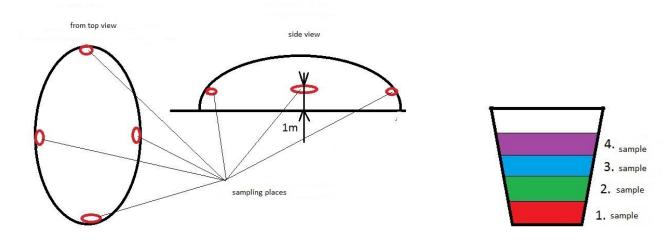


# Control measures of purchased aluminium turnings/chips

# Making samples

Employee of Confal a.s. responsible for providing the entry control within 0.5 hours after unloaded of aluminium skimmings takes a sample for quarting.

**Quarting** - a sample will be taken into the marked container from the unloaded purchased aluminium skimmings, from four different places of approx. 0,5 kg. (the place of taking samples shall be 1m above the ground under approx. 90° angle, pic.n.1). The procedure shall provide as in the pic.n.2.

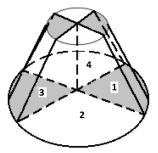


Pic.n.1 Taking samples from unloaded purchased aluminium skimmings

### Quarting of sample

On the container is placed template, which is rotated through 180 ° to the appropriate surface. The template is pulled out and the container is slowly raised up to spread the turnings/chips to the appropriate surface. The chips/turnings sample is divided into quarters and will take sample only  $\frac{1}{4}$ . The final sample should weigh 0.5-0.8 kg.

A chemical analysis by the analyzer is made from the sample. If a deviation is detect, then the sample is dried and melted in a laboratory oven and analyzed on a spectrometer. In case of new suppliers the analyze of chemical composition will provide in the laboratory oven automatically.



Pic.n.2 Layering of samples

Pic.n.3

#### Determination of organic content and moisture in sample.

After quarting, the sample will put into the container for drying oven and the drying process is started. The sample is put out from the oven and will be weigh. Measured values before and after drying are recorded and the proportion of organic materials and moisture is determined.

### Determination of fine parts under 1 mm

After drying, the sample is put to the sieve No. 1 (3 mm sieve size) and sieved to a finer proportion. The sieve sample is put to the sieve No. 2 (sieve size 1 mm) and then sieved again. The sieve sample is weighed and the weight (grams) recorded and to determine the level of fine parts.



### **Determination of Fe mechanical content**

Samples from sieve No. 1 and No. 2 will put together and in a layer of max. 1 cm to the appropriate surface. By magnet split to the turnings/chips with Fe content and Al turnings/chips with Fe. The demagnetized portion is weighed and the weight (grams) together with the total weight will recorded and will reach final proportion of mechanical Fe.

## Determination of the chemical composition of the sample in a laboratory oven

The turnings/chips sample is put to the melt container and put to the oven. After melting, the molten metal is put into the sampler. The sample (called also mushroom) is evaluated and will reach final chemical composition.