

Refinery & Petrochemical Solutions



Power Generation Solutions



Tank and Terminal Solutions



Smart Grid Solutions



Pipeline Solutions



SERVICES

Delivering Asset Protection Solutions

NDE/NDT INSPECTION | TESTING | ENGINEERING SERVICES
24/7 ON-LINE MONITORING | APPLICATION & ENTERPRISE SOFTWARE





Local Presence, Global Reach!

VISIT WWW.MISTRASGROUP.COM/LOCATIONS FOR A MISTRAS OFFICE NEAR YOU!

OVERVIEW

MISTRAS is a leading global provider of technology-enabled asset protection solutions used to evaluate the structural integrity of critical energy, industrial and public infrastructure. MISTRAS combines industry-leading products, technologies, expertise in mechanical integrity (MI), traditional, advanced nondestructive testing (NDT) services, and proprietary data analysis software to deliver a comprehensive portfolio of solutions, ranging from routine inspection to complex, plant-wide asset integrity assessments and management.

ONE SOURCE FOR ASSET PROTECTION SOLUTIONS



TRADITIONAL AND ADVANCED NON-DESTRUCTIVE TESTING

With more than 50 years of experience in providing traditional NDT services, utilizing standardized procedures, certification programs and audit tracking, MISTRAS Services has become a leader in the traditional NDT industry. These services are the fundamental basis for most inspection and reliability programs. Our traditional NDT services encompass a wide range of Inspection, Quality Assurance and Quality Control offerings operating within the guidelines of our ISO 9001:2000 Quality Program.

All in-house and field services are supported by our highly experienced management and engineering team, dedicated to customer service, and available through our national network of laboratories, 24/7.

In addition to traditional NDT, MISTRAS Services also delivers specific advanced NDT techniques. By constantly focusing on uncovering industry needs and concerns, MISTRAS team members work diligently to supply the latest in cutting edge technology and inspection programs that help our customers save money by increasing

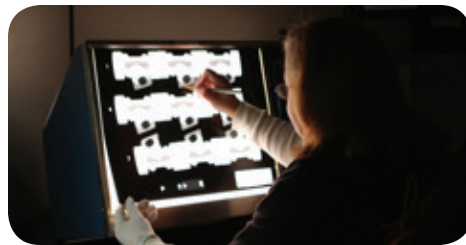
productivity and reducing costs. Our suite of advanced NDT services, proprietary equipment and engineered inspection programs allows us to meet difficult challenges head on.

MISTRAS leverages this traditional and advanced testing data by integrating it with the unique capabilities of our Asset Integrity Management Services (AIMS) group, enabling plants to maintain the integrity of its assets in a Fitness for Service condition for the desired life of the assets, maximizing the return generated based on their safe and efficient operation.



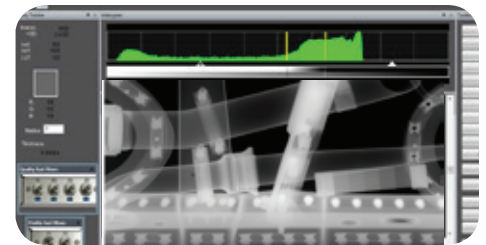
SURFACE INSPECTIONS MAGNETIC PARTICLE & LIQUID PENETRANT

Penetrant and Magnetic particle inspection are used to locate surface breaking defects. Magnetic particle inspection is used on ferrous materials looking for cracks, laps, seams, voids, pits and other surface or slightly subsurface defects. Penetrant inspection is used on nonferrous materials such as metals, composites and ceramics, identifying surface anomalies such as cracks, seams, laminations, blow holes, laps, external bursts and welding defects. Both techniques can be performed in-house or in the field.



RADIOGRAPHY

Our line of radiographic services for shop and field applications run the gamut from 4 MEV units utilized to radiograph large and thick castings and forgings, to portable X-Ray cameras for field weld applications and thin wall material inspection. Gamma sources vary from low level fluoroscopic units to perform real time corrosion under insulation surveys, to Iridium (Ir-192) and Selenium (Se-75) sources used for weld inspections, to Cobalt (Co-60) thick component inspections. Our qualified certified radiographers operate within strict safety parameters.



COMPUTED RADIOGRAPHY

MISTRAS Services employs a wide array of digital radiographic systems to solve specific industrial problems. Thickness profiles of piping systems, both insulated and non-insulated, are performed using Computed Radiography (CR), while large production runs of smaller parts are inspected using Direct Radiography (DR). Real Time Radiography (RTR) is utilized for large "real time" inspections of insulated piping systems looking for areas of pipe degradation. Computed radiography is also used for code quality weld inspection per ASME code. Captured images can be digitally enhanced for increased detail, collaboration and archiving.

TRADITIONAL NDT APPLICATIONS

Our Traditional NDT Services use the standard approach to code or specification compliance with industry proven non-destructive testing techniques.

ENSURING SAFE AND EFFICIENT OPERATION OF INFRASTRUCTURE



ULTRASONIC

Traditional UT inspection uses high frequency sound energy to conduct examinations and perform measurements gathering considerable information such as the presence of discontinuities, material or coating thickness. Our highly qualified technicians detect surface and subsurface defects and supply accurate readings regarding discontinuity size and shape. Ultrasonic surveys are used as the main inspection technique for a plant's erosion/corrosion programs and are utilized extensively at our multiple evergreen site locations around the world.



VISUAL

Visual inspection is the basis for all NDT inspection programs. At MISTRAS, we provide a wide variety of visual inspection techniques (VT) to various industries such as API 510, 653 and 570 inspectors to the Oil and Gas industry, ANSI N45.2.6 inspectors to the nuclear industry and Certified Weld Inspectors to a wide variety of other industries. In addition, MISTRAS provides staffing and oversight of Oil and Gas maintenance turnarounds through its Center of Excellence in Turnaround Management.



EDDY CURRENT

MISTRAS provides eddy current inspection for HVAC, Aircraft, Heat Exchangers and various other types of infrastructure. While eddy current inspection of exchanger tubing with IRIS back-up remains a staple inspection technique in the Oil and Gas and Power industries, its sister techniques such as Remote Field and Near Field inspections for the inspection of carbon steel and fin fan tubes respectively, have gained acceptance in the industry. MISTRAS provides the entire range of tube inspection technologies to its customer base.

ACOUSTIC EMISSION (AE)

By performing thousands of field tests on pressure vessels, storage tanks, pipelines, valves, nuclear lift rigs, railroad tank cars, bridges, compressed gas cylinders and transformers with Acoustic Emission (AE) inspection, we have developed an extensive database for interpreting the significance of AE signals as they relate to flaws, cracks and leaks.

This extensive experience led to the development of knowledge-based systems such as CORPAC™, VPAC™, MONPAC™, POWERPAC™, and TANKPAC™. Our state-of-the-art AE systems and sensors are manufactured under ISO-9001 Certification and calibrated and maintained by MISTRAS' highly trained staff.

These technology packages are designed and developed by Physical Acoustics Corporation (PAC), a member of MISTRAS Products & Systems division, and have been providing AE Solutions worldwide since the late 70's.



LARGE STRUCTURE INSPECTION (LSI)

The LSI™ System, designed and manufactured by our Products & Systems Division for the exclusive use of our Services Division, is a fully automated, turnkey Ultrasonic Inspection System performing high-speed ultrasonic C-Scan imaging. The system operates at scan speeds up to 25 inches per second, for tank, heat exchanger & pressure vessel shells, uninsulated piping systems, large marine vessels and tower system applications. Using our UTIA software, scans are displayed in color coded A, B and C-Scan modes & individual scans are "stitched" together in C-Scan mode to display the asset in its entirety.

ADVANCED NDT APPLICATIONS

Advanced NDT techniques are important to our customers because they supply both increased productivity and the ability to reduce other ancillary costs such as scaffolding, insulation removal, etc. Our sophisticated testing techniques help to solve industry problems cost effectively and efficiently.

REALIZED VALUE: LSI survey used in lieu of scaffolding and Traditional NDT yielding equipment cost savings through less trade involvement and increased scan speeds.

PROVEN PERFORMANCE - EXPERT SERVICES - ADVANCED RESOURCES



PEC TECHNOLOGY

PEC is an inspection technique for measuring the thickness of steel objects without direct surface contact. The electromagnetic test identifies general corrosion through insulation or concrete surfaces by introducing an electric current into the transmitter coil, magnetizing the steel and measuring wall thickness. PEC is ideal for surveying large sections of piping or pressure vessels to detect moisture trapped under insulation causing corrosion of the asset being inspected. Use PEC when other NDT techniques may be limited due to the larger diameters encountered when inspecting insulated vessels.



TOUCH POINT CORROSION (TPC)

MISTRAS has developed a unique inspection methodology utilizing manual UT with Visual and Guided Wave inspections for the analysis of TPC areas. Piping is surveyed using an API 570 inspector to identify visual signs of degradation followed by a guided wave inspection for a rapid survey. Areas that illustrate degradation are inspected using our proprietary TPC methodology utilizing a Pocket UT system. This produces grading criteria of pipe condition in percentage wall loss and provides guidance for further maintenance follow up.



ULTRASONIC P-SCAN TECHNOLOGY

P-Scan Technology can be operated in automated raster scanning mode or semi-automated manual manipulation mode. Ultrasonic P-Scan uses multiple angle beam transducers operating independently and is utilized mainly for the highly accurate location and sizing of defects. If the health of an operating asset is in question, P-Scan damage mechanism results produce the most accurate data enabling a highly effective Fitness-for-Service evaluation.



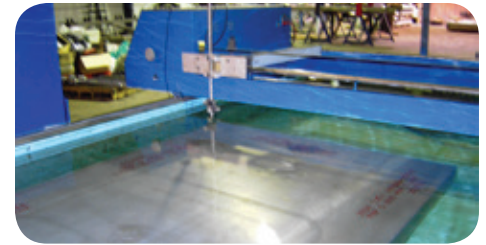
PHASED ARRAY

Phased Array generates an ultrasonic beam with the capability of setting beam parameters such as angle, focal distance, and focal point size through computer controlled excitation of the beam. It can be multiplexed covering large areas and the operator can vary the angle of the beam without moving the probe. Applications include weld inspection, complex geometries, defect detection and location, and sizing. The ability to record weld scans and to visualize the reflectors and their position within the weld makes it a qualified technology and an excellent choice for projects constructed to ASME Code.



ULTRAVIEW™

Ultraview™ is an integrated phased array UT inspection process used in lieu of code compliant radiography to ensure savings, limit safety hazards and increase productivity. Ultraview™ is based on providing the systematic and disciplined approach the code requires in order to utilize this technological advancement. Our approach integrates specific training requirements, unique internal qualification and certification standards, specialized equipment kits, calibration standards, examination procedures and procedure qualifications that are vital to the success of this program.



IN-HOUSE IMMERSION ULTRASONICS

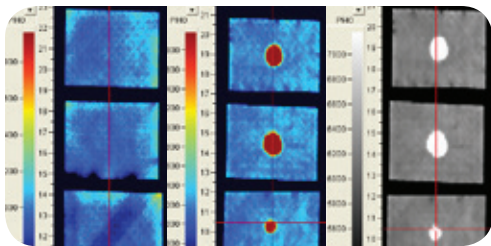
Mainly utilized in shop applications to accurately locate, classify, and size defects in large plate, bar or forged materials. Using contour following computerized probes, we inspect highly irregular components, and also perform through transmission immersion ultrasonic inspection, primarily used to inspect composite materials. Higher inspection speeds are realized by using the latest "Array Technology" with our in-house immersion systems. Our in-house facilities are approved by various outside quality agencies such as NADCAP and AS9100, while also holding certifications from most major aerospace OEMs.

ADVANCED NDT APPLICATIONS

REALIZED VALUE: Avoided opening tanks saving \$10M by foregoing cleaning, disposal and remediation of highly hazardous sludge and wastewater using AE TANKPAC™.

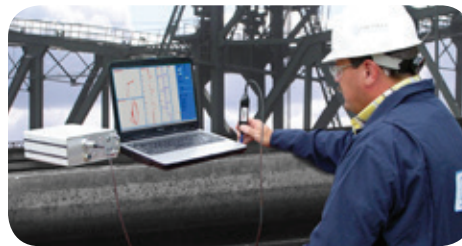
REALIZED VALUE: \$2.1M in product loss through flare line valves identified and stopped by using VPAC™.

TECHNOLOGIES AND ENGINEERED SOLUTIONS



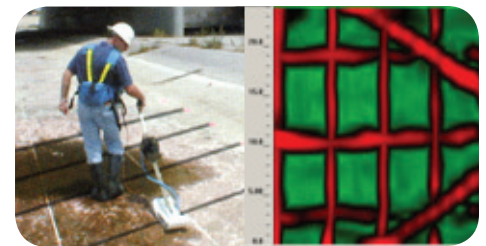
LINE SCAN THERMOGRAPHY (LST)

Uses an infrared technology technique that is capable of inspecting large surfaces in a short period of time without loss of resolution. This technique is ideal for the inspection of Composite Materials and detecting porosity, delaminations and non-visible impact damage. Its lateral motion provides heating uniformity and allows image processing capabilities that improves distinction among defect region, image noise and sound area.



ALTERNATING CURRENT FIELD MEASUREMENT (ACFM)

ACFM is used to identify and size surface breaking cracks in metal components. ACFM can be performed if the surface contains minor scaling and debris eliminating the need for pre-cleaning. Test indications can be sized to show depth and length of indications.



GROUND PENETRATING RADAR

GPR is a safe and effective way to locate buried obstructions in concrete structures, soil and other substrates. Our GPR services are multi-configurable using a variety of high resolution collection antennas that allows the operator to locate obstructions up to a depth of 18" of concrete. GPR is also used during construction in advance of setting large cranes.



CENTERS OF EXCELLENCE

Throughout North America and the world, we maintain Centers of Excellence (COE) in NDT inspection technologies. With the use of a sophisticated, collaborative intranet network, our inspectors and engineers employ technologies/software/hardware that their colleagues may have developed in any one of our worldwide locations.



API TURNAROUND MGMT.

Our API COE specializes in providing both on-site and off-site management to complete your turnaround on schedule and on budget while satisfying your staffing needs with full-time experienced API inspectors. Our turnaround management team utilizes the latest in project management software and leverages decades of API turnaround management experience for your project. In addition, our project managers are versed in various advanced inspection techniques that can be utilized to lower your overall turnaround inspection budget.



PIPELINE CONSTRUCTION

We provide inspection services using state-of-the-art technology for new pipeline construction projects. Our full complement of pipeline inspection tools include manual X-ray and source radiography, X-ray crawlers and automated ultrasonic capabilities. Our fully Automated UT Systems operated by our certified technicians, provide girth weld pipe inspections by combining conventional and phased array ultrasonics.



ABOVEGROUND STORAGE TANKS

We oversee and perform in service and out of service visual inspections, UT thickness readings, UT corrosion surveys of shells and roofs, Magnetic Flux Leakage (MFL) testing of tank floors, UT prove-up of floor indications for volumetric determination, API 653 calculations, shell and edge settlement and verticality inspections. All inspections and findings are packaged into a comprehensive electronic report that includes summarized recommendations, calculations, API checklist items, CAD drawings and photos. In addition, our inspectors have worldwide experience in AE and TANKPAC™ testing.



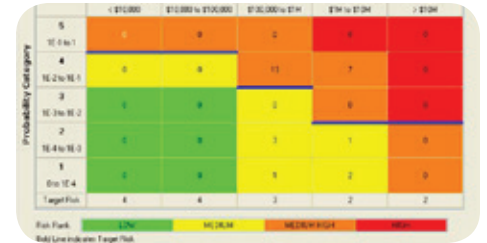
AUTOMATED ULTRASONICS

We specialize in helping our clients choose the proper inspection technique based on your application and requirements. We discuss your current needs and inspection scope objectives to ensure the proper ultrasonic technique is prescribed. The ultimate ultrasonic technique that is best for a particular application will depend primarily on the anticipated damage mechanism, the percentage of area chosen to be assessed, the probability of detection, the likelihood, and the accessibility to the areas of interest. MISTRAS technicians are experts in Phased Array, TOFD, Shearwave and UT imaging techniques.



PCMS INSPECTION IT & RBI

Plant Condition Management Software (PCMS) is a comprehensive, cost effective, preventative maintenance software program developed by MISTRAS for the process industry. PCMS offers tremendous advantages for a facility to organize, link and synchronize information enabling a thorough evaluation of the results and providing the economic tools to budget and plan long term maintenance strategies. The software's latest module, PCMS RBI Calculator, is API 580 compliant. Using information from API 571, PCMS automatically identifies likely damage mechanisms and then calculates the probabil-



ity and consequence of failure in determining risk. The risk is used to plot the equipment in a user-configurable risk matrix. Risk thresholds are established to build inspection plans. PCMS automatically recommends scope of inspection, intrusive and non-intrusive techniques and due dates in the inspection planning process. Results are graded for effectiveness with automatic recalculation of risk resulting in an evergreen RBI program.

Visit www.pcmssoftware.com for more info.

CENTERS OF EXCELLENCE

REALIZED VALUE: 30 Vessels were removed from a turnaround list as a result of AUT and RBI evaluation. Significant cost savings resulted from shorter T/A and planned replacement.

CENTERS OF EXCELLENCE



MECHANICAL INTEGRITY (MI)

The protection of people, property and the environment at industrial facilities is a serious concern. Our state of the art resources aid clients in developing, implementing and maintaining a MI Program that meets the requirements of OSHA 29 CFR 1910.119 Section (j). Our mechanical integrity experts advise plants on the development of MI programs and critique and modify existing programs. These capabilities include inspection audits, procedural development, advanced NDT technologies and risk based methodologies customized to fit each facility's unique needs.



PIPELINE INTEGRITY (PLI)

The PLI COE employs engineers and technicians who design and implement pipeline and facility integrity programs that help clients meet integrity mandates of PHMSA, NACE, API, ASME, OSHA, etc. By combining multiple basic and advanced technologies and methodologies with other MISTRAS COE's, our programs integrate pipeline integrity with PSM programs for refineries, chemical plants, utilities, pump/compressor stations, nuclear plants, and others. We also make this available using our Document Creation & Tracking program via secure web access.



PREDICTIVE MAINTENANCE (PDM)

Our PdM services range from development of reliability centered maintenance (RCM) programs to walk-around data collection services, as well as on-line continuous monitoring and training programs. Technologies include vibration, infrared thermography, oil analysis, acoustic emission, ultrasonics, motor condition monitoring, strain gauge materials testing and stress analysis. We also offer proactive maintenance services such as precision dynamic balancing & laser alignment. Our wide range of services are available through MISTRAS or we can train your personnel to take over all or any part of your PdM program.



REFRACTORY INSPECTION

We specialize in refractory system evaluations, detailed design reviews, job scope preparation, installer qualification & refractory product recommendations. Utilizing quality control procedures & monitoring refractory installation, our clients are ensured a high quality finished product. We provide timely material production, pre-qualify monitoring & all refractory inspections & production. Surveillances are conducted in accordance with API 936 & ASTM standards. Reports are provided as needed detailing a complete photographic history of each project.



ROPE ACCESS

Our Ropeworks™ COE inspects difficult to reach locations using certified rope access specialists. Our solution replaces/minimizes the need to erect scaffolding, heavy cranes or sky lifts to access difficult or inaccessible areas. Our rope access technicians are fully certified in the full line of traditional and advanced NDT services.

The MISTRAS Rope Access program, procedures and training are approved and meet the guidelines specified by the Society of Professional Rope Access Technicians (SPRAT).



SMART GRID TRANSFORMER RELIABILITY

To make timely decisions on the condition of High Voltage Power Equipment, our Transformer Asset Protection Solutions (TAPS), as part of an R&D project with EPRI, provides solutions for performing testing, engineering analysis and 24/7 on-line monitoring services while units are in service. AE, high frequency transducer, vibration, portable dissolved gas analysis and moisture content, oil quality tests and infrared and visual inspection are used to detect, locate and assess faults. Critical assets are monitored continuously ensuring safe/reliable operation. Results are compared to a growing database of over 1000 tests worldwide.

CENTERS OF EXCELLENCE

REALIZED VALUE: Transformer testing allowed unit to remain in operation for eight additional months, avoiding a potential \$1.3M loss in revenue.

REALIZED VALUE: AE test found a fault on a large generation step-up transformer, allowing on site repair vs. returning to manufacturer, saving an estimated \$3M.

OUR COES SOLVE YOUR NDT INSPECTION NEEDS



TRANSPORTATION & FIRE APPARATUS

Our Transportation COE is certified to regulatory and industry standards. Third party certification services provided for Fire Apparatus Manufacturers, in accordance with NFPA 1901 and 1911 and on-site in-service inspections, include aerial ladders, platforms, water towers, ground ladders, Compressed Air Foam Systems (CAFS), foam proportioning systems, pump testing and line voltage testing in accordance with NFPA 1911 and NFPA 1932. Airport Rescue Fire Fighting (ARFF) vehicles are tested at the manufacturer or in-service.



TUBE INSPECTION

Our Tube Inspection COE offers a comprehensive program to determine the integrity of exchanger tubing (Condensers, Feed-water Heaters, Boilers, Air Coolers, etc.), by ensuring tubes are properly evaluated to detect damage or defects in both ferrous and nonferrous tubes. Our tube inspection specialists are cross trained to perform work in Power Generation, Oil & Gas and other industries. Tube data is analyzed directly at the job site, or is transferred via a web portal to enable remote data analysis that helps minimize the total project inspection costs using state-of-the-art enhanced visual software



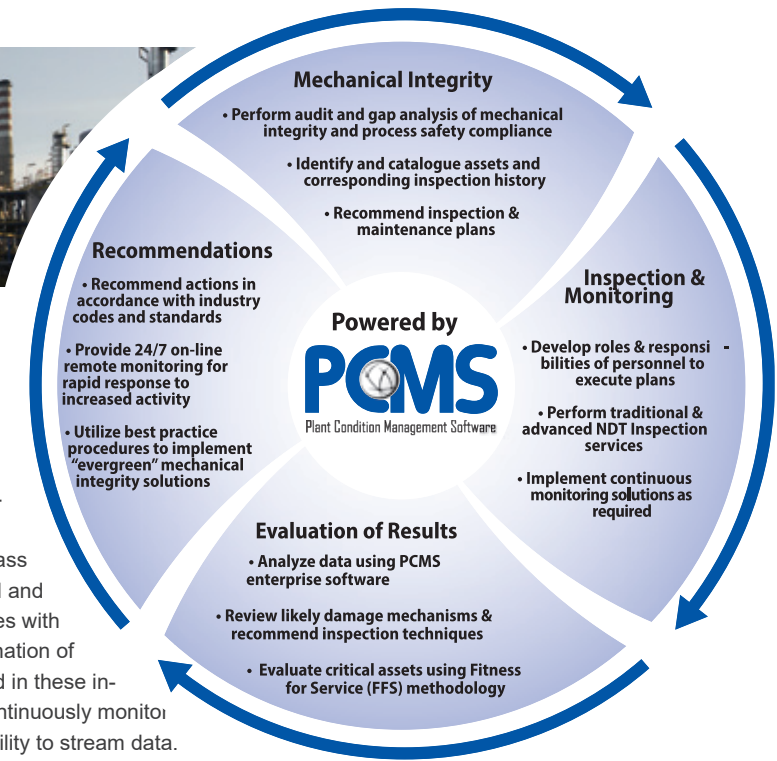
and reporting tools. Using the same color coding scheme as standard tube sheet layouts, our tube inspection software informs our customers of the location of the tube defects within the length of the tube. This directs you to the exact location of the defects and allows you to make more informed decisions regarding the need to retube these locations or possibly modify the operating conditions to mitigate the damage mechanism.

Inspections included are: Eddy Current, Remote Field Testing, IRIS, Magnetic Flux Leakage, Near Field Testing and Remote Visual techniques.



ASSET INTEGRITY MANAGEMENT SERVICES (AIMS)

Our AIMS COE refers to our management system that enables plant owners to maintain the integrity of their assets in a Fit-for-Service condition for the desired life of the assets. The proven and systematized method creates a closed-loop cycle for addressing continuous asset protection and improvement. For example, the cycle begins with the development of a “customized” Mechanical Integrity program. We interview plant personnel to analyze current practices, the owner’s compliance with current regulations, and compare these to world class best practices. After cataloguing the assets, an inspection program is developed and the assets are uploaded into our PCMS inspection database. The cycle continues with the actual inspection and monitoring of the identified assets. We utilize a combination of traditional and advanced NDE techniques to perform the data gathering required in these inspections. For critical assets that exhibit some damage we offer the ability to continuously monitor the asset using AE, Vibration, Strain Gauging, or other sensors that have the ability to stream data.



ASSET INTEGRITY MANAGEMENT SERVICES (AIMS)

ENGINEERING SERVICES

- Fitness for Service (FFS) Evaluation
- API 571 Damage Mechanism Review
- Materials/Corrosion Expertise
- Facility Circuitization/Systemization

MECHANICAL INTEGRITY SERVICES

- Mechanical Integrity Program Development
- Mechanical Integrity Audits
- OSHA Compliance Assessments
- Condition Monitoring Location (CML)

RISK BASED INSPECTION

- RBI Assessments
- Evergreen RBI Implementation
- RBI Data Validation
- RBI Database Configuration Services

TURNAROUND MGMT.

- API Visual Inspection
- Turnaround Planning
- Turnaround Management
- Turnaround Execution

PROJECT MANAGEMENT • TURNKEY SERVICES • BEST PRACTICES



PLANT CONDITION MANAGEMENT SOFTWARE (PCMS)

PCMS is a comprehensive software application developed specifically to assist facilities implement effective mechanical integrity and process safety programs. In use at refineries, chemical plants, production and exploration facilities, and inspection service companies worldwide for over 20 years, PCMS offers best practice solutions developed by an active User Group. Annual User Meetings ensure PCMS meets ever-changing regulations and supports leading-edge technologies.

Benefits include the following:

- Store asset data and control documents in one place
- Streamline record keeping and reduce redundancy
- Maintain design/operating characteristics for fixed, electrical and rotating equipment
- Capture activities such as inspection reports, test results and maintenance requests
- Interface with data loggers, PMI (Positive Material Identification) equipment and PDAs
- Calculate corrosion rates, remaining life, due dates and risk rankings
- Plan future compliance inspections, maintenance activities and equipment tests
- Recommend effective inspection techniques and monitoring solutions
- Link to maintenance management systems such as SAP, Maximo and EMPRV
- Link to continuous monitoring applications to proactively identify potential problems
- Provide KPI (Key Performance Indicators) to benchmark asset and facility performance



LONG RANGE GUIDED WAVE UT

Long Range Guided Wave (LRUT) is a pipe screening tool in the form of a circumferential collar, housing multiple transducers mounted on a pipe that transmits ultrasound in both directions from the source location. Anomalies within range of the inspection return signals interpreted on a display where the significance of anomalies can be determined. Technician training and experience is essential to obtaining accurate data using LRUT. MISTRAS-IMPro employs more technicians trained and certified by GUL (Guided Ultrasonics, Ltd.) and owns more LRUT systems than any other company in the world.



INFRASTRUCTURE

MISTRAS has played an integral part in infrastructure testing since the late 70's. We apply sensor fusion, wireless, and 24/7 on-line monitoring to concrete, suspension cables/stays, steel-type bridge and structures. The FHWA selected our data acquisition system for their steel bridge testing program and awarded a NIST contract for the development of energy harvesting.



OFFSHORE PRODUCTION

Acoustic Emission (AE) on-line monitoring was applied to the structure of a floating "pentagon" oil production platform in addition to strain gauges so dynamic load could be measured and correlated with the AE results to provide an early warning of the presence of flaws after eight areas on subsea nodes were identified as highly stressed. MISTRAS has also developed test procedures, flaw detection algorithms, and real-time monitoring analysis solutions at in-service flexible risers. Use of this technology avoids production delays, environmental pollution and endangerment of operational personnel.

ON-LINE ASSET INTEGRITY - 24/7 UNATTENDED MONITORING

REALIZED VALUE: The use of the GUL gPIM monitoring collar prevents excavations for subsequent examinations.

REALIZED VALUE: AE on-line monitoring technology can determine when a defect is growing, keeping process equipment running, helping to improve safety and reliability.

REALIZED VALUE: 14" crack in high pressure vessel evaluated using on-line AE monitoring combined with FEA/FFS determined test fire could continue.

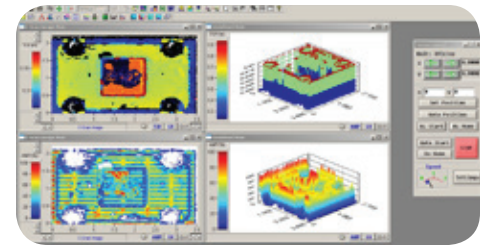
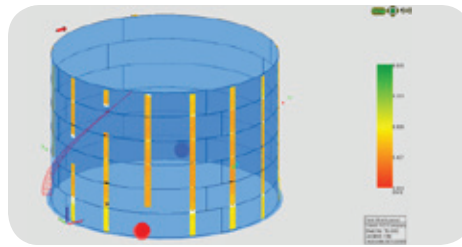


AMMONIA CONVERTER VESSEL

Routine ultrasonic inspections had detected several small cracks in both circumferential and longitudinal welds. 24/7 Acoustic Emission (AE) based on-line monitoring was installed to determine if and when the cracks grew to avoid an emergency shutdown. Thermocouple and pressure data was recorded to correlate with any crack data that might have been detected. In one example, monitoring allowed the plant to continue to operate with a high level of safety, avoiding a loss of \$23M in production revenue in addition to very expensive emergency repair cost.

ONE SOURCE ASSET PROTECTION FOR WIND POWER





IN-HOUSE CAPABILITIES

MISTRAS provides a one-stop-shop for traditional and advanced non-destructive testing of materials and fabricated structures by offering a complete inspection package, from inspection preparation and inspection processing, to post-processing, using state-of-the-art testing equipment in our in-house testing laboratories located across the U.S.A. and Europe with an industry-leading quality program, our testing laboratories are certified to perform inspections to meet or exceed stringent regulatory requirements, including: NADCAP, NAS-410, AS9100/ISO-9001, FAA Repair Station, ITAR/EAR, commercial and military approvals and more.

AUTOMATED UT AND IMAGING ANALYSIS (UTWIN™ AND UTIA™)

UTwin™ is a 32-bit, true Windows™ data acquisition, imaging and analysis software package, including full motion control and data acquisition programming for immersion and gantry ultrasonic systems.

UTwin™ is packed with features, such as real-time A/B/C-Scan display capability and powerful post processing modes like RF storage, pan, zoom, size, and characterization of indications with mathematical statistic and clustering modules.

OPERATING SOFTWARE: AEWIN™

Real-time operating software for advanced graphing, location, waveform processing, remote monitoring, filtering, and data export capabilities; interfaces with LabView, Word and Excel.

NOESIS™: ADVANCED ANALYSIS

Post processing, neural network and statistical analysis program extracts over 23 different features of the AE signal such as amplitude, duration, energy, frequency centroid, partial powers and reverberation frequency, and is the ideal analysis program to find a solution when a multivariate classifier is needed.

USING MISTRAS RESOURCES IN ENGINEERING, R&D, AND SOFTWARE

We provide a comprehensive portfolio of standard NDT software, such as AE and UT acquisition and analysis software and application-specific customized software products. Our software product line covers a broad range of testing and analysis methods, including neural networks, pattern recognition, wavelet analysis and moment sensor analysis.

CONDITION MONITORING SOLUTIONS FOR ROTATING ASSETS FOR THE POWER AND PROCESS INDUSTRIES





SERVICES

Delivering Asset Protection Solutions

Local Presence, Global Reach!

Call or visit www.mistrasgroup.com/locations
for a MISTRAS office near you!

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Chemical Solutions