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\$4.50 CANADIAN

Issue 1 • 2021

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CHOOSING A HAULING PARTNER

Equipment carriers need to know the type, size and weight of the equipment they'll be moving, and whether it's been modified – surprises can lead to problems, delays or fines



Inside:

Need to Hire an Engineer?
Make sure they're licensed first



Soilmec SR-65 Blue Tech

What drillers want

Submitted by Soilmec

A drilling machine that's reliable and simple to maintain. A high-performing machine even in the hardest conditions, a machine that is able to ensure comfort and safety to all personnel on site. A machine with low operating costs and ease of transport, with automatic features to ease the work. A machine like the SR-65 Blue Tech, what else?

The Soilmec SR-65, introduced for the first time in 2018 in the EVO version, has quickly become one of the most desired large-diameter pile drilling rigs in foundation construction. The SR-65 has become well known for its performance capabilities in drilled shaft work as well as with segmental casing and continuous flight auger (CFA) piles. As part of the continued effort to advance drilling technologies, the SR-65 is being upgraded to the Soilmec Blue Tech

version which includes a redesigned operator cabin, new hydraulics and mechanics for improved efficiency.

Designed around new energy-saving architecture, the second-generation SR-65 Blue Tech is a rig that meets the demands of productivity, but also improves flexibility and functionality across all drilling setups and technologies. The Blue Tech drilling rigs have been designed to be easy to use and agile on a jobsite as reflected in the compact design, quick and efficient mobilization for rapid start-up on jobsites, and provides

a comfortable operator's workplace with drilling specifications that meet today's customer priorities for mechanical performance, safety and productivity.

The SR-65 Blue Tech will continue to weigh in at approximately 65 tons (c/w 4 by 13.5 metre Kelly bar), which allows for transport of the rig (with Kelly bar on), in most locations, in just a single load. This allows for quick mobilization with the ability to unload the rig and start working in less than 30 minutes. At the heart of the SR-65 Blue Tech is a new diesel engine - a Cummins L9 - which



PRODUCT SPOTLIGHT

delivers 272 kW (365 hp) at 2,100 rpm. The engine meets the Stage V/Tier 4F emission standards and can also be set up to offer a power surplus up to 283 kW (380 hp), making the rig capable of easily handling the most difficult drilling conditions. These diesel engines are equipped with low-idle and automatic radiator control. Additionally, the new engines will automatically adjust speed according to the actual needs of the drill. In this way, the engines are able to improve combustion and cooling efficiency and permit real reductions in noise pollution. The hydraulic and electric systems have been simplified to minimize energy loss and provide added space for maintenance. The main pumps have been optimized with the new engine to deliver efficient drilling power, pull capacity, performance and fuel efficiency.

In terms of torque, pull up and clearance, the SR-65 Blue Tech ranks among the top of available options on the market and represents the ideal choice for use with segmental casing technology. The rotary head has a compact and lightweight

design that is able to transmit a maximum of 258.5 kNm and can be fitted with two different waste discharge systems. The Soilmecc spin-off system leverages the high rotational speed kinetic energy that is unparalleled when using an auger. The SR-65 Blue Tech also has a new 'click-click' discharge system that is much more efficient when using a drilling bucket or working in very cohesive soils.

To boost productivity in hard soil and rock, and to minimize loss in tough operating conditions, the SR-65 Blue Tech rotary head is equipped with an automatic control of motor displacements. This results in optimizing the drilling speed and productivity in every phase of drilling. Ultimately these small selected measures reduce losses and make it possible to achieve better torque efficiency on the drill tool.

The design of the SR-65 Blue Tech is solid and compact. The tail swing radius is just 3,750 mm and the high strength mast allows the use of a 16.5 m Kelly bar to achieve depths of over 77 m. The mast itself is also prearranged to mount both cylinder

and winch crowd systems depending on the need or preference. The cylinder crowd system, with an extraction power of 280 kN, is equipped with a double positioner on the drilling mast; this allows the use of the entire available track for both large diameter tools (working under the lower part of the mast) and long casing segments. The rig can also be equipped with a winch crowd system that can offer a track of more than 16 m with extraction power of 330 kN. The added stroke and power provide the ability to drive longer casing segments in a single pass. Additionally, the SR-65 Blue Tech can be fitted with a segmental mast boosting its versatility and low headroom (LHR) operation capability. The modular mast allows setup of the machine into LHR configuration by simply removing the upper element, thus reducing the overall height to just 8.5 m.

A prominent feature of the Blue Tech advancements is the redesigned Soilmecc cab. Working with Soilmecc customers around the globe, the new cab went through a ground up redevelopment and testing

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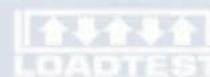
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The hydraulic and electric systems have been simplified to minimize energy loss and provide added space for maintenance.

process with the goal that operator comfort and safety will result in better operator performance. The cab is equipped with a well-furnished seat featuring a pneumatic shock absorber, vertical, angular and seat-back adjustments, lumbar support and operator's presence micro switch. The position of levers and pedals is designed to provide more space between them and the seat base for better foot support. A powerful HVAC system with recirculating air ensures a consistent temperature and pleasant work environment even in adverse meteorological conditions. The cab features enlarged storage containers behind the seat and on the armrest sides for better accessibility and operability.

Three locked glove boxes (one of which is air-conditioned), a large compartment for placing a helmet and jacket, two dual cup holders and a file folder create more usable cabin space. A USB port, phone charger mount (USB or wireless), radio player and ambient lights with LED ceiling lamps contribute to a positive operator experience. The cab has a front windshield in stratified glass that allows work without a protection grid. Moreover the right-side glass has reduced transmittance, which increases the cab monitor's brightness.

The SR-65 Blue Tech is built in compliance with the most stringent safety standards with special care for easier accessibility, higher

visibility and safer manoeuvrability without losing sight of the eco-friendly characteristics. The rig is equipped with platforms, handrails, a video camera with a dedicated 7-inch monitor, adjustable mirrors to see 360-degrees, a radio remote control for rig loading and unloading and an automatic acoustic safety alarm during rig travelling and turret rotation.

The rig is equipped with Soilmecc's Drilling Mate System (DMS) 4.0. DMS 4.0 provides a simple graphical navigation menu to assist the operator in day-to-day planning and drilling execution. With a suite of new functions and automated services that allow for easy set-up and use, DMS 4.0 helps minimize downtime and maximize productivity. DMS 4.0 was also implemented with a wide range of automatic functions to simplify and optimize the operator's drilling activities including an interlocking display system to assist when using a Kelly bar, automatic return to centre hole or CFA auto-drilling device. ☐

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