

Title diploma thesis Optimization of a manufacturing process



The Light Side of Life



Students Michael Imboden & Silvan Horat

Expert Frederic Sala

Lecturer Urs-Peter Schild

Client Reima Ollila, Greenled Oy

Field of study Mechanical engineering / systems engineering

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Initial situation Greenled is a Finnish company providing LED lighting solutions.

The products are assembled manually in five assembly lines. A

5S system has already been implemented.

Task/objective The main goal is to create a concept for the One-Piece Flow

implementation. To do so, it's necessary to analyse the current work content and corresponding times. Additionally, automation possibilities shall be clarified, and an employee skills matrix

created.

Results/Benefits All goals could be reached. Multiple One-Piece Flow test runs

have been carried out with the conclusion that it could be implemented without big changes. The lead time can be shortened significantly and the flexibility increases. The skills matrix is in daily use and most possibilities of partial automation

turned out as not feasible or already in planning.