

Capability Statement

# IMPROVE DESIGN, QUALITY & RELIABILITY

NDT ASSESSMENT PROGRAMS & EDUCATION MATERIALS TESTING, ADVICE & FAILURE ANALYSIS

## **MANAGE YOUR ASSETS AND CAREER**

ATTAR delivers risk assessment and training programs for early detection, cause identification and implementation of effective prevention and mitigation measures to prevent costly failures. NDT inspection technologies are complemented by failure analysis services to determine mode and root cause, as well as materials & mechanical testing & consultancy, all of which are used to improve the design, quality and reliability of infrastructure and associated assets.

#### NDT TRAINING PROGRAMS

As a Registered Training Organisation and Authorised Qualifying Body for both AINDT & BINDT, ATTAR is an industry leader in NDT training, providing expert classroom instruction in a multitude of NDT disciplines. We deliver focused education that integrates theory with practical application. Our training programs offer comprehensive lessons in the theory and application of particular NDT methods, as well as ample opportunities for hands-on experience. ATTAR can train and qualify personnel, as well as being the pathway to certification.

We offer state-of-the art training to suit your needs:

- Multitude of NDT disciplines
- Basic & Advanced techniques (Levels 1,2&3)
- Customised courses
- Complementary courses in related disciplines
- Public and/or private training
- Professional training facilities and/or on-site training
- Personnel qualification
- Certification examinations

# CUSTOM TRAINING TAILORED TO YOUR NEEDS

All of our courses are designed such that they can be adapted to client specific requirements. We can design and deliver programs of any length or complexity, and deliver the training in your workplace or in our professional training facilities.

ATTAR NDT training courses are constantly being updated and additional courses scheduled. For the latest on all course dates & locations, or to discuss how ATTAR can support your training and certification requirements, visit our website www.attar. com.au or contact us today.

# NDT CONSULTING & AUDITING

Does your company require the services of an independent Level 3?

ATTAR's dedicated team of NDT Level 3 personnel hold current AINDT (AS 3998), BINDT (PCN to ISO 9712) and ASNT

certifications, and possess detailed knowledge of national and international Standards as well as extensive experience in a multitude of applications covering many industries. We can assist your business with personnel qualification, written practices, procedure writing & review, auditing services and program recommendations, which:

- Detect/assess (early stage) discontinuities
- Optimise inspection and testing procedures
- Solve difficult problems

ATTAR's experts possess extensive experience in the development and optimisation of NDT techniques and procedures, as well as training, auditing and equipment selection. Our intimate knowledge of NDT methodology enables clients to choose NDT method(s) most suited to the application, as well as train personnel for the high degree of operator competence required for results to be reliable and relevant.

## **SPECIALITY CORROSION TESTING**

#### **ACOUSTIC EMISSION TESTING**

Acoustic Emission (AE) is an effective Risk Based Assessment tool used to monitor whole structures for defects due to fatigue, cracking, delaminations, disbondment, leaks and a wide variety of corrosion activity, and has the capacity to locate and characterise the source, type and stage of defects experienced under service conditions. Accepted worldwide, AE can save valuable time and money

by avoiding the need to temporarily decommission an asset: entire structures can be inspected in one test, without major shutdowns. AE monitoring facilitates early detection, cause identification and targeting of inspection and maintenance resources, thereby improving safety and reliability while reducing capital expenditure.

# TRANSMISSION LINE CORROSION SURVEYING

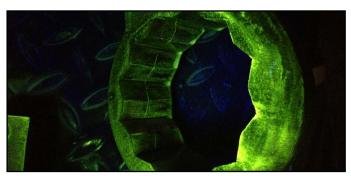
Corrosion of the sacrificial coatings of transmission lines and larger distribution cables is a key factor limiting the life of steel reinforced aluminium conductors. Early detection of the percentage loss of the galvanising or aluminium cladding sacrificial coatings gives warning of deteriorating conductors before the end of life stage where the steel is unprotected and risk of failure becomes high. ATTAR has optimised systems with high accuracy to determine the extent of corrosion on transmission lines [ACSR(AC & Gz)]. We have worked with asset owners in Australia and New Zealand for over 23 years, and are regarded as experts in this field.

### **MATERIALS TESTING & ANALYSIS**

ATTAR's team of experienced engineers are able to provide a broad range of independent and expert services to help you:

- Identify why equipment, products or structures may have failed
- Determine why performance expectations are not being met

- Develop new and better products through better materials selection, testing & analysis
- Identify then mitigate the effects of corrosion on structures and vessels







ATTAR's experts have a wide base knowledge and experience with materials and mechanical testing, product development, corrosion, and failure assessments analysis. We deliver customised solutions to performance, durability, environmental exposure, corrosion, strength, material properties, reactivity, materials identification, manufacturing process parameters, reverse engineering, and other common or uncommon problems.

# MATERIAL TESTING AND CONSULTANCY

Analytical techniques can provide muchneeded guidance throughout product development. Our materials & mechanical experts will work with you to determine the best testing program to ensure products are performing to your expectations. ATTAR's engineers are well versed with specialised testing for materials & mechanical characterisation, using the most advanced techniques available.

Our experts are frequently called upon to select materials, manufacturing process parameters, surface finishes and other related practices to arrive at the optimum fit for your application.

- Turnkey solutions in support of all types of materials (metals, polymers, ceramics, composites)
- Selection based on cost, availability, and desired properties (corrosion resistance, wear resistance, high temperature creep resistance, high strength, fatigue resistance, etc.)
- Determination of manufacturing process parameters such as heat treatment recommendations to bring out desired properties
- Protective coating recommendations for special applications (corrosion, wear, high temp, etc.)

We are also able to advise you on a coating system such as painting, anodising and electroplating for a specific environment and service application, in order to minimise premature corrosion and erosion damage.

#### **FORENSIC FAILURE ANALYSIS**

ATTAR specialises in quantifying how materials and products fail, including assessment of equipment an deteriorated due to corrosion, has fatigue, damage, abuse, and improper manufacture. We also evaluate the reliability of systems and components, as well as perform legislative review, compliance and life cycle assessments. Our comprehensive investigations identify both the failure mechanism (the 'how') and the root cause (the 'why') by means of specialised analysis of the materials involved alongside structural, physical and mechanical testing.

ATTAR also conducts expert witness evaluations providing engineering analysis, accident investigation, litigation support, expert witness testimony and evaluation of conformance to relevant Australian Standards. Evidence has been presented in the Supreme, Federal, County, Magistrates and Coroners Courts and emphasis is always placed on the continuity or logical chain of evidence.

### **CONTACT US**

For a risk-free consultation, contact our team today via *info@attar.com.au* or 1300 139 155.

