



Case Study

Impact Crusher from BHS-Sonthofen processes Turkish Perlite for the Juice Industry

Edited by on 22. Dec. 2022

Harborlite Aegean in Turkey, a subsidiary of Imerys, now processes different types of perlite for the juice industry with an impact crusher of type PB 0806 from BHS-Sonthofen. This is the first time for the machine to be used for this purpose. Tests with original material in Sonthofen and previous experiences with the maintenance-friendly machines from BHS gave the customer the confidence to make this unusual choice.



The impact crusher of type PB 0806 from BHS-Sonthofen processes two different types of perlite for the juice industry.

Performance minerals are key to many different industries, from plastics and paint production to batteries and filtration purposes. Imerys, a world leader for mineral-based specialties for industrial use, is an expert in producing a wide

variety of performance materials. In Turkey, Imerys' subsidiary Harborlite Aegean processes two types of perlite, an amorphous volcanic glass, mined in a nearby quarry. The product is used as a filtration medium by the Italian and Spanish juice industries.

Reliability and reduced Wear Costs

In 2021, one of the crushers in Harborlite Aegean's plant in Dikili needed replacement. The old Turkish impact mill had reached the end of its service life as it could no longer produce the required grain size of 35 millimeters. Imerys decided to contact BHS-Sonthofen, which the company knew from a related project. BHS-Sonthofen had recently delivered a rotor centrifugal crusher of type RSMX to another Imerys plant in Teutschenthal, Germany.

There the machine processes aluminum oxide – a highly abrasive mineral. For the sturdy RSMX the material was no real challenge. It proved to be a reliable choice with low wear costs. The technology and the service from BHS-Sonthofen convinced Imerys that the German company could be a good fit for replacing the Turkish perlite crusher as well.

Tests with original Material in Sonthofen

After a first assessment of the requirements, BHS and Harborlite Aegean decided that an impact crusher of type PB 0806 with an output of 50 tons per hour was the ideal choice for the task at hand, even though the BHS machine had never been used in this application before. The chance to thoroughly test the machine's capability in the BHS Test Center in Sonthofen gave the team confidence.



Harborlite Aegean replaced the old crusher in their plant with an impact crusher of type PB 0806 from BHS-Sonthofen.

For this purpose, a truck brought both varieties of the original materials to Germany. One of them was a pre-crushed perlite that was to be reduced from 0 – 90 mm to a target size of 0 – 35 mm, the other one was a pre-crushed fraction with 0 – 300 mm of another type of perlite also with a target size of 0 – 35 mm.

“Running tests with original material is a standard procedure at BHS-Sonthofen,” explains project manager Hans Traut from BHS-Sonthofen. “With our tests we make sure the machine is the best choice for the client. They also ensure optimal machine configurations for minimal wear and help us to adjust the machine so that the processed minerals match the company’s crushing requirements.” The tests confirmed the experts’ recommendation. The impact crusher is a particularly economical solution for the fine crushing of perlite with a maintenance-friendly design. The adjustable gap width is a key advantage for Harborlite Aegean as it allows their employees to adapt the machine and avoid wear to produce inaccuracies regarding the desired grain size. This guarantees consistent quality of the product with low-maintenance costs.



Harborlite Aegean processes two types of perlite, mined in a nearby quarry.

Also, a throughput rate of 50 tons per hour and the size of the machine were a good fit for the existing plant and Harborlite Aegean’s demands. The Turkish company successfully installed the machine in late December 2021. “The impact crusher from BHS proved to be a perfect fit for our plant and has been running smoothly since production started in January,” resumes Hikmet Bozkurt, Plant & Mine Manager at Harborlite Aegean in Izmir /Turkey.