



CASE STORY

BASALT AG  
BISCHOFSHHEIM, GERMANY

SANDVIK WX7000 SCREENING MEDIA

## WX7000 SCREENING MEDIA BRING ADDED VALUE TO THE PROCESS

**When it comes to the preparation of mineral raw materials, Sandvik is renowned for its world class crushing and screening technology. Perhaps it's less well-known that Sandvik also has an outstanding range of screening media. We can expect this to change based on the positive customer feedback Sandvik is now receiving on its new WX7000 screening media.**

The operating hour monitor was reporting exactly 1.632 hours of operation when Selim Sahin, Sales Manager Sandvik screening media & wear protection in central Europe, dropped by at the Bischofsheim (Germany) plant of Basalt AG on 4 of October 2017 to reassure himself that his promise was standing the test. Sandvik's new WX7000 screening media had been installed in the lower deck of a screening machine at the plant in March 2017. Since then, operators have been carefully monitoring this efficient, anti-blinding, tensioned screening media which is made from wear-resistant polyurethane. So far, they are seeing excellent screening results.

### DEDICATED CUSTOMER SERVICE

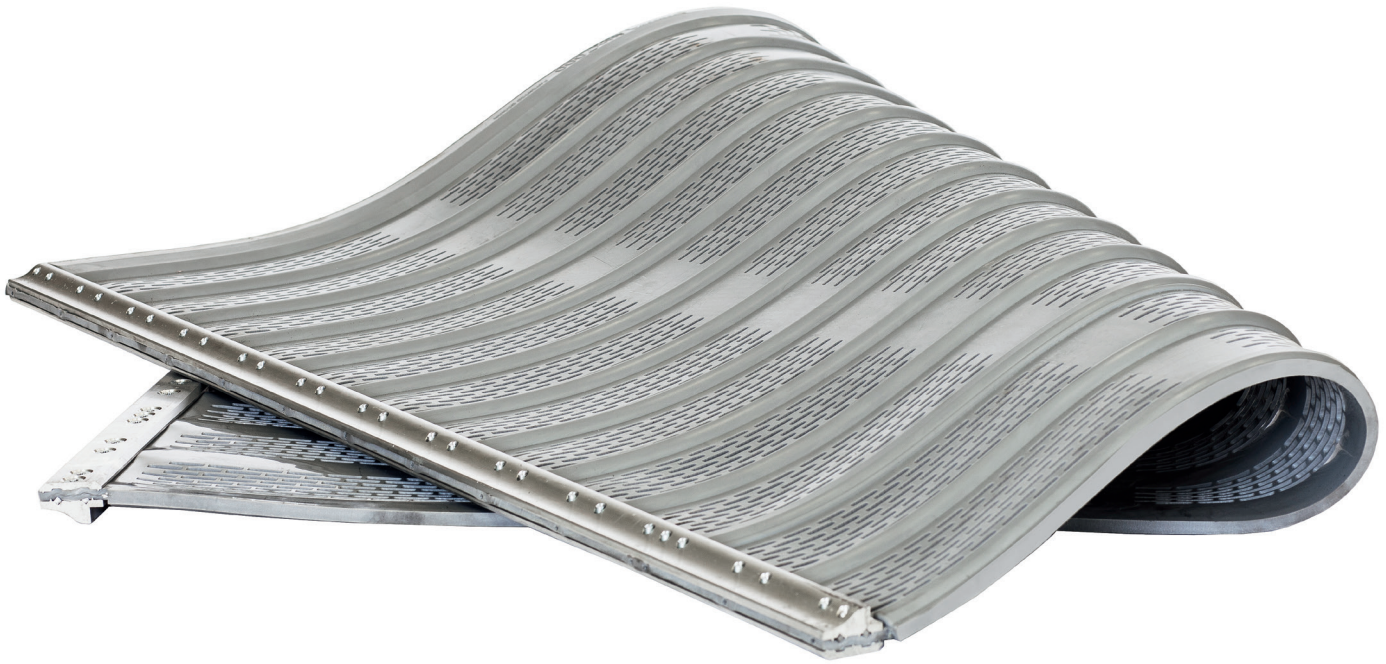
The decision to change to the WX7000 screening media from the previously used wire mesh media was a result of a long and close partnership with the customer. The plant underwent extensive modernization during 2011-2012 and, following in-depth discussions with Sandvik, several Sandvik cone crushers (Sandvik CH660, Sandvik H440 and Sandvik H3000) have taken over preparation of the pre-crushed basalt in the post-crushing stages.

During discussions regarding the winter repair program, the customer mentioned he was frequently experiencing difficulties changing the media on

the lower deck of the screening unit. Taking note of production conditions and required parameters, Sandvik WX7000 tensioned anti-blinding polyurethane screening media was suggested as the solution. Alongside the guaranteed wear life offered by the manufacturer, operators were also reassured by the professional approach of Sandvik's experts. These two factors combined led to the decision to install the WX7000 screening media.



A specialist Sandvik screening media development team made the journey from Sweden to change the screening media on the lower deck of a 12m<sup>2</sup> circular vibrating screen, which had been in service for a long time. They examined the material feeding section and evaluated the existing grading analyses. After a detailed investigation, they recommended an overlapping, longitudinally tensioned version of WX7000 for the screening deck. Finally, the hole pattern was accurately defined to avoid misplaced particles and to produce a clean target granulation, with as few undersized particles as possible.



#### ONCE WAS ENOUGH!

Deputy Plant manager, Burkhard Kunze, was very impressed by how easy it was to install the flexible WX7000 screening mats. In the past, routine changes of the rigid wire mesh on the lower deck were arduous and physically demanding, an even greater burden due to the required frequency of the media changes. The plant stood idle for at least half a day every 10-12 week due to the need to change the wire mesh. Various attempts to switch to harp or rubber had failed, due to quality and/or wear issues. The desired aim to reduce wear, prolong change cycles and maximize product quality could only be achieved with Sandvik WX7000.



Under the guidance and close supervision of Sandvik's experts, it was evident how easy it would be to undertake media changes in the future, by installing overlapping 1000 x 2000 mm flexible mats. Instead of laboriously feeding heavy, rigid wire screens into the lower deck area, the light (15 kg) WX7000 mats are

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rolled out by the installation staff. They are then simply tensioned - job done! No more lost half-days every 10-12 week. Instead, the manufacturer's guarantee that its WX7000 media will give at least six-times the wear life is realized.

Operators have stated that the considerable increase in wear life is already having a positive effect on operating costs. After a detailed analysis, Michael Hinz, Technical Manager of Basalt AG, has confirmed that it has already been possible to measure the direct utilization value of the process.

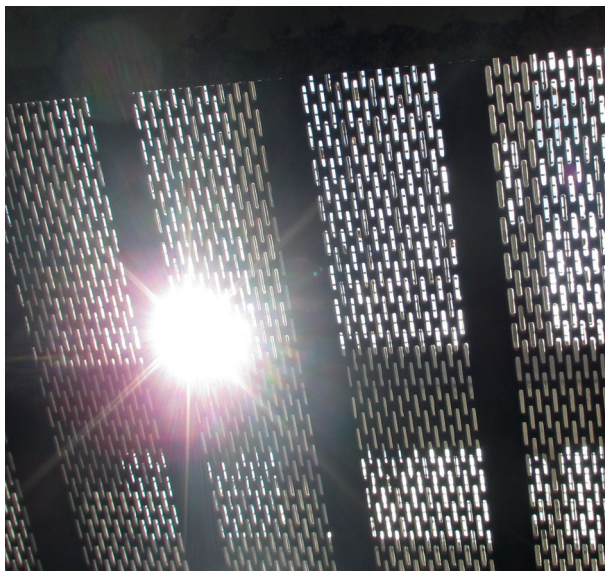
"We are producing a very accurate 2-5 mm granulation with the new screening media and compared to the previous situation, the average proportion of undersized particles has dropped from 8% to just 6% This means that we can now supply our best-seller, 2-5 building material aggregate, at a significantly higher and uniform quality" explains Plant Manager Michael Deckert.

### NO VISIBLE WEAR, NO CLOGGING

When inspecting the screening media after six months' use, it showed no weaknesses, no clogging and no initial visible signs of wear. The wear-resistant polyurethane-material is designed both for fine screening and for harsh operating conditions. Integrated steel cable reinforcement minimizes both stretch and the resulting risk of out-of-control flutter, guarantees secure attachment and lengthens adjustment intervals. The polyurethane material's flexibility prevents the holes from clogging. They are punched out in various geometrical shapes and are exactly matched to the required task.

Screening results are further optimized thanks to the installation producing an almost constant material bed depth over the width of the screen mats, optimizing the separation accuracy and product quality.

The plant produces quality 5-8 and 2-5 products from the 0-8 feed material in the last process stage, with a throughput of approximately 140 tph. The separation



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accuracy of this screening media and its quality has an influence on the production output of the entire processing line.

On average, approximately 100 tonnes of this lands on the lower deck, which has been yielding clear quality improvements since March. “What we hoped for has so far been delivered,” confirms the plant manager.

From work optimization to process optimization, with its innovative products and expert advises on utilization, Sandvik endeavours to support the customer, helping to improve safety and improve the working environment.



#### SANDVIK WX7000 SCREENING MEDIA

Screening duty: Intermediate and final

Max feed size: 30 mm

Separation: 2-16 mm

Application: Dry

Dewatering: No

Deck design: Cambered

Panel type: Tensioned

Material: Polyurethane (PU)

Aperture: Punched holes max. 20 mm

Fastening: Cross- or longitudinally tensioned

