

# OPERATIONAL EFFECTIVENESS

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## HOST DETAILS

- Organisation: Alcoa World Alumina Australia
  - Location: Pt Henry Smelter – Pt Henry
  - Facilitator: Kate Mein
  - Nominal Work Hours: 08:30 am - 4:30 pm
  - Induction: Wednesday 30-Nov-05 08:00 – 12:00
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## BACKGROUND

- Do you know what the most likely causes of your production delays and losses are in your factory? OEE is a method that is used to capture information against delay and loss codes to enable improvements to be made in utilising your assets.
  - OEE - Overall Equipment Effectiveness. OEE is defined for a production process as 'Availability' x 'Rate' x 'Quality'. It generally applies to that period for which you plan to run the production line. So, if the process is 95% available, operating at 95% of ideal rate, and producing a first pass quality yield of 95%, then its OEE is calculated as:
  - $OEE = 95\% \times 95\% \times 95\% = 86\%$  asset utilisation.
  - OEE is not just a number for relative comparison of equipment performance. The real benefits come from using the delay/loss codes of OEE, which lead to root cause analysis and eliminating the causes of poor performance. It entails collecting, trending, and analysing the right data on your critical equipment performance and reliability.
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## OUTLINE FOR THE WEEK

- Receive a plant familiarisation tour and an overview of how OEE fits into the Reliability Excellence Strategy.
- Work in an area where OEE methodology has not yet been set up - this will be assigned to you. You can learn from how it has been implemented in another area (the pilot area) and we will be looking for how we can transfer the learnings to other areas.
- Your work will include collecting data, trending and analysing data from your assigned area.
- Prepare a short presentation to be given at the end of the week to management of your findings and recommendations.
- A facilitator will work with you to ensure this is a successful week for our Science & Technology In Industry Program.