

Staehle Consulting Experience

Aerospace

- Wingbox SCC
- Landing gear structural
- SCC of Apollo oxidizer tanks
- SCC of booster fuel tanks

Appliances

- Air conditioner corrosion
- Hot tub temperature control

Architectural

- Underground piping corrosion

Automotive

- Frame corrosion
- Bumper plating corrosion
- Fastener SCC

Bio-medical

- Orthopaedic implants
- Heart valves
- Pacemaking equipment
- Pumps
- Heart stents

Bridges

- Corrosion of reinforcing bars
- Degradation of concrete

Buildings

- Post tension tendons
- Brick panels
- Reinforcing rods
- Underground corrosion
- Weathering steels
- Microbiological corrosion
- Water distribution

Chemicals

- Condensers and heat exchangers
- Turbines
- Processing vessels
- Underground corrosion
- Storage vessels

Consumer goods

- Spray cans
- Bungee cords
- Deer stands

Electronic

- Controls for system operation
- Compatibility of electronics with environments

Food

- Rusting of bottle tops
- Corrosion due to food chemicals
- Corrosion of food processing equipment

Fossil Power

- Water side corrosion
- Fire side corrosion
- Turbines
- Heat exchangers
- Condensers

Geothermal Energy

- Extraction of energy from volcanic magma
- Extraction of energy from hot springs
- Materials of construction
- Corrosion
- Deposits

Insurance

- Corrosion exclusion
- Extent of coverage

Legal

- Technical expert
- Experimental support

Manufacturing

- Hot isostatic pressing
- Surface treatments
- Heat treatment effects
- Welding effects
- Cold formation

Nuclear Power

- Fuels and cladding
- Zirconium properties
- Heat exchangers
- Condensers
- Pumps
- Piping
- Turbines
- Storage tanks
- Storage of radioactive waste

- Storage pools
- Pressure vessels
- Fires

Paper manufacturing

- Corrosion by concentrated alkaline solutions
- Corrosion by highly oxidizing solutions

Petroleum exploration

- Corrosion by sulfur-containing environments
- Mercury corrosion and removal
- Drill bit materials for H₂S Service

Petroleum refining

- Heat exchangers
- Explosions
- Corrosion of vessels and piping

Pipelines

- Explosions
- Corrosion from outside
- Stress corrosion cracking and corrosion fatigue

Shipping

- Corrosion fatigue of propellers

Solar Energy

- Focused towers
- Home heating

Sporting equipment

- Bicycle pedals
- Deer stands

Water distribution

- Corrosion of distribution lines
- Blue water
- Release of toxic species
- Microbial corrosion

Water treatment

- Release of corrosive species
- Requirements for performance