JCB Wheel Loader keeps production going at Much Asphalt Gqeberha

The 'just in time' concept is often used in industry as a cost-saving method to cut down on keeping large inventory, but in the asphalt industry it is the norm that demands that all components from raw materials to mechanical tools create a synergy without which there would be no product to sell.



Asphalt is made when mixing raw aggregates, supplied by quarries, with bitumen, a by-product of the fuel refining industry. At the Much Asphalt plant in Gqeberha (formerly Port Elizabeth), the company's Maintenance Supervisor of some 34 years, Louis Blume, tells us more: "We're a major supplier of asphalt to SANRAL (the South African National Roads Agency SOC Limited), a host of district and local municipalities, private contractors, and even smaller customers like plumbers who all work with asphalt in one way or another.

We have 10 different mixes that we make up and these each contain different sizes of dry aggregates that we receive from various quarries in our area. The different aggregates are stockpiled in separate concrete compartments." The other raw product, bitumen, is obtained from fuel refineries where it is pumped into road tankers at 120°C and then kept hot during transit to arrive at Much Asphalt's plant in Gqeberha at a temperature of around 150°C to maintain and improve its viscosity.

"We receive our orders for the following day's delivery during the afternoon and then plan our production," Louis adds. "We use a wheel loader to load the bins with the various aggregates from where the exact amounts are weighed to be mixed with the hot bitumen."

The machine in this case is a JCB 436ZX Wheel Loader with a standard 2,6 cubic metre bucket. Much Asphalt took delivery of it in May 2022 after their previous loader was moved to another branch.



"Having the new JCB 436ZX Wheel Loader has boosted our confidence to keep delivering the quality product that we're known for, as given the tight timeframes we work to we simply cannot afford to have equipment go down in our production cycles," Louis explains. "Our JCB Wheel Loader would normally be active for around 10 hours in a regular day shift but when we're under pressure and work extended shifts, that number could increase to anything between 13 to 19 hours in a 24-hour cycle."

Louis adds that during a normal day shift, their JCB 436ZX Wheel Loader would load 1 000 tons of dry aggregates into the bins and has other duties too like stockpiling the aggregates that are delivered to ensure easier loading. Working on a concrete base, the JCB 436ZX Wheel Loader's bucket is fitted with a half-arrow cutting edge. "We chose the JCB 436ZX Wheel Loader after lengthy consultations with Bell Equipment's Sales Representative in our area, Tom Swartz, who advised us on the similarity of the machine's features and capabilities compared to our previous model," Louis adds. "These criteria included its power, breakout force and bucket size, and we're well pleased with our eventual choice."

The JCB 436ZX Wheel Loader boasts a Cummins 685,9 engine which produces 132kW of gross power and 786Nm of torque at 1 300 rpm. Its breakout force of 147kN allows it to easily handle the dry but abrasive aggregate loads it constantly feeds into the asphalt plant. The operator enjoys good visibility from the ROPS/FOPS certified cab where air-conditioning and a reverse camera help to keep his attention on working efficiently and safely. An automatic reverse fan and turbo pre-cleaner take care of the engine's health. Much Asphalt's new JCB 436ZX Wheel Loader had just passed the 1 000-hour mark when we saw it. The machine was bought with an extended warranty to 6 000 hours or 36 months on its wet drivetrain and a Bell Care Package to the same limits, which will see mechanics from Bell Equipment, as the official South African distributor for JCB equipment, service the machine.

"Our city, Gqeberha, is not known as the 'windy city' for nothing and due to the swirling and penetrating dust we experience when working with the aggregates on windy days, we've asked Bell Equipment to schedule intermittent services at 250 and 750 hours as well, which we're happy to pay for," Louis says.



Louis has high praise for Bell Equipment's personnel in the local Gqeberha branch. "We've had the pleasure of having Bell service our previous loader and I quite frankly won't work with any other equipment supplier as the levels of service and care we get from these chaps is off the scale. From Gert Nelson the Branch Manager to Tom Swartz in sales and not forgetting the mechanics, Daniel van der Walt and Kenneth Meiring, who will always give us a call after doing a service or repair to find out whether everything was to our satisfaction.

"All these gentlemen are great ambassadors for the Bell and JCB brands," he says.