

Dando 2000 **Drilling in the Tough** Terrain of the East African coast



Customer	Drilling & Prospecting International
Product	Dando 2000 Mk2
Projects	-Mombasa South Coast Bypass -Expansion of the European Satellite Tracking Station at Ngomeni -Construction of a high rise tower office block on Mombasa
Geology	East African Coast. Coral limestone, sand, clay & mud stone
Drilling technique	SPT & U100

Drilling & Prospecting Int. Ltd. was established in 2002 and is today one of East Africa's largest geotechnical drilling contractors, operating a total of 15 rigs of various sizes and capabilities, including a Dando 2000 which has been used in countless projects on the East African coast.

The Dando 2000 MK2 belongs to the range of cable percussion drilling rigs designed to drill in soft to medium conditions and conduct U4 sampling and SPT. This unique machine uses an engine powered cable winch to raise and lower a range of weighted tools that progress the drilled borehole. Since the percussive method does not require flushing media (water-based) or compressed air, the rig is ideally suited to drilling in remote locations and extreme climate conditions.





"We have found over the years that our Dando cable percussion rigs and tooling are the only suitable equipment for drilling the very difficult formation encountered on the East African coast. The formation normally comprises of coral limestone, followed by sand, then clay and finally mud stone. Without the ability of driving casing as the borehole advances, the driller runs the risk of getting stuck. Also due to the unconsolidated varying formations, you would get poor recovery trying to drill this formation in any other way."

One of the projects on which the Dando 2000 MK2 was used was the Mombasa South Coast Bypass in 2012. Funded by the Japanese Government the bypass connects the island of Mombasa to South Coast and provides an alternative route to the Likoni Ferry through a 20km long road. Katahita & Engineers international, the consultancy firm designing and building the bypass, required the services of the contracting company Drilling & Prospecting International who purchased a Dando 2000 MK2 to conduct site investigation for this large-scale project. Working on a jack-up pontoon the Dando 2000 MK2 rig drilled four water boreholes to a maximum depth of 45 metres from the sea bed - 8" casing to 20m and 6" to final depth – and taking SPT's and U100's every metre. Drilling operations stopped once mud stone formations were encountered.



Last year the European Satellite Tracking Station facilities at Ngomeni - north Malindi on the Kenya Coast - was expanded by the Italian Space Agency using again the Dando 2000 MK2 to carry out site investigation. On this occasion nine boreholes 6" cased were drilled to a depth of 15 metres. SPT's and U100's were taken every metre. Piezometers were also installed to monitor the sea level.



In February this year, Dando's customer Drilling & Prospecting investigation for the construction of a high rise tower office above-mentioned Dando 2000MK2. Three boreholes were drilled 8" cased to 20 metres and 6" to final depth. SPT's and U100's were taken every metre.