



AGMPM – Quality & Lean Card Nr 6

What?: Lean Analysis Part 2

Eco6s
 Statistical Analysis
 Environmental Analysis
 Technical Analysis

Thales (590 BC): Measure Time (TEMPS) to analyze the Space (Gnomon)						
WHAT	In Analysis Part 1, the System is measured in 3Q. In the Overall Efficiency Analysis: the System is analyzed up stream, core stream and down stream to review and adjust as lean as possible Specifications.					
	INPUTS X	PROCESS STEPS X	OUTPUTS Y-PHEN	OUTPUTS Y-FUNCTIONS	VALUES RATIO Y/X	STATISTICS X/Y & dx,dy
	ANALYSIS for ENERGY PACK MATERIAL PACKED PRODUCT	ANALYSIS for PROCESS PARAMETERS	ANALYSIS for PHYSICO-CHEMICAL PHENOMENONS	ANALYSIS for Multi-Functionnal System	ANALYSIS for VALUES $V = Q/C$	ANALYSIS for Statistical Distribution of $x, dx, \Delta x, y, dy, \Delta y$ for Energy, Material, Process
	X-EN X-MAT X-PROD	X-PRO	Y-PHEN	Y-FUN	Quality: Y / Costs: X Ratio: Y/X; dy/dx $f(x), F(x), f'(x), f''(x)$	Binomial Exponential Normal ...
	The Overall Analysis allows to model the System in differential, polynomial & thermo-dynamical Equations to pilot & predict Performances of the System					
	SPECIFICATIONS for INPUTS X-EN X-MAT X-PROD	SPECIFICATIONS for X-PRO (Thermo-dynamical Laws)	CARACTERISATION for Y-PHEN (Thermo-chemical Laws)	SPECIFICATIONS for OUPUTS Y-FUN (Statistical Laws, Natural & Human Laws)		
Specified Value x Specified Variation / Limits $\pm dx, \Delta x$	Specified Value x Specified Variation / Limits $\pm dx, \Delta x$	Specific Value y Variation / Limits $\pm dy, \Delta y$	Specified Value / Target Y Specified Variation $\pm dy, \Delta y$			
WHY	Too much intoxicates the System. Too less stress the System. The Lean Regulation of the Specification(Supplier, Internal, Customer) will allow the System to respire, sustain & evolve without overcharge.					
HOW	<p>The TEMPS®ECO6S Tool Box will help you to determine the 3 Equations System you need to pilot and predict the System Performances in linking the X Material and X Process Parameters to the Y Functional Responses of your critical Variables (Specifications).</p> <p><u>3 Equations System to pilot your Lean Specifications</u></p> <p>1) Pilot with your differential Equation $f(x)=y$ and $f(x+dx)= y + dy$ in controlling your deviation/variation dx and dy.</p> <p>2) Pilot with your polynomial Equations $y = a_0 + a_1X1 + a_2X2 + a_{12} X1X2$ in identifying the Influence Factors a_i of your Inputs Parameters.</p> <p>3) Pilot with your thermo-chemical Equations to characterize the Sealing Quality, the Compatibility Pack & Products, the Specifications ...</p>					
WHO	Quality, R&D & Industrial Team to Characterize System Performances					
WHEN	Lean Analysis Part 2 to be done after Analysis Part 1 (FMEA Tool)					