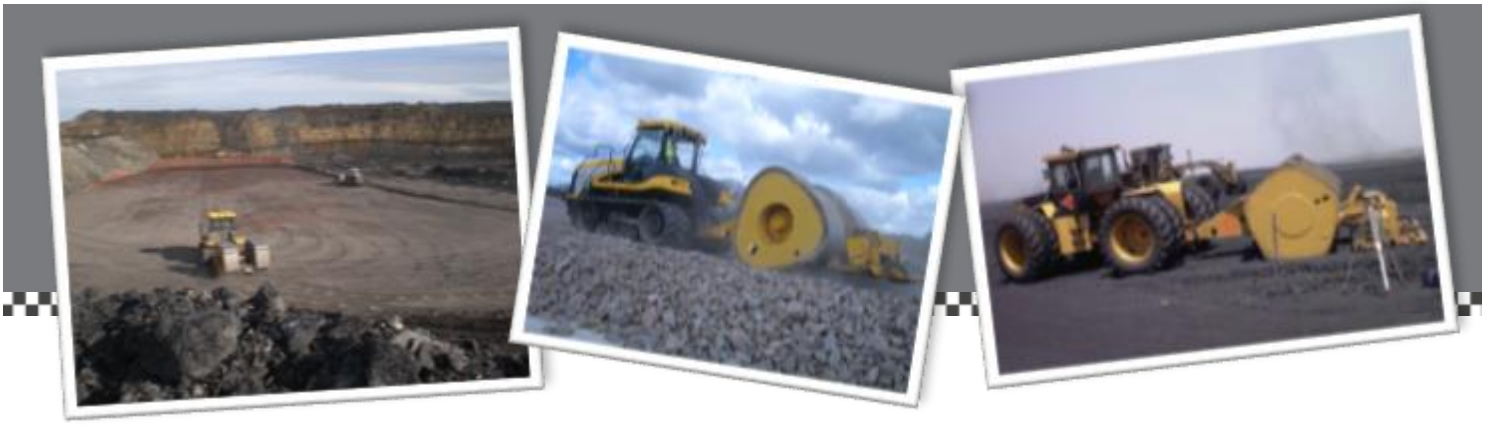
LAND PAC®

.....focus on Mining

Alternative and unique controlled solutions to ground improvement in infrastructure, mining and marine applications.

Features of HEIC

1. *Compaction forces of between 1200kN and 2500kN.*
2. *Ability to compact material to a higher maximum dry density and over a wider range of moisture conditions, particularly dry of optimum moisture content.*
3. *Ground improvement is typically measured to effective depths of 2m-3m with depths of up to 5m being recorded in some applications.*
4. *This extended load transfer duration leads to a softer soil response to the load and hence an enhanced soil compressibility is achievable.*
5. *The relatively high operating speed and depth of influence of the Landpac HEIC process leads to very high productivity of compaction. The HEIC process can typically cover 15,000m^2 per hour per surface coverage. The productivity of the Landpac HEIC process can be between 2 and 5 times higher than that of conventional shallow compaction equipment when performing fill works and many times more productive than that when it comes to the improvement of in-situ material.*



Mining Application benefits

1. *Compaction of a wide range of materials over a wider range of moisture content.*
2. *Deep in-situ compaction may eliminate the need to excavate and replace in thin layers.*
3. *Thick lift layerworks (800-1000mm) as opposed to traditional thin layers (150-250mm).*
4. *Reduced water requirements; potential 40-50% saving.*
5. *Reduced crushing requirements due to compaction of thicker rock fill layers.*
6. *Improved productivity; up to 10 times more volume per shift.*
7. *Improving existing on-site materials, eliminating the need to import expensive material.*
8. *Potential reduction in design layer thicknesses, even complete layers, with improved bearing capacities achieved through deep in-situ compaction.*
9. *Reduction in "black-top" thicknesses due to increased bearing strength achieved through deep in-situ compaction and improved compaction of layers.*
10. *Employment of an improved quality control technique (CIR) resulting in improved accuracy and an increased number of correlated results whilst reducing the time required to test and the time required for results to be made available.*

Where in Mining?

- *Tailings Dams*
- *Haul Roads*
- *Access Roads*
- *Terraces*
- *Airstrips*
- *Coal discard compaction*
- *Temporary working platforms*
- *Earthworks*
- *Erosion and dust control*
- *Waste site management*
- *Mine/Quarry Rehabilitation*

……. and many more……

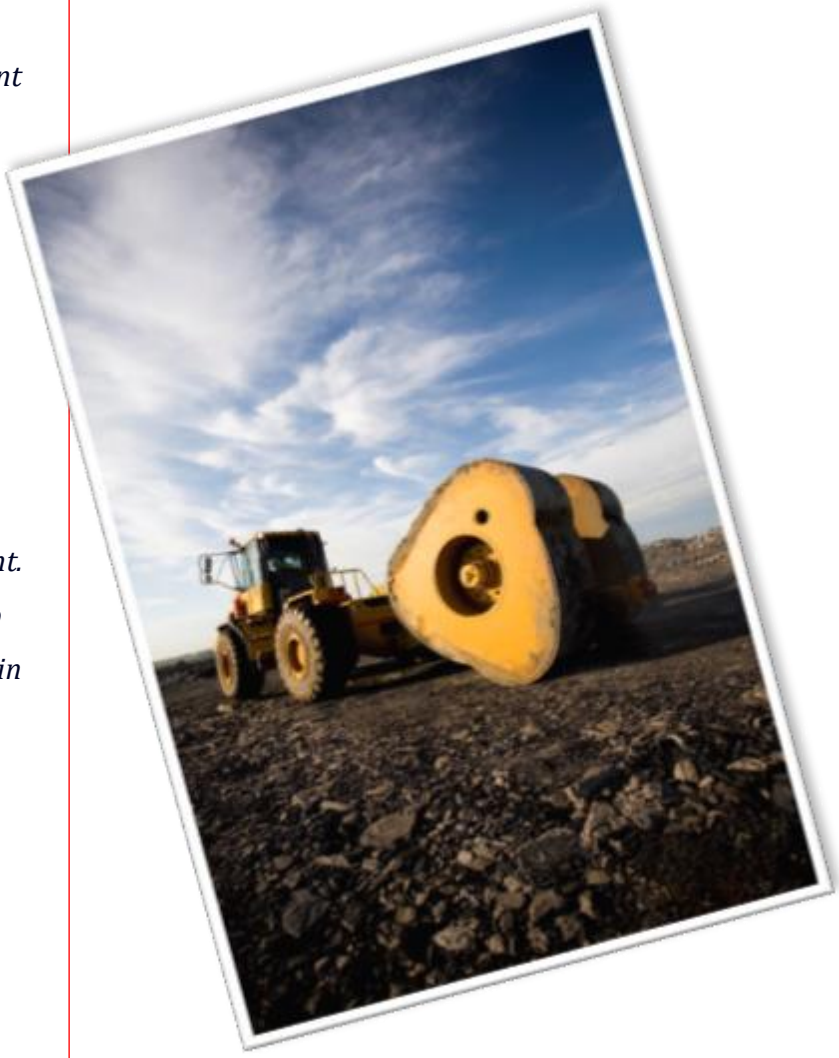
LAND PAC

Examples

of application benefits

Typical benefits experienced include:

- *Reduction from 400kL of water requirement per shift to 250kL per 9 hour shift.*
- *Improve compaction of in-situ material to 3500-4000m² per 9 hour shift.*
- *Improve compaction of 1m fill material to 5000-6000m² per 9 hour shift.*
- *Reduction of excavation and replacement requirements can reduce production costs by 60%, when compared to direct in-situ compaction to 1.5-2.5m depth improvement.*
- *Increasing layerworks from 300mm lifts to 1000mm lifts can reduce production costs in excess of 45%, up to 65%.*
- *Elimination of a complete layer due to the improved bearing capacities achieved by using HEIC can reduce costs by 60% and improve production considerable.*
- *Reduction of crushing requirements by more than 50% by using thicker rock fill lifts of up to 1.2m, allowing maximum particle sizes of up to 65% of the layer thickness.*



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