CHEMICAL PLANT PRODUCTIVITY DOUBLES AFTER THREE MONTHS OF OVERALL EQUIPMENT EFFECTIVENESS (OEE) MEASUREMENT

YOU CAN'T IMPROVE WHAT YOU CAN'T MEASURE

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ABSTRACT

Manganese ore processing is a hot, hard and idrty business. Black, abrasive powder everywhere accelerating the wear and degradation of just about all equipment. As a result, it was easy to accept and understand machine failures and reduced production. This led to breakdowns, minor stoppages, quality rejects and startup losses that lower production. These practices became so common routine that the specific elements of an OEE program weren't even measured.

But when a conscientious effort was conducted to measure OEE and identify where the losses were occurring, the results led to a surprising doubling in the level of production.

ABOUT THE AUTHORS

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This paper describes the efforts that led to this OEE measurement implementation. The presentation and accomp anying slides will include the following:

- Brief introduction to the business of Erachem-Comilog, Inc.
- Production history of the roaster system four years prior to the commencement of the OEE project
- Benchmarking - identifying of the need for improvement
- Research efforts leading to the understanding of OEE concepts
- Brief introduction of OEE basics
  - identifying the six big losses of production equipment
  - defining OEE using availability, throughput and quality
  - educating the workforce in order to promote acceptance of the OEE concepts
- Development of the OEE worksheet
  - what information must be tracked and how often
  - who maintains the information
- Implementation of the OEE program
- Direct results as a result of measuring OEE
- Interfacing OEE with Reliability Centered Maintenance (RCM) and CMMS
- Discussing lessons learned
- New opportunities for improvement as a result of this project