

# Proposals to improve product quality at Jurgens Ci

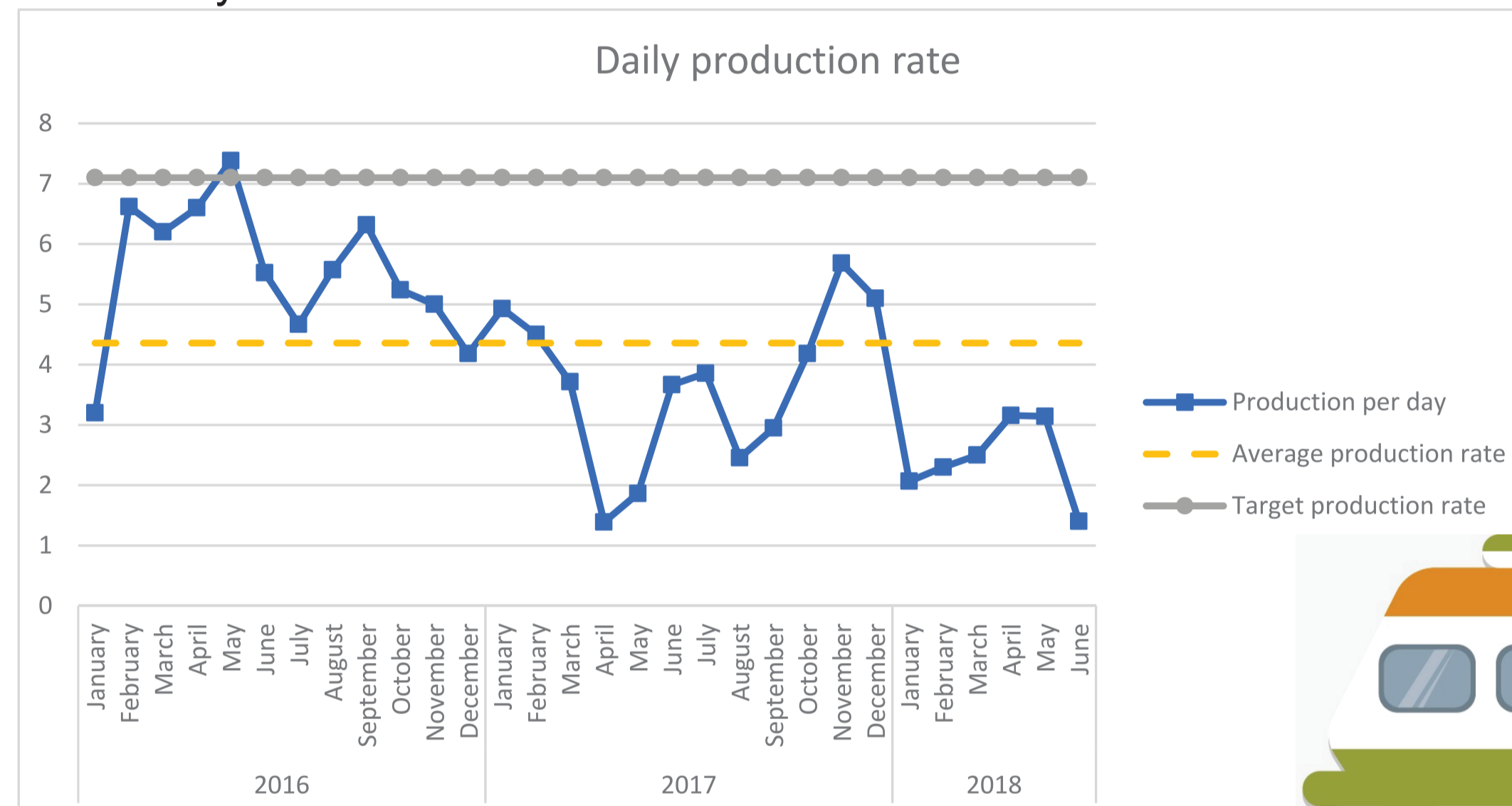
## 1 Background

Jurgens Ci Pty. Ltd. is the oldest and largest manufacturer of caravans in South Africa. Over a history that spans 60 years, the company has assisted in driving the South African domestic tourism market and has responded to changing market needs by expanding the product range the company has to offer. Jurgens Ci has a very wide variety of products across the different product ranges.



## 2 Problem statement

The biggest problem Jurgens Ci is facing is the failure to reach the production targets in the factory, which is exacerbated by wasteful activities within the production process. The goal of the project is to investigate the process, to identify sources of waste and factors contributing to the low production rate and to make recommendations for improvement. The aim of the project is to recommend extensive quality improvement measures that will ensure the decrease and prevention of quality related issues on the assembly line in the future.



## 3 Project Approach

**PHASE 1** Define opportunities for improvement in the factory

**PHASE 2** Detailed study to identify the causes of the problems

**PHASE 3** Literature study of existing solutions

**PHASE 4** Recommended solutions for identified problems

## 4 Investigation

The investigation revealed unbalanced cycle times within the assembly process.

The review of the quality inspection area revealed that the most problems are caused by mistakes made by the workforce, the methods used by them and the way they handle the products.

Shortages of crucial parts on the subassembly and assembly lines cause stoppages and idle time that has a domino effect throughout the factory.

Chronic waste is contributing to the low production rate within the factory and the wasteful activities are built into the process from the product and process design phase.



## 5 Recommended Solutions

### Re-Establish Customer Needs

Jurgens Ci has to revise the needs of their customers in order to get the right perspective on the current products and the products that the customers would like to have enter the market. This can also help the company to restrict their product range.

### Redesign Product

The redesign of the products will permit Jurgens Ci to create the right product specifications and tolerances that both meets the customer's needs and falls within the capability of the operating forces and the manufacturing process.

### Redesign Process

The standardization of the process is of utmost importance to ensure that the workforce knows exactly what to do and to improve the flow of the products through the factory.

### Suppliers

Outsourcing some of the subassembly functions to external suppliers will relieve some of the pressure from the factory. This will allow the factory to focus solely on the assembly process.

### Operations and Control

Replacement of the current manual quality system with an electronic quality monitoring system will ensure accurate, processable and up to date data on the quality status of the factory.