


## “Manufacturing Chaos Fatigue” the Australasian Epidemic

Addressing  
the risk reduction requirements,  
and the cure for  
Chaos Fatigue



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## “There will always be fatigue in the workplace”

- Work related fatigue
  - Rotating shifts
  - Undesirably long overtime worked
- Non-work related fatigue



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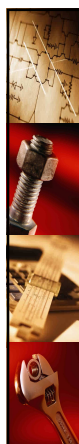
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## What is “Manufacturing Chaos Fatigue?”



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## “Manufacturing Chaos Fatigue” and the Consequences

- Extreme reactivity
  - Time not available to plan and schedule
  - Stuck in a reactive cycle
  - Keeping the plant running at all cost
- Staff turn over.
- Lack of complete manufacturing.
  - Renders Lean ineffective.
  - Uncompetitive cost of goods.
  - Countries with cheaper labour and compliance cost make our products.

**SMS**  
Systematic Manufacturing Systems™

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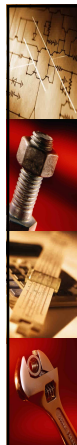
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## So what's the cure?

**SMS**  
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## The Reliability Logic

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    graph LR
      SOP[S & OP] --> PR[Plant Reliability]
      PR --> RPO[Reliable Plant Output]
      PR --> ProcR[Process Reliability]
      PR --> EquipR[Equipment Reliability]
      EquipR --> PBQ[Plant Build Quality]
      EquipR --> ME[Maintenance Effectiveness]
  
```

**SMS**  
Systematic Manufacturing Systems™

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## The Evolution of Maintenance™




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## Where Do You Start? Build the Foundation




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## Building the Foundation

- Ensure that the people are safe
- Structure
  - *Right people in the right roles.*
  - *Clearly defined roles and responsibilities*
- Process and procedure
  - *Create a work flow process through a CMMS system*
    - *Write procedures that clearly describe.*
      - *Method of communication.*
      - *Work flow process.*
      - *Work order priority.*
    - *Train everyone on the procedures and insist they are followed.*




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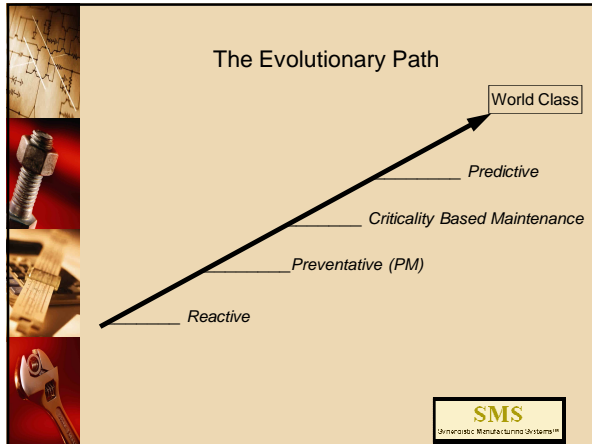
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The Drive for World Class

“More often than not the companies that try, get it wrong”

SMS  
Symplectic Manufacturing Systems™

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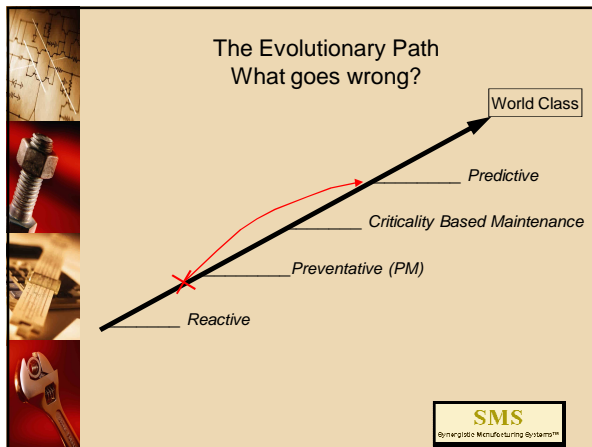
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Your Maintenance people must understand

What Maintenance is!




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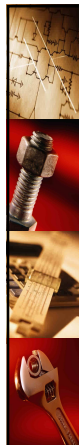
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Maintenance is:

*“Work undertaken that sustains or improves the reliability of a Plant”*




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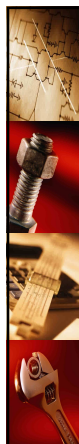
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The Current Tasks of Maintenance

- Improving the operation of a machine
- Fitting and adjustment of change parts.
- The installation of new equipment.
- Responding to breakdowns.
- Maintenance work that sustains or improves the reliability of the plant




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## Maintenance Strictly Is Not

- Improving the operation of a machine
- Fitting and adjustment of change parts.
- The installation of new equipment.
- Responding to breakdowns.

● Maintenance undertake these activities but they are not maintenance




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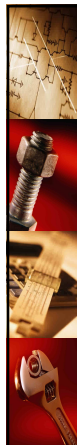
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## Standards and Consequences

- AS/NZS 4801:2001  
OH&S Management Systems

Queensland  
Workplace Health and Safety Act 1995.

Victoria  
Occupational Health and Safety Act 2004




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## Compliance to Standards

- 90% of site we visit do not have systems that comply!
- None of the site we have visited comply regardless of their systems.
- Many of these sites did not realise they didn't comply




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## SMS Permit to Work

- The first compliance discipline.
- Starts the departments talking to each other.
- Too simple to not do.
- Good enough to make people safe.



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## In Conclusion

- The first step to fixing 'Manufacturing Chaos Fatigue' is enforcing safety discipline.
- The better we maintain our plants the safer and less fatiguing they are to staff.
- We need to do this to keep industry in our country.



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## Thank you

Any questions



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