Process Reliability and Waste Management

Controlling Costs in Today’s Manufacturing Environment

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What is Process Reliability?

• Process reliability is a method for identifying problems, which have significant cost reduction opportunities for improvements.

• The normal process reliability technique is a look down method. It uses both probability plots and management reports.

• Line personnel always look up at the process from a low altitude where the view is overwhelming from a maze of problems.
Process Reliability Requires…

• Clearly Defined and Communicated Expectations which are Reasonable
• Accurate Real Time Data Collection Regarding Actual Performance
• Data Analysis which Allows Comparison of Performance Against Demonstrated Capacity
• Creation and Tracking of Targeted Action Plans
Process Reliability Business Plans

• PR-WM Helps Managers Create Full Plant Business Plans Based on Demonstrated Capacity
• Business Plans are then Created for each Process Reliability Operation to Support the Plant Business Plan
• Real Time Performance Against the Business Plan is Always Available
Demonstrated Capacity is based on the elimination of lost capacity due to the following factors:

- Unplanned Downtime
  - Machine
  - System
  - Process
  - Etc
- Waste / The Creation of Non Salable Products
- Slow Down Factors effecting Run and Set Up
The hardest part of any reliability analysis is getting the data. However, process reliability techniques use data available at any plant—daily output of prime quantities produced. Production quantities are precursors for money, and thus restriction in output is very important for every profit driven operation.
What Data Must Be Collected?

Specific Details of Downtime, Waste and Machine Slow Downs

- Occurrences
- Length of Time
- Classification
- Cause
- Location
Management Dashboard

- Process Reliability Performance Rating
- Lost Production in Area, Pieces, Revenue and Projected Profit
- Total Cost of Waste, Downtime and Slow Down
- The Causes which when Solved have the Greatest Potential for Cost Containment
- Drill Down Capability to the Lowest Details
- Accurate, Brief and Clear Communications
Action Plans

1. Provide the Ability to Identify the Expected Results and Track Performance
2. Provide the Ability to Track Ancillary Performance Areas
3. Performance can be Displayed on Display Boards in the Plant
4. Provide the Basis for Continuous Improvement
Integration with Productivity Awareness Stack Lighting Systems
Real-Time Production Dashboard
Thank You for Your Time and Attention