

ThyssenKrupp Fördertechnik - leading supplier of jaw gyratory crushers worldwide

All over the world jaw gyratory crushers are used for the crushing of ores, natural rock and limestone. Unlike the standard gyratory crusher the jaw gyratory crusher has a specific shaped feed opening, which is extended to one side. For this reason, the crusher combines the principal advantages of both jaw and gyratory crushers – high capacity, high crushing ratios and a wide feed opening so it can handle even bigger feed lumps than every comparable size of gyratory crusher. Therefore, no scalping screen is required before the material, which is mined by blasting or by using the block caving method, is fed to this primary crusher. In addition, the big ring-shaped discharge opening and the specific shape of the feed opening reduces the risk of clogging owing to bridging.

ThyssenKrupp Fördertechnik GmbH, Ennigerloh, Germany, is the only manufacturer and supplier of jaw gyratory crushers in the world. Thanks to the proven high performance and great versatility of these machines, several contracts for different applications have been signed in recent years.

Recently ThyssenKrupp received orders for the supply of three jaw gyratory crushers model BK 63-75 to be installed in Australian underground ore mines. All three crushers will take run-of-mine ore mined by using the advanced block caving method, which is carried out by undercutting the base of the ore-body to induce fractures and allowing it to collapse into the empty space for extraction by loaders. This particular mining method is proven to be highly cost effective but is likely to provide a relatively coarse run-of-mine material with unpredictable maximum lump size, which can be crushed very effectively by using the jaw gyratory crusher.

One of the three jaw gyratory crushers has been ordered by a customer, which received an identical crusher for their crushing station in 2003. The operation has been extremely successful since the commissioning, particular when comparing its performance with the double toggle jaw crushers previously utilised.

The new crushing station is located approximately 550m below the surface and the crusher is designed to run at an average capacity of 900tph copper ore to provide a final product size of P80=150mm. The crusher is expected to be put in operation at the end of 2008.

Two other crushers of the same model will be supplied earlier in April 2008 and September 2008 to a Diamond Mine in Western Australia for their new underground development and will process run-of-mine diamond bearing ore, each line achieving an average throughput rate of 900tph and a final grain size of P80=150mm.

For an open-cut application in Europe, i.e. the primary crushing of copper ore, Ellatzite Copper Limited in Bulgaria has awarded to ThyssenKrupp an order for the supply of the key components of their new primary crushing station incorporating one jaw gyratory crusher model BK 63-75 which is expected to be put in operation in autumn 2007. The crusher is designed to run at an average capacity of 1,800tph but will achieve a maximum capacity of 2,500tph and provides a final product size of 200mm.

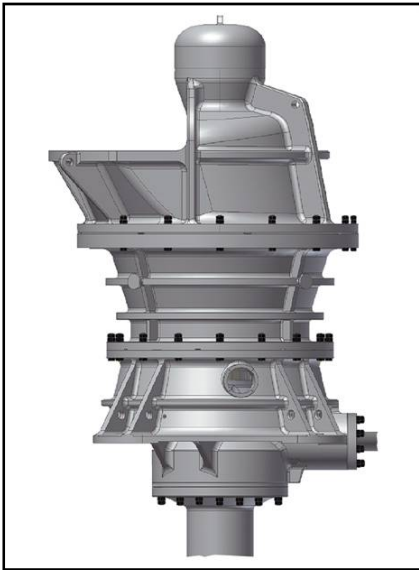


Bild 1: Backenkreiselbrecher Typ BK 63-75
von ThyssenKrupp Fördertechnik

*Fig. 1: ThyssenKrupp jaw gyratory crusher
type BK 63-75*



Bild 2: Kompakter Backenkreiselbrecher
zur Primärzerkleinerung von Kupfererz
im Block-Caving-Einsatz Untertage

*Fig. 2: Compact jaw gyratory crusher
for primary crushing of copper ore
operated underground in a block cave mine*