Six Big Losses

ENGINEERING POSSIBILITIES

Availability Losses

1 Breakdowns

- Unplanned Maintenance
- Equipment Failures
- Tool Malfunctions
- Missing Information

2 Setup & Adjustments

- Setup & Changeovers
- Material Shortages
- Warm Up Time
- Equipment Adjustments

Performance Losses

3 Small Stops

- Product Flow Disruptions
- Blocked Sensors
- Short Cleaning Actions
- Misfed Components

4 Reduce Speed

- Operating Below Capacity
- Equipment Wear
- Inefficient Operations
- Rough Running

Quality Losses

5 Start Up Rejects

- Scrap Product
- Rework
- Rejects duing steady-state start up operations

6 Production Rejects

- Scrap Product
- Rework
- Rejects duing steady-state production operations