

IMPACT RING BIT SYSTEM®

SYSTEM DESCRIPTION

Numa's Impact Ring Bit System is a technically advanced, efficient drilling product that is revolutionizing the way casing is being installed in both horizontal or vertical rock drilling applications.

The system consists of a down hole hammer, auger and a unique two-piece bit design incorporating a center and ring bit combination. The down hole hammer provides the power for the drilling system while the auger fitted on the backhead of the hammer is used to promote more efficient cleaning of the hole during drilling. The system's center bit is connected directly to a DTH hammer and the ring bit is attached directly to the casing being installed. To begin drilling, the hammer and center bit are inserted through the casing to align with the ring bit. The two bits work in unison to install casing while drilling.

The benefit of the two-piece design is realized at the completion of each hole. Once the casing has been drilled down to the required depth, the center bit and drill string can be pulled back out the hole leaving the casing installed. The ring bit is also fully recoverable in horizontal application that utilize pit-to-pit drilling techniques. Virtually all components of the Impact Ring Bit System are recoverable which reduces overall equipment costs because the product can be used again and again on multiple projects.

Try Numa's Impact Ring Bit System on your next casing installation or your competitors will!

SYSTEM FEATURES

- Revolutionary two-piece ring bit system that simultaneously installs casing while drilling
- Drill holes 5-1/4" to 50-1/2" (133 - 1283 mm) in diameter
- Designed for use with horizontal or conventional DTH hammers.
- Systems available for steel, P.E. or concrete/clay pipes and casing
- Fastest penetration rates for setting casing in rock formations
- Drills with extreme accuracy - on-grade and on-line
- Ring and center bit may be reused on multiple jobs
- Center bit and hammer may be retracted while leaving the casing installed
- Large air flushing holes for better hole cleaning
- Thick ring bit promotes longer and deeper bores





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Hammer Reference	Casing Size OD	Drilled Diameter	Casing Wall Thickness	Compressor Required	Suggested Auger Diameter
P35A C40	4-1/2" 114 mm	5-1/4" 133 mm	1/4" 6.3 mm	350 cfm 165 l/sec	3-3/4" 95 mm
C40 P50	5-1/2" 140 mm	6-1/4" 159 mm	1/4" 6.3 mm	450 cfm 212 l/sec	4-3/4" 121 mm
P50 P60W/WQ	6-5/8" 168 mm	7-3/8" 187 mm	1/4" 6.3 mm	600 cfm 283 l/sec	5-3/4" 146 mm
P60W/WQ P80	8-5/8" 219 mm	9-3/8" 238 mm	1/4" 6.3 mm	600 cfm 283 l/sec	7-3/4" 197 mm
P80 N100	10-3/4" 273 mm	11-3/4" 298 mm	3/8" 9.5 mm	950 cfm 448 l/sec	9-3/4" 248 mm
N100 P120	12-3/4" 324 mm	13-3/4" 349 mm	3/8" 9.5 mm	1000 cfm 472 l/sec	11-3/4" 298 mm
P120 P125	14" 356 mm	14-3/4" 375 mm	3/8" 9.5 mm	1500 cfm 708 l/sec	12-3/4" 324 mm
P120 P125	16" 406 mm	17" 432 mm	3/8" 9.5 mm	1500 cfm 708 l/sec	14-3/4" 375 mm
P125 P180	18" 457 mm	19" 483 mm	3/8" 9.5 mm	1500 cfm 708 l/sec	16-3/4" 425 mm
P125 P180	20" 508 mm	21" 533 mm	1/2" 12.7mm	1500 cfm 708 l/sec	18-3/4" 475 mm
P180 P240	24" 610 mm	25" 635 mm	1/2" 12.7 mm	2400 cfm 1133 l/sec	22-3/4" 578 mm
P180 P240	30" 762 mm	31" 787 mm	1/2" 12.7 mm	2400 cfm 1133 l/sec	28-3/4" 730 mm
P180 P240	32" 813 mm	33-1/8" 842 mm	1/2" 12.7 mm	2400 cfm 1133 l/sec	30-3/4" 781 mm
P240 C330	36" 914 mm	37-1/4" 946 mm	1/2" 12.7 mm	3500 cfm 1652 l/sec	34-3/4" 883 mm
C330	40" 1016 mm	42" 1067 mm	1/2" 12.7 mm	6000 cfm 2832 l/sec	38-3/4" 984 mm
C330	42" 1067 mm	44" 1118 mm	1/2" 12.7 mm	6000 cfm 2832 l/sec	40-3/4" 1035 mm
C330	48" 1219 mm	50-1/2" 1283 mm	1/2" 12.7 mm	6000 cfm 2832 l/sec	46-3/4" 1187 mm

Casing and auger sizes are nominal. Casing specifications are required upon placement of order.