5 – Examples

5-1 Specific CP option generation methods: The waste box

This example shows the results obtained by adapting one of the methods recommended in chapter 5.7.3 "Tricks for CP option generation" of the textbook. In this particular case, the waste box of a company which manufactures special kitchen benches was analysed. Based on the collected information, a material flow analysis was carried out.
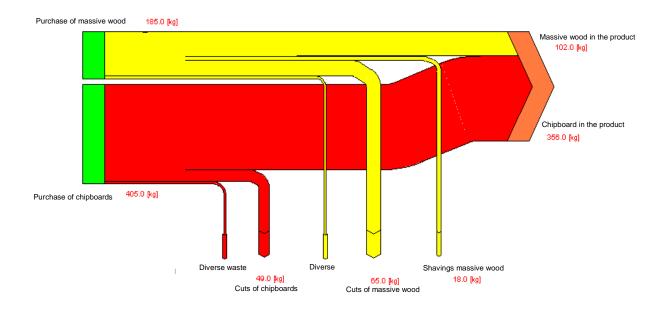
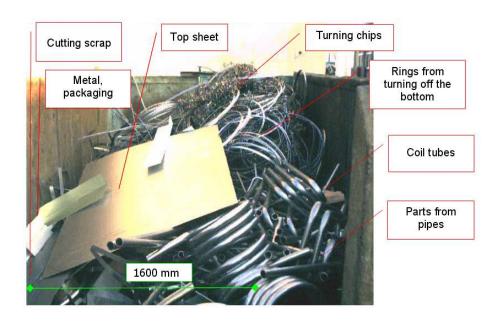The waste of a specific product – a corner seat – was collected over a certain period of time (one week).

All the employees helped to collect the waste in a special waste box.

Based on the collection of the material in the waste box the following material flow analysis was drawn up:

Purchase of massive wood — 185.0 [kg]

Massive wood in the product — 102.0 [kg]

Chipboard in the product — 356.0 [kg]

Purchase of chipboards — 405.0 [kg]

Diverse waste — 49.0 [kg]
Cuts of chipboards

Diverse — 65.0 [kg]
Cuts of massive wood

Shavings massive wood — 18.0 [kg]

The same procedure was carried out in a metal processing company. The picture below shows the analysis of the waste box.

Cutting scrap

Top sheet

Turning chips

Metal, packaging

Rings from turning off the bottom

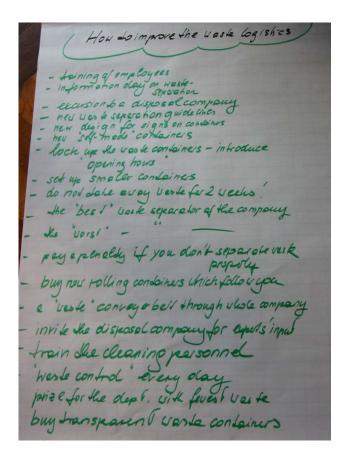Coil tubes

Parts from pipes

1600 mm

5-2 Brainstorming on a specific topic: How to improve the waste management in our company?

As already explained in the textbook of volume 5, a brainstorming session is ideal for problems which are not too complex. During the session the following four principles should be observed:

- **Any kind of criticism is strictly forbidden!**

- **There are no limits to imagination.**

- **Quantity comes before quality.**

- **Take up the ideas of others and develop them.**

Each group works on its own flipchart and chooses a moderator and a person who notes all the ideas. The time frame for a brainstorming session should not exceed 15 minutes. The below picture shows a list of ideas that the participants generated during the brainstorming session.

During the second stage of the brainstorming session, and always after a short break, the groups **evaluate the feasibility** of each idea as shown in the picture below.

How do improve the waste logistics

Extent of realisabilit.

- training of employees — 1
- information day on waste-separation — 1
- excursion to a disposal company — 2
- new waste separation guidelines — 1
- new design for signs on containers — 2
- new "self-made" containers — 2
- lock up the waste containers – introduce "opening hours" — 2
- set up smaller containers — 3
- do not take away waste for 2 weeks — 3
- the "best" waste separator of the company — 1
- the "worst" — " — 4 (not motivating)
- pay a penalty if you don't separate waste properly — 3
- buy new rolling containers which follow you — 4
- a "waste" conveyer belt through whole company — 4
- invite the disposal company for experts input — 1
- train the cleaning personnel — 1-2
- "waste control" every day — 3
- prize for the dept. with lowest waste — 1-2
- buy transparent waste containers — 3

Through this approach valuable ideas to improve the waste management in the company were generated, evaluated and categorized.