#### **Business Model Case Description #19**

Company:	robotif GmbH
Locations:	Harsdorf, Germany
Туре:	Independent remanufacturer
In reman:	Since 2009
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# Product

Industrial robots from Adept, Bosch, Denso and Staubli.

# **Core Sourcing**

Most industrial robots (around 90%) that come in for remanufacturing are remanufactured on-demand of an industrial robot user who is in need of remanufacturing. The rest (10%), is bought from the market through E-bay, customers etc.

# customers etc. Business Model

The best way for the customers of robotlf to keep their

industrial robots working is to have them remanufactured. If the industrial robots are not remanufactured emergency repairs are needed and this is not economic over time. Another option would be to buy a new industrial robot with all new installation costs that comes with it. Therefore, having the industrial robots remanufactured by robotif. The customer value is to have their manufacturing machines in business fast. By remanufacturing the industrial robots can run longer time than specified from the OEMs. In order to have the industrial robots remanufactured over time the customers need to tell robotif that they have the industrial robots so that robotif can be prepared to perform emergency repairs and/or remanufacturing on them when needed.

The remanufacturing process consist of the following steps: After robotif receives a robot for repair, a visual inspection of the robot for external damage is made. Thereafter, a technical inspection is accomplished, consisting of individual test of all components to function and durability. If there are any defective components, it will be checked which components need to be repaired or replaced, to find the best economical solution for the customer. The result is an individual, customized offer. After receiving the order, robotif starts with the disassembly, cleaning and overhaul or repair of the robot and defective components. The robot will be assembled, measured and a 24h test run is made. After the successful completion of the test run, a final inspection takes place. At last, robotif organizes the packaging in special robotif safety-boxes and freight, so your robot arrives fast and safely at your company again.

The key resource is the staff. The staff is being trained from easy repairs until being able to do advance remanufacturing. It is important for the staff to understand how to remanufacture an industrial robot to make into a reliable machine.

The most important driver for robotif is to fulfil customer value. The customers understand the value and pay for it. Some customers ask for environmental calculations but to get that they have to pay for the calculations so then they avoid it.

Economic risks are few – it has happen one time that a company have gone bankrupt so that was a small loss but not much overall. A challenge could be in recession time when there could be hard or even impossible to buy new spare parts sine the spare part suppliers having shut down their manufacturing. This means that spare parts needs to be found in already existing industrial robots.

The biggest challenge for robotif is to get the small amount of spare parts that are needed for their business. Another problem is the computerisation of parts. For example, previous industrial robot had amplifiers easily changed but current design has the amplifiers integrated in the computer systems. Therefore, they are much harder to change if broken.

### **Economic Benefits**

The customers pay well to achieve their value of having their industrial robots working longer time.



### **Environmental Benefits**

There are environmental benefits but they have not been calculated.

#### **Social Benefits**

The business keeps around 20 people at work in a smaller city, Harsdorf, in Germany.

# **Advanced Materials Recovery**

The wiring is containing advanced materials from the Aerospace industry such as PTFE Kapton or PTFE with glass fibre braid.