

**Company:** Toyota Material Handling Sweden  
**Location:** Mjölby, Sweden  
**Type:** Original Equipment Remanufacturer (OER)  
**In reman:** Since 2003  
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**TOYOTA**

TOYOTA MATERIAL HANDLING SWEDEN



## Product

Forklift trucks

## Core Sourcing

Around 90% of the used fork lift truck comes from rental agreements and the rest is bought from the market.

## Business Model

Most of the forklift trucks are deriving from the market from different kinds of rental models. These rental contracts run from one month up till 10 years. Usually the newly manufactured forklift trucks are sold on a long-term rental contract and then sold several times on short-term rental until sold as used forklift truck or for being scrapped and then only the material value is returned. The advantage of having this kind of business model is mainly that the company keeps the control of the forklift trucks while being used and reused several times. It keeps a good relation to the customers. A challenge is though is that the company takes more risks than in normal traditional sales. This is e.g. the case when companies using their forklift trucks are get bankrupt. By providing the market remanufactured forklift trucks the company reaches new customer segments i.e. those who are not willing to buy new forklift trucks. These kinds of companies could for example be new started companies that are not willing to invest much in equipment.

The forklift trucks are being remanufacturing according to the following five process steps:

- 1) **Inspection** at the gate to determine which class the used forklift is going to achieve from 1 to 5 depending on e.g. age, wornness, and ability to be sold to a new customer.
- 2) **Cleaning** the forklift trucks in an environmentally controlled manner,
- 3) **Repairing** parts that needs to be repaired, changing parts that needs to be changed, changing wear and tear parts. The new spare parts are ordered from the Toyota parts company that is located a few kilometers from the remanufacturing facility which makes the lead time fairly short.
- 4) **Repainting** to meet the new customer demands, and
- 5) **Testing** the remanufactured forklift truck to ensure it meets the new customer requirements.

The value for the customers is that they get price-worthy forklift trucks that have been treated well during their previous usages under the control of Toyota. New forklift trucks come with a 12 months warranty while the remanufactured forklift trucks come with a warranty between 3 and 9 months. The remanufactured forklift trucks that are given a warranty of 3 months are sold at a price of 60% of a newly manufactured forklift truck while a remanufactured forklift truck sold with 9 months warranty is sold at a price of 80% of a newly manufactured forklift truck. Usually the same sales channels are used for selling both new and remanufactured forklift trucks but in some cases the remanufacturing customer are more knowledgeable and ask more questions over phone about their remanufactured forklifts before buying it.

## Economic Benefits and Challenges

The economic benefits for the remanufacturing operations are to retrieve good cores that are easily remanufactured and also more important easily sold to a next customer. It is also important for the business that the remanufacturing staff have the knowledge of knowing what value the forklift truck have in order to put down the right amount of time on their manual remanufacturing work.

A main challenge for the remanufacturing operation in Mjölby, Sweden is that the manual work creates high costs which need to be balanced with the actual profit made on each and every forklift truck that enters the remanufacturing facility for being remanufactured, sold as is, and being scrapped for material recycling. Another challenge is how to deal with the uneven amount of used forklift truck entering the remanufacturing facility. Another challenge is that the sales companies are traditionally mostly still measured in how many new forklift trucks being sold but maybe this is about to change in the future.

### **Environmental Benefits**

By having the forklift trucks remanufactured several times environmental benefits are achieved. This concerns for example material resources used and reduced greenhouse gas emissions.

### **Social Benefits**

Social benefits of the remanufacturing operation is that it creates much work since all processes in the remanufacturing process is done manually. The forklift trucks are too complicated to perform automation on. Currently there are 25 people working within the remanufacturing facility in Mjölby, Sweden. In each European country has a sales company who is in charge of approximately one remanufacturing facility (FMC). This means that there are around 35 remanufacturing facilities within Europe.