



*Dando has been supplying rigs to Africa since 1868; they are designed and built for remote areas and harsh conditions*

## More splash for your buck

Dando Drilling International has designed more versatile solutions for water-well drillers

The non-profit mission organisation Friends in Action (FIA) has put its new Dando water-well rig to work in Burkina Faso, where the drilling has turned into quite a spectacle.

"When we roll into a village in a remote part of the country and raise the mast on the rig, there can be 300 people watching," says FIA driller and project manager Mark Collier.

"The people have not seen equipment like our Watertec 9000 before. So we spend some time engaging with the people and camp out in the villages. We become a show. A lot of villagers know about Dando now."

Commenting on the effect the new equipment has had on FIA's ability to provide clean water for the people of Burkina Faso, Collier says: "Most of the private contractors are achieving success rates of a little over 50%. With the Watertec 9000 we are currently averaging around 75%

for completed, productive wells."

FIA purchased its Watertec 9000 rig in 2013 at a time when Dando's design department was rethinking its solutions.

"While we were receiving continuous orders for our prime water-well rigs, such as the Watertec 40 and Watertec 24,



from government departments and the bigger non-governmental organisations (NGOs), we realised that a section of the market did not have the budget for this kind of equipment," explains Dando sales manager Quentin Dulake.

"Contractors and smaller NGOs, for example, still require powerful, reliable, fast drilling rigs, but they are looking for lower-cost solutions."

The Dando engineering team decided to tackle the problem from a design standpoint.

"We came up with a range of rigs that require a smaller footprint. That means smaller trucks or track units and smaller deck engines, but ones that continue to provide the capabilities of our bigger rigs," engineer Rupert Coler elaborates.

The first of these models designed specifically for water-well drilling was the Watertec 9000. Mounted on any robust 4x4, such as the MAN truck ▶

---

**"While we were receiving continuous orders for our prime water-well rigs, we realised that a section of the market did not have the budget for this kind of equipment"**

---

*While the rig is also fitted with a mud pump, FIA predominantly drills with air, which is a fast but sometimes dusty business*

The multipurpose Multitec 4000 is available in dedicated water-well guise on a small truck or trailer

**“The modular nature of the rig means**

**we can make immediate changes based on the customer’s preferences”**



► chosen by the FIA team for Burkina Faso, in standard form this rig features a 142hp Caterpillar C4.4 deck engine; a versatile rotary head capable of down-the-hole hammer and air-flush drilling, as well as regular mud rotary; a 2,040kgf main winch; and a robust drill table with double-acting hydraulic cylinder to hold a break-out

wrench. With 10,000kgf of pullback, the rig has a theoretical dry-hole capability of over 700m using 3½in (8.89cm) rod.

### **MODULAR MODELS**

The Watertec 9000 features a modular design, which allows the driller control over the specifications. They can, for example, choose between Caterpillar,

Kubota or John Deere engines, a selection of mud pumps, multiple rotary-head options, a hydraulically deployed mast extension that allows tripping of 6m sections of rod, an on-board rod rack and a rod loader.

“The modular nature of the rig means we can make immediate changes based on the customer’s preferences,” Coler says.

Dando states that fuelled by the success of the mid-sized modular rig, it has just revealed a new model that it feels will make a big impact.

The Multitec 4000 continues Dando’s range of modular multipurpose rigs. Drillers can choose from a selection of key components to suit their requirements.

In standard form the Multitec 4000 is mounted on a 1.36m-wide crawler, a small 4x4 truck or a trailer, and is powered by a choice of diesel engines, including a range of Tier 4



*The Friends in Action team next to a successfully drilled well*

silent-pack units with power output between 50hp to 100hp. A 2.6m working stroke accommodates 2m drill rods, and an on-board tool rack can safely carry rods and augers.

This multipurpose rig is also available in dedicated water-well form with a larger mud pump, and a modified mast fitted with an open guide table and an automatic break-out wrench.

As well as being able to select from a range of engine manufacturers and models, customers can choose from a number of rotary head specifications up to 1,000rpm and 6,500Nm of torque, an extended 3.6m stroke to allow the use of 3m rods, and a hydraulically deployed mast extension that allows two rods to be pulled at once.

Dando confirms that the Multitec 4000 is already receiving a steady stream of orders and is being built on a continuous production schedule in order to keep lead times short.

Dulake says he has been overwhelmed by the response to these new designs and sees Dando succeeding in a new corner of the market: "Our dedicated, bigger water-well rigs have an established reputation for deep drilling and this won't change. But with the small, versatile yet powerful models we have just released, we have opened Dando's doors to a niche in the market for drill operators on smaller budgets." ♥

---

**"Dando confirms that the Multitec 4000 is already receiving a steady stream of orders and is being built on a continuous production schedule to keep lead times short"**

---