

Atlas Copco extends SmartROC range

Atlas Copco has unveiled its latest machines in the SmartROC series, the D50 and D55, which are rugged surface drilling rigs designed to tackle a wide variety of demanding jobs.

The SmartROC D50 and D55 are versatile rigs powered by low-emission engines, which can adapt their output to the task at hand at all stages of production.

The Rig Control System (RCS) allows for intelligent control of engine rpm and air compressor load for more effective penetration with lower fuel consumption and lesser wear on components for greater longevity, the manufacturer explained. Automatic rod handling and uniform feeding also offer greater productivity and efficiency on site.

The SmartROC D50 is designed for precision drilling of holes with a diameter of 90-130mm (3½-5 1/8in), while the SmartROC D55 is specialised for holes with a slightly larger diameter of 90-152mm (3½-6in) for depths down to 45m (148ft), while more shallow holes can be drilled with a larger diameter. Atlas Copco stated that its Hole Navigation System is an intelligent option for SmartROC rigs for fast and accurate collaring and drilling to the desired depth and inclination.

Comacchio's CH 650 gets to work

The first CH 650 rig produced by Comacchio, after its debut at CONEXPO 2017, has been successfully implemented on a power line extension project in Texas, US. In addition, more units are expected to go into operation in the US and Europe in the next few months.

The CH 650 is the latest addition to the Comacchio line-up of piling rigs. The launch of this machine follows the introduction in late 2015 of the CH 450, the first machine designed by the Italian manufacturer for the large-diameter market.

The CH 650 is a multipurpose drilling rig mounted on a dedicated excavator carrier with an operating weight of 70t. The rig is self-erecting and can be transported with minimal machine disassembly, thus allowing for easy and fast rig-up. The CH 650 is designed to cover a wide range of drilling technologies that include kelly drilling,

continuous flight auger (CFA), displacement piles and soil mixing. The rig can be supplied in CPD and WPD versions, and can be equipped with different kelly bars reaching a max. pile depth of 69m.

The rotary quill adopted by Comacchio allows for the use of kelly bars of different diameters (394-419mm), including HD bars and XHD bars, with minor changes on the rotary head. The rotary head, designed entirely by Comacchio, offers 262kNm max. nominal torque and is connected to the Comacchio Controlling System, a software developed by the company that allows for the control and monitoring of the drilling parameters and performance through a touchscreen.

To meet the various needs, the machine can be supplied in different configurations. In WPD configuration, the CH 650 features a 16,000mm stroke mast and 330kN

pull-up/down force. This machine can be used for the construction of cased piles up to 2,000mm in diameter and uncased bored piles (2,500mm max. diameter), up to 69m deep. The WPD version of the machine can be supplied with a CFA conversion kit. In this arrangement, the machine can be used for CFA piles with a max. diameter of 1,000mm up to 22.5m deep, using a 17.5m-long auger string and 7m-long auger extension.

The CPD configuration of the machine features 6,500mm feed stroke and offers 280kN max pull-up and 200kN max pull-down force. It can be used for the installation of bored piles up to 2,500mm in diameter up to 62m deep.

The CH 650 is equipped with a Caterpillar engine delivering 240kW/321hp power and complying with the latest EU Stage IV/US EPA Tier 4 Final emission standards.



The first CH 650 rig piling in Texas, US