

The rock eater just got bigger

THE first production Vermeer T1655 Terrain Leveller in the world recently commenced work in Western Australia. In terms of size this was not a step up from the previous model – it was a giant leap.

The T1655 is the first terrain leveller to be purpose designed for mining applications and the first to have direct hydraulic drive to the drum – the direct drive removes the ability to cut flush but delivers more power to the drum.

It is also the first machine to have the vacuum dust containment system mounted completely on the attachment.

Compared to its predecessor, the T1255, the T1655 weighs an extra 72 tonnes, topping the scales at 181t, and has twice the engine capacity with two 447 kilowatt engines – the previous model has just one.

With the extra power to the drum, the T1655 is able to cut harder material than the T1255. The cutting tool patterns remain largely unchanged, but the tools themselves are larger.

In terms of the variation that direct drive to the drum makes, a Vermeer customer with direct drive on a T1255 claims that it makes a 20% difference.

Vermeer remains firmly convinced of the benefits of separating the milling of the rock from the collection of the millings, but is investigating loading options in response to market feedback.

The operator experience has also improved. The T1655 has a larger roll over module cab with a second seat for a trainee operator, and is mounted on 2 air bags for improved comfort.

Vermeer Corporation senior director of

specialty excavation Mark Cooper was in Australia for the launch of the machine.

"Australia has been the largest adopter of surface mining technology," Cooper told *Contractor*.

"While this has been largely in the mining industry in Australia to date, civil has led the way for our machines in the rest of the world.

"While civil will continue to be an important market, we feel that mining will eventually be the larger market."

Regardless of the industry surface miners are used in, Cooper believes the machines are under-exploited on a whole. For mining applications he said the surface miners could precisely excavate material, or undertake precision mining.

"You now have the ability to separate grades of ore," he said.

"You have the ability to chase the seam precisely. It requires fewer steps to get the ore to the secondary crusher. It is about a more precise and repeatable way of mining."

Blasting restrictions are seen as driving an increase in the use of surface miners.

This provides the additional benefit of maintaining higher grade ore, or less dilution.

Cooper also sees increased use of automation and automation (automation combined with human interventions) as providing greater opportunities for surface mining because of their linear method of operation and precise control of drum position.

As Cooper does not see the T1655 as being the size limit for terrain leveller development, any move towards larger and more productive mining equipment is regarded as an opportunity rather than a threat. Vermeer plans to produce a second T1655 in 2011, and is geared for increased numbers in 2012.

The Vermeer T1655
Terrain Level

