

**Effecticus.
Excellenticus.
Environmenticus.**

Epsilon² – Next Level Rotary Drill Bit

 **Epiroc**



Easy selection

We made it as easy as possible for you to select the right Epsilon² bit for each drilling operation. The bits are divided into only four categories based on the strength of the rock where they will be used. The Epsilon² diameter range is from 6-3/4 inches (171 mm) to 16 inches (406 mm), and the IADC code range is from 412 to 722.



Rock strength 0–8,000 UCS / SOFT

Bit diameter	IADC code		
	41E2	43E2	44E2
6-3/4" (171 mm)			
7-7/8" (200 mm)			
9" (229 mm)	5697000042		
9-7/8" (251 mm)		5697000046	
10-5/8" (270 mm)			5697000010
12-1/4" (311 mm)			
13-3/4" (349 mm)			
16" (406 mm)			



Rock strength 6,000–28,000 UCS / MEDIUM

Bit diameter	IADC code		
	52E2	53E2	54E2
6-3/4" (171 mm)		5697000054	
7-7/8" (200 mm)	5697000038	5697000039	
9" (229 mm)		5697000043	
9-7/8" (251 mm)			5697000047
10-5/8" (270 mm)	5697000028		5697000013
12-1/4" (311 mm)		5697000029	5697000030b 5697000031
13-3/4" (349 mm)			
16" (406 mm)			



Rock strength 24,000–46,000 UCS / HARD

Bit diameter	IADC code		
	62E2	63E2	64E2
6-3/4" (171 mm)		5697000037	
7-7/8" (200 mm)	5697000040		5697000041
9" (229 mm)	5697000044		5697000045
9-7/8" (251 mm)	5697000048		5697000049
10-5/8" (270 mm)	5697000025	5697000026	5697000027
12-1/4" (311 mm)	5697000032		5697000034b 5697000033
13-3/4" (349 mm)	5697000036b		
16" (406 mm)			



Rock strength 38,000+ UCS / VERY HARD

Bit diameter	IADC code		
	71E2	72E2	
6-3/4" (171 mm)			
7-7/8" (200 mm)			
9" (229 mm)			
9-7/8" (251 mm)			
10-5/8" (270 mm)			
12-1/4" (311 mm)		5697000035b	
13-3/4" (349 mm)			
16" (406 mm)	5697000053b		

Nozzles diameter

Based on bit diameter and compressor rating.

Target bit PSI: 45 Assume: 3,000 feet elevation, 70°F (21°C) intake air temp, 120°F (49°C) delivered air temp

Bit diameter	Air compressor rating, iCFM							
	1000	1250	1400	1600	1900	2600	3000	3800
6-3/4" (171 mm)	5/16	3/8	7/16	1/2	5/8	-	-	-
7-7/8" (200 mm)	5/16	3/8	7/16	1/2	5/8	-	-	-
8-1/2" (216 mm)	1/4	5/16	3/8	7/16	9/16	13/16	-	-
9" (229 mm)	1/4	5/16	3/8	7/16	9/16	5/8	3/4	15/16
9-7/8" (251 mm)	3/16	5/16	5/16	7/16	1/2	9/16	11/16	15/16
10-5/8" (270 mm)	3/16	1/4	5/16	3/8	1/2	9/16	11/16	7/8
12-1/4" (311 mm)	1/8	1/4	5/16	3/8	7/16	1/2	5/8	7/8
13-3/4" (349 mm)	1/8	3/16	1/4	5/16	7/16	1/2	5/8	13/16
15" (381 mm)	1/8	3/16	1/4	5/16	7/16	1/2	5/8	13/16
16" (406 mm)	1/16	3/16	3/16	5/16	3/8	7/16	9/16	13/16

Target bit PSI: 60

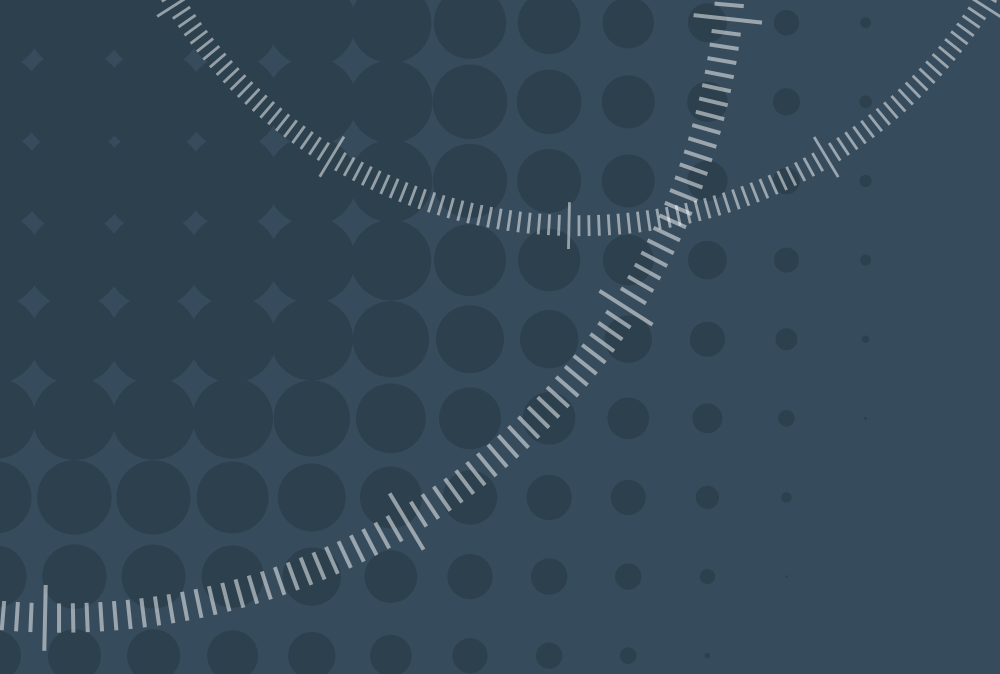
	1000	1250	1400	1600	1900	2600	3000	3800
6-3/4" (171 mm)	2/8	5/16	3/8	7/16	1/2	11/16	13/16	1-1/16
7-7/8" (200 mm)	3/16	5/16	5/16	3/8	1/2	11/16	13/16	1
8-1/2" (216 mm)	3/16	1/4	5/16	5/16	7/16	5/8	3/4	15/16
9" (229 mm)	3/16	1/4	5/16	5/16	7/16	5/8	3/4	15/16
9-7/8" (251 mm)	-	3/16	1/4	5/16	3/8	9/16	11/16	15/16
10-5/8" (270 mm)	-	3/16	3/16	1/4	5/16	9/16	11/16	7/8
12-1/4" (311 mm)	-	-	3/16	1/4	5/16	1/2	5/8	7/8
13-3/4" (349 mm)	-	-	3/16	3/16	5/16	1/2	5/8	13/16
15" (381 mm)	-	-	-	3/16	5/16	1/2	5/8	13/16
16" (406 mm)	-	-	-	3/16	1/4	7/16	9/16	13/16

Target bit PSI: 45 Assume: 10,000 feet elevation, 60°F (16°C) intake air temp, 120°F (49°C) delivered air temp

Bit diameter	Air compressor rating, iCFM							
	1000	1250	1400	1600	1900	2600	3000	3800
6-3/4" (171 mm)	1/4	5/16	3/8	3/8	1/2	-	-	-
7-7/8" (200 mm)	3/16	1/4	5/16	3/8	7/16	-	-	-
8-1/2" (216 mm)	3/16	1/4	1/4	5/16	7/16	5/8	-	-
9" (229 mm)	3/16	1/4	1/4	5/16	7/16	10/16	3/4	15/16
9-7/8" (251 mm)	1/8	3/16	1/4	5/16	3/8	9/16	11/16	7/8
10-5/8" (270 mm)	1/16	1/8	3/16	1/4	5/16	1/2	5/8	7/8
12-1/4" (311 mm)	1/16	1/8	3/16	1/4	5/16	1/2	5/8	7/8
13-3/4" (349 mm)	1/16	1/8	1/8	3/16	5/16	1/2	5/8	13/16
15" (381 mm)	0	1/16	1/8	3/16	1/4	7/16	9/16	13/16
16" (406 mm)	0	1/16	1/8	3/16	1/4	7/16	9/16	3/4

Target bit PSI: 60

	1000	1250	1400	1600	1900	2600	3000	3800
6-3/4" (171 mm)	3/16	1/4	1/4	5/16	3/8	9/16	5/8	13/16
7-7/8" (200 mm)	-	3/16	1/4	5/16	3/8	1/2	5/8	6/8
8-1/2" (216 mm)	-	3/16	3/16	1/4	5/16	7/16	9/16	6/8
9" (229 mm)	-	3/16	3/16	1/4	5/16	7/16	9/16	6/8
9-7/8" (251 mm)	-	-	-	3/16	1/4	7/16	1/2	11/16
10-5/8" (270 mm)	-	-	-	3/16	1/4	3/8	1/2	5/8
12-1/4" (311 mm)	-	-	-	-	3/16	3/8	7/16	5/8
13-3/4" (349 mm)	-	-	-	-	3/16	5/16	7/16	5/8
15" (381 mm)	-	-	-	-	3/16	5/16	7/16	9/16
16" (406 mm)	-	-	-	-	-	5/16	3/8	9/16



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Performance unites us, innovation inspires us, and commitment drives us to keep moving forward. Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.

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