Anglo Coal’s Dawson coal mine near Moura in Queensland has just taken delivery of a Broons BH-1950 MS “Square” Impact Roller to crush rock on their haul roads as a way of improving their tyre management regime. The Dawson Mine is one of Australia’s largest coal mines, and will take out approximately 12 million tonnes this year.

The Mine Spec Impact Roller is a world leader in minimising haul truck tyre wear by improving the running surface on haul roads, tip heads and pit floors.

Towed by a Case IH STX280 articulated tractor, the 12 tonne module quickly reduces the large and sharp-edged rock to 40mm product that allows haul trucks to travel over it easily without the fear of tyre damage. Large or sharp rock will slice through and critically damage even a brand new tyre, while smaller rocks can lodge between the lugs and eventually penetrate and puncture the tyre.

The purchase and use of the Broons “Square” Impact Roller is a very cost efficient move that will be quickly recouped by Anglo Coal through the improvement in tyre wear and reduced damage to haul truck tyres.

Anglo Coal’s Pumps and Earthworks Superintendent, Greg Hicks, said that so far they have used the impact roller on dragline shutdown pads and small road building exercises.

“However, I expect that we will be using it quite a bit in the near future, when we re-dress our old haul roads. The impact roller has the ability to crack big rocks that lie just beneath the surface, and then the small rock can be used to fill in the holes on the roads. We use the impact roller to compact this and then put a suitable road base on top and grade it. We will then compact again with the impact roller with final trim grader afterwards.

It really does its job well, and there is no doubt that it’s got deep compaction. You can feel it going into the ground from 20 metres away on newly placed road material,” Greg said.

Mining companies that have reduced the size of surface rock and improved haul roads and loading areas with a Broons Mine Spec Impact Roller have also shown it’s possible to reduce mechanical wear and tear on haul truck suspension and associated components.

Broons launched their revolutionary patented BH-1300 "Square" Impact Roller onto the world market in the mid-1980s, and quickly developed an international reputation as specialists in the application and operation of rolling dynamic compaction equipment.
In the mining industry, their enormous BH-1950MS Square Impact Roller has revolutionised the way to reduce tyre damage and ultimately consumption of these expensive and hard-to-get items. Its improved frame design and heavy duty linkage assembly can easily handle the rigours of the demanding mining industry, while the specially designed wear plate package protects the faces of the module when working on hard rock as well as improving the breaking force.

The 12 tonne mine spec module travels at close to 10kph, and imparts a massive 50kJ with every blow. And, there are two of these huge blows every second when the unit is towed at that speed. And, as the Impact Roller only requires a turning circle of fifteen to twenty metres it is effective in such confined areas as pit floors.

Even today, no alternative compaction equipment comes close to the Broons Impact Roller on performance, productivity and price.

Broons' experience in dynamic compaction using their "Square" Impact Roller is unequalled anywhere around the globe, and they have undertaken major projects in the UK, Europe, Hong Kong, USA, New Zealand, Indonesia, South Africa, the Middle East, and of course throughout Australia.

The Company is renowned for its commitment to customer service, and provides full in-field operator training and service, backed up with a comprehensive and prompt parts operation. Broons continues to set the pace with innovative compaction techniques, and are a renowned global leader in the application and operation of this unique technology in the mining industry. They can be contacted on (08) 8268 1988 or info@broons.com for further information.