

## MEDIA RELEASE

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### IMPROVING SUBGRADES BY USING A "SQUARE" IMPACT ROLLER

The Broons "Square" Impact Roller has been a hit with Local Government, Contractors and Mining Companies for decades - proof rolling failing road formations, and increasing subgrade densities. Use on rural roads, highways, mine haul roads and sub-divisions has resulted in significant improvements in many cases claims Broons' Technical Manager, Derek Avalle.

"Broons' Impact Roller is readily identified when compared to conventional drum rollers by the single solid square compactor module weighing either 8 or 12 tonnes, along with an operating speed of 10-12km/h. The combined effect of a non-circular module towed at high speed and thumping the ground twice per second with substantial impact force delivers two major advantages over alternative methods. Simultaneously, deep penetration and a high production rate", says Mr Avalle.

"Weakness in subgrade materials perhaps 0.3m to 0.6m below the surface reflect in surface deformation and potholes, causing a major problem. Using conventional equipment to improve these materials would require boxing out or excavation, as most vibrating rollers are only effective to a depth of about 200mm. However, there is an alternative readily available. With just 6-10 passes of the Broons "Square" Impact Roller applied on the surface, significant improvement in density can occur to depths of at least 0.5-1.0m. This offers a simple and productive means of improving subgrade strength in a road formation without any excavation working straight on the surface wearing course which is broken up in the process. In addition, Impact Rolling is ideal for locating "soft spots" which are rapidly identified."

Mr Avalle reminds, "Care should be exercised when considering operation close to shallow buried services; for vibration effects on existing adjacent or nearby structures; along narrow spaces that constrain turning, and for short runs that could inhibit the optimum operating speed."

"An Impact Roller is not considered a finishing roller therefore grading, watering and final rolling of the top disturbed layer will always be required after impact compaction. Broons' unique subgrade improvement process is widely accepted as a proven means of overcoming poor subgrade density insitu. Impact Rolling should not be seen as an additional cost item, but rather a saving in time and money and an investment in the long term sustainability of your road formation and pavement," Mr Avalle concluded.

Broons' in-house Technical Manager is available to discuss how you can benefit from the use of this unique technology.

