



Qualifications & Professional Memberships

- Engineers Australia Fellow status (FIEAust)
- Masters Preliminary (MEngSc.Prelim.)
- Bachelor of Engineering (BEng Materials)
- Materials Australia Certified Materials Professional (CMatP)
- AS ISO 9712 Non-Destructive Testing (NDT) Certifications
- Engineering Design Authority
 - significant & non-significant & changes for airframe & undercarriage components
- Project managed NADCAP certification
- Quality Manager: NATA Quality Systems
 - mechanical testing & NDT
- Development & delivery of training courses
 - NDT, heat treatment & materials engineering
- Gas Cylinder Test Station Approved Inspector
- Accredited Hardness Testing
- Certificate IV in Training & Assessment

Areas of Expertise

- Technical engineering assessments
 - all infrastructure materials: metals, welding, plastics, rubbers, ceramics, composites, coatings, adhesives, electroplating, anodizing, sealants and paints
 - interpretation of results and standards
 - Defence & Statutory requirements; industry, national & international standards; all relevant codes
 - over a wide array of relevant infrastructure, complex & noteworthy projects
- Specification Writing
- Materials Selection & Testing
 - new or existing designs
- Manufacturing Optimisation, including
 - heat treatment & surface finishing
- Remediation Advice
- Forensic Failure Investigations
 - failure mode & root cause
 - corrosion modes
 - recurrence prevention
- Condition Assessments
 - corrosion, coatings, structural, materials, concrete & reinforcing, erosion
- Compliance reviews
- Condition Monitoring Programs
 - specification & assessment; NDT
- Weld Fabrication & Assessment
- Testing Services
 - materials, chemical & mechanical
 - destructive & non-destructive
- Process & Quality Control

Trevor Rowlands

Trevor Rowlands is the Engineering Director and lead consultant for Induction Group, which specialises in multidisciplinary technical services. He has a strong engineering background, over all engineered materials, relating to specification and remediation, manufacturing processes, root cause forensic failure analysis, maintenance program management and compliance evaluations, focusing on specialised applications, complicated or extreme service environments and critical assets of high consequence.

Trevor has over 25 years of experience covering materials, components, assemblies, systems and infrastructure across hundreds of Defence and Civil projects.

Experience includes:

- Energy (Production, Transmission & Distribution and Storage)
 - Industrial plants, infrastructure and pipelines: BOC, INPEX Icthys, Rio Tinto, Exxon Mobil, GrainCorp
 - Electrical transmission towers & distribution lines; hardware: Ausnet Services, Central Power, Snowy Hydro, Suzlon Energy, SA Power Networks, AGL Energy, Powerlink
- Aerospace
 - multiple Defence and civil aircraft platforms including Lockheed P3/AP3C Orion and C-130 Hercules, McDonnell Douglas F/A-18, General Dynamics F-111, Boeing 737, 767 and 777, Airbus A320, A330 and A340
- Infrastructure, Machinery & Equipment
 - Altona water recycling plant, Worksafe Victoria, Johnson Controls, various city Councils (e.g. Monash, Glen Eira, Whitehorse, Ballarat, Casey, Noble Park), Beca, Penske Transportation, Davey Pumps, Renold, Reece, Jayco, Iveco, Crown Casino, Victoria Police Major Collisions Unit, FMG Engineering
- Legal
 - King & Wood Mallesons, Moray & Agnew, Cunningham Lindsey, Turks Legal, Hall and Wilcox, HWL Ebsworth, Slater & Gordon, Ligeti Partners, Maddocks Lawyers, Norton Rose Fulbright, Maddens, Wotton & Kearney, Sparke Helmore, Meridian Lawyers and many others.

Trevor has also been responsible for carrying out investigations and reinstatement of numerous distressed residential and commercial buildings, large fire or water damaged buildings, in addition to a wide variety of sizeable industrial projects.

Trevor is currently involved in providing expert assessments and remediation advice on complex infrastructure failures.