

TSi 150AC8



COMPACT CRAWLER-MOUNTED ARTICULATING SONIC DRILL RIG

Harnessing the power of Sonic at any angle. A Massenza MM8 platform engineered to accommodate the TSi 150 Series Sonic Oscillator features an articulating mast that allows drilling at angles between 90° and 130° in any direction. This remarkable technology makes the AC8 ideal for micropiles, anchors, geotechnical investigations and geothermal boreholes.



FEATURES

- Exclusive TSi 150 Series Sonic Oscillator Uses 150 hp to Generate Resonant Sonic Energy
- Combination of an articulated mast in 3 planes of motion and SONIC Power Is perfectly suited for foundation work, geotechnical investigations, and geoconstruction applications
- 245 hp, Stage V, Diesel Engine to power all driving, drilling, and accessory hydraulic functions
- The Rig has 14 ft 5 in (4.4 m) of stroke
- Accommodates 10 ft (3.1 m) sections of tooling
- The 150AC8 operational control panel can be tripod mounted or used remotely with the included padded shoulder sling
- Rough terrain access afforded by the crawler-mount design





SONIC HEAD SPECIFICATIONS

Sonic Head Model	TSi 150
Oscillator Frequency	0-150 Hz
Oscillator Output Force	50,000 lbf (222 kN)
Max Torque (high torque/low speed)	4,677 ft-lb (6,341 Nm)
Rotation Speed (low speed/high torque)	0 to 62 rpm

TRANSPORT DIMENSIONS AND WEIGHT

Width	7 ft 6 in (2.17 m)
Length	28 ft 5 in (8.65 m)
Height	11 ft 5 in (3.47 m)
Weight	41,888 lbs (19,000 kg)
Ground Clearance	12 in (305 mm)

MAST SPECIFICATIONS

Head Travel/Stroke	14 ft 5 in (4.40 m)
Head Travel Speed	0 to 155 ft/min (0 to 48 m/min)
Overall Length	27 ft 3 in (8.30 m)
Drilling Angle	Variable, depending upon articulation positioning
Service Winch	98 ft 6 in (30 m) of Ø ½ in (12 mm) steel cable. Direct pull capacity 6,969 lb (3,160 Kg). Speed 125 ft/min (38.3 m/min)
Upper and Lower Jib Hoist capacity	674.4 lb (305.9 kg), Bare Drum Speed 145 ft/min (44.31 m/min)
Hose Carrier is a Mast Integrated Hose Management System with Accessible Bulkheads	
Head Tilt	80°



DECK SPECIFICATIONS

Jack Legs	Two front Jacklegs 3 3/4 in × 15 3/4 in (95 mm × 400 mm) + Two rear Jacklegs 7 1/2 in × 5 in (190 mm × 125 mm); Located at Deck Corners with Built-in Lock Valves
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RIG PERFORMANCE SPECIFICATIONS

Rated Drill Depth	Up to 304.8 m (1,000 ft) Depending on Lithology and Casing Design
Max Drilling Diameter	12 in (305 mm) Casing
Drill Feed Rate	0 to 159 ft/min (0 to 48.5 m/min)
Pull Back Force	17,958 lbf (8,000 daN)
Down Force	13,035 lbf (5,800 daN)
Max Tooling Length	10 ft (3 m)
Max Tooling Length	10 ft (3.05 m)

HYDRAULIC SYSTEM SPECIFICATIONS

Hydraulic Oil Capacity	135 gal (514 L)
Hydraulic Cooling System	20916 Btu/hr @ 12 gpm (6.13 kW @ 46 L/min) and 50,000 Btu/hr @ 20 gpm (14.7 kW @ 76 L/min) for Sonic Head Lubrication
Variable Displacement Pump	Load Sense Piston Pumps with Pilot Controlled Valves
Pilot Hydraulic Controls	
Manual Setup Functions	

ENGINE SPECIFICATIONS

Engine	Deutz, Model TCD 6.1 L6, Diesel, Stage V
Engine Power	245 hp (180 kW)
Fuel Capacity for Drilling/Transport	40 gal (150 L)
Engine Monitor Mounted in Rig Control Panel	



BREAKOUT WRENCH SPECIFICATIONS

Wrench Has Dual Clamping Cylinders on Both Top and Bottom Wrench	
Bottom Wrench Clamping Cylinders	Lock Valves Incorporated in Hydraulic Circuit
Wrench Clamp Force	Adjustable Pressure Control Preset at 34,500 lbf (153.4 kN)
Breakout Torque	30,365 ft-lb (41,169 N-m) with Dual Cylinders
Wrench Size Range	3 in (76 mm) to 12 in (305 mm)
Wrench Travel/Swing	19°
Hardened teeth Inserts are Standard	

TRIPLEX WATER/MUD PUMP SYSTEM

Pump Type	Deck Mounted FMC W1122 Bean Pump
Output pressure	1,000 psi (69 bar) with relief valve set at 500 psi (34.5 bar)
Max Flow rate	53 gpm (200 L/min)

WASHING SYSTEM

Max Output	4.2 gal/min (16 L/min) Max pressure 2,465 PSI (170 bar)
Complete with reel, hose with 49 ft 3 in (15 m) length and washing nozzle	

ANTI-INTRUSION SAFETY BARRIER

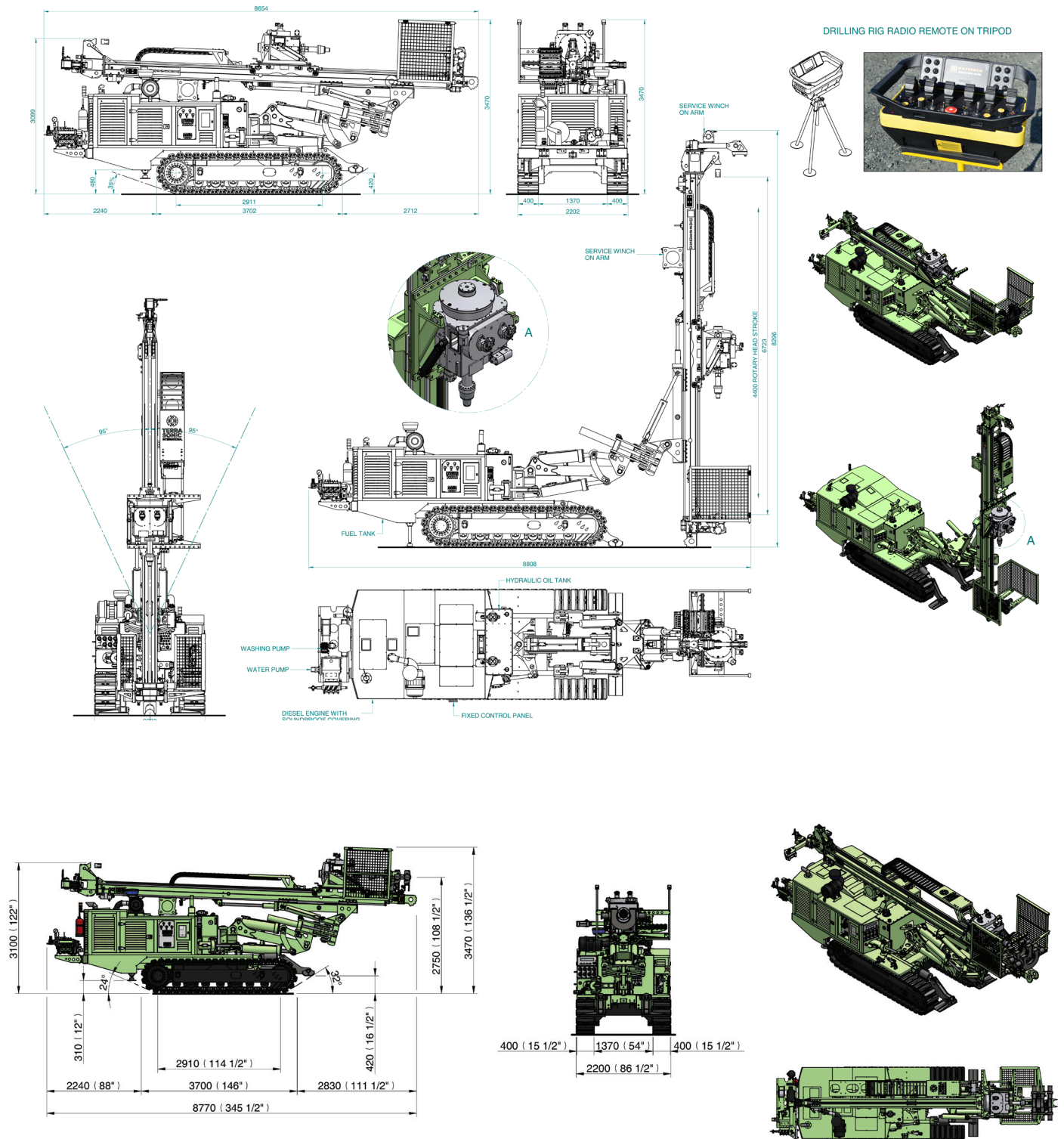
Anti-intrusion infrared barrier with side cage	
With Restricted Operating Mode (ROM), excluding the safety barriers	
Max height from ground	5 ft 3 in (1.6 m)
Min height from ground	1 ft 8 in (0.5 m)

RIG OPTIONS

Please contact Terra Sonic to discuss the optional extras best suited for your operation

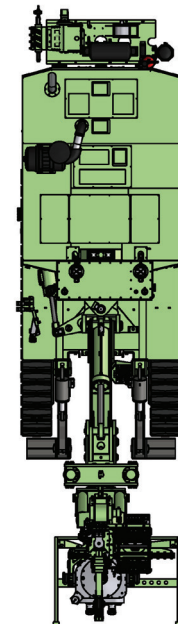
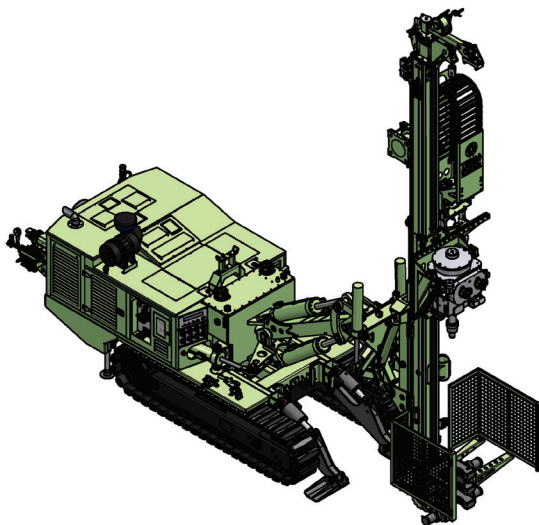
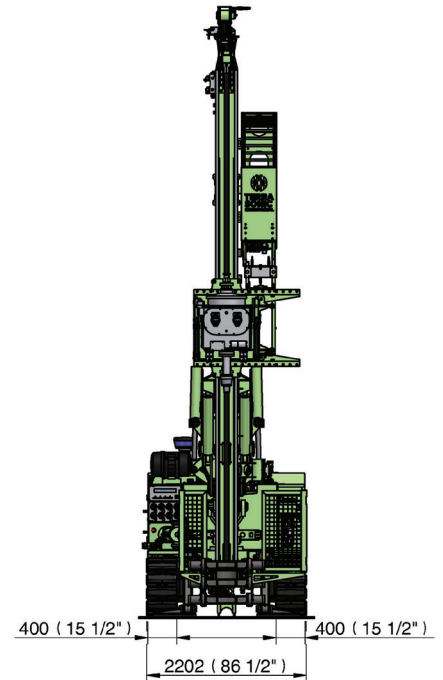
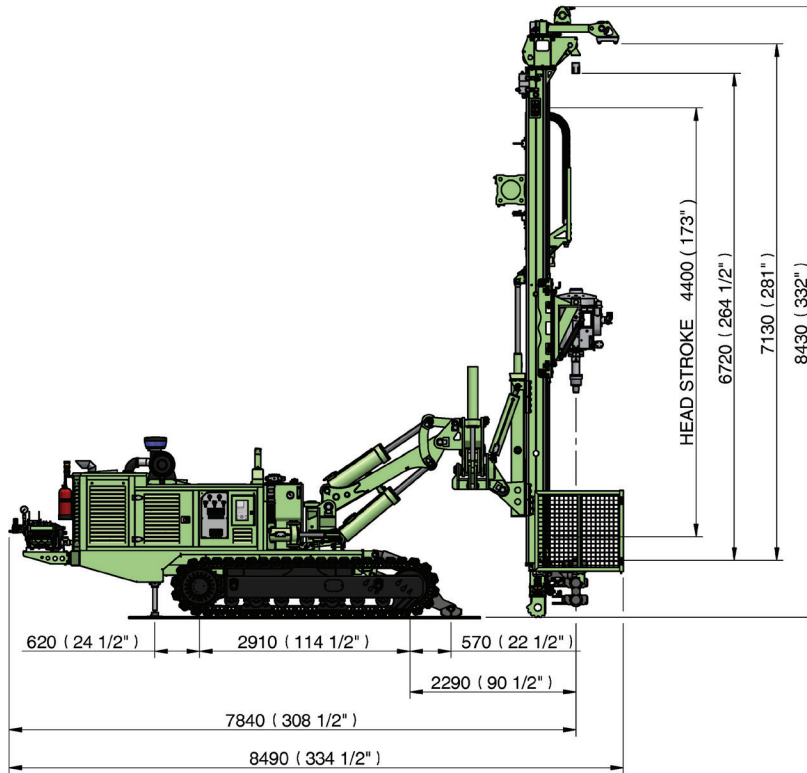


OVERALL DRAWING



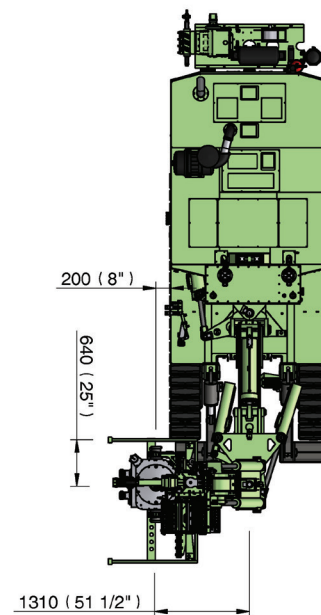
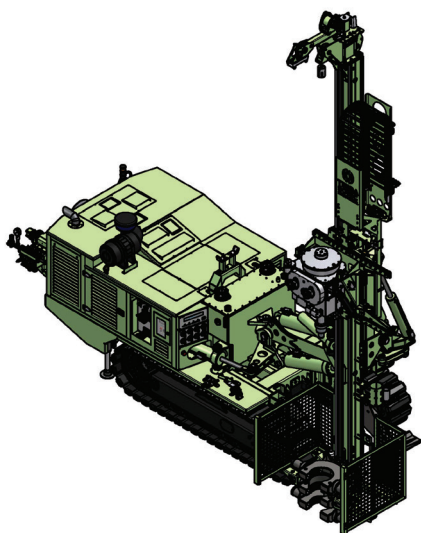
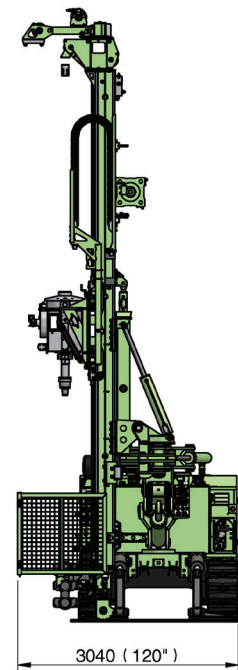
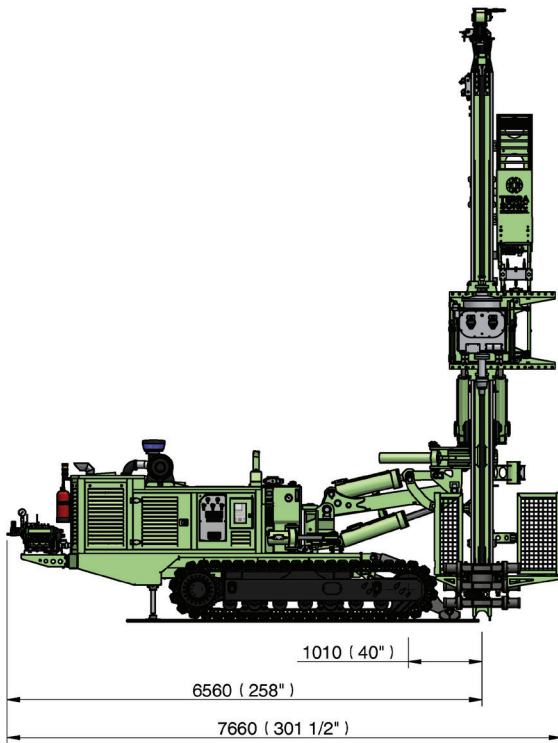


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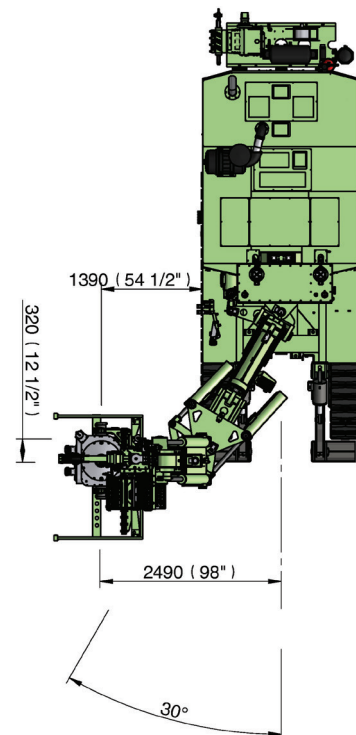
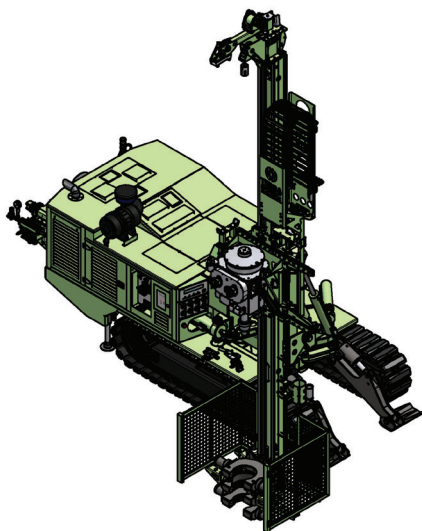
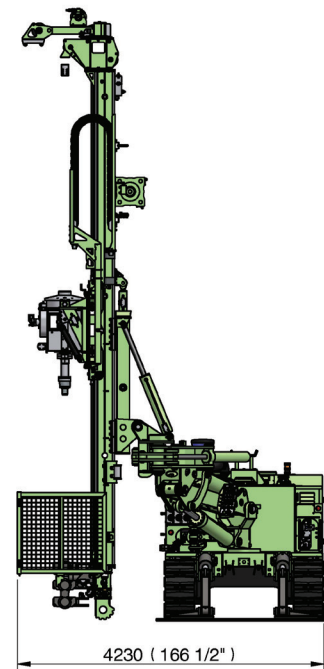
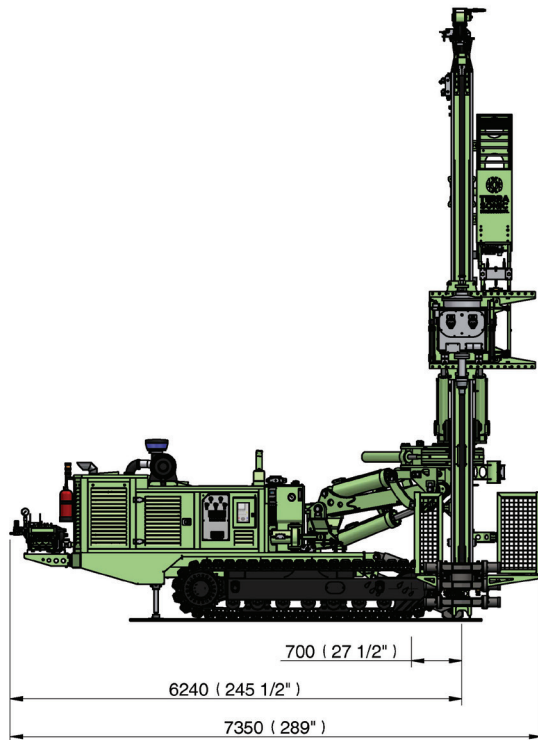


LATERAL 90° CONFIGURATION



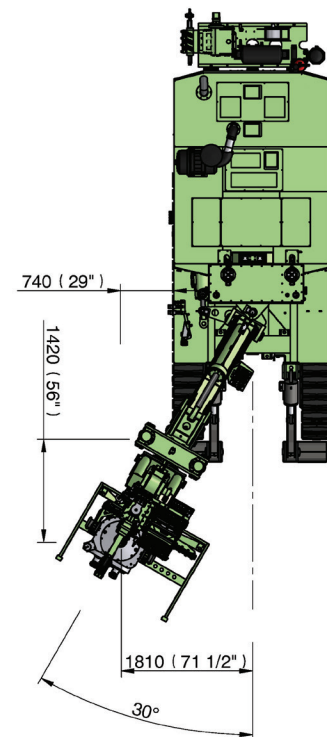
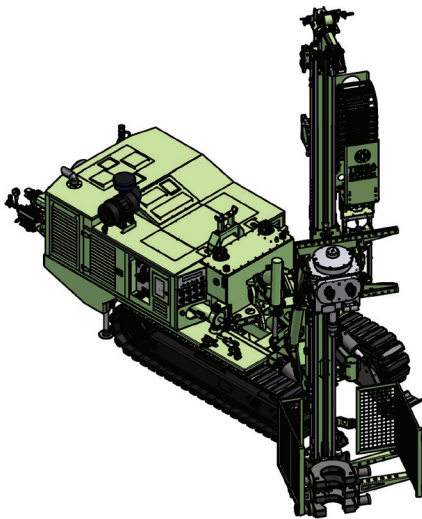
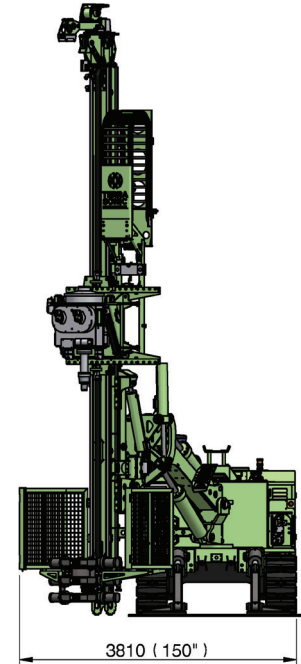
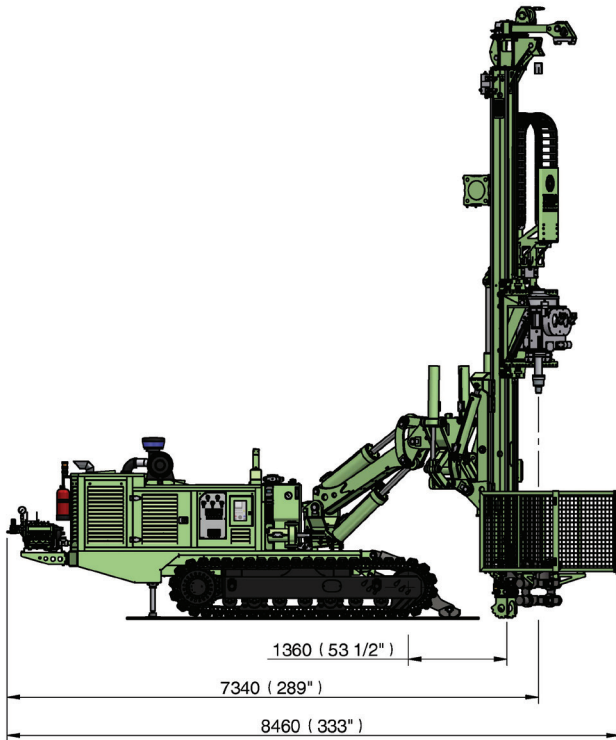


LATERAL 90° EXTENDED CONFIGURATION



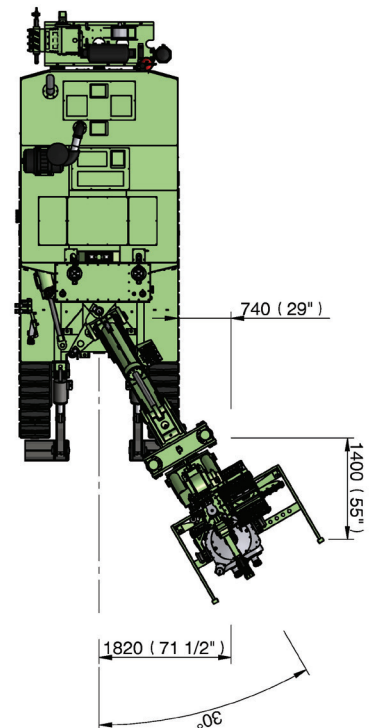
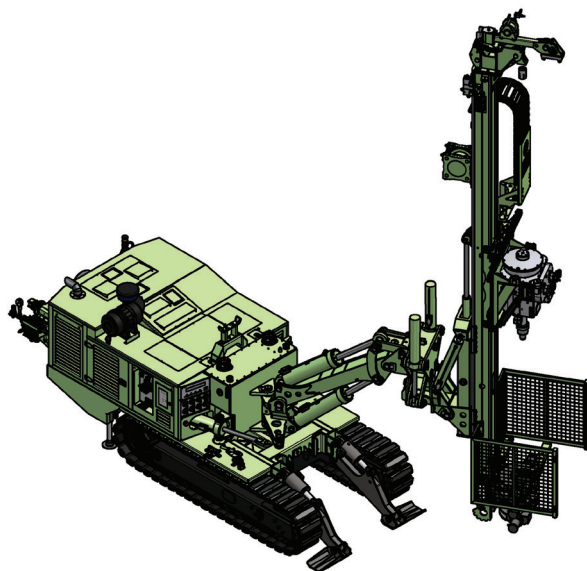
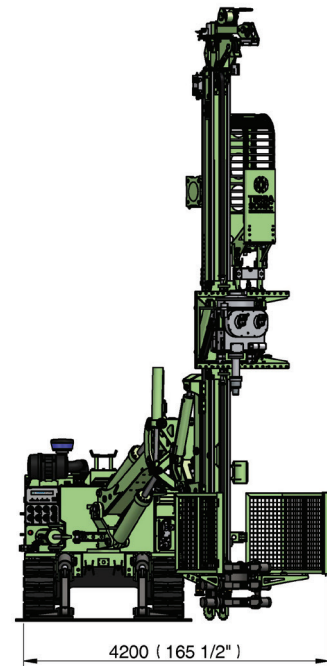
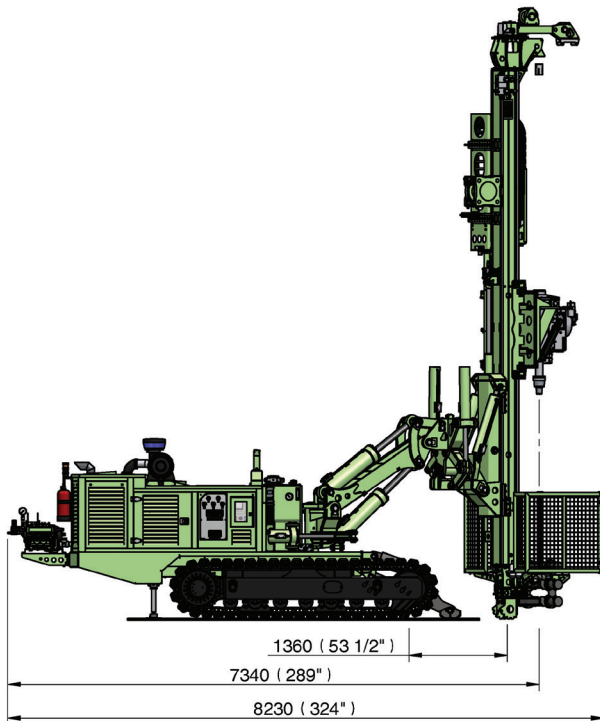


LATERAL 30° LEFT CONFIGURATION



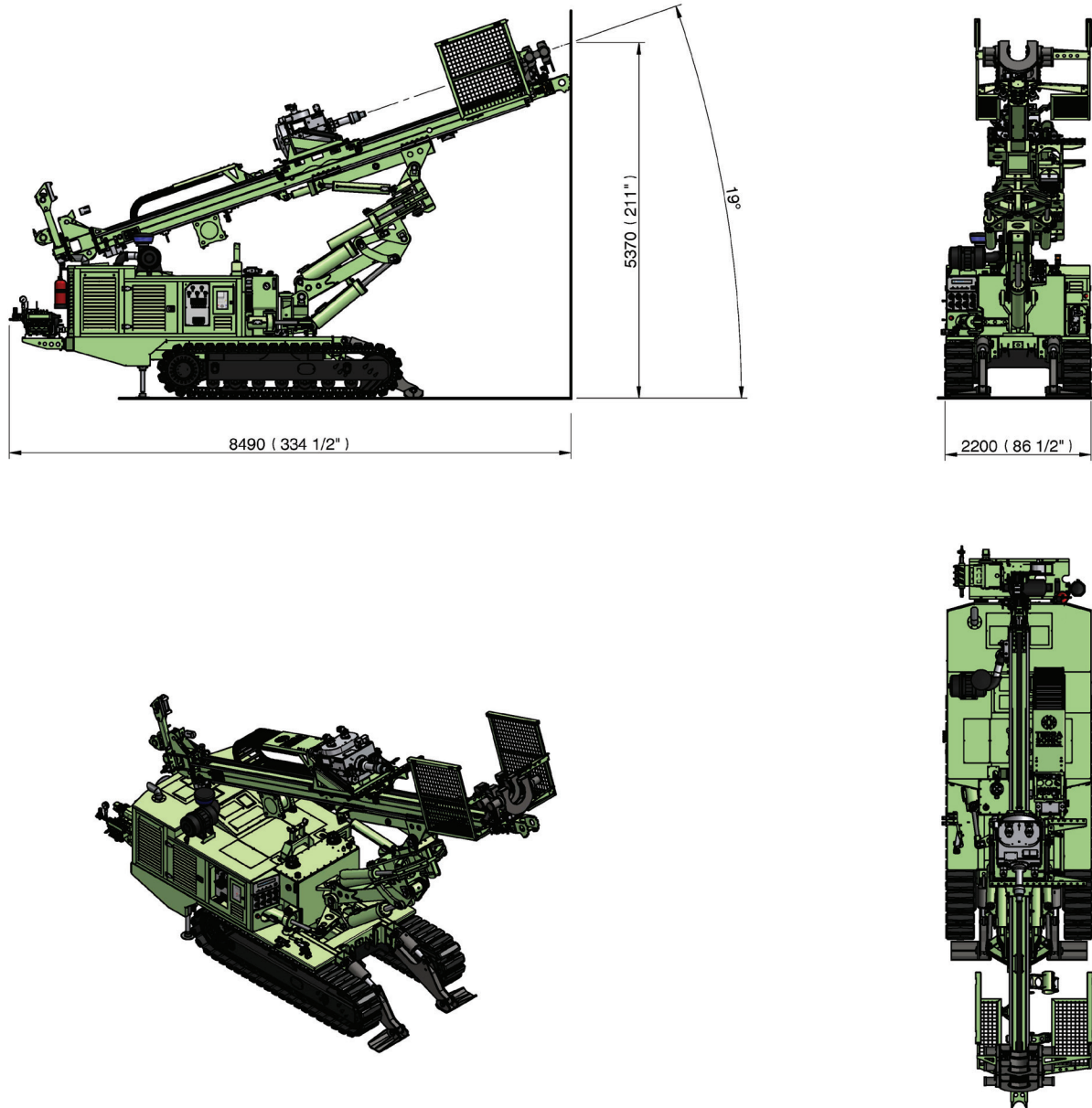


LATERAL 30° RIGHT CONFIGURATION



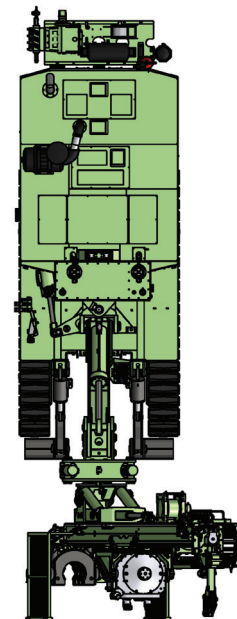
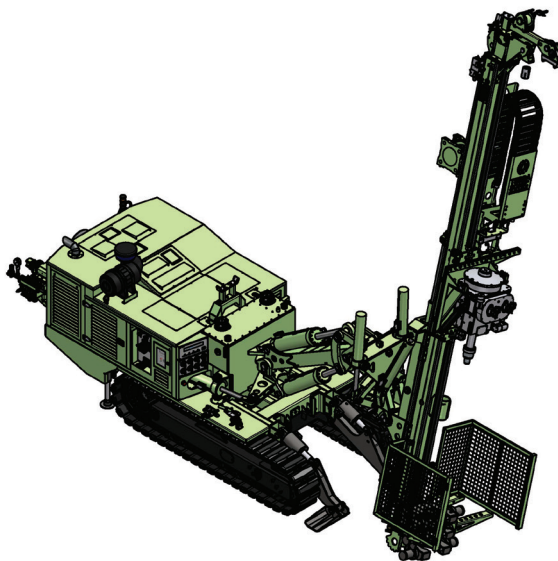
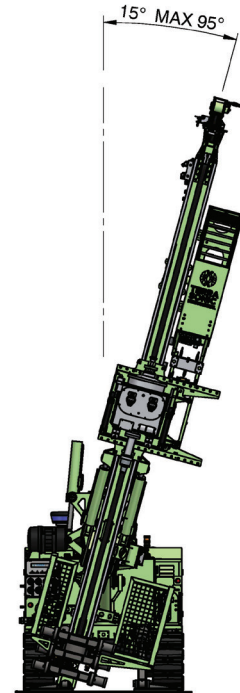
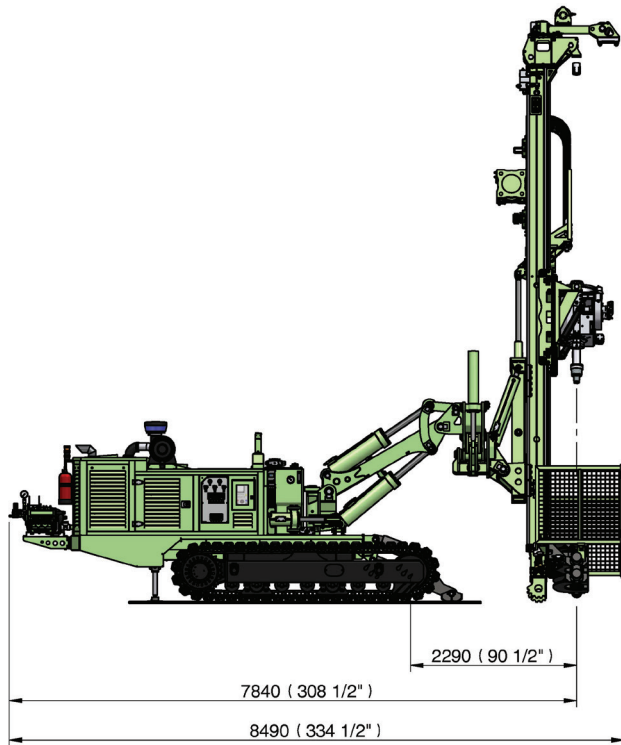


LATERAL 19° VERTICAL CONFIGURATION



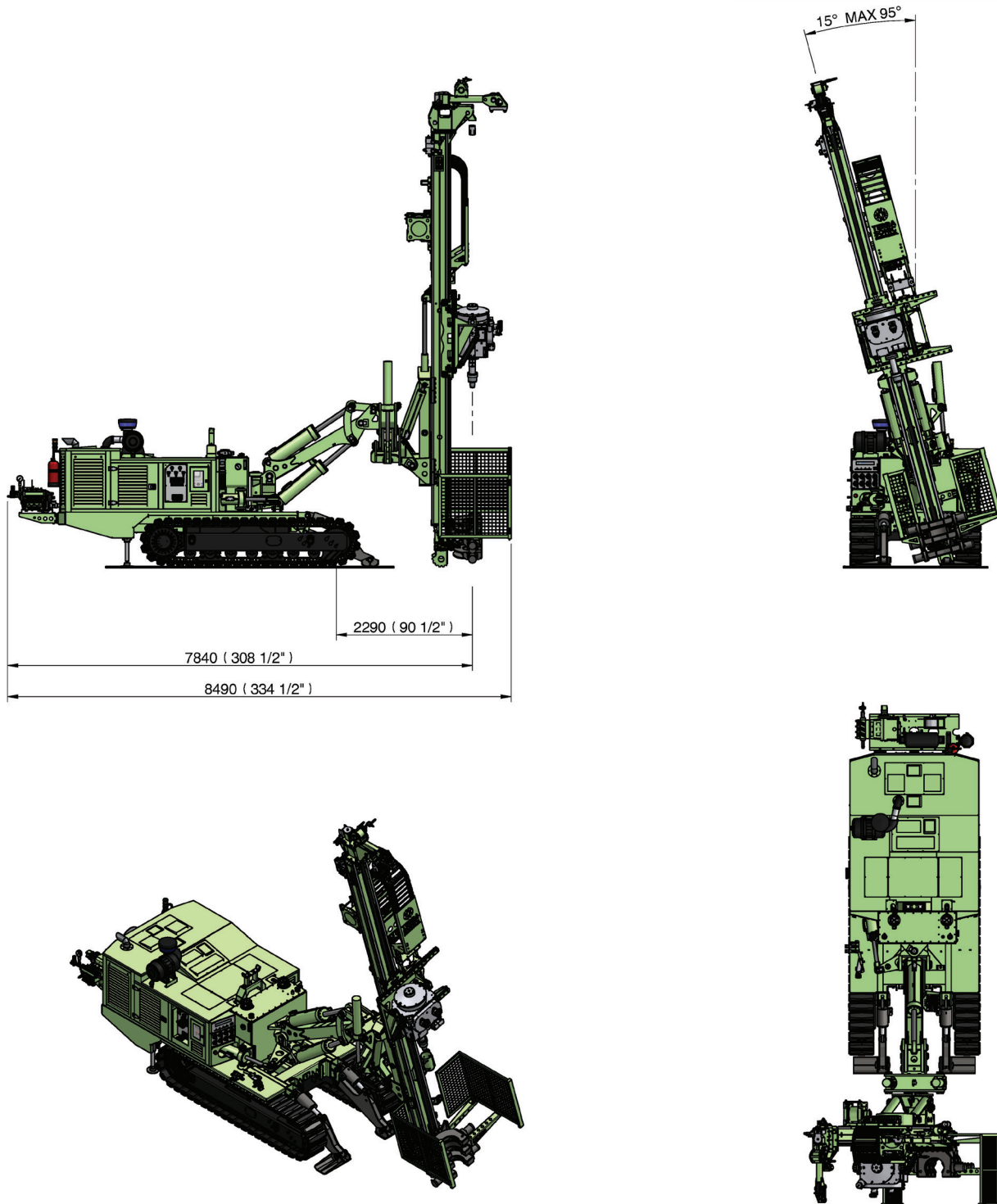


LEFT 15° INCLINE CONFIGURATION



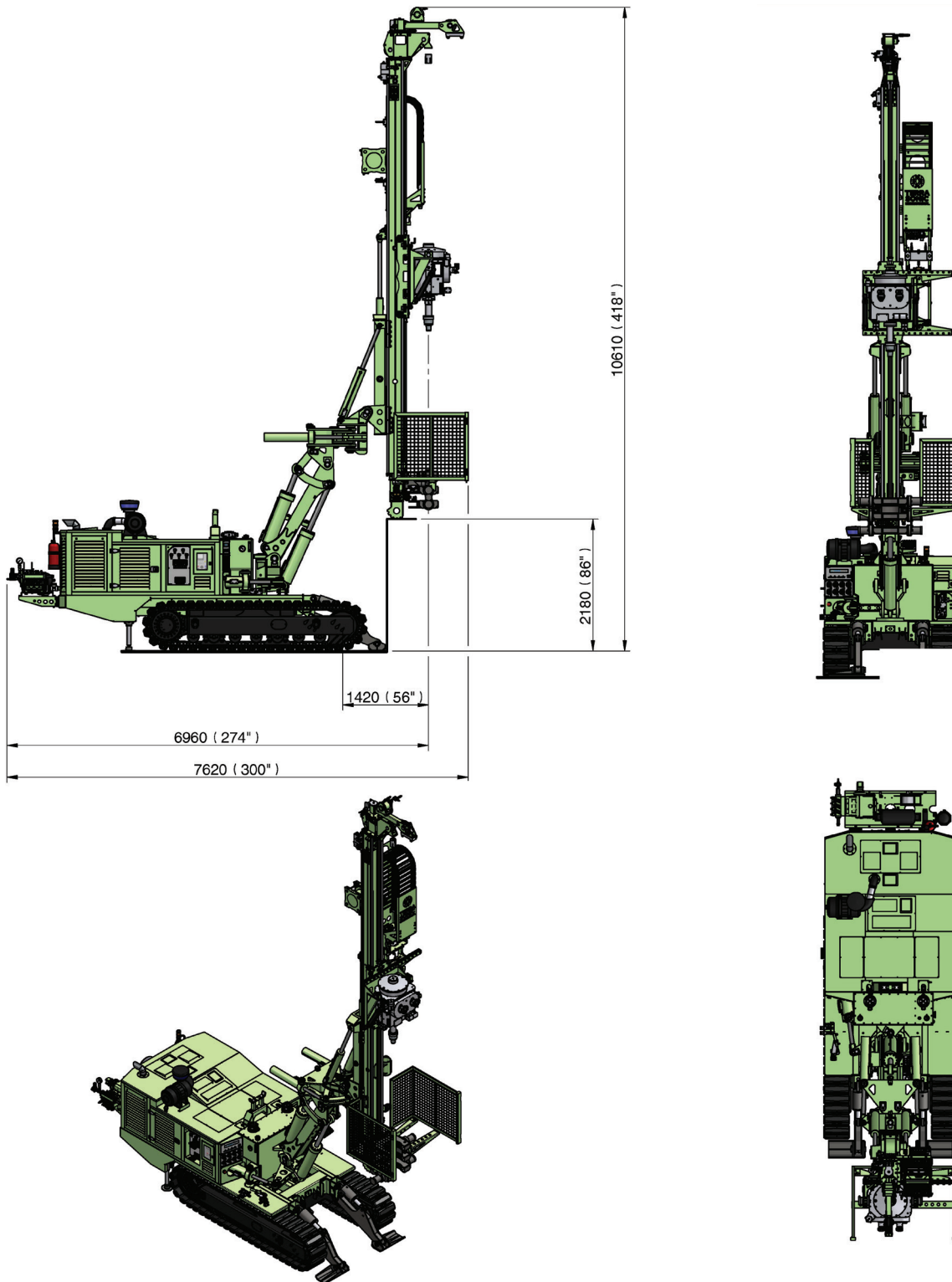


LEFT 15° INCLINE CONFIGURATION



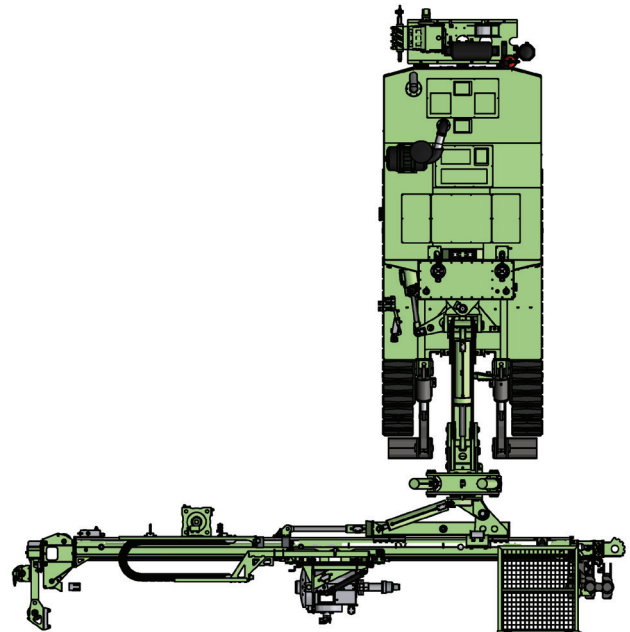
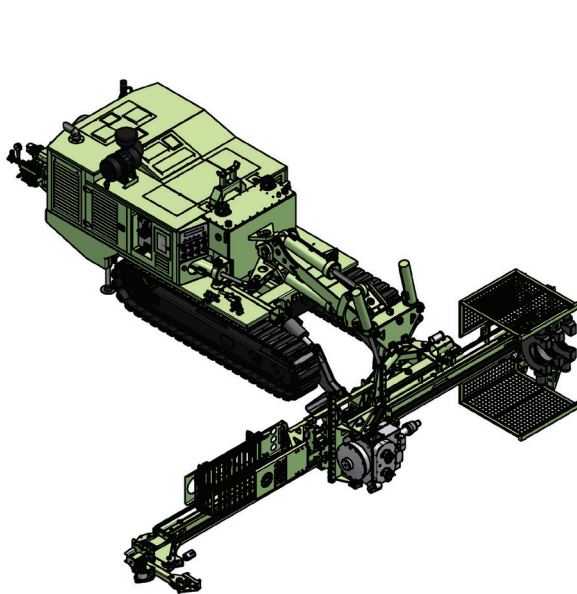
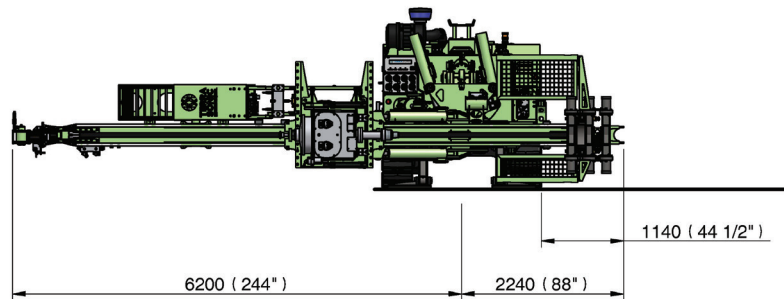
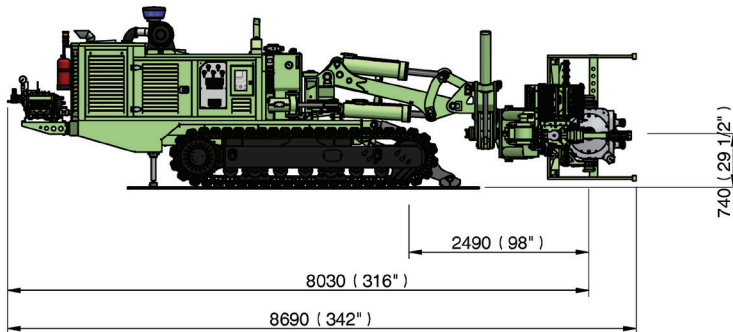


FRONT RAISED CONFIGURATION



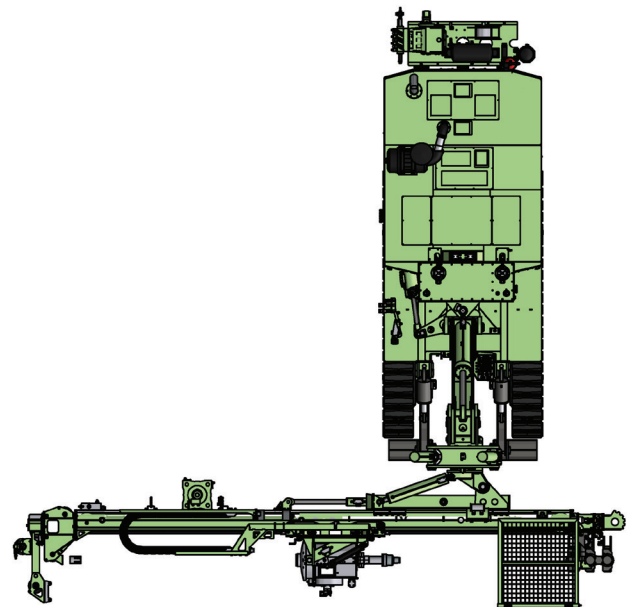
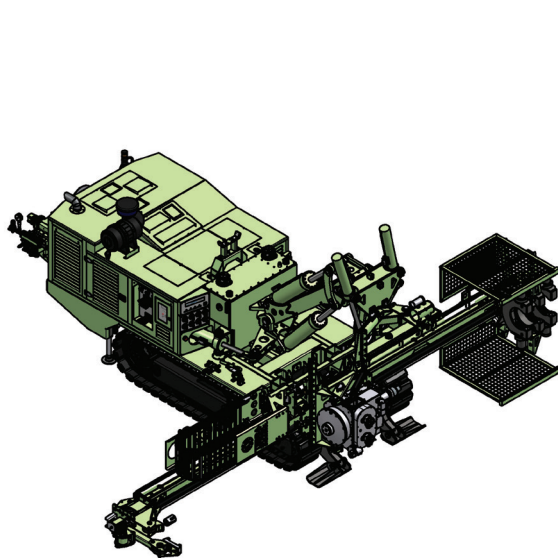
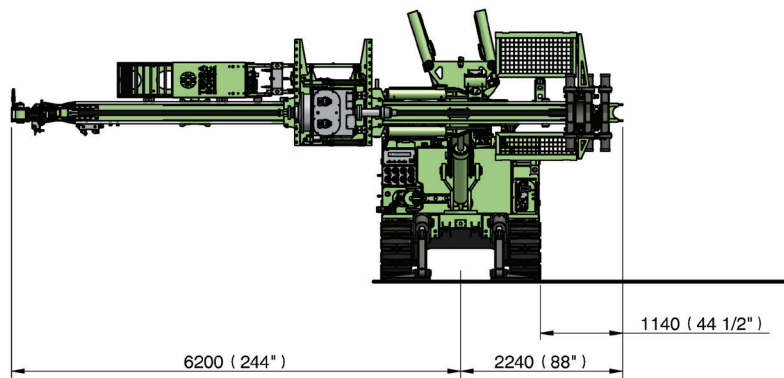
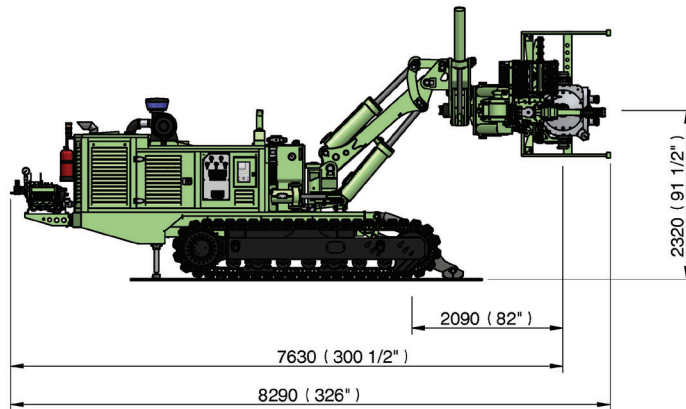


LATERAL LOW CONFIGURATION



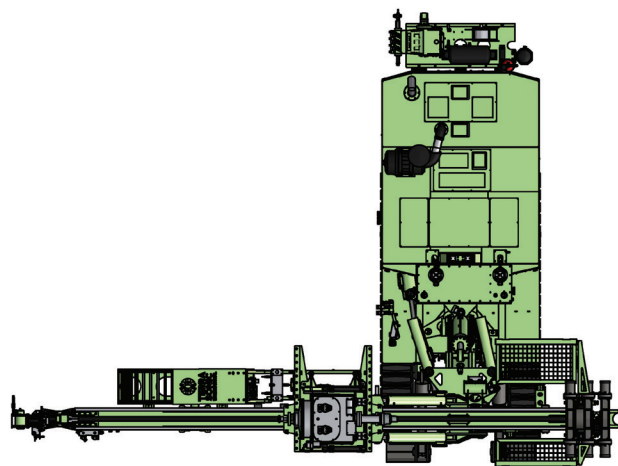
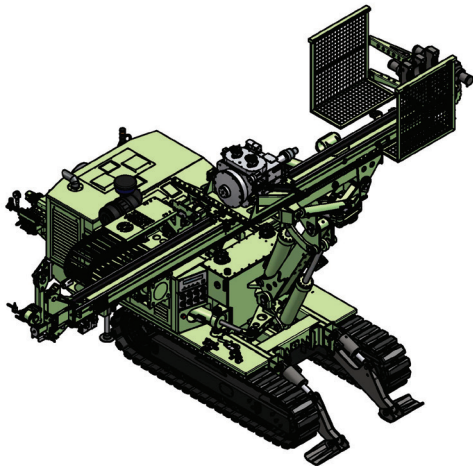
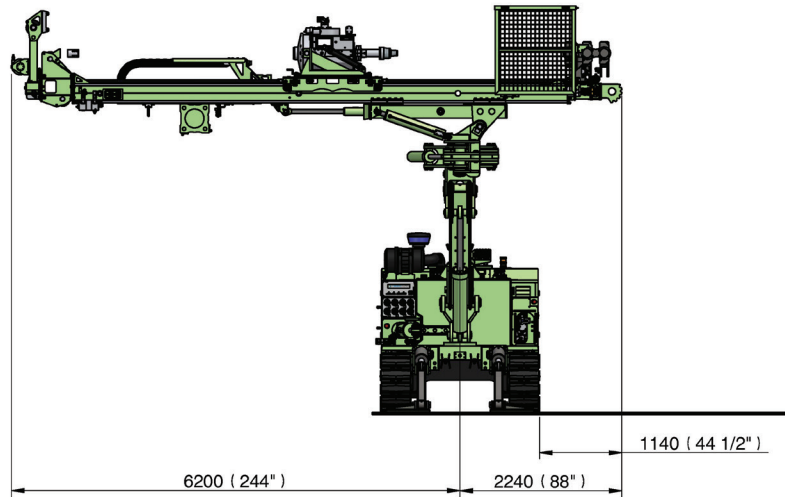
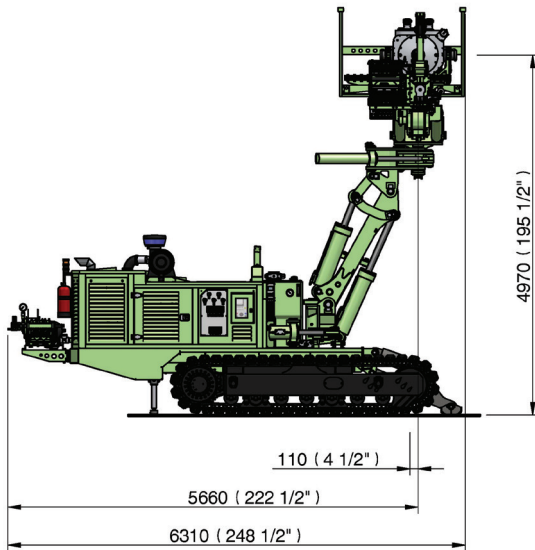


LATERAL MID CONFIGURATION



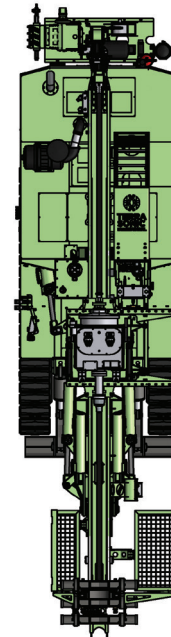
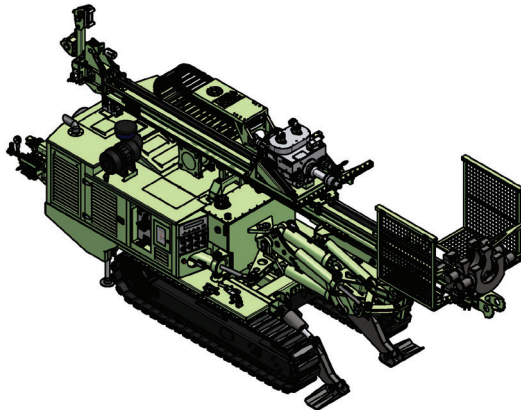
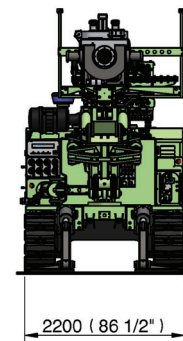
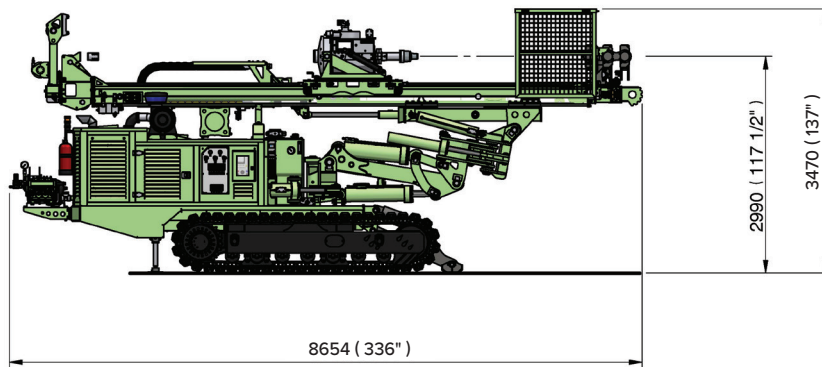


LATERAL HIGH CONFIGURATION



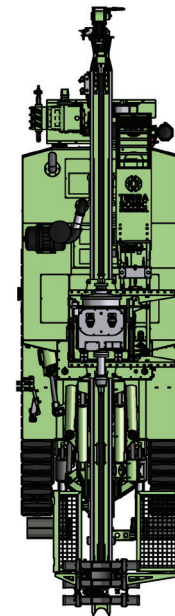
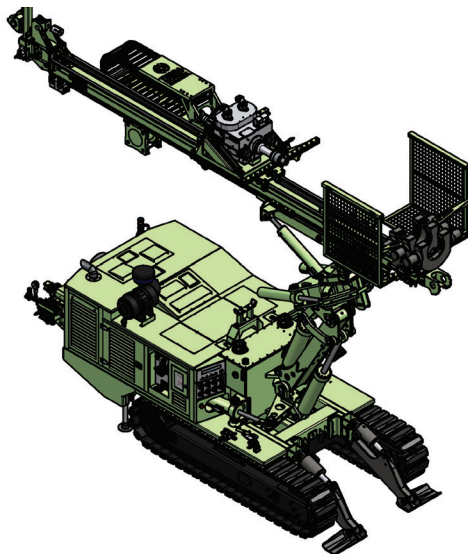
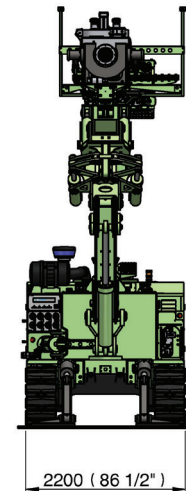
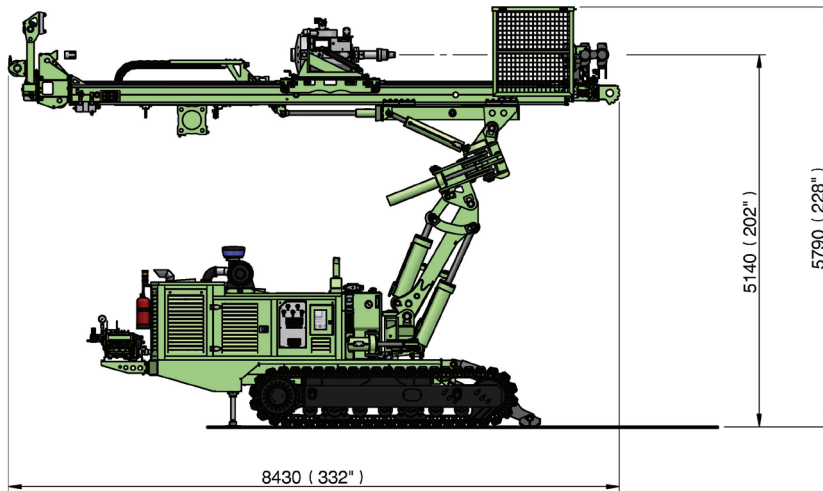


FRONT HORIZONTAL LOW



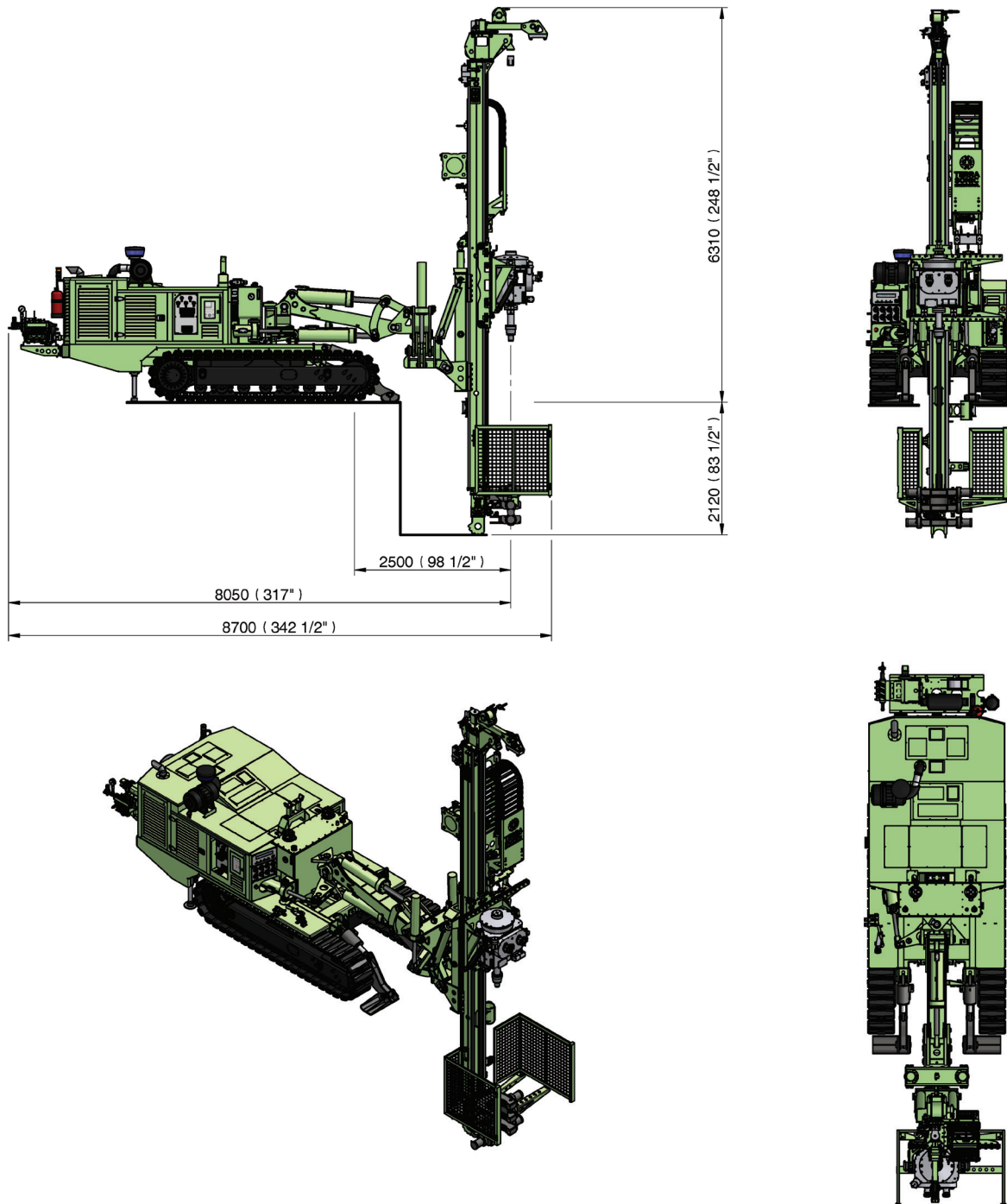


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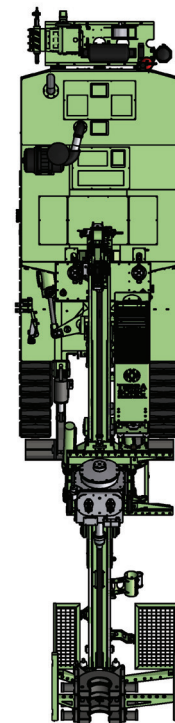
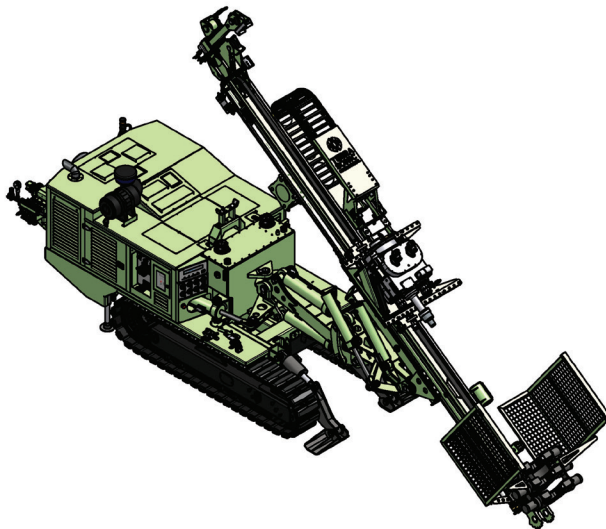
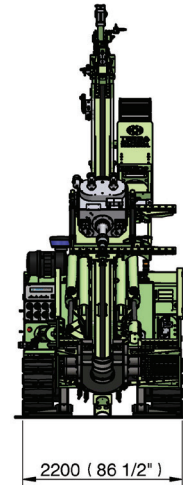
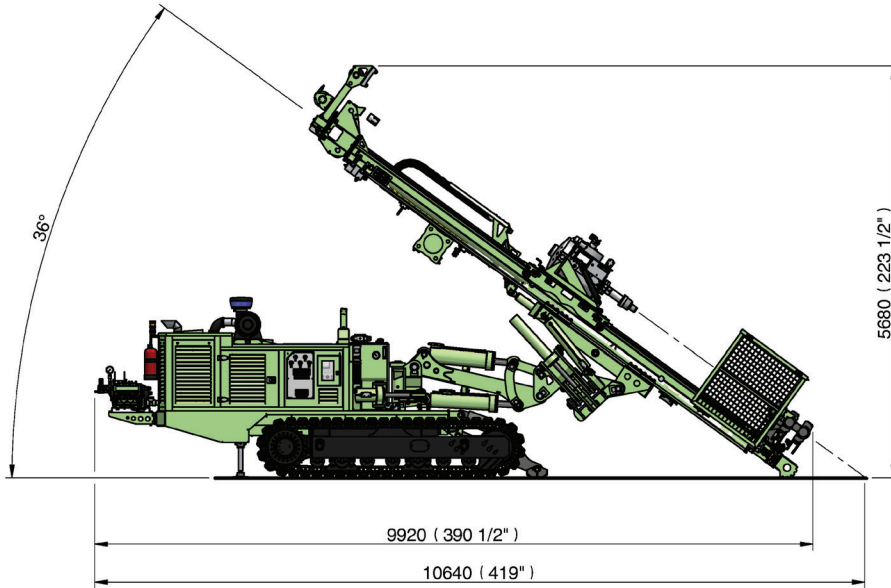


FRONT LOWERED CONFIGURATION





FRONT 36° ANGLE CONFIGURATION





FRONT 130° ANGLE CONFIGURATION

