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Etude diagnostic sur l'implémentation des concepts de « Lean Manufacturing » à SMO dans le cadre d'une approche HTO

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SMO is the Swiss Manufacturing Organization of the Medtronic group, the world leader in medical technology. Although SMO is one of the best manufacturing facilities of implantable devices in the world, improvement is always a major strategic target. Lean Manufacturing is a system, the main purpose of which is to eliminate various kind of waste within a company through improvement activities (see *Figure 1*).

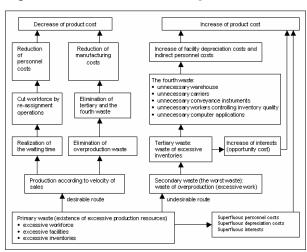


Figure 1: Processus d'élimination du gaspillage pour la réduction des coûts

One of the companies of the Medtronic group, Xomed, has successfully implemented Lean Manufacturing methods and improved its performance. The objective of this project was to estimate and measure the possibility of implementing Lean Manufacturing concept at SMO.

The process used was to first evaluate the actual situation of SMO in term of material

and information flow, workforce, quality management and equipment. One of the methods used for this evaluation was the Value Stream Mapping (see *Figure 2*). It shows all the actions (both value added and non-value added) currently required to bring a product through the production flow.

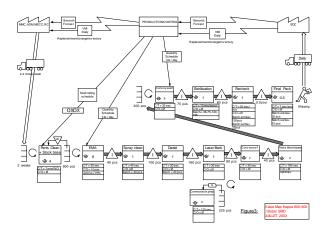


Figure 2:Value Stream Map of SMO

Based on this evaluation and with the help of the HTO (Homme-Technique-Organisation) approach, which focuses on socio-technical optimization, Lean methods were proposed to SMO to improve the whole production process with implementation plans:

- One short term plan which conserves the actual Layout of the plant and optimizes resource efficiency.
- One long term plan with the aim of installing autonomous U-shape lines.