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SD100 SONIC HELI-PORT

TECHNICAL SPECIFICATIONS

SD100 Sonic Heli-Port rig is a light weight machine, ideal for drilling projects in difficult to access locations. The rig adjusts to rugged steep terrain and has a small footprint for minimal environmental impact. With an overall height of 94" [2388] the rig can easily be shipped on any common transport trailer. The machine is designed to breakdown into 2 main modules to minimize set-up time (tower module and substructure module). Each module has a flight weight designed specifically to suit the lift performance of either a K-Max or Bell 214B helicopter. Accessory component modules like drill rod basket and air compressor are extra options. Modules are connected with pull pins and quick release hydraulic couplings, the assembly can be quickly disassembled into even smaller modules to suit helicopters with lighter lift performance.

SONICOR 33K DRILL HEAD:

- drill head type: hydraulically driven rotary head with vibration.
- vibration output force: 33,047 lbs force [147 KN]
- frequency: 130Hz
- rotation torque: 2,876 ft-lbs [3.9 kn-m] forward 3,614 ft-lbs [4.9 kn-m] reverse.
- rotation speed: 66 rpm

DRILL RIG:

- length (mast folded): 250.5" [6363]
- width: 100-3/16" [2545] with stabilizers, 87 [2210] without
- height (mast folded & stabilizers retracted): 94" [2388]
- height (mast raised): 270" [6858]
- mast length: 250.5" [6363] Note: mast will fit into 20' container when breakout table and jib boom are removed.
- mast 8" x 8" square tube construction.
- outrigger stroke: 36" [914]
- stabilizer foot print: 100-3/16" [2545] x 125-9/16" [3189].
- center of spindle to mast frame: 12-7/8" [327]
- drill head tilt: 60 degrees
- weight of rig: tower module = 3749 lbs [1700 kgs] substructure module = 5072 lbs [2300 kgs]
- feed system type: variable speed hydraulic cylinder with chain.
- feed stroke: 12.8 ft [3.9m] to suit 10' drill rods.
- hydraulic breakout table: 1.5" - 7" clamp range [38-178]
- hydraulic system: Brevini split double hole alloy pump drive, 4 variable displacement pumps, pressure and flow controlled.
- hydraulic pressure (system): 4500 psi [310 bar]
- hydraulic flow rate (system): 45 gpm [170 l/m]
- hydraulic reservoir: 53 US gal [200 litre]
- fuel capacity (diesel): 29 US gallon [110 liters]
- Engine (diesel): Cummins 4BTA or VM Detroit, turbo 6 cyl turbo intercooled.
- EC Stage IIIA/USA EPA Tier 3
- Engine power (gross intermittent): 140 hp / 104 kw @ 2600 rpm
- cooling system: liquid

DRILL RIG (CON'T):

- electrical system: 12 VDC
- auxiliary hydraulic oil cooler.
- fixed boom & hoist type: variable speed planetary c/w brake.