

# Reliability & Failure



## Costly Breakdowns

An entire company relied upon a drilling machine. But every 6 months, without warning, a 'dustbin sized' gearbox would explode; forcing the entire business to a halt. Sourcing custom gears and rebuilding took at least 2 months each time. The manufacturer was at a loss & deigned responsibility. A 1,400 employee business was at risk.

## *Reliable & Cheaper*

### Azteck's Role in a Permanent Solution

This complex unit had 2 large motors and over 30 output shafts; the OEM manufacturer and maintenance team were at a loss (and had failed 3x to make it reliable).

- Δ Painstaking and detailed fault analysis: (greasy hands, experience and computer analysis).
- Δ Rapidly procuring replacement parts.
- Δ Azteck identified the design fault.
  
- Δ Azteck modified the machine ( in 30 minutes ).
- Δ Azteck's solution was Cheaper than the original and Never Broke Down again.
- Δ The Savings (by not breaking down) were enormous- true company-wide impact.

### A Fresh Eye & New Experience

The 'home team' often have huge difficulties with 'seeing' the actual and potential faults. Bringing in different eyes, different experiences and expertise can be shockingly powerful.

*“A problem can not be solved from within the circumstances that gave rise to the problem”* 1993

### Application & Expertise

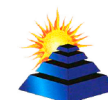
Azteck's 'products & business' expertise is in both in failure investigation and design.

- Δ Product Design such as: electrical switches  
handheld equipment.
- Δ Manufacturing Machines.
- Δ Complex failures in huge Plant: food  
chemical etc.
  
- Δ Total Productive Maintenance – the art of 100%  
reliability, availability and perfect products.
  
- Δ 'Fool-proofing' & Simplifying Business Processes.
- Δ Processes Mapping & Value Stream Analysis.
  
- Δ Failure Mode & Effect Analysis (FMEA).
- Δ Accident and Failure Investigation.
- Δ Expert Witness.

Call us to discuss Product and Business Process Reliability.



**...providing Useable Expertise**



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