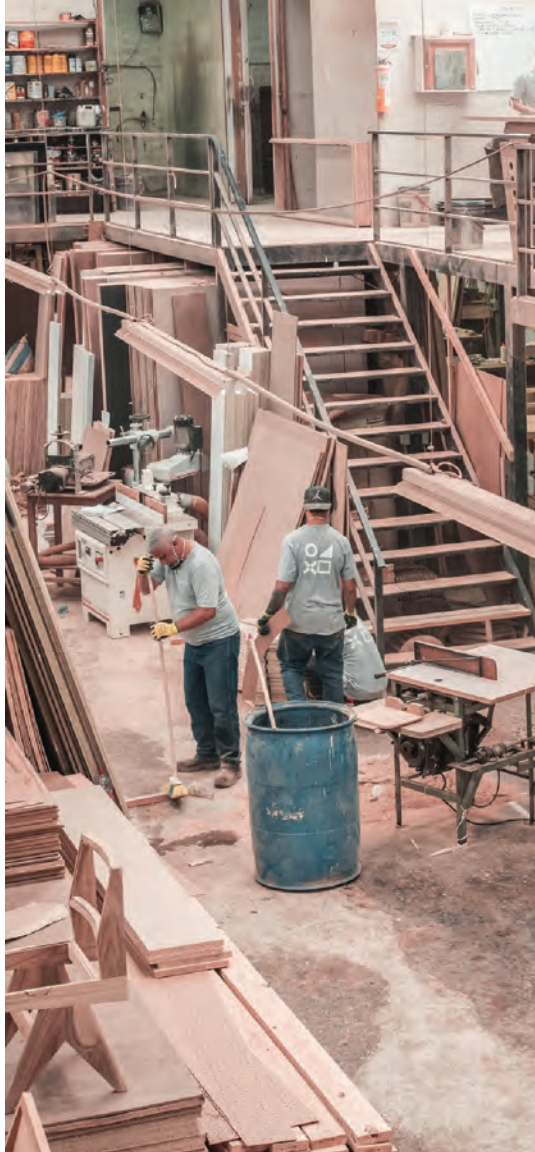
Singapore

United Kingdom

United States

**SERVING THE
ENTIRE WORLD**





To submit an assignment, please visit envistaforensics.com/en-ca or email project@envistaforensics.com

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INDUSTRIES AND CLIENTS WE SERVE

Our job is to solve complex problems for our clients in the face of a disaster. Our client portfolio is diverse, from insurers, loss adjusters, and legal professionals, to owners and developers, risk managers, and self-insureds. We serve clients, small and large, no matter where they are in the world and no matter what problem they are facing.

Our global services footprint, combined with our comprehensive services and specialty model, offers clients access to more than 500 experts, many of whom are industry leaders.

INDUSTRIES SERVED

Chemicals and Gas

Construction

Financial

Government

Healthcare

Heavy Industry

Hospitality and Retail

Infrastructure

Insurance

Manufacturing

Marine

Petroleum

Power and Energy

Semiconductors

Transportation

When you choose a company or expert to help you with a case, it's because you believe they will offer you trusted solutions. And because of that, we take pride in our commitment to providing the very best—including the use of technological tools and enhancements for the benefit of our clients. We work to be a leader when it comes to developing trends in the market because we know if we don't, we are doing a disservice to our clients.

That's why we make sure our forensics labs use the latest state-of-the-art equipment. We utilize 3D imaging for onsite modeling. Our engineers and experts work with forms of AI, UAV, and augmented reality to provide the quickest and most accurate forms of analysis. Technology is at the heart and soul of our organization, and the world we live in today. Although we have been around for over 35 years, our integrated and forward-thinking approach is what keeps propelling us into the future.

TECHNOLOGY

We take pride in our commitment to providing the very best, including using technological tools and enhancements to benefit our clients.



Catastrophe Response

Envista's dedicated experts and engineers have worked on thousands of catastrophe (CAT) losses over the last two decades. Our experts are trained to respond quickly to disasters and follow proper protocol to ensure safety and efficiency when handling these complex claims. Whether you require a structural engineer to evaluate damage to buildings or a mechanical or electrical engineer to evaluate damage to equipment or electrical systems, our global team of experts can assist you with:

- Identifying the cause and origin of failure, as well as corresponding fires or explosions
- Determining the extent of damage, costing, repair/replacement valuation options
- Ensuring that the extent of damage is stabilized and protected from unnecessary and avoidable deterioration
- Analyzing the space for mold or contaminants
- Evaluating the implications of new codes for reconstruction
- Providing large or mega loss evaluations for energy, construction, infrastructure, data centers, heavy industry, and more
- Aiding in provisioning for temporary repairs or identifying alternative sources of services that help maintain business operations



Envista's Catastrophe Response Team is specially trained and equipped to assist during large natural disasters or severe weather events, such as:

Earthquakes
Explosions
Floods
Hurricanes
Storms
Tornadoes or Severe Storms
(hail, high winds)
Tsunamis
Wildfire



Digital Forensics

An entire case can often hinge upon a single document such as a text message, spreadsheet, or database containing trade secret information. At Envista, our Digital Forensics division anticipates future complexities so we can meet tomorrow's challenges. At the core, our strength is in our experts. They possess extensive training, certifications, and experience, combined with access to cutting-edge forensic software and hardware. Our team is dedicated to assisting our clients with actionable and accurate results, often under strict guidelines and tight deadlines.

OUR AREAS OF DIGITAL FORENSICS INCLUDE:

IoT Forensics

Our experts can extract and collect data from devices such as smart home assistants, robot cleaners, smart watches, home security systems, connected vehicles, fitness trackers, and more.

In-Vehicle Infotainment Forensics

The recovery and analysis of data obtained from the vehicle's infotainment system, which is rich with content, including navigation history, social media feeds, text messages, call activity, and data about driver activity.

Forensic Imaging and Collections

Our experts are equipped with leading forensic imaging technology solutions that allow for rapid deployment and acquisition of data from phones, computers, the cloud, or other network environments.

Mobile Phone Forensics

The examination of cell phones, tablets, and other mobile devices for location evidence, text messages, call history, emails, search history, emails, and much more.coverage area.

Computer Forensics

The investigation and analysis of data recovered, including deleted data, from computers, networks, servers, and electronic storage devices.

Location Forensics

We specialize in acquiring and analyzing location data as a source of digital evidence from cell phones, digital cameras, GPS devices, personal assistants, connected vehicles and more.

SERVICES

Equipment Loss Consulting

Property damage claims involving technical equipment can be catastrophic for policyholders and extremely complicated for insurers to navigate.

The equipment loss engineers and consultants at Envista Forensics are industry leaders with more than 35 years of experience providing comprehensive post-loss assessments that enable claim expenses to be reduced and business interruption to be minimized.

Our equipment loss experts determine the scope and extent of the damage, verify the cause, and then provide reinstatement cost estimates. Our specialists can help with vendor coordination and warranty options, and have extensive experience serving as expert witnesses.



OUR AREAS OF EQUIPMENT EXPERTISE INCLUDE:

Building Systems

Commercial Equipment

Electrical Power Equipment

Electronics

Heavy Equipment

HVAC and Boilers

Industrial

Information Technology

Mechanical

Medical Equipment

Pharmaceutical/Scientific/Laboratory

Telecom



**OUR MULTI-DISCIPLINARY TEAM
HANDLES FIRE AND EXPLOSION
INVESTIGATIONS INVOLVING:**

Correctional Facilities
Energy (Power Production/Refineries)
Healthcare
Heavy Machinery/Equipment
Manufacturing
Marine
Multi-Occupancy Residential
Product Liability
Warehousing
Wildland

**SERVICE FEATURES WE
OFFER INCLUDE:**

Drone Documentation
Evidence Handling
Fire and Explosion Complex Scene
Management
Fire Spread Identification
Fraud Investigation
Subrogation Identification
3D Scene Image Documentation
Wildland

Fire and Explosion Investigation

Large fire and explosion losses, in particular, pose a number of challenges. That's when years of experience, access to numerous experts that can arrive on-scene quickly, and the knowledge to manage extremely high levels of evidence is most vital. All of our experts are highly experienced, with at least 20 years in the industry and can provide expert court witness testimony for any issue.

Our multi-disciplinary team has worked massive origin and cause investigations, from multi-million dollar cases to \$500M cases, from manufacturing facilities, to warehouses, power production, refineries, and more. From loss of life to loss of business, we've been there for our clients and their clients to help them through the worst of times.

SERVICE FEATURES WE OFFER INCLUDE:

Our experts have worked with companies around the world, including some of the most well-known Fortune 500 companies. We've conducted investigations for the U.S. Navy and led investigations for two of the largest wildfires documented in the western hemisphere. We've been to Columbia, Haiti, and Croatia. We've traveled from Georgia to France, from St. John to the UK. We are here to assist with cases no matter where in the world those services are needed.



SERVICES

Forensic Engineering

Envista's forensic engineering experts are leaders in their respective industries and are committed to providing the best possible service. We strive to have experts that can meet any need that may arise. By assembling the right team of experts and applying a structured, scientific approach, Envista can quickly and cost-effectively address questions surrounding any incident, regardless of its size or location.

OUR AREAS OF EXPERTISE INCLUDE:

Civil and Infrastructure Failure

Electrical Failure Analysis

Employee and Workplace Safety

Energy Failure Analysis

Environmental Engineering and Consulting

Fire Protection Engineering

Industrial Hygiene Evaluations

Material Failure Analysis

Mechanical Failure Analysis

Product Liability

Soils & Geotechnical Engineering

Structural Failure

Transportation & Injury Biomechanics



STRUCTURAL FAILURE

Envista's experienced structural engineers have the ability to sift through the facts to pinpoint the root cause of a structural failure and extent of the related damage. Our engineers investigate anything from soil conditions to design error, to the type of materials used, vibration, or weather-related contributions.

CIVIL FAILURE

When civil engineering projects are damaged because of structural disasters, complex technical issues must be considered and the immediate concern for life and safety is paramount. At the same time, any evidence that helps identify the cause of the incident must be carefully documented and preserved. Envista's team of engineers have the ability to assess the entire structure and determine the underlying cause.

GEO-TECHNICAL ENGINEERING

Our engineers and geologists can help determine the underlying cause of the damage and what could have contributed to the soil failure. We assess and test soil samples to find underlying causes and then analyze how that impacted the structure. Our team presents our comprehensive findings and plainly communicates our scientific process, as well as the failure analysis.

SERVICES | FORENSIC ENGINEERING

Civil and Structural Investigation

Envista's civil and structural engineering experts specialize in the investigation of complex structures. Our engineers and forensic experts come from various disciplines and work to quickly and cost-effectively uncover the origin, cause and extent of incidents and failures. Our team has worked on some of the largest structure failures across the globe, as well as some of the most devastating disasters our clients have handled.

We are equipped to handle structure defect analysis, impact assessments following incidents or accidents, and CAT response.

OUR FULL LIST OF SERVICES:

Building Envelope

Building Systems

Civil Engineering

Infrastructure Failure

Storm Damage

Concrete Damage Assessment

Construction Defect

Drone/UAS Investigations

Soil/Geo-Technical Engineering

Structural Failure Analysis

Electrical Failure Analysis

When incidents or failures to critical electrical systems, equipment or components occur, you need a skilled expert to assess the damage, determine possible cause, and provide mitigation options so recovery occurs quickly and cost-effectively.

OUR ENGINEERS AND EXPERTS ARE SKILLED IN THE AREAS OF:

Electrical Accident Investigation

Electrical Failure Analysis

Electrical Fire Investigations

Electronics and Electrical Systems

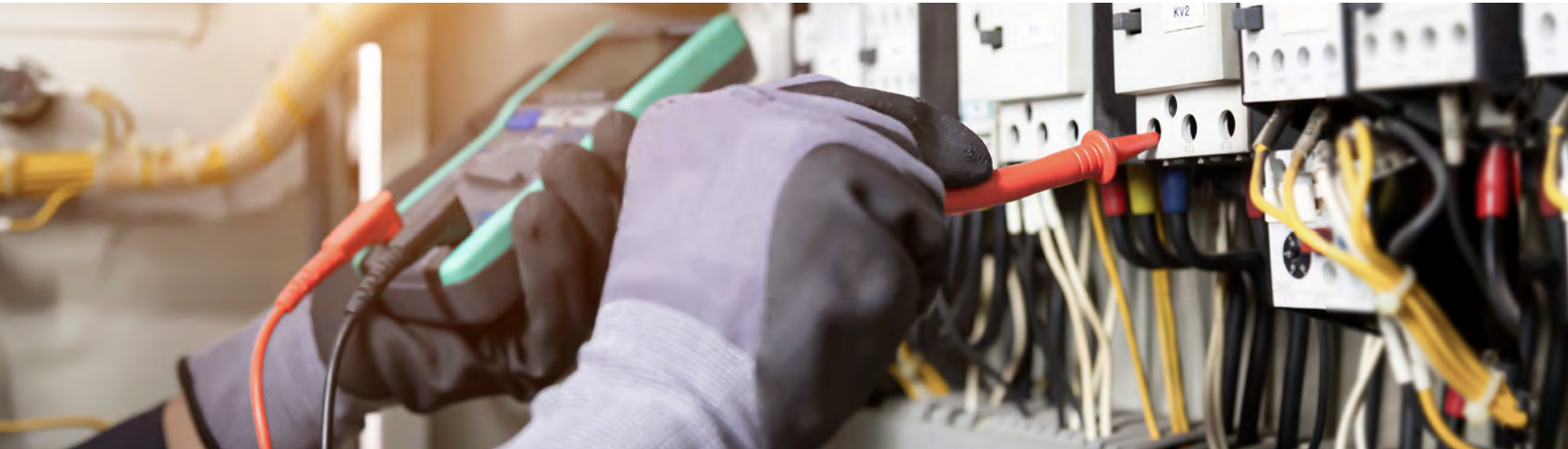
Product Liability Investigation

COMMON ASSESSMENTS FOR OUR LICENSED ELECTRICAL ENGINEERS AND MASTER ELECTRICIANS INCLUDE:

Electrical Systems and Wiring Analysis

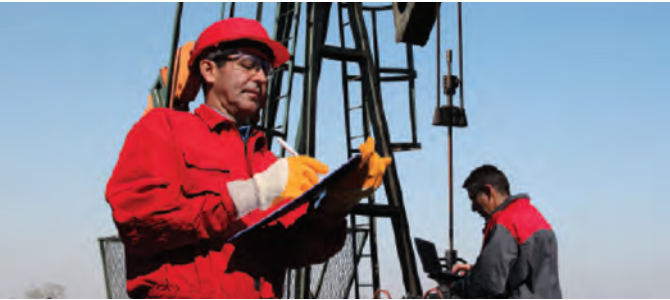
Power Surge or Power Quality Assessments

Smart Home and IoT Device Evaluations



Energy Failure Analysis

From power generation and petrochemical processing to offshore and renewable, energy systems across the globe keep businesses running. Our skilled energy experts and engineers have specialized knowledge and experience responding to failures involving business critical components, such as turbines, pressure vessels, generators, control systems, boilers, and switchgear.



WE INVESTIGATE ALL TYPES OF EQUIPMENT AND FACILITIES DAMAGE, ESPECIALLY THOSE RELATED TO:

Power Generation and Distribution | Our global experience spans design, installation, operations, and maintenance for all types of power generation plants and facilities.

Petrochemical | With experts in the operation and design of refineries, as well as pipelines and storage terminals, we handle all aspects of the oil and gas market for cause, cost, and downtime solutions. We answer our clients' questions regarding corrosion, process, execution plans, schedules, and an array of other facets in the industry.

Offshore | Our experts are skilled in all aspects of drilling, exploration, and production of rigs, fracking, deep water, offshore platforms, and ancillary equipment, and have consulted for some of the largest producers in the world.

Renewable | From solar panels to wind, to geothermal or biofuel, we have experts in all corners of the world, including industry-leading providers of damage assessment, failure analysis, origin and cause, and reinstatement viability.

Industrial Hygiene Evaluations

Envista's industrial hygiene experts have the understanding and experience to handle health and safety concerns involving the built environment, as well as contents and products. We can assist in cases where health and safety or industrial hygiene issues are suspected, or as a part of a multidisciplinary investigation when issues like flooding or fire arise.

Industrial hygiene issues can result from an array of biological, chemical agents, and physical hazards and can cause severe or even fatal injury and sickness. They can sometimes go unnoticed until the effects of these hazards are actualized. Our industry-leading experts can help assess liability and protect public health on construction projects and in manufacturing, commercial, residential, healthcare, and education facilities.

**OUR INDUSTRIAL HYGIENE EXPERTS
CAN ASSIST WITH CONCERNS
INVOLVING, BUT NOT LIMITED TO:**

- Asbestos and Lead
- Biological Hazards
- Chemical Contamination Assessments
(in air and on surfaces)
- Environmental Compliance
- Exposure Assessments
- Hazardous Materials Management
- Indoor Air Quality
- Indoor Noise Surveys
- Mold and Moisture Damage
- Smoke and Combustion Residue
Assessments



MATERIALS LAB SERVICES

With investment into our Material Science Lab, Envista has expanded our Material Science practice, expertise, and services to better ensure QA/QC and quicker results for our clients.

The Lab is ISO/IEC 17025:2017 accredited for chemical testing, demonstrating our proficiency in lab operations and the ability to generate the highest quality results.

OUR CURRENT IN-HOUSE SERVICES INCLUDE:

Microscopic Analysis
Fourier-Transform Infrared (FTIR) Spectroscopy
Ionic Contamination Wipe Sample Testing



SERVICES | FORENSIC ENGINEERING

Material Failure Analysis

Following a product-related failure, Envista's experts must examine and analyze the nuances of a material's composition in order to understand the features and properties that differentiate materials because material requires specific scientific and analytical techniques that allow our experts to forensically determine the cause of failure.

ENVISTA PROVIDES ANALYSIS ON VARIOUS MATERIALS, INCLUDING:

Chemical Analysis
Codes and Standards Interpretation
Electron Microscopy and X-Ray Spectroscopy
Finite Element Analysis
Mechanical Testing
Microstructural Analysis
Nondestructive Testing
Photomicroscopy
Stress Analysis
Vibration Analysis

Mechanical Failure Analysis

Envista's forensic engineers and experts use a structured scientific approach in their investigation of mechanical failures to determine the origin and cause—identifying the factors that contributed to the failure—who may be responsible, as well as the necessary steps to mitigate the issue.

Our licensed mechanical, metallurgical, materials engineers and equipment experts have the experience to quickly and effectively diagnose problems and determine appropriate next steps.

ENVISTA HAS CONDUCTED ANALYSES IN MANY AREAS INCLUDING:

Elevators and Escalators
Fire Protection Engineering
Heavy Equipment
HVAC and Boiler Systems

Manufacturing, Industrial
and Food Processing Plants
Material Failure
Pipe Ruptures
Plumbing and Complex
MEP Systems

Product Design
Refineries and
Petrochemical Processing
Rotating Machinery
Vehicle Accidents



ENVISTA'S VEHICLE RECONSTRUCTION SERVICES INCLUDE:

Accident Scene Diagramming/Investigation
Commercial Vehicle Investigation
Computer Simulations and Animations
Digital Evidence Investigations/EDR and
HVEDR Data Collection
Expert Witness Testimony and Reporting
Human Factors and Potential to Avoid
Light/Seatbelt Usage Determination
Risk Mitigation
System/Component Failure Analysis
Vehicle Dynamics Analysis
Witness Reliability Analysis



SERVICES | FORENSIC ENGINEERING

Vehicle Accident Reconstruction

Envista's experts follow an in-depth scientific approach to analyze vehicle collisions accurately and efficiently and utilize the most advanced technology in the industry as part of the reconstruction process.

Our experienced vehicle accident reconstructionists are industry-recognized experts trusted to provide the information and answers you need following a vehicle collision.

Envista's VAR experts have conducted thousands of investigations on low- and high-speed collisions involving all types of vehicles.



SERVICES

Litigation Support

Envista's team of experts provide multi-disciplinary analysis following any type of incident or disaster no matter where the loss occurred. We have been involved in high-profile, litigated matters all over the world, providing consultation for our clients, expert opinion, and expert witness testimony.

Having the right technical expert can make or break your case. Experts need to know the technical topic well, understand the big picture, but also understand the smallest technical details, while being able to easily explain the findings. Our team of licensed and qualified experts have devoted their entire careers to their specialties, delivering and assuring certainty to clients.

AT ENVISTA, OUR EXPERTS HAVE ASSISTED ON THOUSANDS OF CASES INVOLVING:

- Construction Incidents
- Dispute Resolution
- Digital Forensics
- Employee Misconduct
- Employment Law
- Employee or Workplace Safety
- Failures or Defects
- Fires or Explosions
- Fraud
- Intellectual Property
- Location Forensics
- Personal or Work-Related Injury
- Subrogation
- Vehicle Accidents
- Video/Photo Forensics
- Water Damage



AREAS OF EXPERTISE INCLUDES:

- Criminal Investigation
- Civil & Commercial Litigation
- Dispute Resolution, Mediation and Arbitration
- Document Review
- Expert Witness Testimony

- Forensic Litigation
- Fraud Investigation
- Liability and Subrogation
- Loss Investigation
- Premise Liability
- Product Liability



Major Loss Investigation

At Envista, our major loss professionals combine their insurance and forensic experience with a depth of knowledge across various industries to deliver an unrivaled customer experience, capable of and committed to resolving any problem, large or small. We're leading engineers and experts who have designed some of today's most complex systems, structures, and projects. We are also trusted advisors who have spent decades analyzing the world's most challenging failures and providing customized recovery solutions.

No one loss is the same, and when facing critical claims or disputes, experience matters. We ensure that our Major Loss teams are customized every time, so that the unique technical needs of the investigation are met, and confidence and operations are restored.

ENVISTA'S MAJOR LOSS SPECIALISTS PROVIDE COMPREHENSIVE, INTEGRATED, AND CUSTOMER-CENTRIC SOLUTIONS ACROSS DIVERSE INDUSTRIES INCLUDING:

Building and Structures
Power and Energy
Chemical

Oil and Gas
Manufacturing
Semiconductor

Heavy Industry
Infrastructure
Construction

SERVICES

Marine Investigations

With increasing engineering and electronic complexity across a global supply chain and ever greater scrutiny placed on management of the claim, you need to obtain a robust, substantiated opinion on the cause, the extent of damage, and the critical steps for minimizing loss. Our marine team, comprised of diversified experts and Professional Engineers, including career Naval Architects, Marine Engineers, and Marine Surveyors, have aided claims adjusters, legal professionals, safety and risk managers and brokers with mitigating all types of claims related to the global transportation system.

OUR MARINE EXPERTISE CAN ASSIST WITH CLAIMS RELATED TO:

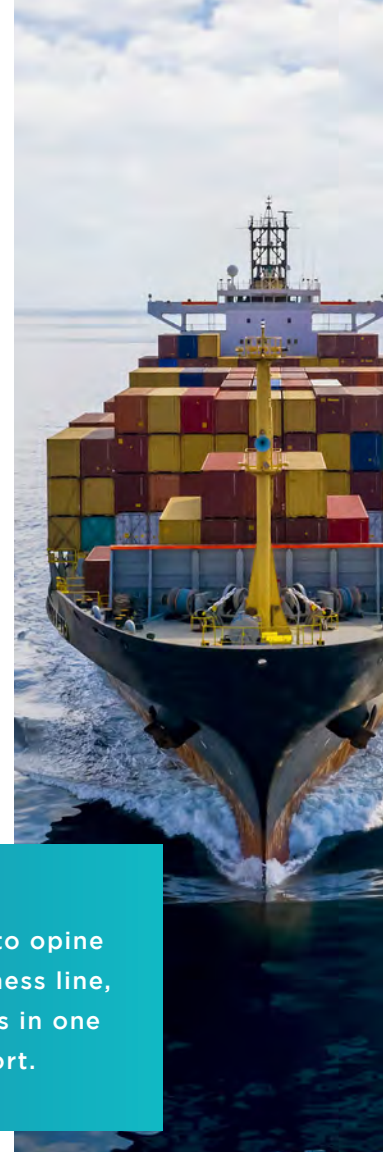
- Corrosion and Coating Defect Analysis
- Damage Assessments and Repair Plans
- Electronics Contamination Assessment
- Emergency Recovery Assessment of Mechanical/Electrical Equipment
- Engineering/Electrical Diagnostics and Failure Analysis
- Fire Origin and Cause
- Fuel and Lube Oil Analysis
- Structural Failure Analysis and Material Testing
- Subsea Installation Survey and Assessment
- Vessel Cargo Securing, Cargo Stowage, and Cargo Loss Exams
- Vessel Marine Casualty or Accident Investigation
- Vessel Stability and Structure Reviews

ENVISTA'S WORLDWIDE CAPACITY OFFERS:

The ability to work one matter across land and sea, as one team, to meet client needs.

Breadth and depth of subject matter experts that span numerous technical and scientific fields to truly deliver on multi-disciplinary, complex claims.

A unique structure to opine on any marine business line, and provide answers in one comprehensive report.



SOME OF OUR NICHE AREAS OF EXPERTISE INCLUDE, BUT ARE NOT LIMITED TO:

Aircraft

**Beer, wine, spirits
production, and shipment/
storage**

Ceramics

Cryogenics

Entomology

Fabrics

Feathers

Firearms

**Handwriting, paper, and
ink analysis**

Microbiology

Mycology

Plastics

Railroad equipment

Rare art

Sand

Specialty Expertise

From the rarest to the most unique need, to the most complex and terrifying major catastrophes, we have a network of thousands of specialty experts and renowned authorities waiting to help you find answers.

These sophisticated subject matter experts and consultants are highly vetted, senior level professionals in their respected fields. When assigned, our project management teams actively collaborate with the selected specialist to review findings and ensure assignments are handled consistently, conveniently, and seamlessly.



SPECIALTY EXPERTS

Having access to the right expert, at the right time, in the right location takes an established, experienced network, and that is just what we have at Envista. In addition to our excellent full-time staff, our Specialty Experts group was created to provide clients with a complete global forensics engineering solution covering a wide variety of technical and unique specialties. In brief, Envista can provide everything you need for those complex losses.

From the rarest to the most common of needs, from the most complex to the most terrifying major catastrophes, our network of more than 500 additional experts and specialists are waiting to help you. All assignments are project managed by an Envista engineer whose focus is to deliver answers for your highly technical, and sometimes even strange, claims in a timely and cost effective manner.

SPECIALTY EXPERTS IN ACTION

Here are a few technical cases that illustrate the expertise that lies within this amazing network:

A facility had a cryogenic pipe rupture resulting in personal injuries. Our cryogenic expert was able to determine why the pipe ruptured and how to restore operations of the system.

Our ceramics and glass expert assisted with a ballistic grade level 5 clad polycarbonate pane examining the integrity of the glass and rendered an opinion as to the cause of breakage.

After a bug infestation in a lumber yard, our entomologist identified the type insect, how the infestation and migration of insects occurred, and provided a pest control protocol to eliminate infestation.



Out of the ordinary needs, matched with extraordinary people

IF YOU HAVE A CLAIM NEED, ENVISTA HAS SPECIALTY
EXPERTS FOR IT.



ENVISTA IN ACTION



It's not uncommon for our clients to come to us with a loss that involves more than one discipline. In fact, we find that it happens all too often, and that's because of the complex nature of the matters that come through our doors.

For us, this multi-disciplinary approach is second nature and it allows us to provide immediate help and response to insureds and clients alike, all while offering one easy point of contact—the project manager—to lead the charge.

Take for example a major port and shipping hub in the southeast United States that experienced catastrophic wind and water damage following Hurricane Harvey. Envista was called on-scene to investigate more than 21 buildings, high-tech equipment, and specialized cranes, which were integral to the port's operations. We were hired to help determine the extent of damage and cost of repairs. Total damages for this claim totaled approximately \$16M USD.

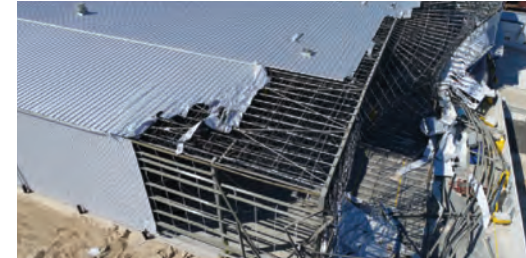
Highlights

Our engineering team along with our building experts responded first.

Later, AREPA, our equipment restoration division was engaged to work on the decontamination and restoration of computer equipment and servers (essentially, the heart and soul of the port's operation). These systems needed to get back up and running as soon as possible to not hinder the continuation of ship traffic.

Our mechanical engineering team was retained to assess the cranes and was able to assist in identifying the damaged components and limit the damages to under \$100,000 USD.

Our civil engineering team worked with the port's identified contractor and were able to develop a repair plan, for one building in particular, that saved an estimated \$6M USD.



The joint efforts of our structural, mechanical, restoration, and building teams were able to bring a large claim to an unprecedented closure efficiently, cost effectively, and within a quick timeframe.

[ENVISTAFORENSICS.COM/EN-CA](https://envistaforensics.com/en-ca)



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