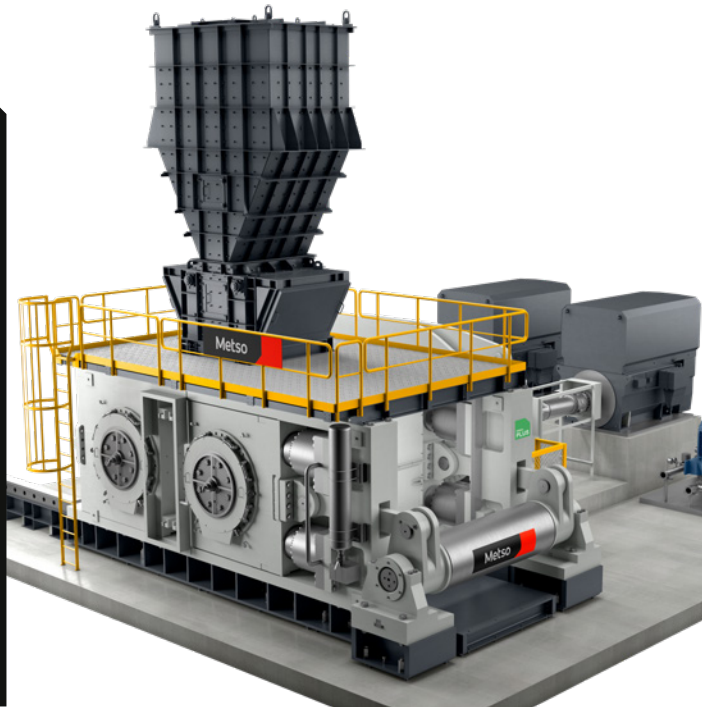
Metso

HRC™e
High pressure grinding rolls

Grinding

The HRC™e HPGR is not just another HPGR. It was designed as a direct response to the market need to overcome industry challenges and optimize operations. The HRC™e is not just a machine, but the solution you want.



The Metso HRC™e HPGR combines proven technology and a customer-focused evolution for superior grinding and energy efficiency to help optimize your grinding circuit.

Setting the industry standard
In 2014, the HRC™ high pressure grinding rolls were launched and set an industry standard for HPGRs. Not only known for its increase in energy efficiency and throughput, but this also pioneered the industry acceptance of flanges as superior grinding technology. These flanges are part of the advanced technology we are using in our latest evolution: The HRC™e HPGR.

Maximum productivity
The HRC™e HPGR takes proven technology and enhances it. The high throughput comes from the elimination of the edge effect with the flange design, which ultimately maximizes the amount of crushed material. With the mechanical skew control system you will find faster restarts and no downtime from skewing events.

The HRC™e also comes with a large feed size acceptance and improved energy efficiency compared to similar HPGRs. This results in increased efficiency as well as cost savings.

Ease of maintenance
The HRC™e HPGR creates a safe and simple maintenance operation. The edge segments replacement process is simple due to the bolted design and flange integration. The dust enclosure separates the crushing zone from critical mechanical components within the machine.

The unique feed chute also comes with control gates for quick maintenance and reliable start up. These features and reduced tire wear life leads to low downtime.



Benefits

- Improved energy efficiency by up to 15%
- Reduced circulating loads by up to 24%
- Increased throughput by up to 19%
- Ease of maintenance
- Reduced downtime from restarts

HRC™e high pressure grinding rolls

The HRC™e HPGR provides superior grinding and energy efficiency through reduced circulating load, decreased power consumption, and increased lifetime of rolls.



Elimination of edge effect
The edge effect can significantly reduce grinding efficiency of HPGRs due to uneven pressure distribution across the rolls. This results in material bypassing the rolls near the edge. Metso's patented and proven flange roll design eliminates this challenge and improves overall performance of the HRC™e HPGR.



Intelligent flange design
Metso is the only OEM to successfully implement HPGR flange rolls that ensure pressure is distributed evenly across the rolls. With a reduced circulating load due to less material bypassing the rolls, the HRC™e HPGR also reduces total power consumption as it no longer needs to crush the recirculated material. Even load distribution reduces wear on the rolls, increasing their lifetime.

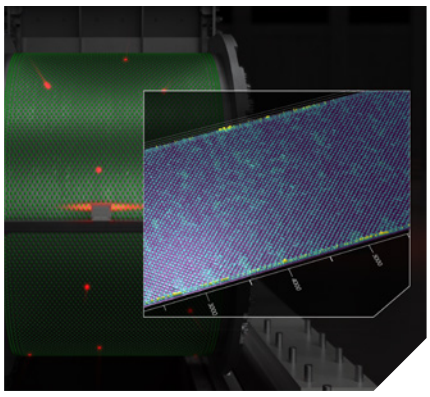


Mechanical skew control
The HRC™e HPGR patented MSCS controls skew at all times providing the conditions to use flanges. It provides critical limits for skewing and is equipped with self-monitoring features to evaluate and optimize the equipment and components. This ensures that the unit is consistently running at optimal levels , therefore increasing the availability and reliability of HRC™e HPGR.

HPGRSense™
Unique to the market, the HPGRSense™ is a stand alone system that provides continuous simultaneous monitoring of the rolls.

Operators receive frequent reporting on roll surface condition. The scanning device uses an array of sensors to inspect the roll surface, and detect anomalies and wear. This gives the ability to predict service life and maximize efficiency of spare stock holding. The scan report will not only deliver key metrics, but a 3D representation of the condition of both rolls.

HPGRSense provides maximum visibility of the rolls condition to the operator enabling them to deliver maximum productivity, grind and energy efficiency of their HPGR.



Read more at metso.com/hrce

Have a question? Contact us today!

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