

Innovative adaption of a JCB Excavator wows W.O. Trackworks

Earthmoving equipment suppliers are generally not keen to entertain requests from customers to fit specialised equipment to standard machines that may require some 'out of the box' thinking and adaptation – all except one supplier, Bell Equipment.

This is the opinion of Gary Ollewagen, the youngest of three brothers who, together with their financial director, own and manage W.O. Trackworks (Pty) Ltd (WOT), a specialist company that will get involved at the inception stage of projects with prospective clients and, where applicable, manage the designs and undertake construction of new railway trackwork/networks. Furthermore, WOT undertakes the maintenance of existing rail networks, and offers the design and manufacture of custom concrete products related to railway infrastructure.

"W.O. Trackworks was started by our father, Winston Ollewagen, in 1982 and currently me, my older brothers, Winston and Ian, and the Financial Director, Raynard Weyers, manage the company," says Gary.

"Our father is a platelayer by trade, which to the layman is a person who regularly inspects the section of railway track that he is responsible for from an operational safety perspective, checking for geometrical deviations, wear on the rails, sleepers and fastenings, and the general safety of the surrounding area as well."

Gary and Winston draw on their extensive experience in civil engineering and mechanised on track plant, with Ian in support and focusing on construction and concrete products and the installation thereof. WOT has an impressive resume with projects undertaken successfully on four continents, including large parts of Africa (including South Africa), the Middle East, and even as far as Vietnam and Mexico.



Bell Equipment Sales Representative, André Jordaan (left) with two of the W.O. Trackworks Directors, Gary and Ian Ollewagen.

"Approximately 12 years ago we decided to investigate the opportunity to introduce a more mechanised system in our industry by using standard earthmoving equipment that we would then adapt to better suit our purposes. We subsequently grew our skills set tremendously, which enabled us to tender and be awarded higher value, and more complex contracts," Gary adds.

"We bought our first JCB JS140 Excavator in 2017 and the adaptability of the machine with our special attachments, coupled with its reliability, prompted us to expand our fleet of JCB equipment in 2022 by purchasing additional units, i.e. JCB 3DX Backhoe Loaders and a JCB JS205 Excavator. These transactions were concluded with the advice and assistance of Bell Equipment's Sales Representative, André Jordaan."

"An interesting fact is that not all suppliers of such equipment are keen to take on the additional work of adapting a standard machine to our needs. Bell Equipment, as the South African supplier of JCB, however, agreed to partner with us, which in turn led W.O. Trackworks to become a loyal customer going forward."

Gary explains that although the attachments may be readily available in the Northern Hemisphere, the foreign exchange and importation costs make this option very prohibitive. WOT supplies their own design of bespoke attachments and then request Bell Equipment to fit these attachments to standard 20-ton JCB JS205 Excavators.

"We require Bell Equipment to remove the bucket and decrease the hydraulic flows on the JCB JS205 Excavator. They then mount a switching panel in the cab that will control the increased three auxiliary functions that we need for our specific tasks, namely

to grab five sleepers and place them, grab five sleepers and place them to exact spacing of predetermined widths, and finally grab and place two sections of rail of 18-metre lengths weighing more than two tons and place them accurately."

The fact that Bell Equipment, as the supplier of the equipment, does the post-market conversion, ensures that the warranty on the JCB JS205 Excavator is not affected, which is a huge advantage for WOT.

Gary has designed a cam-lock system which, when attached to the boom of the JCB JS205 Excavator, allows for two 18-metre lengths of rail to be safely lifted simultaneously and placed in position on the concrete sleepers.

By using these attachments efficiently, a team of only three people can place 940 meters of concrete track sleepers in a seven-hour shift while another team, also consisting of only three people, can lay 40 pairs of 18-metre rail track in the same timeframe. This makes for reduced labour, faster turnaround times and improved safety on a site, the latter being a huge plus factor for clients that consider safety and risk paramount.

"These attachments have worked so well for us and the reduced hydraulic flows on the JCB JS205 Excavator makes it the ideal machine for our purposes," Gary says.

"Proof of this is the two more similar machines we bought in March and June 2023 which we believe will be with us for a long time to come. Furthermore, with our specialised, and to a certain extent, limited usage, the JCB Excavators won't run up large hours at all." "This is also the reason we don't take extended warranties as we believe the JCB JS205 Excavators are solidly designed and built," he says.

"Fuel consumption is not that important to us due to the short periods for which the machines are used, but our experience has taught us that, once again, the reduced hydraulic flows do cut down on fuel consumption as the engines do not run hard."

WOT's JCB 3DX Backhoe Loaders are used for their projects on internal hires to fulfill housekeeping duties and keep the sites tidy. "To say that we are pleased with our purchases of the JCB JS205 Excavators would almost be an understatement as the machines fulfill a very important role in our company by decreasing labour input, whilst still completing the job efficiently, safely and to the client's satisfaction," Gary says.

He adds that pivotal to their satisfaction is the fact that "Bell Equipment was prepared to listen to our needs, think innovatively, and is true to our company's own nature. This makes it a market leader as much as we, W.O. Trackworks, would like to think we are too."

