



TECHNOLOGY SPECIFICATIONS

<u>Bottom Hole Assembly – All Components</u>	<u>Specification</u>
BHA dimensions, at full extension length	3.750" OD x 18.6 ft / 5.7 m
BHA weight	211 lbs / 96 kg
Casing Sizes, range	4-1/2" to 9.625" OD
Hole Types	Open or Cased Hole
Wellbore Direction	Vertical, Deviated, or Horizontal
Position in well	Centralized
Depth limitation	None
Deviation limitation	None
<u>Productivity</u>	<u>Specification</u>
Window width, max (at casing)	1 in / 2.5 cm
Window width, max (in rock)	5.125 in / 130 mm
Lateral excavation depth, max	18 feet / 5.5 m
Guaranteed Window Height for One (1) Run	30 feet / 9.1 m
Guaranteed to cut multiple casings to max OD	30" conductor casing
<u>Operations</u>	<u>Specification</u>
Working Pressure, typical (at surface)	5000 psi
Flow Rate, range	4 – 7 bbls/min
Typical Abrasive Use	3800 lbs/hr (1.73 metric tonnes/hr)
Sand Concentration, max	5 lbs/gallon
Suitable Abrasive	20/40 non-API quartz or garnet sand
Suitable Working Fluid	Any water (fresh, salt, or brine), oil, acid, solvent, or surfactant. Not mud.
Trip Speed, max	100 ft/min
Sub Crossover to Work String	2-3/8" 8-Rnd Pin
<u>Main Chassis</u>	<u>Specification</u>
Chassis Dimensions	3.750" OD x 10.1 ft / 3 m x 95 mm
Chassis Weight	160 lbs / 72.5 kg
Burst Pressure	11,320 psi
Spud Weight on Tool, max	100 psi
Operating Temperature, range	-5°F to 365°F / -20°C to 185°C
Wellbore deviation limitation, approx.	45° / 100 ft

<u>Perforator Train</u>	<u>Specification</u>
Number of Perforators, max	3
Nozzles per perforator, typical	2
Extension Length, max	5.200 feet / 1.58 m
Vertical Stroke Length	19.7 in / 50 cm
Stroke Speed, range	2 – 28” / hr / 1 – 12 mm/min
Nozzle wear rate, max	50 microns/hr
Slurry Velocity, typical (at nozzle)	2200 mph / 3520 kmh
<u>Centrator</u>	<u>Specification</u>
Dimensions	3.750” OD x 16 in / 40.6 cm
Weight	26 lbs / 11.8 kg
Accuracy, Azimuth / Inclination / Roll	±0.5° / ±0.1° / ±0.5°
Accuracy, Depth	± 0.0001% (≤ 1 foot / 10000 feet depth)
Self-adjustment accuracy	5°, ±1° at zenith angle
Operating Temperature, range	-5°F (-20°C) to 250°F (125°C)
Battery Power, typical	40 hours
HPHT Operating Temperature, max.	350°F (175°C) for up to 10 hours
<u>DPDR</u>	<u>Specification</u>
Passive Directional Control	Yes
Reporting Frequency	Every 0.5 seconds or 120 calls/min
Inputs	Local coordinates at Set-up
Outputs	N/S, E/W. TVD & Measured Depth Azimuth, Inclination, Gyro- and Highside Tool Face Angles Temperature, Quality Factors Jet & Differential Pressures
Exports	Configurable Table Reports Plots to Printer or CSV Data Export

Specifications Subject to Change due to Technical Advances