Crushing and compaction specialists, Broons, in collaboration with The University of Adelaide’s School of Civil, Environmental and Mining Engineering has again recently proven the worth of rolling dynamic compaction with a Broons ‘Square’ Impact Roller during a compaction trial.

In this particular case the mine was looking to confirm the level of compaction necessary during the construction phase of new haul roads at the mine, but the unique ‘Square’ roller could just as easily have been proof rolling pads for new infrastructure, or compacting waste dump capping layers.

It is common for such a haul road trial to use overburden that is carted by haul trucks and dumped on the test pad (haul road) being constructed, spread with a dozer; moisture conditioned and compacted using the ‘Square’ Impact Roller with a number of passes.

Testing is then usually undertaken using a number of techniques to confirm the effectiveness of the Impact Roller, and it is good practice to confirm this testing with the on-site visual observations of an experienced geotechnical engineer. Invariably the test results from the compaction trial confirms that the material can be successfully compacted with the Broons ‘Square’ Impact Roller, and will determine whether the fill material and moisture content is representative of what will be used during the wider project.

Nearly 100 mines throughout Australia and overseas have proven the application of the Broons ‘Square’ Impact Roller in a variety of uses at their sites over the last 40 years and many have expanded their use of the Impact Roller because of its versatility and proven performance.

Towed by a 270-330hp tractor the 1.3 metre wide BH-1300HD with 12 tonne compactor module and wider BH-1950MS will compact the subgrade and provide a solid foundation on which to erect infrastructure and build haul roads.

Broons can tailor a package to suit individual mines involving wet or dry hire of their unique Australian designed and made equipment and can be contacted on (08) 8268 1988 or info@broons.com to further explain how companies can benefit from the use of this unique technology. Machines are available for rental right around Australia.