

Bradken Vortex[®]



Bradken's Vortex[®] discharge system has been engineered to optimize production and extend the service life of components in SAG and AG mills. Transforming your straight radial to Bradken Vortex[®] and Super Vortex[®] will maximize grinding performance and throughput.

Bradken's Vortex[®] mill liner's unique design improves product movement and decreases the time to exit the discharge cone.

Improved efficiency and durability

Bradken's Vortex[®] curved lifters reduce and optimize wear, extend service life, and increase throughput efficiency. They also minimize particle projection and reduce ball impacts on liners, thereby lowering stress on grate and pulp lifter bolts.

Our innovative design improves the transfer of ground ore from the mill cylinder to the pulp lifter chambers, as it increases the functional discharge area of the grates.

Increased production

Curved pulp lifters enable earlier discharge evacuation, boosting efficiency and reducing flowback—even at high rotational speeds—thus improving overall mill productivity.

Our extended grate and pulp lifter design reduces the number of components and allows for a larger area available for slots in the grates, which further increases material discharge and, consequently, boosts mill production.



Our innovative design optimizes material evacuated from the grates to the pulp lifter chambers, even at high mill RPM.

Vortex® and Super Vortex®

Bradken Vortex® Discharge End has been developed to encourage early discharge of coarse product that travels down the pulp lifters during each revolution. Bradken's innovative Vortex® improves product movement and decreases the time to exit the discharge cone, reducing pulp lifter wear and improving pulp discharge from the mill.

Features:

Our one-piece Super Vortex® Grates cover the full depth of the charge to maximize grate open area and mill throughput exposure.

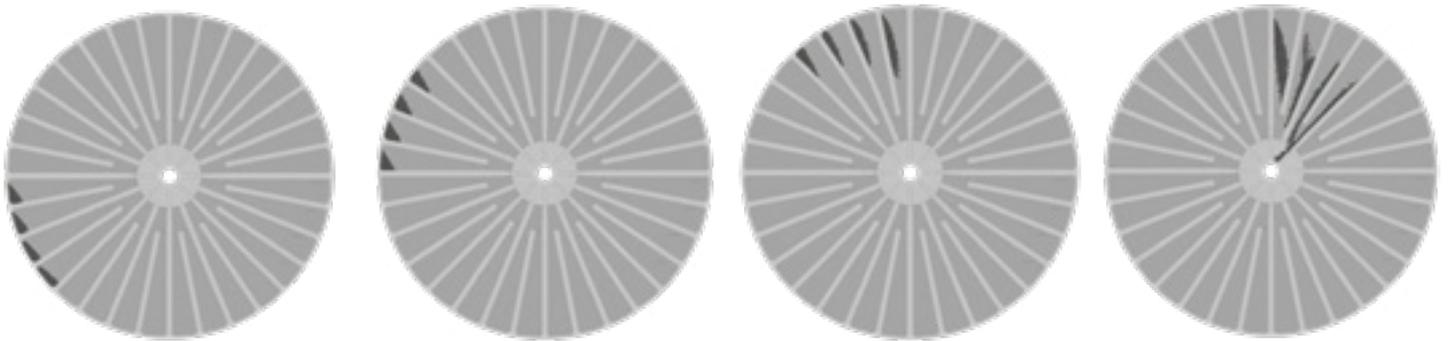
Discharge grate slot analysis is carried out across all grate designs to optimize open area, recycle size, and product passing.

Large one-piece Super Vortex® curved pulp lifters generate maximum flow dynamics during the discharge of ore and slurry.

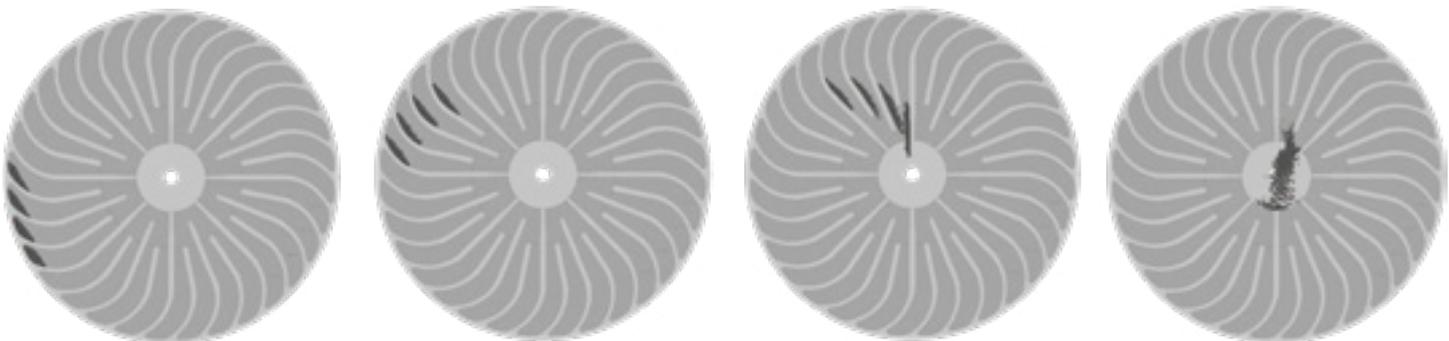
Innovative design and throughput advantage with Vortex®:

- Vortex® is proven to improve product movement and decrease the time to exit the discharge cone, reducing pulp lifter wear.
- Bradken Vortex® Discharge Ends are designed to improve uni-directional AG/SAG mill performance.
- Each design is customised to suit your mill size, application and operating conditions.
- Bradken's Vortex® design can be fully retrofitted into an existing mill or supplied for new mills.

Radial



Vortex®



Our Innovation. Your Advantage.

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