

pitt&sherry

Specialist Knowledge.
Practical Solutions.

Amusement Rides & Devices In-Service
Inspection
Tourism & Recreation Sector
Capability Statement



pitt&sherry provide innovative solutions for independent inspections of amusement rides. pitt&sherry has over 25 years' experience supporting the amusement ride industry, including major inspections and compliance audits to AS3533, failure investigation, functional testing and safety systems.

Our engineers provide specialist advice on structural, geotechnical, civil, electrical, control and mechanical components to associated Australian Standards.

pitt&sherry has delivered assessment and instruction on repairs/rectification works, planned maintenance, refurbishment, compliance and modification/upgrades to metal, timber and water park amusement devices of classifications 2 to 5.

For new and imported rides, we provide compliance and design review documentation for registration.

Inspection & performance assessment services

- Annual inspection & certification – independent/3rd party inspection by a competent person(s) for compliance with AS3533
- Identification and instruction of corrective actions, including NDT works and results interpretation
- Annual shutdown condition assessment - (including strip down and disassembly)
- Post shutdown / pre-commissioning inspection and test plan development/evaluation
- Foundations, structures & track, motors, gearboxes, wheel and brake systems, utility services, electrical distribution, control and safety systems
- Corrosion management strategies and material selection.



Risk identification, mitigation & due diligence

- Hazard & Risk assessment, risk review workshop, and bowtie risk management to confirm the required controls are in place to prevent the occurrence of an event or to manage the outcome of an unforeseen event.

- Safety system functional testing & failure scenario testing – confirming that the life safety systems work as intended, that the systems are adequate for the confirmed risks, and that the safety systems have suitable defence against intended and unintended compromise.
- Occupant restraint system assessment and development of upgrade systems.
- Documentation, traceability and quality control management systems.

Pre-purchase to operation ready – “Owners Engineer”

- Detailed condition assessment – structural, mechanical, materials and electrical (compliance and end of life)
- Geotechnical suitability of site
- Compliance to Australian Standards and Workplace Regulations
- Third party design verification for new and imported equipment.
- Project management & engineering.

Design, registration & modification

- End of life & superseded component replacement through re-design & upgrade
- Reliability upgrades through component and system (mechanical and electrical) replacement
- Material property assessment and alternatives.

Asset life extension & performance optimisation

- Term of Life – adequacy and condition of the ride structure & foundations, mechanical condition and longevity of moving parts, electrical safety category assessment and compliance, calculated remnant (structural & mechanical) life
- Corrective and compliance works planning, instruction and future investment schedule
- Cycle time optimisation – maintenance and operational
- Maintenance management strategies for fatigue sensitive structures and equipment
- Loading cycle determination
- Fatigue analysis (crack growth fracture mechanics)
- Site survey and foundation stability assessment/tracking.

