



Product News

thyssenkrupp: New crusher revolutionizes material processing in mining

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With the development of a completely new type of crusher, the so-called eccentric roll crusher type ERC25-25, thyssenkrupp has achieved a quantum leap in primary crushing. The new crusher features a particularly flat and robust design and high throughputs of up to 3,000 tons per hour, enabling it to process hard rock and ores efficiently and economically in underground mining operations. As the centerpiece of a mobile or semi-mobile system the eccentric roll crusher also enhances cost efficiency in surface mining. In the future, the new series will be supplemented with further models to enable both smaller and higher throughput capacities for different applications.

Torsten Gerlach, CEO of the Mining Technologies business unit of **thyssenkrupp Industrial Solutions**: *“Our customers are looking for dependable, safe and easy-to-install crushers that permit maximum productivity even underground. To meet these requirements we have combined our many years of experience with different crushing technologies and our comprehensive engineering expertise. The new eccentric roll crusher from thyssenkrupp offers a wide range of possibilities for effectively processing ore and hard rock both underground and on the surface as part of mobile and semi-mobile systems.”*



Eccentric_roll_crusher_test_plant_thyssenkrupp

One of the key advantages of the new crusher is its flat and compact design with integrated screen. It is 20 to 50 percent lower than conventional primary crushers. This greatly simplifies transportation, installation and maintenance below ground. If required, the crusher's height can be reduced further for installation by removing individual components, saving additional time and costs.

Innovative design for greater efficiencyThe newly developed and patented design featuring a roll mounted eccentrically between the crushing and the screening chamber offers greater efficiency and productivity compared with other crusher types. The large, constant stroke of the ERC25-25 crusher combines with the integrated screen to provide very high crushing intensity and throughputs of up to 3,000 tons per hour. In the large crusher infeed area, the material to be reduced is divided into two material flows: The first with fine material is screened out and passes through the screening chamber to a discharge conveyor. The second stream with coarse material is transported to the crushing chamber and reduced between the eccentrically mounted roll and the chamber walls. In addition to higher production, this design also requires less maintenance. Keeping the fine material out of the crushing chamber reduces the power consumption of the electric motor and significantly reduces the load on the machine. An integrated automatic gap adjustment system with overload safety device also offers good protection in the event of non-crushable foreign material. Low-vibration machine also offers advantages in mobile use. The symmetric arrangement of the roll permits the eccentric roll crusher to be balanced with

great precision. With additional balancing weights it can be balanced almost completely. This lowers machine vibrations when idling and significantly reduces the loads on surrounding structures compared with other primary crushers. That makes the new crusher ideal for use in mobile crushing systems.

About thyssenkrupp:Industrial Solutions *is a leading partner for the engineering, construction and service of industrial plants and systems. Based on more than 200 years of experience we supply tailored, turnkey plants and components for customers in the chemical, fertilizer, cement, mining and steel industries. As a system partner to the automotive, aerospace and naval sectors we develop highly specialized solutions to meet the individual requirements of our customers. More than 21,000 employees at over 70 locations form a global network with a technology portfolio that guarantees maximum productivity and cost-efficiency. The Mining Technologies business unit supplies a full range of machinery, systems, equipment and services for the extraction, processing, storage and transportation of raw materials. In collaboration with our customers in the mining and minerals sectors throughout the world we develop custom, forward-looking solutions that enhance productivity and allow natural resources to be used responsibly and efficiently.*