

Resource-conserving use of BIVITEC screening machines at OKSM in Poland



Reduction of the energy requirement and minimal maintenance costs by using Binder+Co technology

Year of construction:	2007/2008
Country:	Poland
Feed material:	Sand and gravel
Feed rate:	350 t/h sand and gravel "0/120 mm"
Type of machine:	BIVITEC KRL/DD 3000x8
Ref. Number:	28314

Starting situation

The Polish company OKSM has built a new plant for processing gravel in both wet and dry extraction. The percentage of sand in the deposit is approx. 60% (< 2mm). The marketable products are "2/8 mm", "2/16 mm", "8/16 mm" and "16/80 mm" of washed gravel. As it is not cost-effective to market the "0/2 mm" material in Poland, the proportion of <2 mm arising as a by-product is screened out and dumped directly at the extraction point.

Solution by Binder+Co

- 4 double-deck BIVITEC screening machines for the first processing stage and 2 triple-deck circular vibratory screens with spray facilities for screening the end products
- All 4 BIVITEC screening machines are of identical design, they are prepared for wet screening and have already been delivered with a spray water unit
- The cut points of 2 mm and 80 mm will be effected with the BIVITEC screening machines. Wear-resistant BIVITEC mats are used in the upper deck for the feed grain size (up to 120 mm). The lower deck is executed with BIVITEC mats in ox-horn design
- The 4 BIVITEC screening machines are fed successively with material as extraction progresses and they are linked to the final screening system by means of an adaptable conveyor belt line via an intermediate dump for "2(0)/80 mm" material

Benefit for the customer

- The use of BIVITEC screening machines for dry extraction results in a reduced electrical and water consumption even at the pre-screening stage
- In combination with wet extraction, the fraction of sand fraction produced for the interim dump is in the range of 10% and therefore only a small fraction of sand is still carried into the plant for screening of the end products
- Advantages in respect of compatibility and interchangeability of the spare and wear parts by using two types of screening machines (BIVITEC 2-deck and circular vibratory 3-deck which are made up of the same components for each type)
- Significant reduction in the number of individual machines with no change in feed capacity due to using larger machines with a larger effective screening area
- Smaller number of electric drives and lower maintenance costs with a positive effect on the plant operating costs