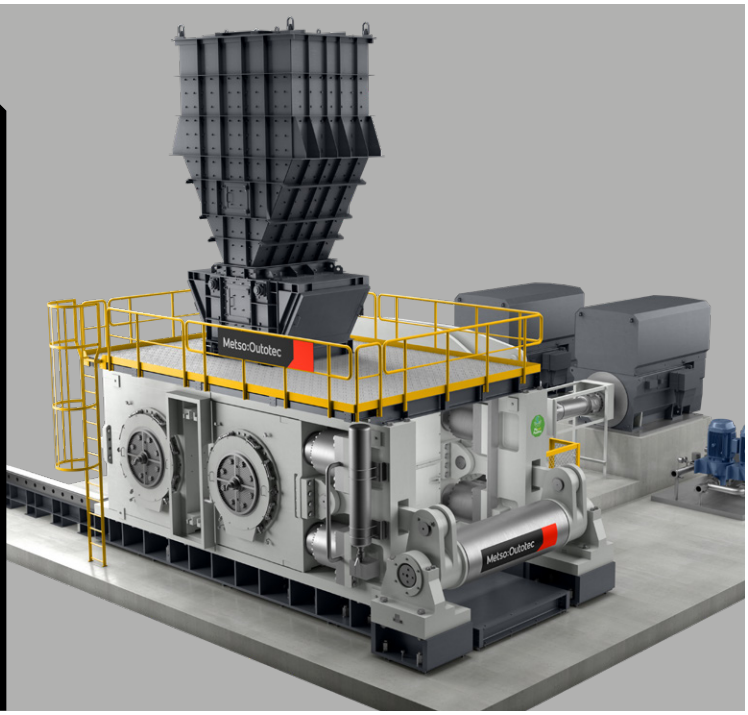
Metso:Outotec

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 Outotec 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.

Read more at mogoup.com/hrce

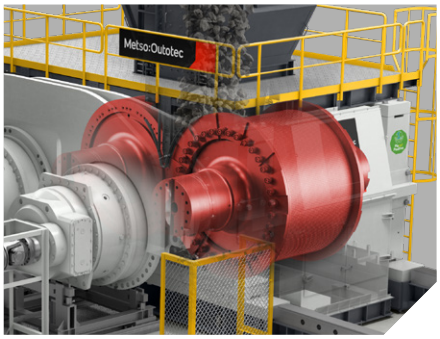
Benefits

- 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 Outotec's patented and proven flange roll design eliminates this challenge and improves overall performance of the HRC™e HPGR.

Intelligent flange design

Metso Outotec 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.

Model	Tire dimension (d mm x w mm)	Max installed power (kw)	Max installed power (hp)	Nominal roll speed (rpm)	Top size (mm)	Typical capacity (tph)
HRC™1200e	1200 x 750	2 x 370	2 x 500	23.5	42	320 - 450
HRC™1450e	1450 x 900	2 x 600	2 x 800	21.4	51	540 - 750
HRC™1700e	1700 x 1000 1700 x 800	2 x 900	2 x 1200	21	60	640 - 1120
HRC™1850e	1850 x 1300 1850 x 1050	2 x 1400	2 x 1880	21	65	990 - 1720
HRC™2000e	2000 x 1650 2000 x 1350	2 x 2300	2 x 3050	21	70	1490 - 2540
HRC™2400e	2400 x 1650 2400 x 1400	2 x 3300	2 x 4400	21	84	2250 - 3660
HRC™2600e	2600 x 2000 2600 x 1750	2 x 4100	2 x 5500	21	91	3300 - 4550
HRC™2800e	2800 x 2000	2 x 5800	2 x 7780	21	98	4320 - 6050
HRC™3000e	3000 x 2000	2 x 6200	2 x 8300	21	120	4950 - 6930

Read more at mogroup.com/hrce

Have a question? Contact us today!

Metso Outotec Corporation, PO Box 1220, FI-00101 Helsinki, Finland
tel. +358 20 484 100, fax +358 20 484 101
mogroup.com

Partner for positive change

Copyright © 2022 Metso Outotec. Leaflet no: 4420-05-22-EN-MNG. All trademarks and registered trademarks are the property of their respective owners.