

## Stationary Feeder-Breakers for Surface Mining



Feeder-Breaker crushes phosphate ore for conveyor belt transport at a rate of 2,000 TPH.



### Summary

The JOY Feeder-Breaker performs three important functions in a stationary installation: provision of surge capacity that allows the discharge of mined material at the maximum capacity of the haulage equipment, reduction of the mined material to a consistent, easily-handled size, and discharge of the fractured material at a consistent, steady rate.

### Benefits

Equally valuable above, as well as below ground, the advantages of a Feeder-Breaker as a primary crusher are being recognized by coal, lignite and limestone mining and quarrying operations. In addition to surge capacity, size reduction and consistent discharge rate, the Feeder-Breaker, when compared to conventional crushers, offers these benefits:

- Lower capital cost
- Lower installation height – site excavation and concrete work is reduced or eliminated
- Higher throughput in tons per hour
- Larger lumps of material handled routinely
- Fewer fines are created because material is fractured rather than crushed
- Lower profile allows most haulage equipment to discharge directly into the feeder hopper. When using trucks, the elevation ramp and foundation work will be simpler, quicker and lighter
- Feeder-Breaker produces no eccentric motion, thus heavy reinforcement and foundations are unnecessary
- Breaker drives are electro-mechanical with direct drive arrangement

### Description

A surge hopper at the intake end of the Feeder-Breaker allows trucks or other haulage equipment to discharge mined material at their maximum rates. A powerful rotary pick breaker reduces mined material to a consistent size easily handled by conveyor belts and secondary crushing operations. As the mined product moves through the Feeder-Breaker, the material flow is discharged onto the conveyor at a consistent rate the belt can accept, virtually eliminating spillage, reducing wear and significantly increasing belt life.



Fixed mounted Feeder-Breaker positioned beneath a 200 ton hopper receives ROM limestone and produces a minus 150 mm (6") product size at 700 MTPH.



Stationary truck dump Feeder-Breaker running 1500 TPH of coal at minus 200 mm (8") output size.



Skid mounted Feeder-Breaker breaking overburden to minus 12 inch product size at a variable rate of 0 to 5,000 TPH.



Skid mounted Feeder-Breaker with a 300 Ton hopper crushing phosphate ore to a minus 12 inch product size at 2,000 TPH.

**JOYGLOBAL**



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