SCIENTIFIC COST REDUCTION MANAGEMENT TOOL FOR MANUFACTURING.

(DATA ANALYTICS SOFTWARE- AN INDUSTRY 4.0 SOLUTION)

Effective Cost Reduction management in High-Mix, Small Lots Manufacturing is crucial for survival. This tool offers an effective scientific solution for Cost Reduction Planning and ROI Measurement and Tracking of all Manufacturing Improvement Projects (eg: Lean 6S, Process Improvement, OEE Loss improvement, etc...).

The Software merges Manufacturing Costs with Manufacturing Machine-level Indices by using proprietary formulas blending Kai'zen Target Costing with OEE losses (see diagram) and enhanced with Modeling Algorithms and provides the following benefits.

1) 100% accurate monthly Product-by-Product Factory Unit-Costs for Pricing strategies.

2) Shows the Gap between individual Current Product Cost versus the No-Loss Ideal Cost at Individual Process levels with drill-down to individual machine levels to show exactly where the losses are in both technical terms and costs.

3) Provides Modeling of What-If scenarios of OEE Losses and Manufacturing Wastes to measure the ROI impact of proposed Lean Manufacturing improvement projects and then tracks the ROI of Lean Projects in "actual" costs and "baseline-condition" cost to eliminate "noises"

4) Provides Digitalized Visualization of selected Manufacturing Indices to promote the Transparent Factory

5) It has a Predictive Maintenance database module for Predictive Maintenance implementation.

[Figure 1]