

TAK Upstream Classifier in sand production for biomass with declassifieds below 1%

- New line of special sands for biomass
- Less than 1% particles below 420 μm .

BACKGROUND

Áridos y Transportes Cabaña is a company based in Huelva which supplies amongst other products, sand for use in biomass boilers. This type of sand has a very restrictive spindle with a grading between 420 and 1.200 μm , allowing less than 10% of declassifieds below 420 μm .

In order to be able to guarantee this grading, **Áridos y Transportes Cabaña** sent a series of samples to **Advanced Mineral Processing** laboratories where tests were undertaken combining the use of hydrocyclones and TAK upstream classifiers, obtaining required quality sands.



Upstream Classifier TAK

RESOLUTION

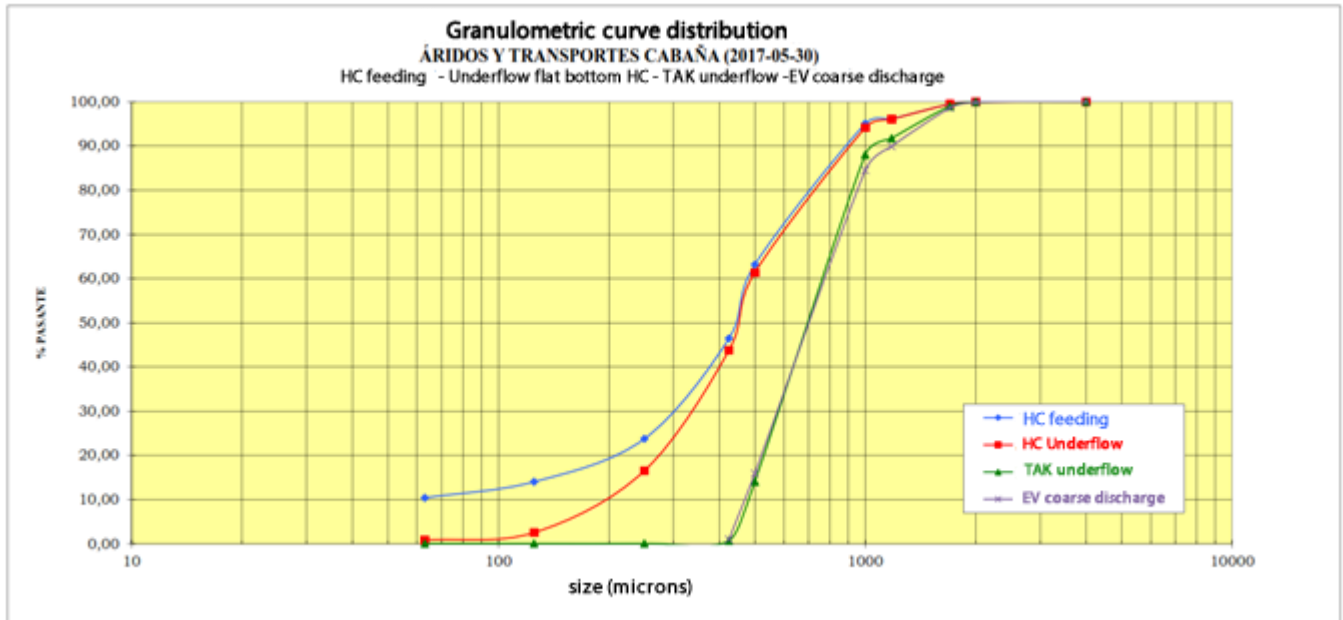
As a result, an installation was designed which currently operates in **Áridos y Transportes Cabaña**. The proposal was undertaken bearing in mind that the **feed material had more than 50% of particles below 420 μm** which added difficulty to reach the cut point.

Thanks to the combination of a flat bottom hydrocyclones with a TAK upstream classifier and a Dewatering Screen, not only the target results were achieved but we were even able to **reduce declassifieds below 420 μm to less than 1%**.



Dynamic adjustment system of the TAK.

In addition, thanks to the dynamic adjustment system of the TAK upstream classifier, the cut point can be modified to instantly adjust the percentage of declassifieds without stopping the plant, thus improving the efficiency of the plant.



CONCLUSION

TAK upstream hydroclassification equipment, widely used in the classification of sands with very closed specifications, are also applicable to the removal of coals from aggregates or inorganic components from organic materials (e.g. biomass), due to their great versatility and good results.

After several months of production in Áridos y Transportes Cabaña, the TAK upstream classifier has proven to be a magnificent solution to achieve sand with a low level of declassifieds.