

## Case Study:

# Continental AG

The Continental AG is an international producer for car components, it has also a remanufacturing division for instrument clusters.

## Company and Business Model

Continental is an international technology company with more than 208,000 employees in 55 countries and five divisions: Chassis & Safety, Interior, Powertrain, Tire, and ContiTech. In Babenhausen in Germany, the Continental AG has a plant to produce and remanufacture instrument clusters for cars. To provide the remanufacturing process with cores, the company can use its well developed network to automotive manufacturers and its service stations.



The collecting of cores and the selling of remanufactured products is managed by the central logistic center of the car manufacturer. The customer comes to the service station of his car manufacturer with a damaged instrument cluster. After changing the instruments, the damaged cluster is sent back to the car manufacturer's central logistic center. From there, a few deliveries per month with huge unit numbers are delivered back to Continental. Due to that, Continental is getting defined types of instrument clusters back for their own remanufacturing process.

By using this business model, the circular economy has no connecting points for

independent remanufacturing companies.

## Remanufacturing Process

The most important part of the remanufacturing process in this case is the connection between the remanufacturing and the development division. If the remanufacturing division identifies statistical anomalies or typical defaults at the cores, they forward this information to the development division to adjust the design parameters of new products. In return, the development division offers a data base with information about important software and hardware updates or technical spare part which should be changed in remanufacturing process. This information is available for every series and type of Continental instrument cluster.

By using the database in the remanufacturing process the remanufacturing division knows, what hard- and software updates should be done for each model, directly from the development experts.

The first step in the remanufacturing process is to scan all the incoming instrument clusters via barcode. After that they make a selection, based on the model and the proposed rectifications from the the division responsible for product development. For the appropriate instruments, the next steps are the software reset and update and the disassembling. After that, the

remanufacturing of worn parts the manufacturing of pointers and the reassembly follows. The last steps are the final test and packaging.

## Unique Characteristic

Continental's unique characteristic is the co-operation between remanufacturing, development and quality department.

Additionally, after end-of-production of a product series, Continental can use the original technical systems for remanufacturing processes.



## Contact Continental AG



Amir Mohseni

Telefon +49 (0) 941 / 790 - 5296

Fax +49 (0) 941 790 / 995296

Amir.Mohseni@continental-corporation.com

## Contact Fraunhofer



Steffen Butzer

Telefon +49 (0) 921 / 78516-420

Fax +49 (0) 921 / 55-7305

steffen.butzer@uni-bayreuth.de