

# Crushers

## Jaw Crusher



Jaw Crusher, as the name suggests, works on the same principle as the human jaw. It has one stationary jaw (like the upper teeth set) and the other movable (like the lower teeth set) with the material to be crushed (food to be chewed) fed inside the two jaws (mouth) and crushed (chewed) to the desired size and discharged (swallowed) to accommodate fresh input of material (food).

CCS manufactures Jaw Crushers of crushing capacity upto 300 TPH and boulder size upto 1000 mm.

Jaw Crushers based on Single Toggle (Grease Lubricated) as well as Double Toggle (Both Grease and Oil Lubricated) mechanisms feature in our product range, each having its own advantage for specific project requirement.

## Single Toggle Jaw Crusher



A Single Toggle Jaw Crusher uses only one toggle plate in its mechanism. Two bearings are fit in the swing jaw of this crusher and the other two bearings support the eccentric shaft, which is driven by the drive flywheel. An extra (non-drive) flywheel is provided to lessen the power requirement of the prime mover (motor / engine).

Being light in size and relatively easy to operate and maintain, the Single Toggle Jaw Crusher is a popular machine for use in hilly terrain and for mobile crushing plants.

## Double Toggle Grease Lubricated Jaw Crusher



Double Toggle Jaw Crushers use two toggle plates and hence the name. Such crushers do not rub the jaw plates with the material to be crushed and hence lead to lesser production of dust (very small crushed size), higher jaw plate life and lesser power consumption.

This type of Double Toggle Jaw Crusher uses grease for the lubrication of the four nos. self aligning double row ball bearings. This is particularly useful for higher altitudes and its simple design and ease of operation makes it particularly suitable for sites far from towns or geographically difficult to access.

### Salient Features of our Double Toggle Grease Lubricated Jaw Crusher

Sturdy design capable of taking high shock loads.

Interchangeable drive mechanism to suit prime mover (motor / engine) position.

Two heavy duty flywheels to reduce power consumption.

Available for capacity up to 400 TPH and 1 metre feed size of material to be crushed.

## Rotopactor



Our Rotopactor, basically a rotary crusher used in the secondary or tertiary stage of a stone crushing plant, is the ultimate weapon against flakiness.

Its sturdy design consists of an impeller (Rotor) rotating at 1000-1200 r.p.m. inside a steel fabricated body lined with high grade austenitic manganese steel breaker liners.

The stone to be crushed is fed directly into the centre of the rotor, the high rotating speed of which throws the material outwards towards the breaker liners and other flying crushed particles for further impact crushing. The result of the process is production of absolutely cubically crushed stone, which finds great use in the construction sector.

### **Use our Rotopactor and cut crushing costs**

The rotor is completely dis-assemblable and hence all its components - back plate, eight rollers and ring (all of manganese steel casting) can be individually replaced to avail optimum useful life.

The direction of rotation of the rotor can be reversed to prolong the useful life of the same as well as the breaker liners, thereby reducing the cost of crushing.

None of the components requires frequent adjustment like in a jaw crusher, roll crusher or cone crusher and hence the down time is very less.

Hopper of the Rotopactor is so designed that when it is fed for the first time, a bed of stones is formed inside it. The material fed further falls on this bed and does not hit the bottom plate of the hopper directly. Hence wear and tear is minimised.

Hinged design of the hopper enables faster access inside the main body, thereby reducing consumables replacement time.

## Double Roll Crusher



A Double Roll Crusher is based on the principle of feeding the material to be crushed between two manganese steel cast rollers rotating in opposite directions, with their axes parallel to each other.

The gap setting between the rolls is very small, and hence the feed material is crushed while it passes through them. The central axis of one roll is fixed while the other is of floating design. The floating roll gives way to any uncrushable material that falls in the feed opening.

A double roll crusher may be categorised as Smooth / Smooth And Corrugated / Corrugated double roll crusher depending on the corrugation on none, one or both rolls respectively.

The shaft on which the rolls are mounted is of special steel and is carried in self aligning cylindrical double roller bearings of adequate size and capacity, fitted in housings and well sealed with labyrinths to prevent possible entry of dust, foreign particles or moisture.

The gap between the rolls can be adjusted with the help of setting the position of the floating roll. This is done by adjustment bolts and insertion or removal of steel strips provided with the equipment.

Drive to both rolls is through individual flywheels which may be driven by a single motor or separately by two motors.