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BUILDING THE ARK

Keller Canada helps
protect the Calgary Zoo
from future flooding

THE SECRET TO DEWATERING

Finding the best way
to pump water for
your project

THINKING AHEAD

How abandoning
tradition made the
Pennsylvania Turnpike
construction a success

Soilmec has recently updated one of its most successful models, the SR-45 hydraulic drilling rig.

The little BIG RIG

Even in tough times, top brands never betray the expectations. Combining renowned Italian creativity with technological excellence, Soilmec has 50 years of know-how to face international market challenges.

Soilmec has recently updated one of its most successful models, the SR-45 hydraulic drilling rig. Powered by Cummins, the SR-45 has been specially designed for suiting applications such as cased bore piles with casing driven directly by rotary head or optionally by casing oscillator powered by the base carrier itself, deep uncased bored piles stabilized by drilling fluid or dry hole, CFA (Continuous Flight Auger) piles by means of long auger string, DP (Displacement Piles)/TCT (traction compacting tool) and TJ(Turbojet®)/TTJ (Twin Shaft Turbojet) for soil consolidation.

A BRAND NEW DESIGN

The SR-45 represents a new approach to the hydraulic drills market. The basic rig has been completely redesigned to offer greater comfort and safety on site. It features special solutions such as the casings entirely covered with sound damping and absorbing material, the totally redesigned walkways, handrails and the camera system complete with an LCD screen to guarantee the best possible safety for the operator. The latest Soilmec “H-Cab” with sliding doors, a touch-screen DMS adjustable monitor and more ergonomic controls and knobs to offer the operator a significantly greater comfort. All packed in a sturdy and reliable technological package powered by a Cummins QSB6.7 Tier4 engine, capable of delivering high power (201kW at 2000 rpm) while maintaining efficiency and flexibility.

EASY TO CONFIGURE

The SR-45 has been designed to meet different geological and operational conditions, using each time the most suitable drilling technologies. This concept is accurately reflected by its outfit, which includes a rotary table designed to give a particularly compact and flattened shape to the case, bringing considerable advantages also with regard to its weight. It was also designed to facilitate maintenance



Above: The SR-45 is equipped with the Soilmec DMS system in order to have total control over the rig performance and site production rates.

Top right: The SR-45 has been designed to meet different geological and operational conditions.

Bottom right: The SR-45 is equipped with a device that can automatically move the mast from the transportation condition to the working position and vice versa.



operations and deliver a maximum torque of 185 kNm. The mast, which is completely new, is built with high strength steel that allows streamlining the rig for easier portability and optimizing the balance in the front part of the drill rig by improving its stability. The rig is also equipped with a device capable of automatically moving the mast from the transportation condition to the working position and vice versa, which is particularly functional because the SR-45 can be transported complete with kelly bar hence reducing the site installation times. The SR-45 can be optionally equipped with a mast extension that allows using 5x13 five self-erecting masts and drilling up to a depth of 61.5 metres.

PRECISION DRILLING

The SR-45 is equipped with the Soilmec DMS system in order to have total control over the rig performance and site production rates. DMS — Drilling Mate System — is a project born in the mid-1990s with the aim of providing to both operator and jobsite personnel an active instrument to control and interact with the machine. It features characteristics such as CAN OPEN bus, full colour touch-screen suitable for the drilling field, diesel engine electronic control unit and machine parameters interface, easy troubleshooting and a double PLC redundant system for superior reliability. The DMS, thanks to its software, can collect, display and process via a PC all the data collected by the machine (drilling and concreting parameters), allowing it to create jobsite reports, analyze production and processing, plan machine maintenance, etc.

The field response has been very positive with excellent production rates achieved as the rig integrates perfectly with the other Soilmec grout line equipment being used, demonstrating that the SR-45 ADV is a little big rig. ●

