

PROVEN PERFORMANCE FOR SOUTH AFRICA'S LARGEST PEANUT BUTTER PRODUCERS

Votator® II Scraped Surface Heat Exchanger

Four of South Africa's largest peanut butter producers rely on the Waukesha Cherry-Burrell **Votator®** Scraped Surface Heat Exchanger (SSHE) for consistent cooling and dependable product quality. For more than two decades, this proven technology has been central to regional peanut butter production—delivering precise temperature control for optimal texture, stability and shelf life. As consumer expectations rise, it's no surprise that producers in South Africa and around the world continue to trust **Votator** systems as a versatile, reliable peanut processing solution.

Precision Cooling at Scale: A South African Success Story

Challenge

Freshly milled peanut butter exits the mill at roughly 85°C but must be cooled to 35°C before filling and packaging. Without controlled cooling, processors risk oil separation, texture issues, limited shelf life and excessive system pressures - especially in high-viscosity applications.

When one South African customer expanded production by adding additional **Votator SSHE** units, the increased throughput overloaded their existing pump setup. Their positive displacement pump struggled to maintain stable flow across all cooling stages, creating bottlenecks and threatening product consistency.

Solution

To stabilize the expanded line, the customer installed additional Waukesha Cherry-Burrell positive displacement pumps—purpose-built for thick, sticky, shear sensitive products like peanut butter.

Their upgraded system now uses:

- **Six **Votator SSHE** units** for controlled cooling
- **A WCB 180 U2 pump** feeding product into the **Votators**
- **A second 180 U2 pump** transferring cooled product to the filling line

The additional pump relieved backpressure, stabilized system flow and ensured uniform cooling from 85°C down to 35°C through all six heat exchanger stages.



Trusted by South Africa's leading peanut butter producers for reliable cooling that preserves texture, stability and consistent product quality.



Result: Greater stability, better quality.

By adding the second pump, the customer achieved precise temperature control that eliminated oil separation, improved texture consistency and protected shelf life. Flow and pressure remained stable from mill discharge through final filling, enabling smoother, more reliable production.

Conclusion

Peanut butter processing presents unique challenges—especially in regions like South Africa where shelf life is critical. From established producers to expanding facilities, Waukesha Cherry-Burrell Votator Scraped Surface Heat Exchangers, paired with Waukesha Cherry-Burrell Positive Displacement Pumps, offer a complete, scalable solution for peanut butter cooling and processing.

South Africa's peanut butter industry is thriving and we're proud to support the region with world class equipment, dependable service, and technology proven for more than 20 years.

- **Industry Leadership:** Four of South Africa's largest peanut butter manufacturers rely on Votator technology—and the number continues to grow.
- **Long-Term Reliability:** More than two decades of continuous performance across the region, with systems built to scale as production needs evolve. One of the oldest Votator units in South Africa has operated reliably for 22 years!

Why the Votator Excels in Peanut Butter Cooling

- Eccentric scraper design continuously removes product from the heat-transfer surface, improving heat transfer and preventing buildup.
- Uniform cooling control minimizes oil separation and ensures reliable thickening.
- Designed for high-viscosity products that challenge plate or tubular exchangers.
- Shorter processing time with excellent thermal performance.
- Reduced downtime and easier cleaning.
- Scalable—models like the 6×72 can cool up to 1 ton per hour

A Trusted Partner in South African Peanut Butter Manufacturing

Our customers in this case study are supported by Pumps and Accessories (www.pumpsacc.co.za), the exclusive distributor of Waukesha Cherry Burrell equipment across Southern Africa (including ECP positive displacement pumps, scraped surface heat exchangers, colloid mills, shear pumps, valves and centrifugal pumps).

Learn more about Waukesha Cherry-Burrell Votator solutions
[Votator II Scraped Surface Heat Exchanger](https://www.spxflow.com/waukesha-cherry-burrell)



Precise scraped surface cooling prevents buildup and oil separation—resulting in smooth texture and consistent quality in every batch.



www.spxflow.com/waukesha-cherry-burrell

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