SANDVIK

Crushes perfect product Squeezes your costs

Sandvik vertical shaft impact crusher range



Shaping a sustainable future together

Industries need more sand and aggregates every day, yet legislation on using natural products gets ever tougher. There's a big demand for crushers that deliver perfect output while cutting cost in a sustainable way. The Sandvik VSI range supports environmental aspects and global UN climate goals. Using rock-on-rock crushing, they create excellent product and more output using less power, cutting operating expenditure by up to 50%.

When you buy from Sandvik you're buying from a company aiming to achieve a 90% circular use of materials, halve our CO2 impact, and aspire towards zero harm to our people.

"Our aim is to eradicate the need for importing sand, and by implementing a Sandvik VSI crusher we are well on the way to achieving this goal."

Halawa quarry, Hawaii

Sandvik VSI crushers are ideal for

Manufactured sand

Sandvik VSI crushers deliver on the toughest demands for manufactured sand specs.

Cement

Using high-quality manufactured sand with constant, minimum requirements for water and cement makes cement manufacturing much more cost-efficient.

Aggregate for road surfaces

Aggregate from Sandvik VSI crushers reduces traffic noise and meets the highest quality specificatons on quality and shape for fine bearing layer.



Glass recycling Sandvik VSI crushers enable minimal contamination of product.

Industrial minerals such as brown fused alumina, zirconia, white fused alumina, quartz and more.
Sandvik rock-on-rock technology gives you a low cost per ton and almost zero contamination.



A VSI that's better by design

Sandvik VSI crushers maximize the crushing of perfect, premium-shaped aggregates at the lowest possible cost.

A unique, patented rotor design and rock-on-rock crushing ensure a more consistent product with minimum equipment wear. This clever, simple design with fewer parts gives you higher tonnage and greater reliability using less power than any other VSI crusher.

Boost your output Lower your cost

Sandvik VSI crushers include a patented, 3-port rotor, hopper design and Bi-Flow™ technique to create a more cost-efficient output. Fewer parts in the upper part of the rotor and a smart bearing design reduces out-of-balance forces and power consumption, achieving a lower cost per ton and greater uptime.

No other VSI crusher offers such a high output level at such a low cost.

Up to

50%

Lower cost per ton

Results achieved when retrofitting Metso/Barmac VSI crushers.

"Everything that was promised was true: increased production, reduced maintenance downtime, no increase in power consumption and better quality aggregate."

Sand and gravel producer, Serbia. Had a non-Sandvik VSI that was retrofitted with a Sandvik rotor.

Easier, more cost-efficient maintenance

Few wear parts and easy mounting and dismounting through the inspection door drive down maintenance costs. Superior wear parts lasting 3 times longer than standard are available when crushing more demanding material.

26%

Fewer wear parts

Compared to other leading VSI crushers.

"We were so satisfied with the solution that we ordered another CV215."

Tertiary crushing stage for glass recycling, Spain. Changed from an impactor type Hazemag APK 105, to a Sandvik CV215.

Premium shaped aggregates

Perfect shape is ensured by the unique rotor and Bi-Flow™ design together with rock-on-rock crushing to meet the toughest requirements for uniform product. You can adjust gradation and output to meet the most demanding aggregate specifications.

96–97%

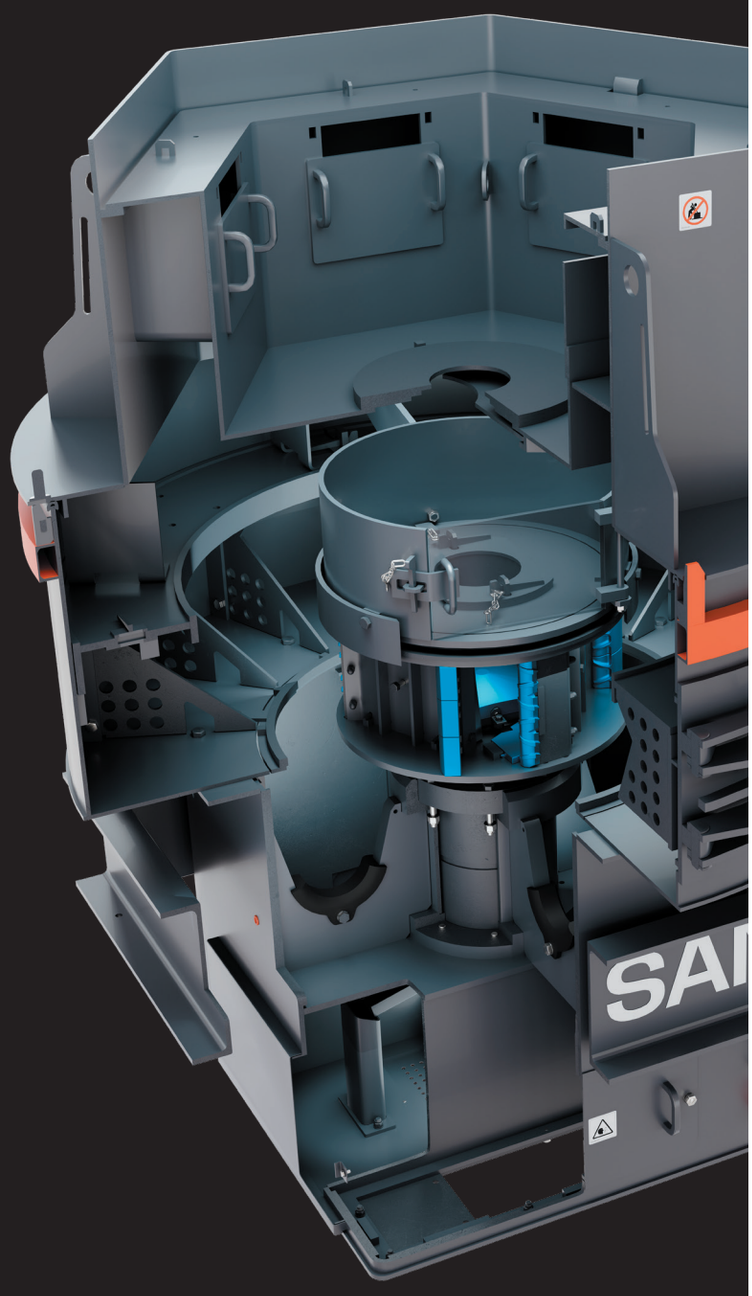
Cubicity for 5–8 mm size

Results achieved at major producer of aggregate for new, more quiet road type for German Autobahns. The standard (EN13043) calls for an average 85% cubicity and for new noise reducing surfacing the standard calls for 92% cubicity.

"The new VSI was chosen for its ability to manufacture high quality sand product of a consistent quality and possess the cubic shape desired by the concrete industry."

Sand producer for the construction industry, UK.

Innovations for better crushing



Bi-Flow

The hexagonal Bi-Flow hopper with Bi-Flow ports and Bi-Flow Collection plates enables perfect, controlled feed material flow. It enters the crushing chamber in the opposite direction from material leaving the rotor. The operator can adjust gradation and output using the Bi-Flow.

Three-port rotor design

The three-port rotor design gives the most efficient and balanced solution.

No feed eye ring means less weight on the highest point of the rotor reducing out of balance forces. This patented design gives greater throughput and lower power consumption.

No tip carrier wear plates give less streaming around top and bottom rotor edges, reduced force on tip carrier, reduced operating cost and reduced metal contamination.



Autogenous crusher

Rock-on-rock crushing means no wear parts are used to directly crush the material. Rock is crushed on rock. Low consumption of wear parts compared to open Rotor and Anvils where material is crushed against the crusher chamber.

Inspection and maintenance door

Wear parts are replaced through this hatch.

Low imbalance forces

Optimized design and placement of upper and lower wear plate gives reduced out of balance forces. It prevents unwanted streaming and provides a more stable rock bed and quick replacement through the inspection door.

No screws or nuts in aggressive areas mean no problems when dismantling wear parts.

The VSI range



	CV215	CV216	CV217	CV218
Capacity	10–50 mtph	51–121 mtph	122–192 mtph	193–270 mtph
Motor power	55 kW	110 kW	185 kW	250 kW
Max feed size	40 mm	50 mm	50 mm	55 mm
Weight	6,000 kg	9,500 kg	9,500 kg	11,800 kg
Rotor	73EP	73LP	73LP	85HP



	CV228	CV229
Capacity	271–444 mtph	445–600 mtph
Motor power	2 x 185 kW	2 x 250 kW
Max feed size	55 mm	55 mm
Weight	14,800 kg	14,800 kg
Rotor	85HP	85HP

Options

To get the job done better

Moist material options	— Bi-Flow acceleration slides — Base water spray kit — Transmission non-stick liners — Crushing chamber water spray kit
Premium wear parts	Tectough range of wear parts with extended life, reducing maintenance intervals.
Automatic grease unit	Automatically put the correct amount of grease into the bearing cartridge. For easy refilling of grease without contamination and minimizing air locks.
Support options	— Access stairs and platform enabling safe and easy maintenance and access to the crusher — Skid frame that makes the crusher semi-mobile — Long or short support legs
Discharge chutes	Makes sure material exits the base of the crusher freely without blocking.
Drive pulleys	Ability to operate the crusher at different speeds other than standard speed.
Rotor balance machine	Simplifies the balancing of the rotor after routine periodic repair.
Dust encapsulation	Minimizes dust emissions at low or no feed, and by dry and dusty material.
High temperature bearing cartridge and grease	For operation in high ambient conditions (desert) or when processing hot feed.
Electrically operated hydraulic rotor throttle system	Changes ratios between rotor feed and Bi-Flow™ to adjust product grading.

Test results and calculations are to be considered as results reached under certain and controlled conditions. These test results and calculations should not be treated as specifications and Sandvik does not guarantee, warrant or represent the outcome of test results or calculations in any or all circumstances.

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