



Overall Equipment Effectiveness (OEE)

OEE – as a key measure of efficiency in production processes – has the potential to improve plant performance, asset utilisation and bring in significant and virtually immediate Return on Investment.

The results are most evident in businesses that approach production from a mindset of **Continuous Improvement**, since the adoption of OEE systems needs to be complemented by a determination to address the key issues impeding optimal performance that are identified by the OEE approach.

Overall Equipment Effectiveness (**OEE**) at its simplest form is the cumulative impact of three factors – Availability, Performance and Quality

Availability = *Actual Production Time / Planned Production Time*

Performance = *Current Run Rate / Ideal Run Rate*

Quality = *Good Product / Total Product*

OEE = Availability x Performance x Quality

With OEE as an analysis tool it can be used to help businesses benchmark their operations against world-class performance. It is a fact however that a simplistic comparison can be misleading if the sector-specific variations (based on industry, type of equipment, level of customer demand etc) are not factored in.

Overall, the following OEE benchmarks are recognised as being ‘best practice’ OEE scores for a continuous manufacturing process: -

OEE Factor	World Class Score
Availability	90.0%
Performance	95.0%
Quality	99.5%
OEE	85.0%

However our experience has been that most production operations typically operate with OEE scores in the range of 60 – 70%, indicating that most organisations have significant scope for improvement.

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