SANDVIK

SANDVIK 1190E ELECTRIC ROTARY BLASTHOLE DRILL

TECHNICAL SPECIFICATION

The 1190E is an electrically powered, self-propelled crawler mounted blasthole drill equipped to rotary drill 229-349 mm (9" to 13 3/4") diameter blastholes in mining applications. The 1190E delivers on productivity and good economy. With full perimeter walkways for accessibility, it is exceptionally operator friendly. It has a solid record of reliability, proven at high altitude and in the harshest desert and arctic conditions. For its size it is very maneuverable on narrow benches.

- Hole depth is up to 85 m (279') Multi-Pass Mast
- First pass depth up to 20 m (65') Single-Pass Mast
- Pulldown is up to 400 kN (90,000 lbf)
- Bit load is up to 523 kN (118,000 lbf)
- Pullback is up to 209 kN (47,000 lbf)

PERFORMANCE

	Metric	Imperial
Hole diameter	229 - 349 mm	9" - 13 3/4"
Maximum hole depth	20 m	65' Single Pass
Drill pipe	7,62 m	25'
Maximum pulldown	400 kN	90,000 lbf
Maximum bit load	523 kN	118,000 lbf
Feed rate	0 - 21,6 m/min	0-71 fpm
Operating weight*	140,616 kg	310,005 lb

*Weights are approximate and subject to change without notice. All performance figures are theoretical and at 100% systems efficiency.

POWER GROUP

	Metric	Imperial
Rated horsepower	Up to 671 kW	900 hp, 50 HZ
	Up to 783 kW	1050 hp max, 60 HZ
Full load rpm	?	
Standard ambient range	40°C	104°F, max
Low pressure	?	?
DTH	15 µm	15 micron replaceable element

FRAME AND INTEGRAL JACKS

	Metric	Imperial
Main frame	Wide flange beam	
Walkways	Bolt on, 609,6 mm	24" inside width, expanded metal walkway, full length right and left sides, front and around exterior of cab
Lifting hooks	?	
Leveling jacks	4 standard	
Pad diameter	1219 mm	48"
Pad ground clearance	889 mm	35" front,
	737 mm	29" rear

UNDERCARRIAGE

	Metric	Imperial
Model	Excavator 385	
Pad width	900 mm	35 1/5"
Pad type	Double grouser	
Width over tracks	5.33 m	17' 6"
Tram speed	0.88 km/h	0.55 mph
	@100% theoretical efficiency	
Gradeability, mast down	?	?

MAST

	Metric	Imperial
Construction	CAD/FEA designed, rectangular tubing, single cut, beveled toe joint design, angle and plate reinforced lower section	
Pivot bushings	Replaceable alloy aluminum bronze	
Hydraulic lines	Pressure rated steel hydraulic tubing, rotation, feed and air pipes shocked mounted	
Table hole diameter	660 mm	26"
	for holding wrench pilot	
Mast Raising cylinders	two	
Angle drill	0° to 30° in 5° increments	
Lubrication	Lubrication system for pulldown chains	

FEED SYSTEM

	Metric	Imperial
Feed type	Hydraulic motor and chain	
Chain type	Double roller chain with thru hardened pins	
Chain size, feed	ANSI #240-2, 76.2 mm	3" pitch
Rotary head stroke	21.94 m	72'
Bit load	489 kN	110,000 lbf
Chain adjustment	Manual hydr. porta-power w/ pins at mast crown	

HYDRAULIC SYSTEM

	Metric	Imperial
Oil reservoir	1155 L	305 gal
Reservoir pressurization	0.34 bar air, filtered breather	5 psi
Standard ambient rating	?	?

OPERATOR'S CAB

	Metric	Imperial
Certification	Steel FOPS cover over AC unit meets AS 2294-1979 & ISO 3449-1992 FOPS drop test criteria	
Length	2.43 m	8′
Width	2.13 m	7′
Floor area	5.2 m^2	56 $ft.^2$
Height inside	1.98 m	6′ 6″
Construction	Welded 12 gauge steel, tubular braced, one piece, shock mounted, removable for shipping	
Doors	3 heavy duty hinges, lockable rotary type latches, upper and lower windows	
	Two, 610 mm	24″ wide,
Operator's seat	Low back trimline with fold-up adjustable arms,mechanical suspension with weight adjustment, swivel and slide features	
Helper's seat	Upholstered, flip-up lid on storage box	
Sound level rating	80 dB(A) or less	

ROTARY HEAD

	Metric	Imperial
Rotary power	172 kW	230 hp
Standard rotary speed/torque	97 rpm @ 16,900 Nm	149,570 in-lb
Optional rotary speed/torque	118 rpm @ 13,973 Nm	123,670 in-lb
	145 rpm @ 11,327 Nm	100,250 in-lb
	175 rpm @ 9,365 Nm	82,890 in-lb
Bullshaft thread	6 -5/8″ API regular	

CABLE REEL OPTIONS

Type	Drum type with electric drive	
Location	Front of mast rest	
Capacity	426 m of #2 AWG SHDGC cable, 2 wraps	1,400 feet
Collector assembly	4 slip rings, 300 amp cont., 10KV, one pilot ring, 20 amp, 500 volt	
Drum assembly	1.6 m dia. x 2.5 m wide	5′ 3″ dia. x 8′ 2 1/2″ wide
Drive unit	3 phase TEFC motor with Hydrodynamic torque unit, chain drive to cable drum	
Index unit	2 wrap design for #2 cable 53 mm dia.	2.09″ dia. with cable guide device

MACHINERY HOUSE

Machinery house location	Covers motor, compressor and switch gear area from right to left walkways and midway of drive to hydraulic pumps to front of machine	
Construction	Welded tubular frame & sheet metal, side walls bolted at corners, 3 piece bolted roof section for machinery removal, access cover for compressor separator element	
Mounting	Side walls bolted to main frame with tension bolting system to allow for frame movement	
Length	4.57 m	15′ 0″
Width	4.11 m	13′ 6″
Height inside	2.0 m	6′ 6″
Number of doors	Three, with windows	
Side wall construction	12 gauge sheet metal with 2″ square tubular framing	
Roof sections	10 gauge sheet metal with 2″ and 3″ tubular framing	
Dimensions	1.88 m x 0.86 m x 2.03 m	74″ X 34″ X 80″
Main motor control	Main fused disconnect, vacuum contactor, current transformers and related main motor control	
Main transformer	Fused 50 kVA transformer with 400 volt, 50 Hz or 480 volt, 60 Hz, WYE secondary	
Auxiliary transformer	10 KVA lighting and control transformer, 400 volt, 50 Hz or 480 volt, 60 Hz, primary with 240/120 volt secondary	

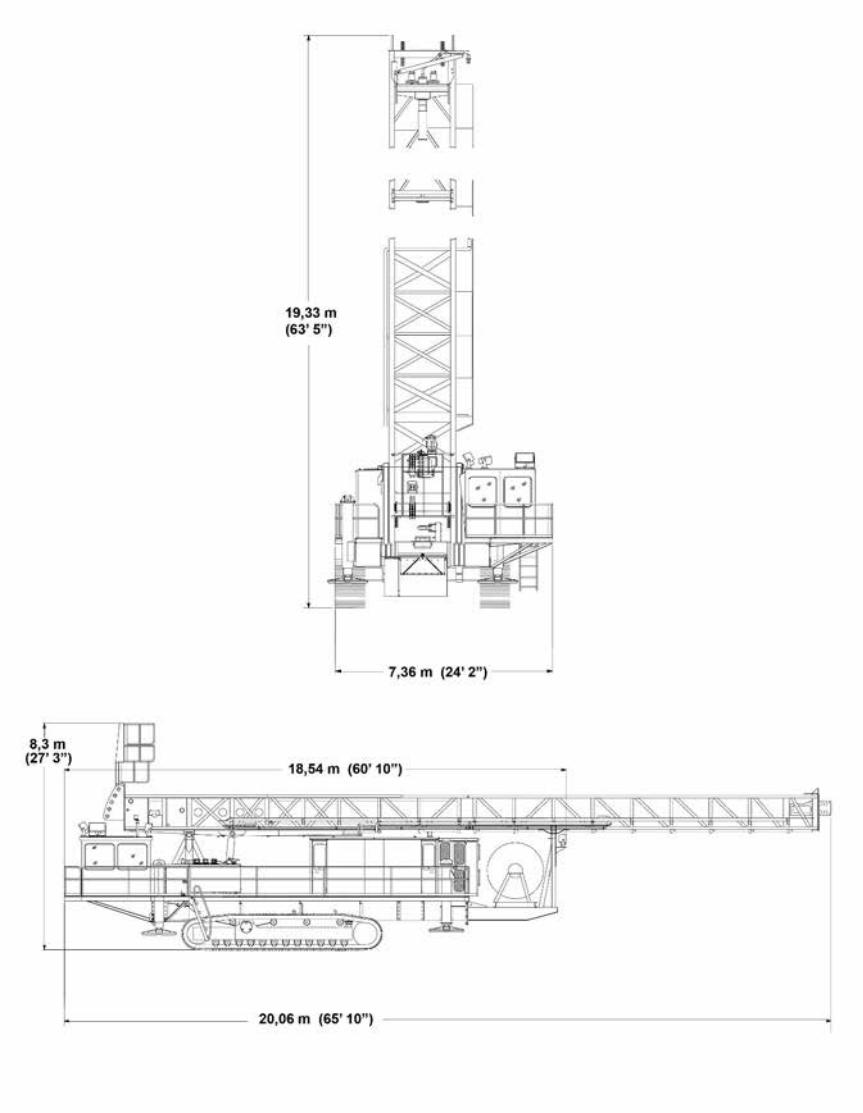
DIMENSIONS

	Metric	Imperial
Mast up height	19.33 m	63′ 5″
Operating width	7.36m	24′ 2″
Mast down length	20.06 m	65′ 10″
Mast down height to safety bar	6.27 m	20′ 7″
Mast up length w/cable reel	18.54 m	60″ 10′

WEIGHT

Base unit less tools	136,080 kg	300,000 lb

Dimensions are per engineering drawings, actuals may vary slightly. Weights are approximate and subject to change without notice. All performance figures are theoretical and at 100% systems efficiency.



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