



NUMA[®] HAMMERS AND BITS

Patriot[®] 80

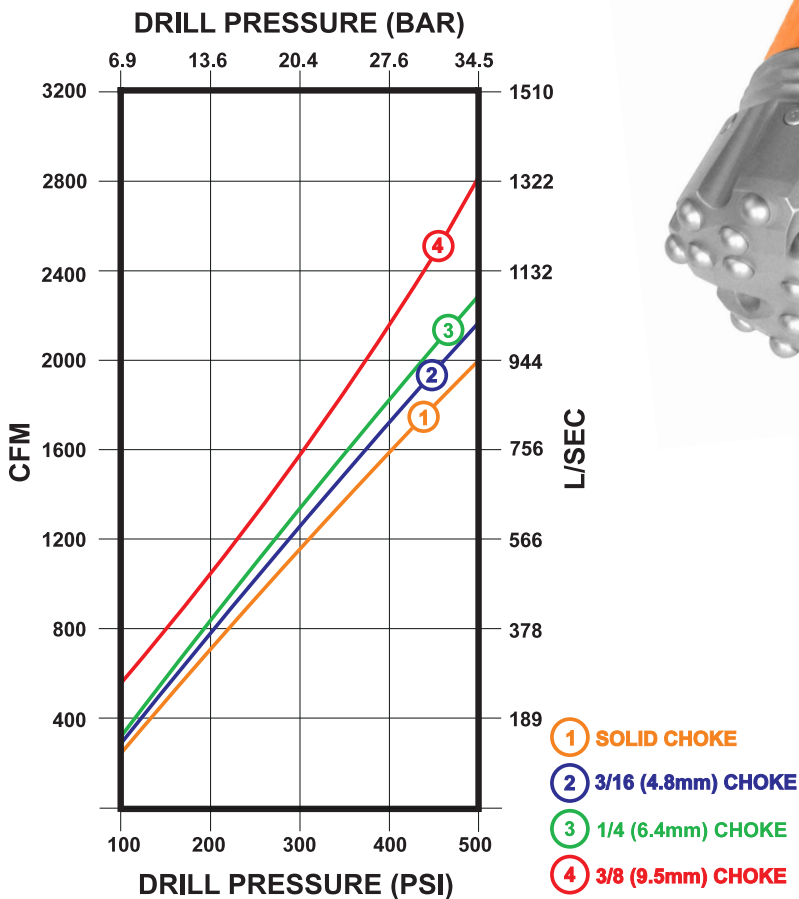
Down Hole Hammer



FEATURES

- Outdistances competitive hammers in both speed and longevity
- Simplified hammer design with less internal components
- Drills at high frequency to provide less vibration and smooth operation
- More efficient design requires less air which equals fuel savings
- Designed to operate at pressures up to 500 PSI (34.5 BAR)
- Ability to drill efficiently against high heads of water

AIR CONSUMPTION



SPECIFICATIONS

Diameter	7-1/8"	181 mm
Bore	6"	152 mm
Stroke	3-3/4"	95 mm
Weight (Hammer only)	362 lbs.	164 kg
Length (Shoulder to Shoulder)	45-1/8"	115 cm
Length (Shoulder to Bit Face)	49-7/8"	127 cm
A.P.I. Reg. Threads	4-1/2	

- 1850 blows per minute at 350 PSI (23.8 BAR)
- Drills holes from 7-7/8" to 10" (200 mm - 254 mm) in diameter
- Accepts 380 bit shank



Down Hole Button Bits

Patriot® 80



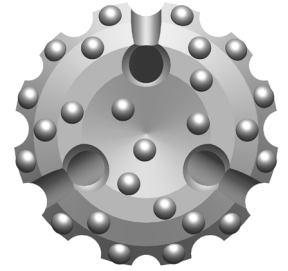
380 Bit Shank

DIAMETER
inches (millimeters)

WEIGHT*
pounds (kilograms)

FACES AVAILABLE

7-7/8"	(200 mm)	106 lbs.	(48.1 kg)
8"	(203 mm)	107 lbs.	(48.5 kg)
8-1/2"	(216 mm)	112 lbs.	(50.8 kg)
8-5/8"	(219 mm)	113 lbs.	(51.3 kg)
8-3/4"	(222 mm)	114 lbs.	(51.7 kg)
8-7/8"	(225 mm)	115 lbs.	(52.2 kg)
9"	(229 mm)	120 lbs.	(54.4 kg)
10"	(254 mm)	125 lbs.	(56.7 kg)



Concave

* Bit weights are approximate

FEATURES

- 3/4" (19 mm) diameter carbide buttons throughout face
- Chipways designed for faster hold cleaning
- Carbide buttons positioned for better fracture of rock providing faster penetration rates
- Several grades and types of carbide are available
- Other bit sizes may be available upon request

For More Information Contact:

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