

TOOLS UNLIMITED

PRESENTS

A PREMIUM HAND TOOL LINE

EQUIVELANT TO

PROTO SK ARMSTRONG

But WITHOUT THE HIGH PRICE

URREA

PROFESSIONAL TOOLS

URREA

MISCELLANEOUS TOOLS

CUTTING TOOLS

597



DRILLING TOOLS

600



The URREA tools that you will find in this section are the perfect addition to any professional's industrial or workshop toolbox or workbench. Their designs and the quality of their materials make them high-performing, durable, and easy to use.

URREA's miscellaneous tools line includes:

- Cutting tools.
- Drilling tools.

URREA high-speed drill bits are compatible with any type of electric, pneumatic, portable, bench drill, grinder, or polisher.

URREA cutting and drilling tools:

- Hacksaws in a wide variety of shapes, sizes, and materials.
- High-speed drill bits are grouped and combined into more than 4 sets

offered in practical metal boxes for transporting them and keeping them organized.

- Drill bits are precision machined and heat-treated to provide the best combination of hardness, tensile strength, torque strength, and wear resistance.
- Compliant with American and European domestic and international standards.
- Country of origin stamped permanently and indelibly on each tool, reinforcing their high-quality image. This country of origin stamp complies with ASME/ANSI standards and the regulations of the Federal Trade Commission of the United States of America.

The information presented in this chapter is organized as follows:

- **Detailed product specifications.**
- **Safety recommendations.**



HACKSAWS

RECOMMENDATIONS FOR CUTTING WITH HACKSAWS

- Solidly secure the material to be cut.
- Support the saw frame firmly as shown in Figure A.
- Tighten the blade firmly.
- Blade teeth must point toward the front of the saw frame (Fig. B).
- Try to keep the greatest number of blade teeth in contact with the material to be cut.
- When making the cut, do not press downward on the saw frame; let the blade make the cut.
- Pull the blade backward gently; do not try to cut on the backward stroke.
- Start the cut slowly, especially if the cut begins at a corner or edge.
- Make long, smooth, uniform cuts, 30 to 50 strokes per minute.
- Use the right blade for each job; otherwise the work will be more difficult and the blade will have a much shorter lifespan or may even break.
- When you are finished cutting, loosen the blade tension before storing the saw frame.
- 18-tooth blades are recommended for soft materials; 24-tooth blades are recommended for harder materials.

Fig. A



Fig. B

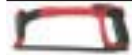


353P

BIMATERIAL FIXED HACKSAW FRAME, HIGH TENSION, 12"

CODE	TYPE	BLADE OPENING		LENGTH TOTAL		STANDARD:	
		in	mm	in	mm	grs	lbs
353P	Fixed tension	12"	304.8	15 1/4"	390	800	1.764

STANDARD:
NOM 0-130
NOM 0-83



High tension mechanism, with lever and adjustable knob for quick changes of saws.



Bimaterial ergonomic handle and front anti-slip front support.
Tensioned and centered saw for a better balance.

Angled assembly saw (55°)

353F

FIXED HACKSAW FRAME, HIGH TENSION, 12"

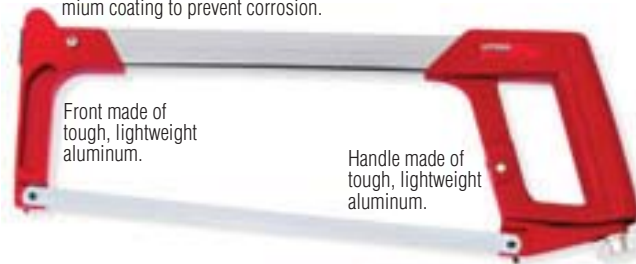
CODE	TYPE	BLADE OPENING		LENGTH TOTAL		STANDARD:	
		in	mm	in	mm	grs	lbs
353F	Fixed high tension	12"	304.8	15 1/2"	393.7	600	1.32

STANDARD:
NOM 0-130
NOM 0-83



Used to store blades.

Steel bridge has thick-walled hollow rectangular section, with nickel-chromium coating to prevent corrosion.



Front made of tough, lightweight aluminum.

Handle made of tough, lightweight aluminum.

352F

FIXED HACKSAW FRAME, 12"

CODE	TYPE	BLADE OPENING		LENGTH TOTAL		STANDARD:	
		in	mm	in	mm	grs	lbs
352F	Fixed	12"	304.8	17"	431.8	180	0.396

STANDARD:
NOM 0-130
NOM 0-83



Ergonomically designed handle.



Butterfly adjustment bolt.

352
ADJUSTABLE HACKSAW FRAME, 8", 10" and 12"

CODE	TYPE	BLADE OPENING		LENGTH TOTAL		Scales	
		in	mm	in	mm	grs	lbs
352	Adjustable	8", 10", 12"	203, 254, 304.8	15 1/2"	393.7	750	1.65

STANDARD:
 NOM 0-130
 NOM 0-83



Sliding bridge adjusts to three positions

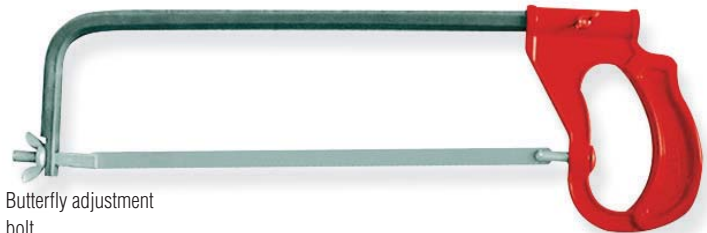
Ergonomically designed handle

Butterfly adjustment bolt

354F
FIXED HACKSAW FRAME, 12"

CODE	TYPE	BLADE OPENING		LENGTH TOTAL		Scales	
		in	mm	in	mm	grs	lbs
354F	Fixed	12"	304.8	16"	406.4	1900	4.18

STANDARD:
 NOM 0-130
 NOM 0-83



Butterfly adjustment bolt

Ergonomically designed handle

availability **starts with U**



Your URREA distributor is close to you and maintains a local inventory of the URREA products that appear in this catalog, so that you can source your tool needs immediately.



CONTACT US

email: customerservice@urrea.com

FAX: (210) 734-8715 **Phone:** (210) 734-8703 / (800) 366-6911

RETRACTABLE KNIVES

689AR SELF RETRACTING UTILITY KNIFE

CODE	LENGTH		WIDTH		THICK		Scales	
	in	mm	in	mm	in	mm	grs	lbs
689AR	6 3/4"	171.4	1 1/2"	38.1	3/4"	19.0	185	0.40

STANDARD: GGG-K-494B



Safety knife.
Interlock system.
Blade storage.
Ergonomic design.



689 RETRACTABLE UTILITY KNIFE

CODE	LENGTH		WIDTH		THICK		Scales	
	in	mm	in	mm	in	mm	grs	lbs
689	6 3/4"	171.4	1 1/2"	38.1	3/4"	19.0	185	0.40

STANDARD: GGG-K-494B



Automatic retractable knife.
Interlock system.
Blade storage.
Ergonomic design.



690 RETRACTABLE ERGONOMIC UTILITY KNIFE

CODE	LENGTH		WIDTH		THICK		Scales	
	in	mm	in	mm	in	mm	grs	lbs
690	7 1/2"	190.5	1 5/8"	41.9	1"	25.4	290	0.63

STANDARD: GGG-K-494B



Safety knife with comfortable grip.
Interlock system.
Blade storage.
Security lock system.



691 SNAP OFF KNIFE

CODE	LENGTH		WIDTH		THICK		Scales	
	in	mm	in	mm	in	mm	grs	lbs
691	6 1/2"	165.1	1 10/16"	41.2	13/16"	20.3	235	0.51

STANDARD: GGG-K-494B



Safety knife with comfortable grip.
Disposable blade tips.
Blade lock adjustable.

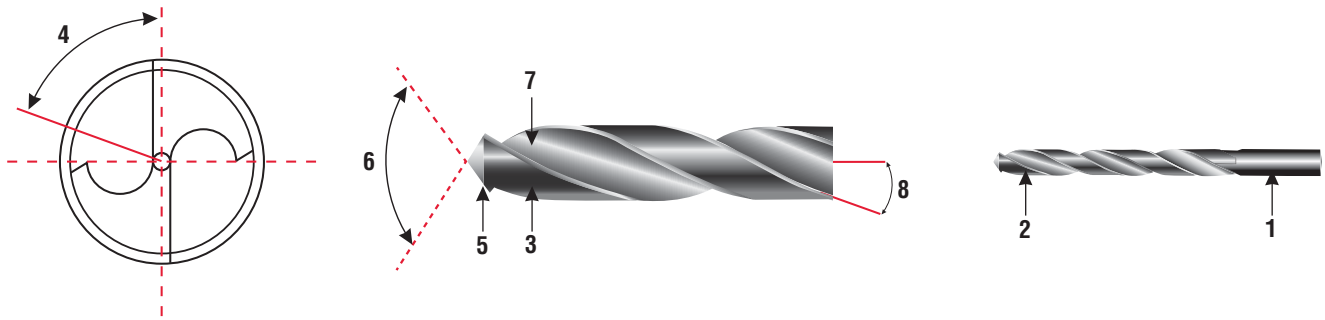


URREA Professional Tools line of drill bits includes the sizes most commonly used in industrial drilling processes for manufacturing, repairs, or maintenance.

URREA drill bits are made of high-quality M2 steel. This steel's properties combined with appropriate heat treatment yields in the strength and hardness levels required by international drill bit fabrication standards.

The process of manufacturing a drill bit requires high precision. First, the helix must be formed, keeping it concentric with the shank. Next the preliminary shape is heat-treated and then ground on a computer-controlled machine using abrasive stones. Its geometry is obtained by using a diamond and a software program loaded on to the same machine. Finally, the bit is given a BLACK finish to protect it against corrosion. This finish forms an integral part of the tool, since it consists of an accelerated attack on the steel's surface that makes it able to withstand the conditions it will later experience in an industrial environment.

Below you can see an illustration of the main parts of a drill bit and a general definition for each of them.

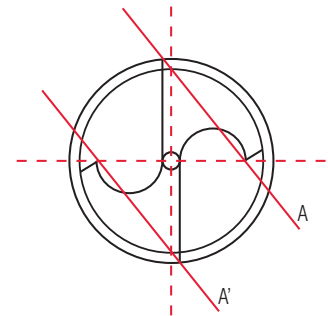


1. SHANK. This is the part where the bit is gripped when used; the shank can be straight or tapered, although the tapered shank is more common in sizes from 1" up. In sizes smaller than 1" diameter, the shank is usually straight and either the same size or a smaller size than the bit itself. URREA high-speed steel drill bits have a straight shank and the same diameter as the tip.

2. HELIX. These are also commonly known as "spirals" and they give the bit its cutting and debris removal characteristics.

3. SURFACE OF INCIDENCE. This is the surface that is reduced when a bit is sharpened. During cutting work, it is very important that this surface does not come into contact with the drilled piece. This is commonly known as heeling and affects the surface of incidence as well as the bit's diameter.

4. CROSS THREAD ANGLE. This is the angle formed by the intersection of each helix's surface of incidence, this angle is very important because it determines the bit's concentric cut. There is a very easy way to check the correct location of this angle, which is to draw an imaginary line (A-A) between the two points of a helix. This line should run parallel to the line formed by the intersection of the surfaces of incidence, otherwise the bit will oscillate and the hole will be slightly larger than the bit's rated size.



5. CUTTING EDGE. This is the bit's actual cutting edge. Physically it is the front line of the surface of incidence. The bit has two cutting edges, one for each helix. Under normal conditions, a continuous burr indicates that the edge is properly sharpened. When the burr breaks into short pieces, the bit needs to be sharpened; otherwise it will begin to bind, which will cause overheating and possible breakage if you continue to use it.

6. ANGLE OF THE POINT. This angle is created when the bit is manufactured and is usually 118°, but it can be varied for special applications. When drilling soft, non-ferrous materials, it is advisable to increase this angle to 140°; this results in a flatter tip, which causes a slower advance and keeps the bit from sticking. When working with materials that are slightly harder than is normal for steel, it is recommended to reduce the angle, giving the bit more penetration and increased cutting inertia.

7. FLUTE SURFACE. The internal surface of the bit, which runs along the burr cut from the drilled piece.

8. HELIX ANGLE. This angle, in combination with the centrifugal force generated by the bit's rotation, causes the burr to be removed smoothly and efficiently. Certain precautions should be taken when using drill bits in situations where drilling tolerances are critical. The cutting edges of drill bits wear down with normal use. Bits should be sharpened when necessary to keep them from overheating; otherwise they may burn and lose their cutting edge hardness properties.

HARDNESS AND CORE OFF-CENTER TEST

To ensure proper drill bit performance, there are testing methods for ensuring mechanical resistance, hardness, sizing, and concentricity.

HARDNESS TEST. Drill bits should be heat-treated in order to obtain the hardness rating required by international drill bit manufacturing standards. A Rockwell diamond-tip hardness tester is used for this purpose, with a load applied perpendicular to the test surface. The test result depends directly on the diamond tip's penetration into the test piece (per ASTM E 18).

CORE OFF-CENTER TEST. The bit is placed in a "V" base with a positioning stop, and the reading is taken at a reference point using a height indicator. Then the bit is rotated 180° and the difference with respect to the preceding reference reading is measured. The height difference may not exceed the values in Table I.

RECOMMENDED DRILLING SPEED RANGES (RPM) DEPENDING ON THE MATERIAL TO BE DRILLED

MATERIAL	DRILLING SPEED	ADVANCE M/min.	5/64"	1/8"	5/32"	13/64"	15/64"	5/16"	25/64"	15/32"	5/8"	(DIN 1414) TIP ANGLE ± 3°
SILICON STEEL	RPM	30-50	5,800	3,900	2,900	2,350	1,950	1,450	1,250	1,050	790	140°
LOW-CARBON STEEL	RPM	25-35	4,400	2,900	2,200	1,750	1,450	1,100	960	790	590	118°
MEDIUM-CARBON STEEL	RPM	15-25	2,900	1,950	1,450	1,150	970	730	630	530	395	118°
HIGH-CARBON STEEL	RPM	10-15	1,750	1,150	880	700	580	440	380	320	240	118°
STAINLESS STEEL (Cr-Mo)	RPM	5-12	1,150	780	580	410	390	290	255	210	160	140°
STAINLESS STEEL (Cr-Ni)	RPM	3-6	580	390	290	235	195	145	125	105	79	140°
SOFT CASTINGS	RPM	14-25	2,900	1,950	1,450	1,150	970	730	630	530	395	118°
HARD CASTINGS	RPM	6-14	1,450	970	730	580	485	365	320	265	200	118°
BRASS (less than 60% Cu)	RPM	60-80	9,500	6,300	4,750	3,800	3,150	2,350	2,050	1,700	1,300	118°
BRASS (greater than or equal to 60% Cu)	RPM	30-60	6,500	4,400	3,300	2,650	2,200	1,650	1,450	1,200	890	118°
ELECTROLYTIC COPPER	RPM	20-30	3,650	2,450	1,850	1,450	1,200	910	790	660	495	140°
ALUMINUM	RPM	40-100	10,200	6,800	5,100	4,100	3,400	2,550	2,200	1,850	1,400	140°
LOW-DENSITY PLASTIC	RPM	16-40	3,650	2,450	1,850	1,450	1,200	910	790	660	495	140°
HIGH-DENSITY PLASTIC	RPM	10-16	1,750	1,150	880	700	580	440	380	320	240	140°
RUBBER, EBONITE	RPM	16-30	2,900	1,950	1,450	1,150	970	730	630	530	395	80°
STONE AND CONCRETE	RPM	3-5	580	390	290	235	195	145	125	105	79	80°

DRILL BIT SETS

5129

29 PIECES

SET OF 29 HIGH-SPEED STEEL DRILL BITS FROM 1/16" TO 1/2" IN METAL BOX

CODE	SIZE		QUANTITY	CODE	SIZE		QUANTITY
	in	mm			in	mm	
B1/16	1/16"	1.588	1	B19/64	19/64"	7.541	1
B5/64	5/64"	1.984	1	B5/16	5/16"	7.938	1
B3/32	3/32"	2.381	1	B21/64	21/64"	8.334	1
B7/64	7/64"	2.778	1	B11/32	11/32"	8.731	1
B1/8	1/8"	3.175	1	B23/64	23/64"	9.128	1
B9/64	9/64"	3.572	1	B3/8	3/8"	9.525	1
B5/32	5/32"	3.969	1	B25/64	25/64"	9.922	1
B11/64	11/64"	4.366	1	B13/32	13/32"	10.319	1
B3/16	3/16"	4.763	1	B27/64	27/64"	10.716	1
B13/64	3/64"	5.159	1	B7/16	7/16"	11.113	1
B7/32	7/32"	5.556	1	B29/64	29/64"	11.509	1
B15/64	15/64"	5.953	1	B15/32	15/32"	11.906	1
B1/4	1/4"	6.350	1	B31/64	31/64"	12.303	1
B17/64	17/64"	6.747	1	B1/2	1/2"	12.700	1
B9/32	9/32"	7.144	1	4079	METAL BOX		1



5121

21 PIECES

SET OF 21 HIGH-SPEED STEEL DRILL BITS FROM 1/16" TO 3/8" IN METAL BOX

CODE	SIZE		QUANTITY	CODE	SIZE		QUANTITY
	in	mm			in	mm	
B1/16	1/16"	1.588	1	B15/64	15/64"	5.953	1
B5/64	5/64"	1.984	1	B1/4	1/4"	6.350	1
B3/32	3/32"	2.381	1	B17/64	17/64"	6.747	1
B7/64	7/64"	2.778	1	B9/32	9/32"	7.144	1
B1/8	1/8"	3.175	1	B19/64	9/64"	7.541	1
B9/64	9/64"	3.572	1	B5/16	5/16"	7.938	1
B5/32	5/32"	3.969	1	B21/64	21/64"	8.334	1
B11/64	11/64"	4.366	1	B11/32	11/32"	8.731	1
B3/16	3/16"	4.763	1	B23/64	23/64"	9.128	1
B13/64	3/64"	5.159	1	B3/8	3/8"	9.525	1
B7/32	7/32"	5.556	1	4078	METAL BOX		1



16

601

5115

15 PIECES

SET OF 15 HIGH-SPEED STEEL DRILL BITS FROM 1/16" TO 1/2" IN METAL BOX

CODE	SIZE		QUANTITY	CODE	SIZE		QUANTITY
	in	mm	PIECES		in	mm	PIECES
B1/16	1/16"	1.588	1	B5/16	5/16"	7.938	1
B3/32	3/32"	2.381	1	B11/32	11/32"	8.731	1
B1/8	1/8"	3.175	1	B3/8	3/8"	9.525	1
B5/32	5/32"	3.969	1	B13/32	13/32"	10.319	1
B3/16	3/16"	4.763	1	B7/16	7/16"	11.113	1
B7/32	7/32"	5.556	1	B15/32	15/32"	11.906	1
B1/4	1/4"	6.350	1	B1/2	1/2"	12.700	1
B9/32	9/32"	7.144	1	4077	METAL BOX		1



5113

13 PIECES

SET OF 13 HIGH-SPEED STEEL DRILL BITS FROM 1/16" TO 1/4" IN METAL BOX

CODE	SIZE		QUANTITY	CODE	SIZE		QUANTITY
	in	mm	PIECES		in	mm	PIECES
B1/16	1/16"	1.588	1	B11/64	11/64"	4.366	1
B5/64	5/64"	1.984	1	B3/16	3/16"	4.763	1
B3/32	3/32"	2.381	1	B13/64	13/64"	5.159	1
B7/64	7/64"	2.778	1	B7/32	7/32"	5.556	1
B1/8	1/8"	3.175	1	B15/64	15/64"	5.953	1
B9/64	9/64"	3.572	1	B1/4	1/4"	6.350	1
B5/32	5/32"	3.969	1	4076	METAL BOX		1



quality starts with **U**




URREA Professional Tools received the ISO 9000 certification in November 1998 and updated to ISO 9001: 2000 certification in February 2004. This certification represents our constant commitment to maintain our operating and product manufacturing standards.



Visit our website: www.urrea.com

HIGH-SPEED DRILL BITS

BXX/XX

CODE	SIZE		QUANTITY FOR PACKAGING	LENGTH TOTAL L		HELIX LENGTH J		 grs. lbs.	
	in	mm		in	mm	in	mm		
B1/64	1/64"	0.40	10	3/4"	19.05	3/16"	4.76	0.25	0.0005
B1/32	1/32"	0.79	10	1 3/8"	34.92	1/2"	12.70	0.5	0.0011
B3/64	3/64"	1.19	10	1 3/4"	44.45	3/4"	19.05	1.0	0.0022
B1/16	1/16"	1.588	10	1 7/8"	47.625	7/8"	22.22	0.7	0.002
B5/64	5/64"	1.984	10	2"	50.8	1"	25.4	0.9	0.002
B3/32	3/32"	2.381	10	2 1/4"	57.15	1 1/4"	31.75	1.5	0.003
B7/64	7/64"	2.778	10	2 5/8"	66.675	1 1/2"	38.1	1.5	0.003
B1/8	1/8"	3.175	10	2 3/4"	69.85	1 5/8"	41.27	2.5	0.006
B9/64	9/64"	3.572	10	2 7/8"	73.02	1 3/4"	44.45	3.5	0.008
B5/32	5/32"	3.969	10	3 1/8"	79.37	2"	50.8	4.5	0.010
B11/64	11/64"	4.366	10	3 1/4"	82.55	2 1/8"	53.97	5.5	0.012
B3/16	3/16"	4.763	10	3 1/2"	88.9	2 5/16"	58.93	7.7	0.017
B13/64	3/64"	5.159	10	3 5/8"	92.07	2 7/16"	61.91	9	0.020
B7/32	7/32"	5.556	10	3 3/4"	95.25	2 1/2"	63.5	12	0.026
B15/64	15/64"	5.953	10	3 7/8"	98.425	2 5/8"	66.67	13.5	0.030
B1/4	1/4"	6.350	10	4"	101.6	2 3/4"	69.85	15.5	0.034
B17/64	17/64"	6.747	10	4 1/8"	104.77	2 7/8"	73.02	21	0.046
B9/32	9/32"	7.144	10	4 1/4"	107.95	3"	76.2	22.5	0.050
B19/64	19/64"	7.541	10	4 3/8"	111.12	3 1/16"	77.78	26	0.057
B5/16	5/16"	7.938	10	4 1/2"	114.3	3 3/16"	80.96	32	0.071
B21/64	21/64"	8.334	10	4 5/8"	117.47	3 5/16"	84.13	33	0.073
B11/32	11/32"	8.731	10	4 3/4"	120.65	3 7/16"	87.31	39	0.086
B23/64	23/64"	9.128	10	4 7/8"	123.82	3 1/2"	88.9	40	0.088
B3/8	3/8"	9.525	10	5"	120.00	3 5/8"	92.07	44	0.097
B25/64	25/64"	9.922	10	5 1/8"	130.17	3 3/4"	95.25	50	0.110
B13/32	13/32"	10.319	10	5 1/4"	133.35	3 7/8"	98.42	57.5	0.127
B27/64	27/64"	10.716	10	5 3/8"	136.52	3 15/16"	100.01	65	0.143
B7/16	7/16"	11.113	10	5 1/2"	139.7	4 1/16"	103.18	72	0.159
B29/64	29/64"	11.509	10	5 5/8"	142.87	4 3/16"	106.36	72	0.159
B15/32	15/32"	11.906	10	5 3/4"	146.05	4 5/16"	109.53	86	0.190
B31/64	31/64"	12.303	10	5 7/8"	149.22	4 3/8"	111.12	90	0.198
B1/2	1/2"	12.700	10	6"	152.4	4 1/2"	114.3	98	0.216
B33/64	33/64"	13.10	1	6 5/8"	168.27	4 13/16"	122.23	123.0	0.271
B17/32	17/32"	13.49	1	6 5/8"	168.27	4 13/16"	122.23	127.0	0.279
B35/64	35/64"	13.89	1	6 5/8"	168.27	4 13/16"	122.23	131.0	0.288
B9/16	9/16"	14.29	1	6 5/8"	168.27	4 13/16"	122.23	134.0	0.295
B37/64	37/64"	14.68	1	6 5/8"	168.27	4 13/16"	122.23	138.0	0.304
B19/32	19/32"	15.08	1	7 1/8"	180.97	5 3/16"	131.76	142.0	0.313
B39/64	39/64"	15.48	1	7 1/8"	180.97	5 3/16"	131.76	146.0	0.321
B5/8	5/8"	15.88	1	7 1/8"	180.97	5 3/16"	131.76	150.0	0.330
B41/64	41/64"	16.27	1	7 1/8"	180.97	5 3/16"	131.76	167.5	0.369
B21/32	21/32"	16.67	1	7 1/8"	180.97	5 3/16"	131.76	185.0	0.407
B43/64	43/64"	17.07	1	7 5/8"	193.67	5 5/8"	142.87	202.5	0.446
B11/16	11/16"	17.46	1	7 5/8"	193.67	5 5/8"	142.87	220.0	0.485
B3/4	3/4"	19.05	1	9 3/4"	247.65	5 7/8"	149.22	290.0	0.639



STANDARD:
ASME/ANSI B94.11M

16

HIGH-SPEED COBALT DRILL BITS

BCXX/XX

CODE	SIZE		UANTITY FOR PACKAGING	LENGTH TOTAL L		HELIX LENGTH J		Scales	
	in	mm		in	mm	in	mm	grs	lbs
BC1/16	1/16	1.59	10	1 7/8	47.62	7/8	22.22	1	0.002
BC5/64	5/64	1.98	10	2	50.80	1	25.40	1	0.002
BC3/32	3/32	2.38	10	2 1/4	57.15	1 1/4	31.75	2	0.004
BC7/64	7/64	2.78	10	2 5/8	66.67	1 1/2	38.10	3	0.006
BC1/8	1/8	3.18	10	2 3/4	69.85	1 5/8	41.27	3	0.006
BC9/64	9/64	3.57	10	2 7/8	73.02	1 3/4	44.45	5	0.011
BC5/32	5/32	3.97	10	3 1/8	79.37	2	50.80	6	0.013
BC11/64	11/64	4.37	10	3 1/4	82.55	2 1/8	53.97	8	0.017
BC3/16	3/16	4.76	10	3 1/2	88.90	2 5/16	58.73	10	0.022
BC13/64	13/64	5.16	10	3 5/8	92.07	2 7/16	61.91	12	0.026
BC7/32	7/32	5.56	10	3 3/4	95.25	2 1/2	63.50	14	0.030
BC15/64	15/64	5.95	10	3 7/8	98.42	2 5/8	66.67	17	0.037
BC1/4	1/4	6.35	10	4	101.60	2 3/4	69.85	20	0.044
BC17/64	17/64	6.75	10	4 1/8	104.77	2 7/8	73.02	21	0.046
BC9/32	9/32	7.14	10	4 1/4	107.95	2 15/16	74.61	27	0.059
BC19/64	19/64	7.54	10	4 3/8	111.12	3 1/16	77.78	29	0.063
BC5/16	5/16	7.94	10	4 1/2	114.30	3 3/16	80.96	36	0.079
BC21/64	21/64	8.33	5	4 5/8	117.47	3 5/16	84.13	40	0.088
BC11/32	11/32	8.73	5	4 3/4	120.65	3 7/16	87.31	44	0.097
BC23/64	23/64	9.13	5	4 7/8	123.82	3 1/2	88.90	48	0.105
BC3/8	3/8	9.53	5	5	127.00	3 5/8	92.07	57	0.125
BC25/64	25/64	9.92	5	5 1/8	130.17	3 3/4	95.25	58	0.127
BC13/32	13/32	10.32	5	5 1/4	133.35	3 7/8	98.42	62	0.136
BC27/64	27/64	10.72	5	5 3/8	136.52	3 15/16	100.01	73	0.160
BC7/16	7/16	11.11	5	5 1/2	139.70	4 1/16	103.18	86	0.189
BC29/64	29/64	11.51	5	5 5/8	142.87	4 3/16	106.36	90	0.198
BC15/32	15/32	11.91	5	5 3/4	146.05	4 5/16	109.53	93	0.205
BC31/64	31/64	12.30	5	5 7/8	149.22	4 3/8	111.12	112	0.246
BC1/2	1/2	12.70	5	6	152.40	4 1/2	114.30	123	0.271
BC9/16	9/16	14.29	1	6 5/8	168.27	4 13/16	122.23	134	0.295
BC5/8	5/8	15.88	1	7 1/8	180.97	5 3/16	131.76	150	0.330
BC3/4	3/4	19.05	1	9 31/32	253.20	6 7/64	155.17	290	0.639

STANDARD:
ASME/ANSI B94.11M



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Your security is very important to URREA. We offer you tools that will facilitate your work in a safe and efficient manner.



CONTACT US

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MISCELLANEOUS TOOLS SAFETY RECOMMENDATIONS



The saw teeth must always point toward the front.



Always hold the saw frame securely by the handle and on the opposite end of the frame.



The user and everyone in the area should wear safety glasses.



Tighten the blade firmly.



Make sure the drill bit is tighten properly.