

Identification of recovery methods for material flows generated (IMT Lille Douai and ULiege):

Crushing test of concrete waste:

As part of the thesis on the study of the formulation and properties of self-compacting concrete based on recycling fines, CTP proceeded to the treatment of concrete pads. The aim was to recover, on one hand, the most intact granular fraction and, on the other hand, the finely ground cement paste with a view to reincorporation into new concretes.

The treatment line has since consisted by the succession of grinding and screening steps in order to recover a powder smaller than 4 mm and larger aggregates. In order to limit the overgrinding of the granular fraction, the jaw crusher has been favored over the impact mill, both of which being frequently used on site. As the grain size reduction was important, the grinding step has been proceeded in two stages with a wider gap in the first phase and narrower on the imbricated fraction (+ 4mm).

The treatment line is shown schematically in Figure 1.

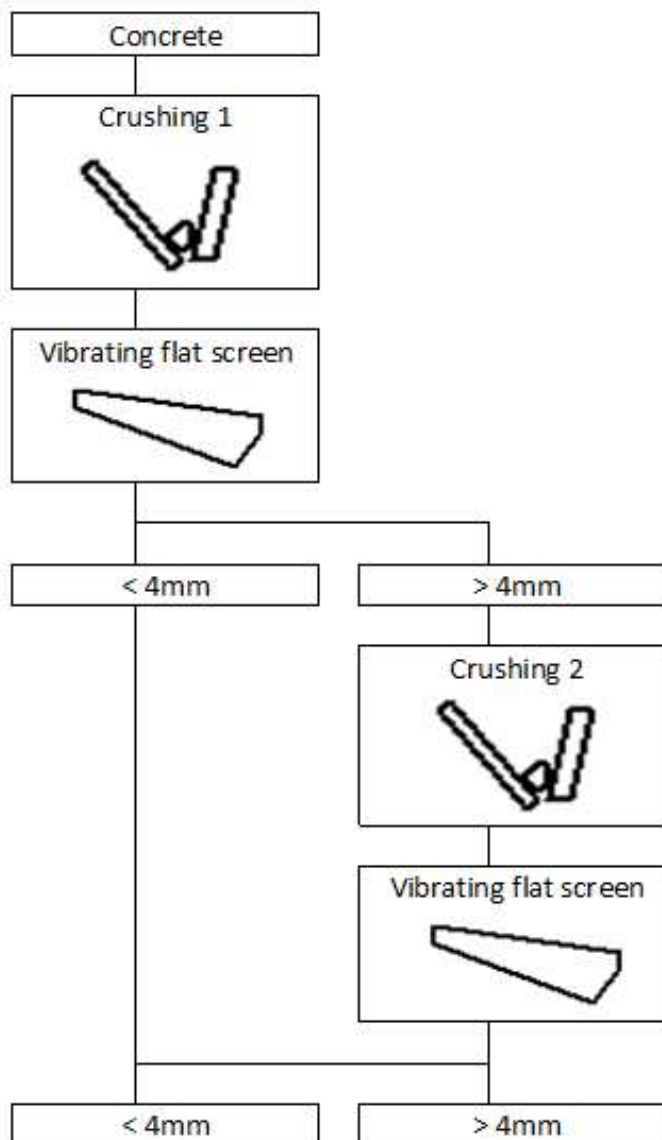
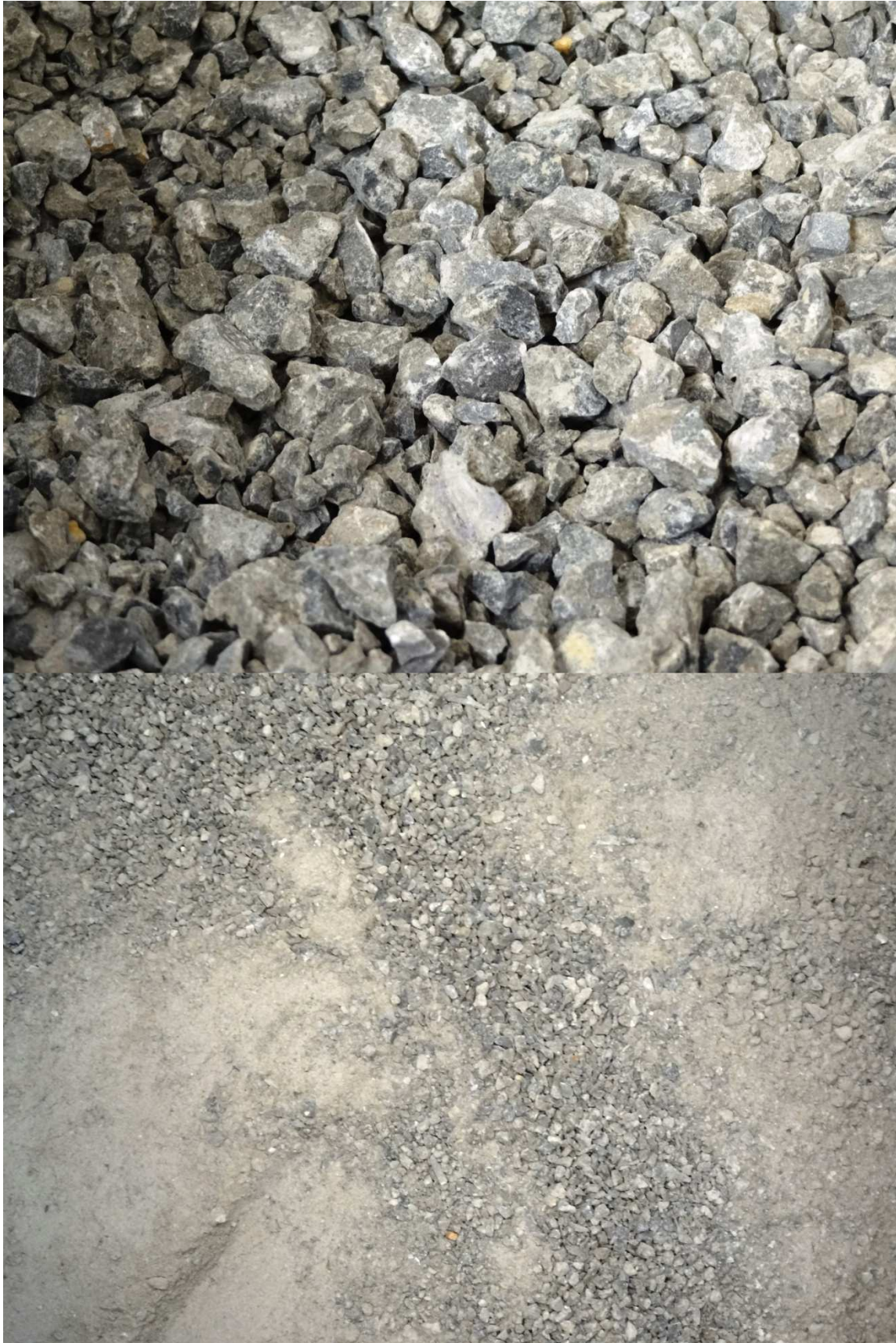


Figure 1 – Process treatment



Pictures top: Jaw crusher (step 1) ; bottom : Treatment line (step 2)



Pictures: Top: granulate $>4\text{mm}$ / Bottom: cement paste $<4\text{mm}$