

Organization: Hospital Products Manufacturing

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Title: Continuous improvement in the manual assembly line of hospital equipments

Problem / Causes:

In hospital equipment line production, was analyzed an increase in production stops after a new method introduced.

According to Lean Methodology, Joint Application Development and tools quality, a study was carried out to identify the process with high impact on the line and compare with seven Lean System waste.

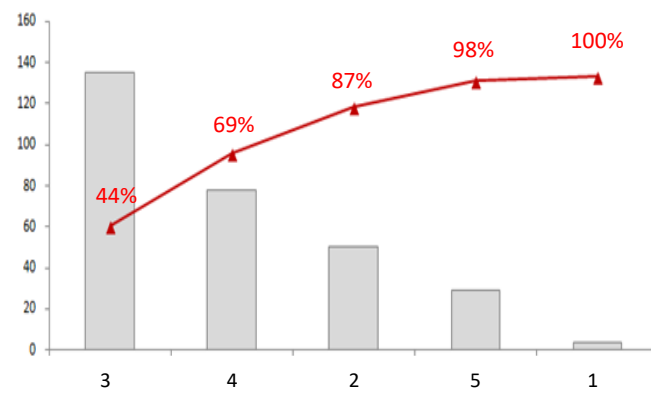
Current Situation Analysis:

Due to frequent disruptions in the assembly line of hospital equipment, the need has been make a meet with the team, using JAD methodology, with the aim of listing the main causes and treat the main focus that has greater influence on production

A brainstorming meeting was done and was elaborated a Pareto Graphic relating the principal problem with the frequencies that they happens.

In addition, an analysis was performed of the items related to the Lean waste classifications, represented by the table below:

Problems	Categories						
	Defect	Over production	Wait	Transport	Operations Drives	Inappropriate Processing	Stock
1					●		
2	●						
3	●					●	
4			●				
5			●				

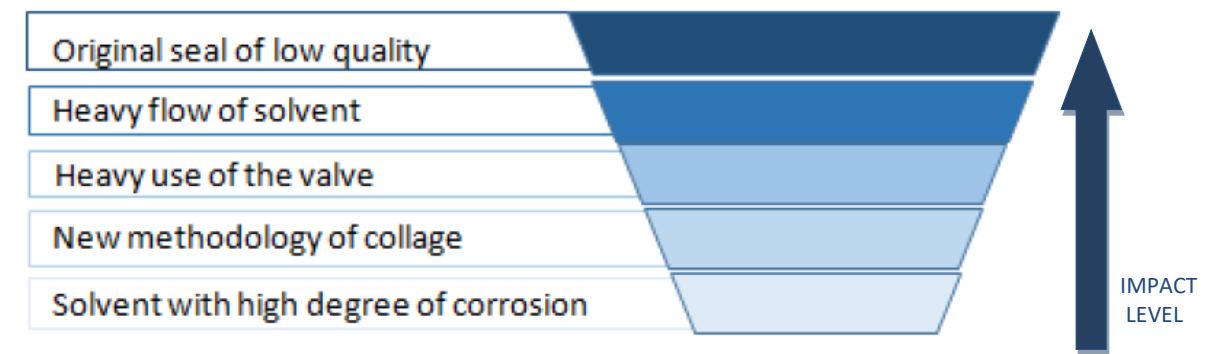


Caption: 1-Non-standard repetitive movements/ 2-Employees outside the workstation/ 3-Solvent leakage at workstation/ 4-Workstation Supplies/ 5-Problems in treadmill production

Tools Used for Solution:

- *Lean Methodology;
- *Preliminary risk analysis;
- *Brainstorming;
- *Ishikawa Diagram;
- *Joint Application Development Methodology;
- * Pareto Graphic.

Using Ishikawa Diagram was elaborated a system has been developed with the possible causes for solvent leakage, according to the impact level. Aiming at the optimization of the production flow, the development of new seals for the workstation is proposed.



Action Plan:

Activity	Responsible	Month 01	Month 02	Month 03	Month 04
Contact suppliers	Purchase department				
Develop prototypes	Suppliers				
Perform tests	Engineering				
Set the best option	Engineering				
Conduct meeting with management	Engineering				
Prepare purchase order	Purchase department				
Introduce the new seals on production	Production				
Control operations	Production				

Results obtained and Conclusions:

Was identify that the solvent leaking represents the high influence on production line and it was related to two kinds of waste of the line (defect and inappropriate processing). Therefore, propose an introduction of new seals for the workstation in the system to eliminate the leaking and consequently minimize material waste, production costs, reworking and improvements to occupational health.