

After Blasting

When rock is blasted loose in the quarry a percentage of it can be used straight away for rugged constructions such as sea walls, retaining walls or anything requiring large, boulder sized rocks.

Many blocks of land in the Oxenford & Upper Coomera area require retaining walls as the house blocks are built into the hill and the higher level must be retained. The rest of the rock, providing it is of suitable size, will be taken to the crushing plant.

Different building and landscaping projects as well as different types of concrete require various sizes of rock, from huge boulders, gravel and all the way down to manufactured sand. All of these products can be produced at our Oxenford quarry.

The act of turning 'big stones into little stones' is called rock reduction and this is performed using a rock crusher.

The Crushing Plant

The crushing plant is comprised of the crushers which reduce the rock, various screens to grade the rock into different sizes and conveyor belts used to transport materials to different stockpiles.

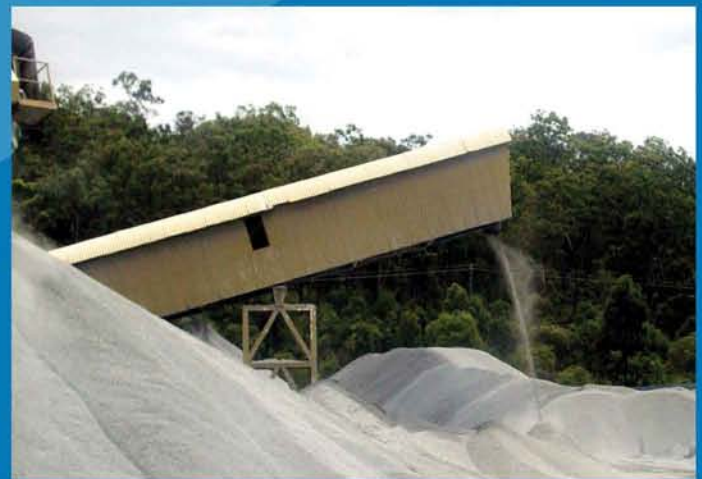
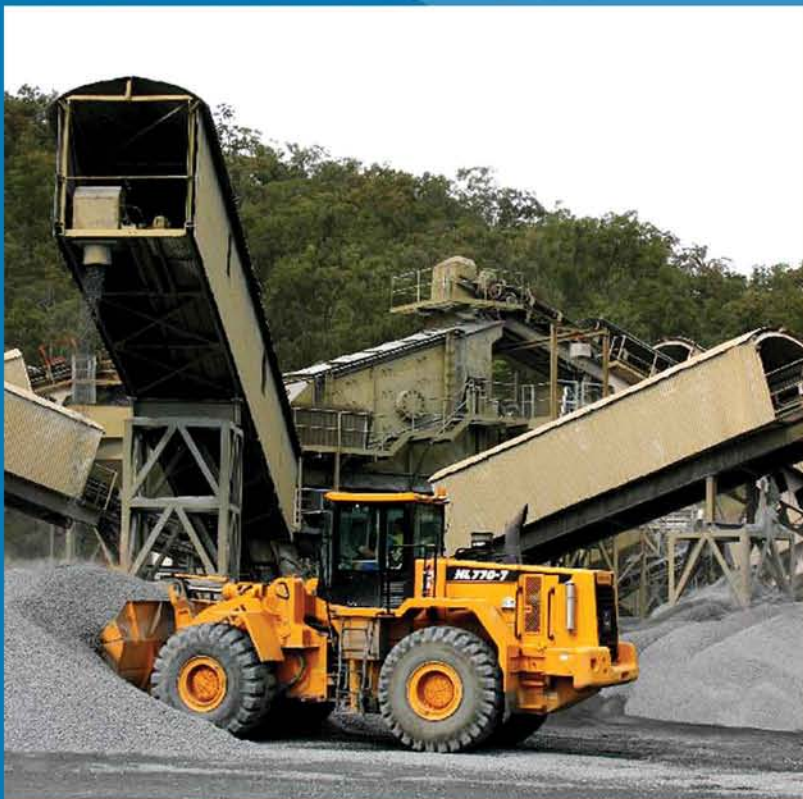
The conveyor belts are covered by special housings made from corrugated metal which help reduce noise and dust emissions.

The freshly loosened rock is loaded from the blasting pit onto 60 tonne dump trucks. The trucks tip their load into a jaw crusher which is the first stage in rock reduction. This is called primary processing. If necessary, the crushing process can continue with secondary and tertiary processing.

The Jaw Crusher (Primary processing)

The jaw crusher generally makes the rocks more manageable for other crushers. Jaw crusher rocks can also be used straight away if the larger sized rock is required. These are typically used for canal walls to stop erosion and for building some types of decorative stone walls often seen at the entrances to housing estates.

In the jaw crusher, the 'jaws' crush the rocks until they are small enough to fall through the bottom. The rocks drop onto a conveyor belt and are carried either to a stockpile ready for use or, if smaller rocks are required, onto the other crushers for secondary processing.



The Cone Crusher (Secondary processing)

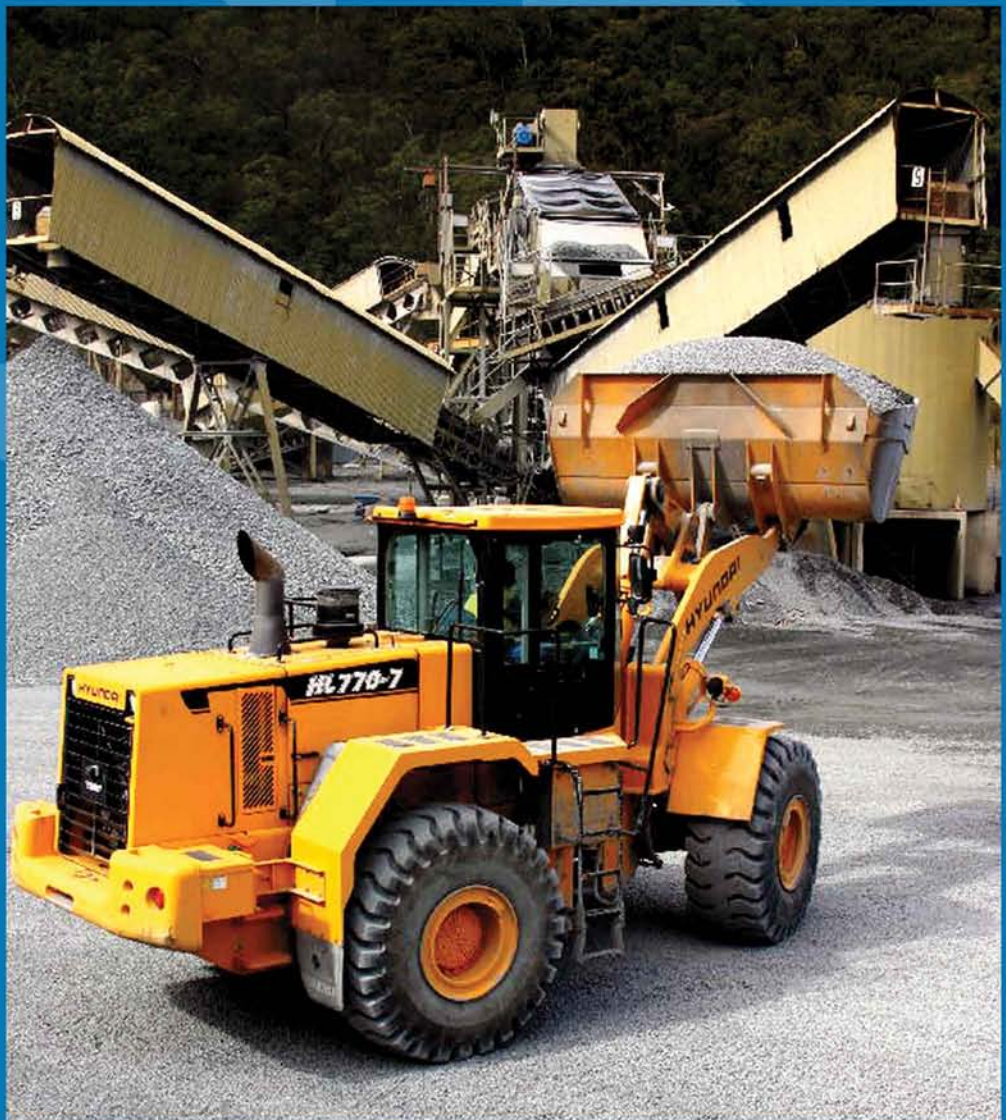
The next crusher is called a Cone Crusher. It further reduces the rock size. The rocks are passed over a screen where the sizes of the screens and the levels of crushing can be changed depending on what is required.

Beneath the screens are more conveyor belts to take the crushed material to stockpiles or for tertiary processing.



The Barmac Crusher (Tertiary processing)

While the main purpose of the crushers is, as the name suggests, to crush rocks, there is also a crusher that helps to shape rocks. The Barmac Crusher is used to take the sharp edges off the individual stones producing a more rounded stone.



Environmental Compliance

Nucrush's plant complies with The Department of Natural Resources and Mines regulations and also meets environmental conditions set by the Environmental Protection Authority (EPA).

The EPA issues Nucrush with a license to operate and regularly audits company records and operations. The regular audits ensure Nucrush is continuously improving its operations and processes to make them as environmentally friendly as possible.



This information was produced by Nucrush Pty Ltd, part of the Neumann Family Group of Companies.

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