



Product datasheet

Double Roll Crusher DRC 18-18 Primary Crushers

High capacity – consistent product – maintenance-friendly operation

Intelligent primary crushing for soft and medium hard rocks

In mining operations, high throughputs and high availability are key – which is why the FLS Double Roll Crusher is designed to withstand the toughest mining conditions while delivering consistent, high-performance crushing. Whether you're looking to increase efficiency, maximise productivity, or reduce downtime, our Double Roll Crushers are the ideal choice for primary crushing of soft and medium-hard rock.

Design benefits

Direct and V-belt drive options

Depending on your requirements, our Double Roll Crushers can be equipped with direct and with V-Belt drive options.

Adaptable design

With years of experience in tooth design, we use the latest technologies to match teeth, liners and gap settings to your operation. This not only optimises throughput but also reduces downtime.

High throughput rates and service life

FLS Double Roll Crushers are capable of impressively high throughput rates – up to 14,000 tph – thanks to the customised tooth and liner design and optimised installed power and drive set-up.

FLS

General features

Automated gap adjustment

In case of overload incidents, the hydraulic system reacts by retracting one roll and letting tramp metal or overloading material pass through the gap. This dramatically reduces the need for personnel to enter the crushing chamber, ensuring greater operator safety and reducing downtime.

Versatility

The Double Roll Crusher crushes a wide range of material types reaching compressive strengths of up to 150 MPa and higher. It is less sensitive to wet and sticky material than RollSizers and can take in larger feed sizes, making it the optimal primary crusher for soft and medium hard rocks.



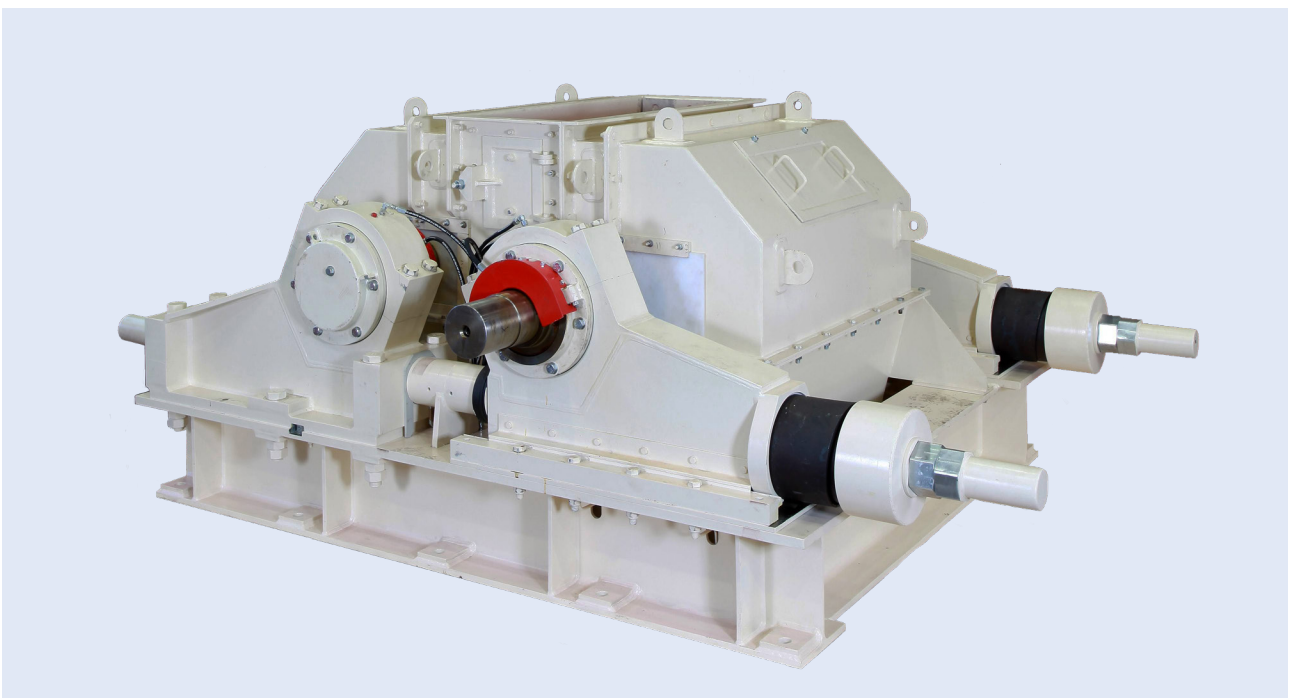
Technical specification

Application data	
Application	Primary crushing
Feed material	Bauxite, ore, coal, overburden
Product size	0 to 300 mm
Capacity ¹	2,500 to 4,000 tph

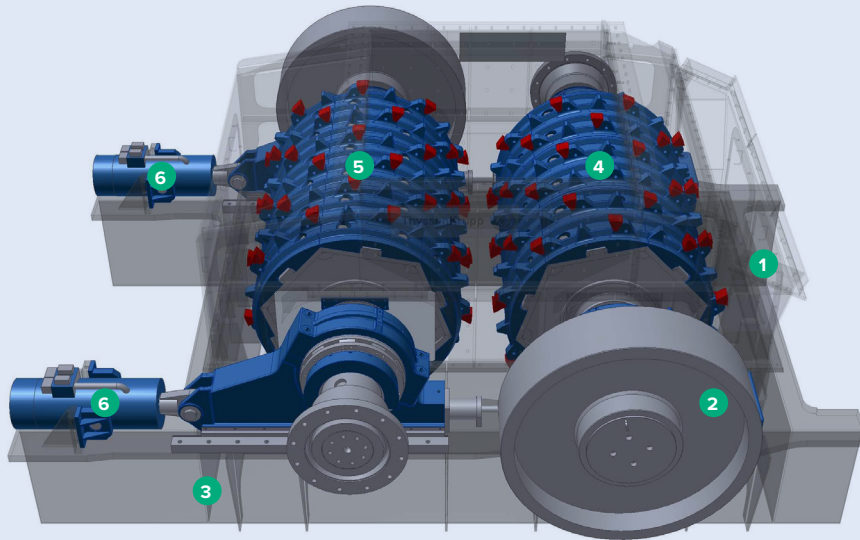
Technical data	
Roll diameter with crushing teeth	Approx. 1,800 mm
Roll length	Approx. 1,800 mm
Feed opening	Approx. 1,700 x 1,850 mm
Crushing gap (adjustable)	Approx. 200 to 350 mm
Total weight ²	Approx. 137 rpm

Drive	
Drive setup	V-belt drive
Motor power ³	2 x 250 kW (each roll driven by one motor)

1. The actual throughput depends on the feed material characteristics (e.g. bulk density, hardness UCS, feed particle size distribution, moisture content), the desired product size and the selected machine settings (e.g. gap setting).
2. Weights indicated do not include base frame, drive motor and tools. Weights may vary depending on the respective machine configuration.
3. Motor rating range applicable for < 1,000 m altitude. The nominal motor power selected for the respective application depends on the feed material characteristics, desired product size, actual machine configuration and actual installation height. Due to the generously dimensioned flywheels, smaller electric motors can also be used.

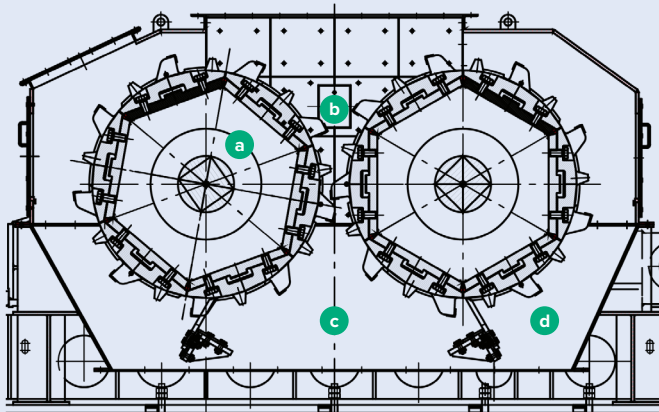


Main components



1. Crusher housing
2. Fly wheel
3. Base frame
4. Fixed roll
5. Floating roll
6. Hydraulic gap setting system

Working principle



Material is fed by a continuous feed arrangement into the middle of the machine between both rolls (a). The rolls operate at 5 m/s or even higher, and shear and compression forces crush the material between the roll in the gap (b). The crushed material is released through the crusher base frame (c) onto a discharge conveyor. The floating roll (d) enables the crusher to release tramp metal and adjust the gap by the hydraulic supported gap setting system.

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