

Safe hands-free rod handling systems developed for sonic drills

New safety regulations and contracts that require drillers to utilize safe rod loading systems are a reality for many companies today. These important safety systems are designed to eliminate any physical lifting over 40 lbs. as well as prevent physical contact with rotating rods.

More than a year ago, the Sonic Drill Corporation, a world-leading manufacturer of patented, award-winning sonic drills, began the development of its new Single Rod Loader (SRL) – one of two optional systems now available for sonic rigs. The SRL is an inexpensive and simple way to eliminate the physical lifting and manipulation of rods by the driller's helper. This new option also eliminates any physical contact with rotating rods.

Comprised of an arm, rotary actuator and clamping assembly, the SRL mounts to the front of the drill rig's breakout table and is powered off of the rig's hydraulic system. The unit is hosed with quick connects which allows for easy removal in limited access sites or low-overhead indoor applications.

The rotary actuator allows the arm to swing through 135 degrees enabling the drill to perform angle drilling up to 45 degrees off the vertical. The SRL assembly has a clamping range of 2" to 8⁵/₈" with enough power to lift 8⁵/₈" x 20 ft. rods. The arm is also fitted with a safety shut-down system which prevents operators from standing on the arm or becoming pinned between the arm and the ground.

This system can be attached to existing machines or added, as an option, to new drill rigs. It can also be "roughed in" on new machines to allow for its addition at a later time. To date, a number of SRLs are proving to be popular additions to sonic rigs around the world.

Safe Hands-Free Handling

As a more complete second option, Sonic Drill Corporation has become the exclusive North American distributor for Bohrmeister's "Hands Free" rod handling system. Completely hands free, this system is the safest rod handling option for sonic drills with absolutely no physical interaction or contact during rod loading and unloading. The Bohrmeister option offers a hydraulic system that runs off the drill rig's own hydraulic system and is operated by the driller's helper.



Sonic Drill Corporation's inexpensive new single rod loader eliminates heavy lifting and prevents physical contact with rotating rods.

The system is comprised of a rotary storage magazine that holds 18 x 4½" x 20 ft. rods plus one rod in the arm. This totals to an astounding 380 ft. of onboard tooling. The magazine, fully enclosed with lightweight removable guards, is also available in a shorter size to accommodate 10 ft. rods.

The Bohrmeister magazine has three basic functions; that of cw/ccw rotation, power roller and raising/lowering the skirt. The rod handler arm also has three basic functions; telescoping, rotary actuator for raising rods/casings and a clamping assembly. The clamping assembly is designed to accommodate 3½" to 8⅝" rods.

The clamping assembly is also mounted to the arm with a 180 degree rotary actuator that allows the arm to reach backwards to pick up and load larger diameter casings off of a service truck or pipe rack/trestle. The entire system is modular and can be easily fork-lifted on and off the drill rig frame as well as connected with hydraulic quick connects. The Bohrmeister option is an easy system to retro fit to existing drills and its magazine is designed to disassemble into two pieces for economical shipping in a 20 ft. container.



Sonic Drill Corporation is the exclusive North American distributor for Bohrmeister's completely hands free rod handling system.

Safety Cages



Sonic Drill Corporation displays its new drill head safety cage.

Safety cages are another new and equally important safety option. This option is now available on all SDC track and truck models. Safety cages envelop the drill head rotating spindle and hydraulic breakout table clamps. The unit is lightweight and attaches to the drill mast (the overall transport height is not increased when the unit is attached).

The safety cage has a hinged access door on the front. Opening the access door immediately stops the spindle rotation. Drillers can also activate a spring-centered override switch at the console which enables 5 rpm of rotation at low torque. Closing the door reactivates full rotation and torque. The switches and circuit are designed to be tamper-proof so that operators cannot bypass the safety system.