

# Modular and movable processing

## The secret to unlocking the Orange River's greater alluvial potential

It is under these smaller-scale operating circumstances that modular processing facilities justify development. Small operations require quick-to-deliver and easy-to-install processing plants that offer the added benefits of reduced carbon footprints, minimal energy consumption and low operating expenditure – without compromising on processing technicalities and efficiencies. The key to alluvial mining is process plant mobility or ease of movability.

Consulmet has specialised in the modular space for decades and considers itself an expert in the field. To retain its position, Lahee notes that the company is continuously looking at “refining the art” of delivering modular plants and improving their efficiency as well.

Because an easy-to-move modular plant requires only a trailer to transport it, the company has proven that a standard trailer with minor modifications can effectively serve this logistical necessity. “This removes the excessive costs required to customise a trailer which most junior miners won’t allocate capex to,” says Lahee.

“Materials of construction have changed over time, and so we are further

able to offer the market modules which are compact, lightweight, easy to construct and while technologically advanced still offer simplified processing functionality. In the diamond field this now includes our ability to deliver XRT technology into a modular, containerised package,” Lahee outlines.

In addition, Consulmet’s ability to assist in operating these modules, including off-site monitoring of the machine, has been developed and refined through various operating contracts spanning the last nine years. The company supplies fully customised maintenance programmes to assist junior miners.

“Don’t just take their word for it” The recent completion of a processing facility for an alluvial company on the Orange River demonstrates the effectiveness of Consulmet’s movable, modular approach.

### Don't just take their word for it

In December 2018 the company

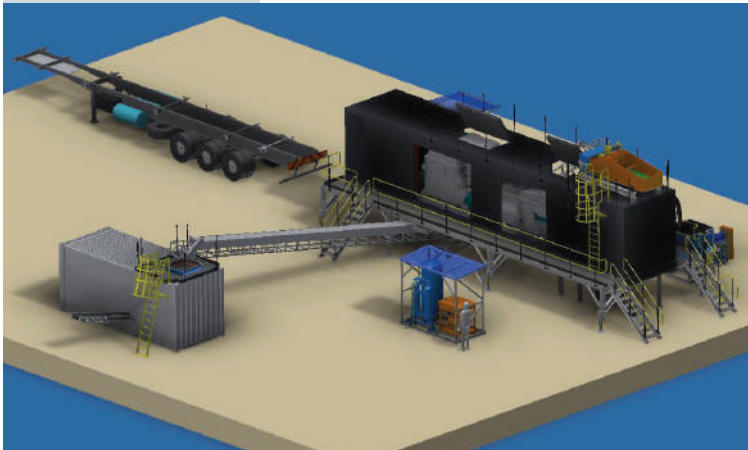
appointed Consulmet to deliver a 100 tph modular plant for its operations in the Saxendrift area. “The client required a movable, high throughput 100 tph modular plant that would be operated in addition to its existing processing infrastructure which is already recovering large diamonds.”

With a consignment stock XRT machine available, Consulmet was able to complete construction of all plant peripherals in February, install it on site in March, and commission and ramp it up to nameplate capacity in April.

The plant itself, which required no civils and is skid-mounted, includes a modular pre-screening unit and conveyor feeding directly into a container comprising an XRT feed preparation screen and Tomra XRT machine, which Lahee notes is rugged, fit-for-purpose and ideal for Africa. Its track record in delivering large diamonds is significant and continues to grow. In addition, a containerised sorting



Consulmet completed the delivery of a 100 tph modular plant for an alluvial diamond miner in the Saxendrift area



↑ Consulmet's trailer modification concept

100  
tph

The largest plant size Consulmet recommends for a modular, movable plant incorporating a containerised XRT



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DEREK LAHEE

facility has been supplied for the purpose of managing the final diamond sorting process.

The Consulmet trailer modification concept was implemented on site and entailed reversing the container into place with a trailer, removing the out-riggers from the trailer and then removing the trailer which can be utilised elsewhere, after which all chute work and peripherals can be attached.

With the addition of a permanent Consulmet technician on site to operate and manage its modular plants, Lahee is confident that the company's movable, modular solution and expertise is ideally suited to helping build a strong and financially lucrative junior diamond sector across the Orange River. **MRA**



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