



## Dismantling and Recycling

### Dismantling Analysis

Complex goods in both the automotive as well as the electronic sector require in excess of numerous individual articles during the course of assembly, articles consisting of the widest imaginable range of materials. The breakdown and analysis of each individual component during the course of a dismantling analysis allows obtaining the information necessary for the creation of:

- Dismantling Information
- Material Balances
- Determination of Recycling Quotas

For tec4U, the acquisition of a meaningful database comes right at the start:

- The vehicle is taken apart by hand and in the process all the specific data such as time required for dismantling, type of joining materials/techniques used, materials, visual information etc, are all recorded in detail.
- Where there is a lack of material data, these data are elicited (own device for identifying plastics, or by means of analyses of metals).
- The data are then reproduced within tec4U's own analysis programme, allowing them to be visualised and analysed.



### Recycling Strategy, Concepts, Procedures

Proceeding on the basis of recycling models, the various materials that accumulate over the course of a dismantling operation must be sorted according to their respective material life cycles and their suitability for recycling tested. In the end, there are two variables that, when determined precisely,

amount to an optimised strategy for recycling: the fulfilment of the legal requirements and those specific to the respective company within the framework of ecological and economic compatibility. In order to determine the overall expenditure that will be required of the manufacturer, the costs per vehicle must be calculated in relation to the current range of vehicles, as must the rate of return to be expected over the years. The crucial expenditure can thus be derived from analysis and from strategy.



Graphik 1: Dismantling of a car

tec4U's approach consists of 5 steps:

1. Determination of the relevant statutory recycling/ recovery rates and general conditions
2. Acquisition material data
3. Definition of a recycling strategy
4. Calculation of recycling rates
5. Estimation of recycling costs

**In case of any questions concerning our dismantling and recycling services please do not hesitate to contact us.**

*Your contact partner:*

*Johannes Chatzis*

*Phone: +49 (0) 681 92747-101*

*Fax : +49 (0) 681 92747-401*

*Email: j.chatzis@tec4U.com*

*www.tec4U.com*