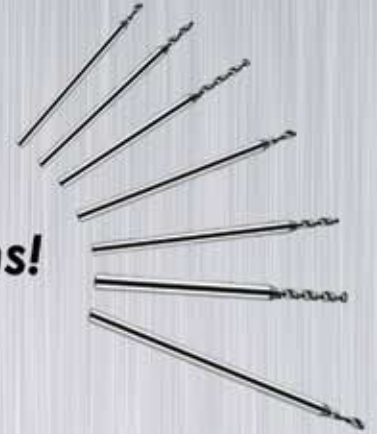




NEW PRODUCT LINE 2013

GMauvaisUSA™
A HASSAY SAVAGE COMPANY

Standard MICRO Drill Solutions!



MICRO Drills
0.1mm – 3.0 mm

Division of
Hassay Savage
Company



SUPERIOR PRECISION • QUALITY • CONSISTENCY • PERFORMANCE



GMauvaisUSA™
A HASSAY SAVAGE COMPANY



Superior Micro Drills...

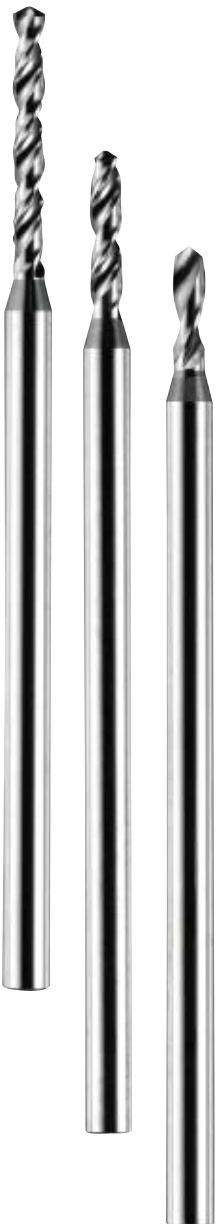
Since 1928 serving the Swiss Watch Industry, our factory in Annecy, France has a global reputation for superior quality and consistency in the production of high precision micro drills in μm Micron tolerances. With innovative and unique manufacturing technologies in turning, bar cutting, grinding, milling, flute grinding, sharpening and heat-treating, we produce products of the most consistent quality and reliable specifications! Our ability to control our high production operations with incredibly tight tolerances, makes us the right choice for all your micro drill needs. We offer a complete range of products in Solid Carbide and Cobalt High Speed Steel

In-process quality controls insure accurate dimensions and perfect surface finishes. Even with the strictest of quality and in-process controls, our production capabilities provide us the flexibility to offer precision, custom specification micro drill solutions for the most unique and demanding micro drill applications. Quality, precision, consistency and outstanding performance are what you can count on from GMauvaisUSA™ from every product we make!

This commitment to consistent quality and performance is relied upon by the most demanding industries. We are a key supplier to the Automotive, Aerospace, Computer / Multi-Media, Medical, Eyewear / Optics, Electronics, Connectors, Watch / Jewelry and Writing Instrument Industries where precision and performance are mandatory in daily production operations!

***Superior Precision, Quality,
Consistency & Performance***

Every Day from GMauvaisUSA™!



CONTENTS

The Anatomy of a Superior Micro Drill 2

5140 Series

HSS-E Cobalt 8% Center – Pilot – Spot Drills 120° / OAL 25mm



8% COBALT HSS-E	RH	120° Point	35° Helix	2 FLUTES	RHC 65	h6
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..... 3

5100 Series

HSS-E Cobalt 8% 5 x D – Depth of Cut 120° / OAL 25 to 40 mm



8% COBALT HSS-E	RH	120° Point	24° Helix	2 FLUTES	RHC 65	h6
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..... 4

6140 Series

Solid Carbide Center – Pilot – Spot Drills 120° / OAL 30 to 38 mm



10% COBALT MICRO GRAIN CARBIDE	RH	120° Point	24° Helix	2 FLUTES	HARDNESS 1570 HV30	h6
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..... 8

6120 Series

Solid Carbide 4-5 x D – Depth of Cut 120° / 25 to 38mm



10% COBALT MICRO GRAIN CARBIDE	RH	120° Point	35° Helix	2 FLUTES	HARDNESS 1570 HV30	h6
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..... 9

6100 Series

Solid Carbide 5-7 x D – Depth of Cut 120° / OAL 25 to 38 mm



10% COBALT MICRO GRAIN CARBIDE	RH	120° Point	35° Helix	2 FLUTES	HARDNESS 1570 HV30	h6
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6200 HP Series

Solid Carbide 6-7 x D – Depth of Cut 140° / OAL 50 mm



HIGH PERFORMANCE!
h4 Tolerance

10% COBALT MICRO GRAIN CARBIDE	RH	140° Point	30° Helix	2 FLUTES	HARDNESS 1570 HV30	h4
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Request for Quotation Form 17



GMauvaisUSA™
A HASSAY SAVAGE COMPANY

THE ANATOMY OF A SUPERIOR MICRO DRILL

The **BIG** Picture of a Very **SMALL**, Precision Made Cutting Tool!

Superior Edge Quality & Flute Surface Finishes For **HIGH PERFORMANCE!**

Amazing Dimension Control **AT h6, h4 & h3 μm TOLERANCES!**

Extraordinary Concentricity, Circularity & Straightness **WITHIN 2 MICRONS!**

Ultra-Fine Surface Finish For **SMOOTH OPERATION!**

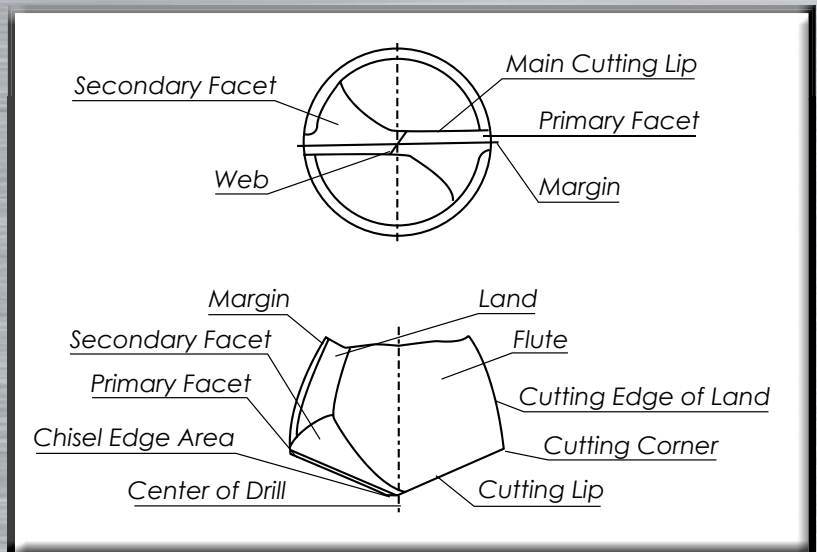
Superior HSS Heat Treating & 10% Cobalt Micro Grain Carbide for **OUTSTANDING PERFORMANCE & LONG TOOL LIFE!!**

Consistent, Accurate Dimensions **EVERY TIME!**

approximately 10x actual size




DRILL TERMINOLOGY



μm

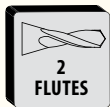
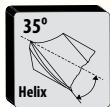
What is a Micron?

1 micron = .001 mm = .00003937"

One Hundredth (1/100) of a Human Hair!

5140 Series

HSS-E Cobalt 8% Center – Pilot – Spot Drills 120°

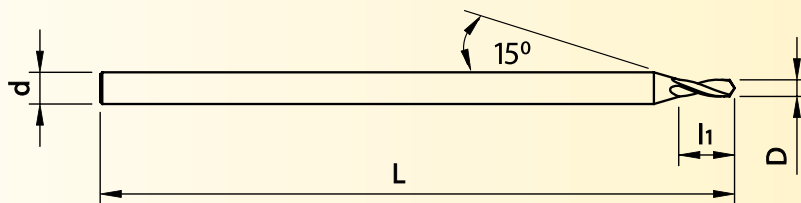


h6 +0.000
-0.006 mm

FOR USE PRIOR TO USING 5100 SERIES DRILLS. CAN ALSO BE USED AS A DRILL WITH 2-3 X D DEPTH
ALL ITEMS CAN BE ORDERED AS LEFT HAND AT SAME PRICING
SPECIAL, CUSTOM SPECIFICATION ITEMS AVAILABLE

CUSTOM SPECIFICATIONS SUCH AS:

- Helix angle of 15°, 24°, 30° or other.
- Point Angles of 90°, 110°, 130°, 140° or other.
- Special Diameters as 1.255 mm or other.
- Special Tolerances as +/- 0.001 mm or other.
- Coatings Available upon request.
- Minimum Special Order is 10 Pieces / Spec.
- Lead-Time on Specials – 3 Weeks ARO.



OAL Range 25 mm

SOLD IN 10 PIECE PACKAGES ONLY

Drill Sizes 0.20 - 3.00 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
5140020R	0.20	0.0079	92	1.5	0.6	25	\$7.25
5140025R	0.25	0.0098		1.5	0.8	25	\$7.25
5140030R	0.30	0.0118		1.5	0.9	25	\$7.25
5140035R	0.35	0.0138		1.5	1	25	\$7.25
5140040R	0.40	0.0157		1.5	1	25	\$7.25
5140045R	0.45	0.0177		1.5	1.2	25	\$7.25
5140050R	0.50	0.0197		1.5	1.2	25	\$7.25
5140055R	0.55	0.0217		1.5	1.4	25	\$7.25
5140060R	0.60	0.0236		1.5	1.4	25	\$7.25
5140065R	0.65	0.0256		1.5	1.7	25	\$7.25
5140070R	0.70	0.0276		1.5	1.7	25	\$7.00
5140075R	0.75	0.0295		1.5	1.8	25	\$7.00
5140080R	0.80	0.0315		1.5	1.8	25	\$7.00
5140085R	0.85	0.0335		1.5	1.8	25	\$7.00
5140090R	0.90	0.0354		1.5	1.8	25	\$7.00
5140095R	0.95	0.0374		1.5	2	25	\$7.00
5140100R	1.00	0.0394		1.5	2	25	\$7.00
5140105R	1.05	0.0413		1.5	2.3	25	\$7.00
5140110R	1.10	0.0433		1.5	2.3	25	\$7.00
5140115R	1.15	0.0453		1.5	2.3	25	\$7.00
5140120R	1.20	0.0472		1.5	2.3	25	\$7.00
5140125R	1.25	0.0492		1.5	2.7	25	\$7.00
5140130R	1.30	0.0512		1.5	2.7	25	\$7.00
5140135R	1.35	0.0531		1.5	2.7	25	\$7.00
5140140R	1.40	0.0551	54	1.5	2.7	25	\$7.00
5140145R	1.45	0.0571		1.5	2.7	25	\$7.00
5140150R	1.50	0.0591		2	3	25	\$7.98
5140160R	1.60	0.0630	51	2	3	25	\$7.98

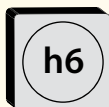
Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
5140170R	1.70	0.0669		2	3.3	25	\$7.98
5140180R	1.80	0.0709		2	3.3	25	\$7.98
5140190R	1.90	0.0748		2	3.3	25	\$7.98
5140200R	2.00	0.0787		2	4	25	\$7.98
5140210R	2.10	0.0827		2.5	4	25	\$8.37
5140220R	2.20	0.0866		2.5	4	25	\$8.37
5140230R	2.30	0.0906		2.5	4.6	25	\$8.37
5140240R	2.40	0.0945		2.5	4.6	25	\$8.37
5140250R	2.50	0.0984		2.5	4.6	25	\$8.37
5140260R	2.60	0.1024		3	4.6	25	\$8.67
5140270R	2.70	0.1063		3	5.3	25	\$8.67
5140280R	2.80	0.1102		3	5.3	25	\$8.67
5140290R	2.90	0.1142		3	5.3	25	\$8.67
5140300R	3.00	0.1181		3	5.3	25	\$8.67

PILOT DRILLS

- For use prior to using 5100 series drills
- Can be used as pilot drill with 2-3 x D Depth

5100 Series

HSS-E Cobalt 8% 5 x D – Depth of Cut 120°

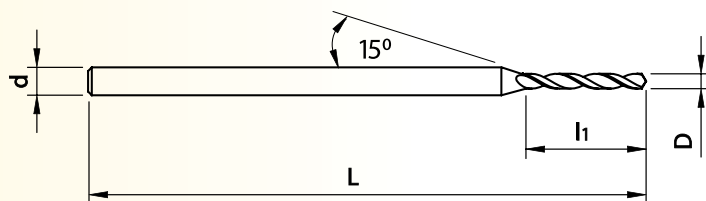


h6 +0.000
-0.006 mm

FOR MATERIALS WITH LONG FORMING CHIPS, STEEL UP TO 35 RHC, COPPER, STAINLESS, TITANIUM
ALL ITEMS CAN BE ORDERED AS LEFT HAND AT SAME PRICING
SPECIAL, CUSTOM SPECIFICATION ITEMS AVAILABLE

CUSTOM SPECIFICATIONS SUCH AS:

- Helix angle of 15°, 30°, 35° or other.
- Point Angles of 90°, 110°, 130°, 140° or other.
- Special Diameters as 1.255 mm or other.
- Special Tolerances as +/- 0.001 mm or other.
- Coatings Available upon request.
- Minimum Special Order is 10 Pieces / Spec.
- Lead-Time on Specials – 3 Weeks ARO.



OAL Range 25 - 40 mm

SOLD IN 10 PIECE PACKAGES ONLY

Drill Sizes 0.10 - 0.65 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
5100010R	0.10	0.0039		1	0.7	25	\$8.93
5100011R	0.11	0.0043		1	0.7	25	\$8.93
5100012R	0.12	0.0047		1	0.7	25	\$8.93
5100013R	0.13	0.0051		1	1	25	\$8.93
5100014R	0.14	0.0055		1	1	25	\$8.93
5100015R	0.15	0.0059	97	1	1	25	\$8.93
5100016R	0.16	0.0063	96	1	1.4	25	\$8.93
5100017R	0.17	0.0067	95	1	1.4	25	\$8.93
5100018R	0.18	0.0071	94	1	1.4	25	\$8.93
5100019R	0.19	0.0075	93	1	1.4	25	\$8.93
5100020R	0.20	0.0079	92	1	1.8	25	\$8.93
5100021R	0.21	0.0083	91	1	1.8	25	\$7.00
5100022R	0.22	0.0087	90	1	1.8	25	\$7.00
5100023R	0.23	0.0091	89	1	1.8	25	\$7.00
5100024R	0.24	0.0094	88	1	1.8	25	\$7.00
5100025R	0.25	0.0098		1	2.2	25	\$7.00
5100026R	0.26	0.0102		1	2.2	25	\$7.00
5100027R	0.27	0.0106	86	1	2.2	25	\$7.00
5100028R	0.28	0.0110	85	1	2.2	25	\$7.00
5100029R	0.29	0.0114	84	1	2.2	25	\$7.00
5100030R	0.30	0.0118		1	2.2	25	\$7.00
5100031R	0.31	0.0122		1	2.8	25	\$7.00
5100032R	0.32	0.0126	82	1	2.8	25	\$7.00
5100033R	0.33	0.0130	81	1	2.8	25	\$7.00
5100034R	0.34	0.0134	80	1	2.8	25	\$7.00
5100035R	0.35	0.0138		1	2.8	25	\$7.00
5100036R	0.36	0.0142		1	2.8	25	\$7.00
5100037R	0.37	0.0146	79	1	2.8	25	\$7.00

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
5100038R	0.38	0.0150		1	2.8	25	\$7.00
5100039R	0.39	0.0154		1	2.8	25	\$7.00
5100040R	0.40	0.0157		1	3.2	25	\$7.00
5100041R	0.41	0.0161	78	1	3.2	25	\$7.00
5100042R	0.42	0.0165		1	3.2	25	\$7.00
5100043R	0.43	0.0169		1	3.2	25	\$7.00
5100044R	0.44	0.0173		1	3.2	25	\$7.00
5100045R	0.45	0.0177		1	3.2	25	\$7.00
5100046R	0.46	0.0181	77	1	3.6	25	\$7.00
5100047R	0.47	0.0185		1	3.6	25	\$7.00
5100048R	0.48	0.0189		1	3.6	25	\$7.00
5100049R	0.49	0.0193		1	3.6	25	\$7.00
5100050R	0.50	0.0197		1	3.6	25	\$7.00
5100051R	0.51	0.0201	76	1.5	4	25	\$6.70
5100052R	0.52	0.0205		1.5	4	25	\$6.70
5100053R	0.53	0.0209	75	1.5	4	25	\$6.70
5100054R	0.54	0.0213		1.5	4	25	\$6.70
5100055R	0.55	0.0217		1.5	4	25	\$6.70
5100056R	0.56	0.0220		1.5	4.5	25	\$6.70
5100057R	0.57	0.0224	74	1.5	4.5	25	\$6.70
5100058R	0.58	0.0228		1.5	4.5	25	\$6.70
5100059R	0.59	0.0232		1.5	4.5	25	\$6.70
5100060R	0.60	0.0236		1.5	4.5	25	\$6.70
5100061R	0.61	0.0240	73	1.5	4.7	25	\$6.70
5100062R	0.62	0.0244		1.5	4.7	25	\$6.70
5100063R	0.63	0.0248	72	1.5	4.7	25	\$6.70
5100064R	0.64	0.0252		1.5	4.7	25	\$6.70
5100065R	0.65	0.0256		1.5	4.7	25	\$6.70

5100 HSS-E Cobalt 8%

Drill Sizes 0.66 - 1.59 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
5100066R	0.66	0.0260	71	1.5	4.7	25	\$6.70
5100067R	0.67	0.0264		1.5	4.7	25	\$6.70
5100068R	0.68	0.0268		1.5	5.2	25	\$6.70
5100069R	0.69	0.0272		1.5	5.2	25	\$6.70
5100070R	0.70	0.0276		1.5	5.2	25	\$7.00
5100071R	0.71	0.0280	70	1.5	5.2	25	\$7.00
5100072R	0.72	0.0283		1.5	5.2	25	\$7.00
5100073R	0.73	0.0287		1.5	5.2	25	\$7.00
5100074R	0.74	0.0291	69	1.5	5.2	25	\$7.00
5100075R	0.75	0.0295		1.5	5.2	25	\$7.00
5100076R	0.76	0.0299		1.5	5.5	25	\$7.00
5100077R	0.77	0.0303		1.5	5.5	25	\$7.00
5100078R	0.78	0.0307		1.5	5.5	25	\$7.00
5100079R	0.79	0.0311	68-1/32	1.5	5.5	25	\$7.00
5100080R	0.80	0.0315		1.5	5.5	25	\$7.00
5100081R	0.81	0.0319	67	1.5	5.5	25	\$7.00
5100082R	0.82	0.0323		1.5	5.5	25	\$7.00
5100083R	0.83	0.0327		1.5	5.5	25	\$7.00
5100084R	0.84	0.0331	66	1.5	5.5	25	\$7.00
5100085R	0.85	0.0335		1.5	5.5	25	\$7.00
5100086R	0.86	0.0339		1.5	6	25	\$7.00
5100087R	0.87	0.0343		1.5	6	25	\$7.00
5100088R	0.88	0.0346		1.5	6	25	\$7.00
5100089R	0.89	0.0350	65	1.5	6	25	\$7.00
5100090R	0.90	0.0354		1.5	6	25	\$7.00
5100091R	0.91	0.0358	64	1.5	6	25	\$7.00
5100092R	0.92	0.0362		1.5	6	25	\$7.00
5100093R	0.93	0.0366		1.5	6	25	\$7.00
5100094R	0.94	0.0370	63	1.5	6	25	\$7.00
5100095R	0.95	0.0374		1.5	6	25	\$7.00
5100096R	0.96	0.0378	62	1.5	6.5	25	\$7.00
5100097R	0.97	0.0382		1.5	6.5	25	\$7.00
5100098R	0.98	0.0386		1.5	6.5	25	\$7.00
5100099R	0.99	0.0390	61	1.5	6.5	25	\$7.00
5100100R	1.00	0.0394		1.5	6.5	25	\$7.00
5100101R	1.01	0.0398	60	1.5	6.5	25	\$7.00
5100102R	1.02	0.0402		1.5	6.5	25	\$7.00
5100103R	1.03	0.0406		1.5	6.5	25	\$7.00
5100104R	1.04	0.0409	59	1.5	6.5	25	\$7.00
5100105R	1.05	0.0413		1.5	6.5	25	\$7.00
5100106R	1.06	0.0417		1.5	7	25	\$7.00
5100107R	1.07	0.0421	58	1.5	7	25	\$7.00
5100108R	1.08	0.0425		1.5	7	25	\$7.00
5100109R	1.09	0.0429	57	1.5	7	25	\$7.00
5100110R	1.10	0.0433		1.5	7	25	\$7.00
5100111R	1.11	0.0437		1.5	7	25	\$7.00
5100112R	1.12	0.0441		1.5	7	25	\$7.00

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
5100113R	1.13	0.0445		1.5	7	25	\$7.00
5100114R	1.14	0.0449		1.5	7	25	\$7.00
5100115R	1.15	0.0453		1.5	7	25	\$7.00
5100116R	1.16	0.0457		1.5	7.5	25	\$7.00
5100117R	1.17	0.0461		1.5	7.5	25	\$7.00
5100118R	1.18	0.0465	56	1.5	7.5	25	\$7.00
5100119R	1.19	0.0469	3/64	1.5	7.5	25	\$7.00
5100120R	1.20	0.0472		1.5	7.5	25	\$7.00
5100121R	1.21	0.0476		1.5	7.5	25	\$7.00
5100122R	1.22	0.0480		1.5	7.5	25	\$7.00
5100123R	1.23	0.0484		1.5	7.5	25	\$7.00
5100124R	1.24	0.0488		1.5	7.5	25	\$7.00
5100125R	1.25	0.0492		1.5	7.5	25	\$7.00
5100126R	1.26	0.0496		1.5	7.5	25	\$7.00
5100127R	1.27	0.0500		1.5	7.5	25	\$7.00
5100128R	1.28	0.0504		1.5	7.5	25	\$7.00
5100129R	1.29	0.0508		1.5	7.5	25	\$7.00
5100130R	1.30	0.0512		1.5	7.5	25	\$7.00
5100131R	1.31	0.0516		1.5	8.5	25	\$7.00
5100132R	1.32	0.0520	55	1.5	8.5	25	\$7.00
5100133R	1.33	0.0524		1.5	8.5	25	\$7.00
5100134R	1.34	0.0528		1.5	8.5	25	\$7.00
5100135R	1.35	0.0531		1.5	8.5	25	\$7.00
5100136R	1.36	0.0535		1.5	8.5	25	\$7.00
5100137R	1.37	0.0539		1.5	8.5	25	\$7.00
5100138R	1.38	0.0543		1.5	8.5	25	\$7.00
5100139R	1.39	0.0547		1.5	8.5	25	\$7.00
5100140R	1.40	0.0551	54	1.5	8.5	25	\$7.00
5100141R	1.41	0.0555		1.5	8.5	25	\$7.00
5100142R	1.42	0.0559		1.5	8.5	25	\$7.00
5100143R	1.43	0.0563		1.5	8.5	25	\$7.00
5100144R	1.44	0.0567		1.5	8.5	25	\$7.00
5100145R	1.45	0.0571		1.5	8.5	25	\$7.00
5100146R	1.46	0.0575		1.5	8.5	25	\$7.00
5100147R	1.47	0.0579		1.5	8.5	25	\$7.00
5100148R	1.48	0.0583		1.5	8.5	25	\$7.00
5100149R	1.49	0.0587		1.5	8.5	25	\$7.00
5100150R	1.50	0.0591		2	10	35	\$7.55
5100151R	1.51	0.0594	53	2	10	35	\$7.55
5100152R	1.52	0.0598		2	10	35	\$7.55
5100153R	1.53	0.0602		2	10	35	\$7.55
5100154R	1.54	0.0606		2	10	35	\$7.55
5100155R	1.55	0.0610		2	10	35	\$7.55
5100156R	1.56	0.0614		2	10	35	\$7.55
5100157R	1.57	0.0618		2	10	35	\$7.55
5100158R	1.58	0.0622		2	10	35	\$7.55
5100159R	1.59	0.0626	1/16	2	10	35	\$7.55

SOLD IN 10 PIECE PACKAGES ONLY

5100 Series Continued

5100 HSS-E Cobalt 8%

Drill Sizes 1.60 - 2.53 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
5100160R	1.60	0.0630		2	10	35	\$7.55
5100161R	1.61	0.0634	52	2	10	35	\$7.55
5100162R	1.62	0.0638		2	10	35	\$7.55
5100163R	1.63	0.0642		2	10	35	\$7.55
5100164R	1.64	0.0646		2	10	35	\$7.55
5100165R	1.65	0.0650		2	10	35	\$7.55
5100166R	1.66	0.0654		2	10	35	\$7.55
5100167R	1.67	0.0657		2	10	35	\$7.55
5100168R	1.68	0.0661		2	10	35	\$7.55
5100169R	1.69	0.0665		2	10	35	\$7.55
5100170R	1.70	0.0669	51	2	10	35	\$7.55
5100171R	1.71	0.0673		2	10	35	\$7.55
5100172R	1.72	0.0677		2	10	35	\$7.55
5100173R	1.73	0.0681		2	10	35	\$7.55
5100174R	1.74	0.0685		2	10	35	\$7.55
5100175R	1.75	0.0689		2	10	35	\$7.55
5100176R	1.76	0.0693		2	10	35	\$7.55
5100177R	1.77	0.0697		2	11	35	\$7.55
5100178R	1.78	0.0701	50	2	11	35	\$7.55
5100179R	1.79	0.0705		2	11	35	\$7.55
5100180R	1.80	0.0709		2	11	35	\$7.55
5100181R	1.81	0.0713		2	11	35	\$7.55
5100182R	1.82	0.0717		2	11	35	\$7.55
5100183R	1.83	0.0720		2	11	35	\$7.55
5100184R	1.84	0.0724		2	11	35	\$7.55
5100185R	1.85	0.0728	49	2	11	35	\$7.55
5100186R	1.86	0.0732		2	11	35	\$7.55
5100187R	1.87	0.0736		2	11	35	\$7.55
5100188R	1.88	0.0740		2	11	35	\$7.55
5100189R	1.89	0.0744		2	11	35	\$7.55
5100190R	1.90	0.0748		2	11	35	\$7.55
5100191R	1.91	0.0752		2	11	35	\$7.55
5100192R	1.92	0.0756		2	11	35	\$7.55
5100193R	1.93	0.0760	48	2	11	35	\$7.55
5100194R	1.94	0.0764		2	11	35	\$7.55
5100195R	1.95	0.0768		2	11	35	\$7.55
5100196R	1.96	0.0772		2	11	35	\$7.55
5100197R	1.97	0.0776		2	11	35	\$7.55
5100198R	1.98	0.0780	5/64	2	11	35	\$7.55
5100199R	1.99	0.0783	47	2	11	35	\$7.55
5100200R	2.00	0.0787		2	11	35	\$7.55
5100201R	2.01	0.0791		2.5	12	35	\$8.11
5100202R	2.02	0.0795		2.5	12	35	\$8.11
5100203R	2.03	0.0799		2.5	12	35	\$8.11
5100204R	2.04	0.0803		2.5	12	35	\$8.11
5100205R	2.05	0.0807		2.5	12	35	\$8.11
5100206R	2.06	0.0811	46	2.5	12	35	\$8.11

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
5100207R	2.07	0.0815		2.5	12	35	\$8.11
5100208R	2.08	0.0819	45	2.5	12	35	\$8.11
5100209R	2.09	0.0823		2.5	12	35	\$8.11
5100210R	2.10	0.0827		2.5	12	35	\$8.11
5100211R	2.11	0.0831		2.5	12	35	\$8.11
5100212R	2.12	0.0835		2.5	12	35	\$8.11
5100213R	2.13	0.0839		2.5	12	35	\$8.11
5100214R	2.14	0.0843		2.5	12	35	\$8.11
5100215R	2.15	0.0846		2.5	12	35	\$8.11
5100216R	2.16	0.0850		2.5	12	35	\$8.11
5100217R	2.17	0.0854		2.5	12	35	\$8.11
5100218R	2.18	0.0858	44	2.5	12	35	\$8.11
5100219R	2.19	0.0862		2.5	12	35	\$8.11
5100220R	2.20	0.0866		2.5	12	35	\$8.11
5100221R	2.21	0.0870		2.5	14	35	\$8.11
5100222R	2.22	0.0874		2.5	14	35	\$8.11
5100223R	2.23	0.0878		2.5	14	35	\$8.11
5100224R	2.24	0.0882		2.5	14	35	\$8.11
5100225R	2.25	0.0886		2.5	14	35	\$8.11
5100226R	2.26	0.0890	43	2.5	14	35	\$8.11
5100227R	2.27	0.0894		2.5	14	35	\$8.11
5100228R	2.28	0.0898		2.5	14	35	\$8.11
5100229R	2.29	0.0902		2.5	14	35	\$8.11
5100230R	2.30	0.0906		2.5	14	35	\$8.11
5100231R	2.31	0.0909		2.5	14	35	\$8.11
5100232R	2.32	0.0913		2.5	14	35	\$8.11
5100233R	2.33	0.0917		2.5	14	35	\$8.11
5100234R	2.34	0.0921		2.5	14	35	\$8.11
5100235R	2.35	0.0925		2.5	14	35	\$8.11
5100236R	2.36	0.0929		2.5	14	35	\$8.11
5100237R	2.37	0.0933		2.5	14	35	\$8.11
5100238R	2.38	0.0937	3/32	2.5	14	35	\$8.11
5100239R	2.39	0.0941		2.5	14	35	\$8.11
5100240R	2.40	0.0945		2.5	14	35	\$8.11
5100241R	2.41	0.0949		2.5	14	35	\$8.11
5100242R	2.42	0.0953		2.5	14	35	\$8.11
5100243R	2.43	0.0957		2.5	14	35	\$8.11
5100244R	2.44	0.0961	41	2.5	14	35	\$8.11
5100245R	2.45	0.0965		2.5	14	35	\$8.11
5100246R	2.46	0.0969		2.5	14	35	\$8.11
5100247R	2.47	0.0972		2.5	14	35	\$8.11
5100248R	2.48	0.0976		2.5	14	35	\$8.11
5100249R	2.49	0.0980	40	2.5	14	35	\$8.11
5100250R	2.50	0.0984		2.5	14	35	\$8.11
5100251R	2.51	0.0988		3	16	40	\$9.48
5100252R	2.52	0.0992		3	16	40	\$9.48
5100253R	2.53	0.0996	39	3	16	40	\$9.48

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5100 Series Continued

5100 HSS-E Cobalt 8%

Drill Sizes 2.54 - 3.00 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
5100254R	2.54	0.1000		3	16	40	\$9.48
5100255R	2.55	0.1004		3	16	40	\$9.48
5100256R	2.56	0.1008		3	16	40	\$9.48
5100257R	2.57	0.1012		3	16	40	\$9.48
5100258R	2.58	0.1016	38	3	16	40	\$9.48
5100259R	2.59	0.1020		3	16	40	\$9.48
5100260R	2.60	0.1024		3	16	40	\$9.48
5100261R	2.61	0.1028		3	16	40	\$9.48
5100262R	2.62	0.1031		3	16	40	\$9.48
5100263R	2.63	0.1035		3	16	40	\$9.48
5100264R	2.64	0.1039	37	3	16	40	\$9.48
5100265R	2.65	0.1043		3	16	40	\$9.48
5100266R	2.66	0.1047		3	16	40	\$9.48
5100267R	2.67	0.1051		3	16	40	\$9.48
5100268R	2.68	0.1055		3	16	40	\$9.48
5100269R	2.69	0.1059		3	16	40	\$9.48
5100270R	2.70	0.1063	36	3	16	40	\$9.48
5100271R	2.71	0.1067		3	16	40	\$9.48
5100272R	2.72	0.1071		3	16	40	\$9.48
5100273R	2.73	0.1075		3	16	40	\$9.48
5100274R	2.74	0.1079		3	16	40	\$9.48
5100275R	2.75	0.1083		3	16	40	\$9.48
5100276R	2.76	0.1087		3	18	40	\$9.48
5100277R	2.77	0.1091		3	18	40	\$9.48

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
5100278R	2.78	0.1094	7/64	3	18	40	\$9.48
5100279R	2.79	0.1098	35	3	18	40	\$9.48
5100280R	2.80	0.1102		3	18	40	\$9.48
5100281R	2.81	0.1106		3	18	40	\$9.48
5100282R	2.82	0.1110	34	3	18	40	\$9.48
5100283R	2.83	0.1114		3	18	40	\$9.48
5100284R	2.84	0.1118		3	18	40	\$9.48
5100285R	2.85	0.1122		3	18	40	\$9.48
5100286R	2.86	0.1126		3	18	40	\$9.48
5100287R	2.87	0.1130	33	3	18	40	\$9.48
5100288R	2.88	0.1134		3	18	40	\$9.48
5100289R	2.89	0.1138		3	18	40	\$9.48
5100290R	2.90	0.1142		3	18	40	\$9.48
5100291R	2.91	0.1146		3	18	40	\$9.48
5100292R	2.92	0.1150		3	18	40	\$9.48
5100293R	2.93	0.1154		3	18	40	\$9.48
5100294R	2.94	0.1157		3	18	40	\$9.48
5100295R	2.95	0.1161	32	3	18	40	\$9.48
5100296R	2.96	0.1165		3	18	40	\$9.48
5100297R	2.97	0.1169		3	18	40	\$9.48
5100298R	2.98	0.1173		3	18	40	\$9.48
5100299R	2.99	0.1177		3	18	40	\$9.48
5100300R	3.00	0.1181		3	18	40	\$9.48

SOLD IN 10 PIECE PACKAGES ONLY

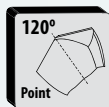
5100 HSS-E Cobalt 8%



- For materials with long forming chips, steel up to 35 RHC, Copper, Stainless, Titanium
- Amazing dimension control at h6, h4 & h3 μ m tolerances
- Ultra-fine surface finish for smooth operation
- Superb heat treating for outstanding performance & long tool life
- Coatings available upon request

6140 Series

Solid Carbide Center – Pilot – Spot Drills 120°

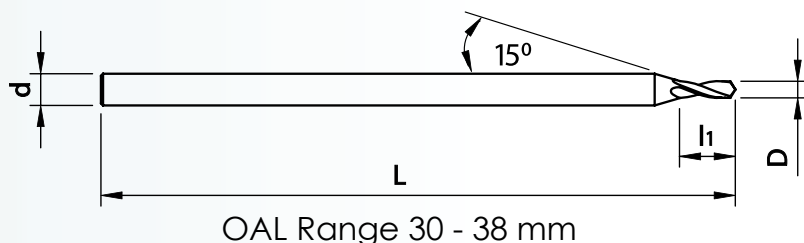


h6 + 0.000
- 0.006 mm

**FOR USE PRIOR TO USING 6120 & 6100 SERIES DRILLS. CAN ALSO BE USED AS A DRILL WITH 2-3 X D DEEP
ALL ITEMS CAN BE ORDERED AS LEFT HAND AT SAME PRICING
SPECIAL, CUSTOM SPECIFICATION ITEMS AVAILABLE**

CUSTOM SPECIFICATIONS SUCH AS:

- Helix angle of 15°, 30°, 35° or other.
- Point Angles of 90°, 110°, 130°, 140° or other.
- Special Diameters as 0.92 mm or other.
- Special Tolerances as +/- 0.001 mm or other.
- Coolant Through Drills at 3 & 4 mm shanks & 1.25 to 3 mm flute diameters.
- Coatings Available upon request.
- Minimum Special Order is 10 Pieces / Spec.
- Lead-Time on Specials – 3 Weeks ARO.



SOLD IN 10 PIECE PACKAGES ONLY

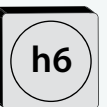
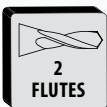
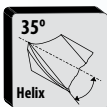
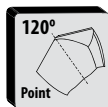
Drill Sizes 0.20 - 3.00 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6140020R	0.20	0.0079	92	1.5	0.9	30	\$10.82
6140025R	0.25	0.0098		1.5	0.9	30	\$10.82
6140030R	0.30	0.0118		1.5	0.9	30	\$10.82
6140035R	0.35	0.0138		1.5	1.2	30	\$10.82
6140040R	0.40	0.0157		1.5	1.5	30	\$10.51
6140045R	0.45	0.0177		1.5	1.5	30	\$10.51
6140050R	0.50	0.0197		1.5	1.9	30	\$10.51
6140055R	0.55	0.0217		1.5	1.9	30	\$10.51
6140060R	0.60	0.0236		1.5	1.9	30	\$10.51
6140065R	0.65	0.0256		1.5	2.1	30	\$10.51
6140070R	0.70	0.0276		1.5	2.4	30	\$10.51
6140075R	0.75	0.0295		1.5	2.4	30	\$10.51
6140080R	0.80	0.0315		1.5	2.6	30	\$10.51
6140085R	0.85	0.0335		1.5	2.6	30	\$10.51
6140090R	0.90	0.0354		1.5	3	30	\$10.51
6140095R	0.95	0.0374		1.5	3	30	\$10.51
6140100R	1.00	0.0394		1.5	3.4	30	\$10.51
6140105R	1.05	0.0413		1.5	3.4	30	\$10.51
6140110R	1.10	0.0433		1.5	3.8	30	\$10.51
6140115R	1.15	0.0453		1.5	3.8	30	\$10.51
6140120R	1.20	0.0472		1.5	4.2	30	\$10.51

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6140125R	1.25	0.0492		1.5	4.2	30	\$10.51
6140130R	1.30	0.0512		1.5	4.2	30	\$10.51
6140135R	1.35	0.0531		1.5	4.7	30	\$10.51
6140140R	1.40	0.0551	54	1.5	4.7	30	\$10.51
6140145R	1.45	0.0571		1.5	4.7	30	\$10.51
6140150R	1.50	0.0591		2	4.7	38	\$11.12
6140160R	1.60	0.0630	51	2	5.4	38	\$11.12
6140170R	1.70	0.0669		2	5.4	38	\$11.12
6140180R	1.80	0.0709		2	6.5	38	\$12.36
6140190R	1.90	0.0748		2	6.5	38	\$12.36
6140200R	2.00	0.0787		3	6.5	38	\$12.36
6140210R	2.10	0.0827		3	6.5	38	\$13.23
6140220R	2.20	0.0866		3	6.5	38	\$13.23
6140230R	2.30	0.0906		3	6.5	38	\$13.23
6140240R	2.40	0.0945		3	6.5	38	\$13.23
6140250R	2.50	0.0984		3	7.5	38	\$13.23
6140260R	2.60	0.1024		3	7.5	38	\$13.23
6140270R	2.70	0.1063		3	7.5	38	\$13.23
6140280R	2.80	0.1102		3	7.5	38	\$13.23
6140290R	2.90	0.1142		3	7.5	38	\$13.23
6140300R	3.00	0.1181		3	7.5	38	\$13.23

6120 Series

Solid Carbide 4-5 x D – Depth of Cut 120°

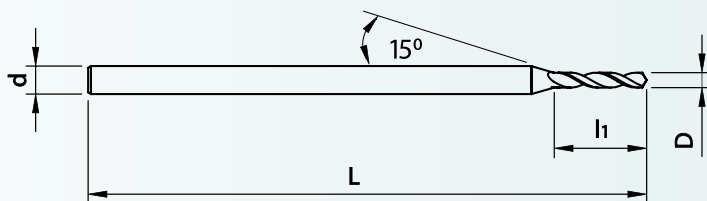


h6 + 0.000
- 0.006 mm

FOR MEDIUM TO HIGH TENSILE STRENGTH STEEL, STAINLESS, TITANIUM ALLOYS & CAST IRON
ALL ITEMS CAN BE ORDERED AS LEFT HAND AT SAME PRICING
SPECIAL, CUSTOM SPECIFICATION ITEMS AVAILABLE

CUSTOM SPECIFICATIONS SUCH AS:

- Helix angle of 15°, 24°, 30° or other.
- Point Angles of 90°, 110°, 130°, 140° or other.
- Special Diameters as 1.255 mm or other.
- Special Tolerances as +/- 0.001 mm or other.
- Coolant Through Drills at 3 & 4 mm shanks & 1.25 to 3 mm flute diameters.
- Coatings Available upon request.
- Minimum Special Order is 10 Pieces / Spec.
- Lead-Time on Specials – 3 Weeks ARO.



OAL Range 25 - 38 mm

SOLD IN 10 PIECE PACKAGES ONLY

Drill Sizes 0.20 - 0.71 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6120020R	0.20	0.0079	92	1	1.1	25	\$11.12
6120021R	0.21	0.0083	91	1	1.1	25	\$11.12
6120022R	0.22	0.0087	90	1	1.1	25	\$11.12
6120023R	0.23	0.0091	89	1	1.1	25	\$11.12
6120024R	0.24	0.0094	88	1	1.1	25	\$11.12
6120025R	0.25	0.0098		1	1.3	25	\$11.12
6120026R	0.26	0.0102		1	1.3	25	\$11.12
6120027R	0.27	0.0106	86	1	1.3	25	\$11.12
6120028R	0.28	0.0110	85	1	1.3	25	\$11.12
6120029R	0.29	0.0114	84	1	1.3	25	\$11.12
6120030R	0.30	0.0118		1	1.6	25	\$11.12
6120031R	0.31	0.0122		1	1.6	25	\$11.12
6120032R	0.32	0.0126	82	1	1.6	25	\$11.12
6120033R	0.33	0.0130	81	1	1.6	25	\$11.12
6120034R	0.34	0.0134	80	1	1.6	25	\$11.12
6120035R	0.35	0.0138		1	1.6	25	\$11.12
6120036R	0.36	0.0142		1	1.6	25	\$11.12
6120037R	0.37	0.0146	79	1	1.6	25	\$11.12
6120038R	0.38	0.0150		1	1.6	25	\$11.12
6120039R	0.39	0.0154		1	2	25	\$11.12
6120040R	0.40	0.0157		1	2	25	\$10.82
6120041R	0.41	0.0161	78	1	2	25	\$10.82
6120042R	0.42	0.0165		1	2	25	\$10.82
6120043R	0.43	0.0169		1	2	25	\$10.82
6120044R	0.44	0.0173		1	2	25	\$10.82
6120045R	0.45	0.0177		1	2	25	\$10.82

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6120046R	0.46	0.0181	77	1	2	25	\$10.82
6120047R	0.47	0.0185		1	2	25	\$10.82
6120048R	0.48	0.0189		1	2	25	\$10.82
6120049R	0.49	0.0193		1	2	25	\$10.82
6120050R	0.50	0.0197		1	2.4	25	\$10.82
6120051R	0.51	0.0201	76	1	2.4	25	\$10.82
6120052R	0.52	0.0205		1	2.4	25	\$10.82
6120053R	0.53	0.0209	75	1	2.4	25	\$10.82
6120054R	0.54	0.0213		1	2.8	25	\$10.82
6120055R	0.55	0.0217		1	2.8	25	\$10.82
6120056R	0.56	0.0220		1	2.8	25	\$10.82
6120057R	0.57	0.0224	74	1	2.8	25	\$10.82
6120058R	0.58	0.0228		1	2.8	25	\$10.82
6120059R	0.59	0.0232		1	2.8	25	\$10.82
6120060R	0.60	0.0236		1.5	2.8	30	\$10.67
6120061R	0.61	0.0240	73	1.5	3.3	30	\$10.67
6120062R	0.62	0.0244		1.5	3.3	30	\$10.67
6120063R	0.63	0.0248	72	1.5	3.3	30	\$10.67
6120064R	0.64	0.0252		1.5	3.3	30	\$10.67
6120065R	0.65	0.0256		1.5	3.3	30	\$10.67
6120066R	0.66	0.0260	71	1.5	3.3	30	\$10.67
6120067R	0.67	0.0264		1.5	3.3	30	\$10.67
6120068R	0.68	0.0268		1.5	3.8	30	\$10.67
6120069R	0.69	0.0272		1.5	3.8	30	\$10.67
6120070R	0.70	0.0276		1.5	3.8	30	\$10.67
6120071R	0.71	0.0280	70	1.5	3.8	30	\$10.67

6120 Series Continued

6120 Series Solid Carbide

Drill Sizes 0.72 - 1.65 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6120072R	0.72	0.0283		1.5	3.8	30	\$10.67
6120073R	0.73	0.0287		1.5	3.8	30	\$10.67
6120074R	0.74	0.0291	69	1.5	3.8	30	\$10.67
6120075R	0.75	0.0295		1.5	3.8	30	\$10.67
6120076R	0.76	0.0299		1.5	4.2	30	\$10.67
6120077R	0.77	0.0303		1.5	4.2	30	\$10.67
6120078R	0.78	0.0307		1.5	4.2	30	\$10.67
6120079R	0.79	0.0311	68- 1/32	1.5	4.2	30	\$10.67
6120080R	0.80	0.0315		1.5	4.4	30	\$10.67
6120081R	0.81	0.0319	67	1.5	4.4	30	\$10.67
6120082R	0.82	0.0323		1.5	4.4	30	\$10.67
6120083R	0.83	0.0327		1.5	4.4	30	\$10.67
6120084R	0.84	0.0331	66	1.5	4.4	30	\$10.67
6120085R	0.85	0.0335		1.5	4.4	30	\$10.67
6120086R	0.86	0.0339		1.5	4.8	30	\$10.67
6120087R	0.87	0.0343		1.5	4.8	30	\$10.67
6120088R	0.88	0.0346		1.5	4.8	30	\$10.67
6120089R	0.89	0.0350	65	1.5	4.8	30	\$10.67
6120090R	0.90	0.0354		1.5	4.8	30	\$10.67
6120091R	0.91	0.0358	64	1.5	4.8	30	\$10.67
6120092R	0.92	0.0362		1.5	4.8	30	\$10.67
6120093R	0.93	0.0366		1.5	4.8	30	\$10.67
6120094R	0.94	0.0370	63	1.5	4.8	30	\$10.67
6120095R	0.95	0.0374		1.5	4.8	30	\$10.67
6120096R	0.96	0.0378	62	1.5	4.8	30	\$10.67
6120097R	0.97	0.0382		1.5	4.8	30	\$10.67
6120098R	0.98	0.0386		1.5	4.8	30	\$10.67
6120099R	0.99	0.0390	61	1.5	4.8	30	\$10.67
6120100R	1.00	0.0394		1.5	4.8	30	\$10.67
6120101R	1.01	0.0398	60	1.5	4.8	30	\$10.67
6120102R	1.02	0.0402		1.5	4.8	30	\$10.67
6120103R	1.03	0.0406		1.5	4.8	30	\$10.67
6120104R	1.04	0.0409	59	1.5	4.8	30	\$10.67
6120105R	1.05	0.0413		1.5	4.8	30	\$10.67
6120106R	1.06	0.0417		1.5	4.8	30	\$10.67
6120107R	1.07	0.0421	58	1.5	4.8	30	\$10.67
6120108R	1.08	0.0425		1.5	4.8	30	\$10.67
6120109R	1.09	0.0429	57	1.5	4.8	30	\$10.67
6120110R	1.10	0.0433		1.5	5.4	30	\$10.67
6120111R	1.11	0.0437		1.5	5.4	30	\$10.67
6120112R	1.12	0.0441		1.5	5.4	30	\$10.67
6120113R	1.13	0.0445		1.5	5.4	30	\$10.67
6120114R	1.14	0.0449		1.5	5.4	30	\$10.67
6120115R	1.15	0.0453		1.5	5.4	30	\$10.67
6120116R	1.16	0.0457		1.5	5.4	30	\$10.67
6120117R	1.17	0.0461		1.5	5.4	30	\$10.67
6120118R	1.18	0.0465	56	1.5	5.4	30	\$10.67

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6120119R	1.19	0.0469	3/64	1.5	5.4	30	\$10.67
6120120R	1.20	0.0472		1.5	6	30	\$10.67
6120121R	1.21	0.0476		1.5	6	30	\$10.67
6120122R	1.22	0.0480		1.5	6	30	\$10.67
6120123R	1.23	0.0484		1.5	6	30	\$10.67
6120124R	1.24	0.0488		1.5	6	30	\$10.67
6120125R	1.25	0.0492		1.5	6	30	\$10.67
6120126R	1.26	0.0496		1.5	6	30	\$10.67
6120127R	1.27	0.0500		1.5	6	30	\$10.67
6120128R	1.28	0.0504		1.5	6	30	\$10.67
6120129R	1.29	0.0508		1.5	6	30	\$10.67
6120130R	1.30	0.0512		1.5	6.7	30	\$10.67
6120131R	1.31	0.0516		1.5	6.7	30	\$10.67
6120132R	1.32	0.0520	55	1.5	6.7	30	\$10.67
6120133R	1.33	0.0524		1.5	6.7	30	\$10.67
6120134R	1.34	0.0528		1.5	6.7	30	\$10.67
6120135R	1.35	0.0531		1.5	6.7	30	\$10.67
6120136R	1.36	0.0535		1.5	6.7	30	\$10.67
6120137R	1.37	0.0539		1.5	6.7	30	\$10.67
6120138R	1.38	0.0543		1.5	6.7	30	\$10.67
6120139R	1.39	0.0547		1.5	6.7	30	\$10.67
6120140R	1.40	0.0551	54	1.5	6.7	30	\$10.67
6120141R	1.41	0.0555		1.5	6.7	30	\$10.67
6120142R	1.42	0.0559		1.5	6.7	30	\$10.67
6120143R	1.43	0.0563		1.5	6.7	30	\$10.67
6120144R	1.44	0.0567		1.5	6.7	30	\$10.67
6120145R	1.45	0.0571		1.5	6.7	30	\$10.67
6120146R	1.46	0.0575		1.5	6.7	30	\$10.67
6120147R	1.47	0.0579		1.5	6.7	30	\$10.67
6120148R	1.48	0.0583		1.5	6.7	30	\$10.67
6120149R	1.49	0.0587		1.5	6.7	30	\$10.67
6120150R	1.50	0.0591		2	7.2	38	\$11.60
6120151R	1.51	0.0594	53	2	7.2	38	\$11.60
6120152R	1.52	0.0598		2	7.2	38	\$11.60
6120153R	1.53	0.0602		2	7.2	38	\$11.60
6120154R	1.54	0.0606		2	7.2	38	\$11.60
6120155R	1.55	0.0610		2	7.2	38	\$11.60
6120156R	1.56	0.0614		2	7.2	38	\$11.60
6120157R	1.57	0.0618		2	7.2	38	\$11.60
6120158R	1.58	0.0622		2	7.2	38	\$11.60
6120159R	1.59	0.0626	1/16	2	7.2	38	\$11.60
6120160R	1.60	0.0630		2	7.2	38	\$11.60
6120161R	1.61	0.0634	52	2	7.2	38	\$11.60
6120162R	1.62	0.0638		2	7.2	38	\$11.60
6120163R	1.63	0.0642		2	7.2	38	\$11.60
6120164R	1.64	0.0646		2	7.2	38	\$11.60
6120165R	1.65	0.0650		2	7.2	38	\$11.60

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6120 Series Continued

6120 Series Solid Carbide

Drill Sizes 1.66 - 2.59 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6120166R	1.66	0.0654		2	7.2	38	\$11.60
6120167R	1.67	0.0657		2	7.2	38	\$11.60
6120168R	1.68	0.0661		2	7.2	38	\$11.60
6120169R	1.69	0.0665		2	7.2	38	\$11.60
6120170R	1.70	0.0669	51	2	7.2	38	\$11.60
6120171R	1.71	0.0673		2	7.2	38	\$12.89
6120172R	1.72	0.0677		2	7.2	38	\$12.89
6120173R	1.73	0.0681		2	7.2	38	\$12.89
6120174R	1.74	0.0685		2	7.2	38	\$12.89
6120175R	1.75	0.0689		2	7.2	38	\$12.89
6120176R	1.76	0.0693		2	7.2	38	\$12.89
6120177R	1.77	0.0697		2	7.2	38	\$12.89
6120178R	1.78	0.0701	50	2	7.2	38	\$12.89
6120179R	1.79	0.0705		2	7.2	38	\$12.89
6120180R	1.80	0.0709		2	8.4	38	\$12.89
6120181R	1.81	0.0713		2	8.4	38	\$12.89
6120182R	1.82	0.0717		2	8.4	38	\$12.89
6120183R	1.83	0.0720		2	8.4	38	\$12.89
6120184R	1.84	0.0724		2	8.4	38	\$12.89
6120185R	1.85	0.0728	49	2	8.4	38	\$12.89
6120186R	1.86	0.0732		2	8.4	38	\$12.89
6120187R	1.87	0.0736		2	8.4	38	\$12.89
6120188R	1.88	0.0740		2	8.4	38	\$12.89
6120189R	1.89	0.0744		2	8.4	38	\$12.89
6120190R	1.90	0.0748		2	8.4	38	\$12.89
6120191R	1.91	0.0752		2	8.4	38	\$12.89
6120192R	1.92	0.0756		2	8.4	38	\$12.89
6120193R	1.93	0.0760	48	2	8.4	38	\$12.89
6120194R	1.94	0.0764		2	8.4	38	\$12.89
6120195R	1.95	0.0768		2	8.4	38	\$12.89
6120196R	1.96	0.0772		2	8.4	38	\$12.89
6120197R	1.97	0.0776		2	8.4	38	\$12.89
6120198R	1.98	0.0780	5/64	2	8.4	38	\$12.89
6120199R	1.99	0.0783	47	2	8.4	38	\$12.89
6120200R	2.00	0.0787		3	12	38	\$13.92
6120201R	2.01	0.0791		3	12	38	\$13.92
6120202R	2.02	0.0795		3	12	38	\$13.92
6120203R	2.03	0.0799		3	12	38	\$13.92
6120204R	2.04	0.0803		3	12	38	\$13.92
6120205R	2.05	0.0807		3	12	38	\$13.92
6120206R	2.06	0.0811	46	3	12	38	\$13.92
6120207R	2.07	0.0815		3	12	38	\$13.92
6120208R	2.08	0.0819	45	3	12	38	\$13.92
6120209R	2.09	0.0823		3	12	38	\$13.92
6120210R	2.10	0.0827		3	12	38	\$13.92
6120211R	2.11	0.0831		3	12	38	\$13.92
6120212R	2.12	0.0835		3	12	38	\$13.92

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6120213R	2.13	0.0839		3	12	38	\$13.92
6120214R	2.14	0.0843		3	12	38	\$13.92
6120215R	2.15	0.0846		3	12	38	\$13.92
6120216R	2.16	0.0850		3	12	38	\$13.92
6120217R	2.17	0.0854		3	12	38	\$13.92
6120218R	2.18	0.0858	44	3	12	38	\$13.92
6120219R	2.19	0.0862		3	12	38	\$13.92
6120220R	2.20	0.0866		3	12	38	\$13.92
6120221R	2.21	0.0870		3	12	38	\$13.92
6120222R	2.22	0.0874		3	12	38	\$13.92
6120223R	2.23	0.0878		3	12	38	\$13.92
6120224R	2.24	0.0882		3	12	38	\$13.92
6120225R	2.25	0.0886		3	12	38	\$13.92
6120226R	2.26	0.0890	43	3	12	38	\$13.92
6120227R	2.27	0.0894		3	12	38	\$13.92
6120228R	2.28	0.0898		3	12	38	\$13.92
6120229R	2.29	0.0902		3	12	38	\$13.92
6120230R	2.30	0.0906		3	12	38	\$13.92
6120231R	2.31	0.0909		3	12	38	\$13.92
6120232R	2.32	0.0913		3	12	38	\$13.92
6120233R	2.33	0.0917		3	12	38	\$13.92
6120234R	2.34	0.0921		3	12	38	\$13.92
6120235R	2.35	0.0925		3	12	38	\$13.92
6120236R	2.36	0.0929		3	12	38	\$13.92
6120237R	2.37	0.0933		3	12	38	\$13.92
6120238R	2.38	0.0937	3/32	3	12	38	\$13.92
6120239R	2.39	0.0941		3	12	38	\$13.92
6120240R	2.40	0.0945		3	12	38	\$13.92
6120241R	2.41	0.0949		3	12	38	\$13.92
6120242R	2.42	0.0953		3	12	38	\$13.92
6120243R	2.43	0.0957		3	12	38	\$13.92
6120244R	2.44	0.0961	41	3	12	38	\$13.92
6120245R	2.45	0.0965		3	12	38	\$13.92
6120246R	2.46	0.0969		3	12	38	\$13.92
6120247R	2.47	0.0972		3	12	38	\$13.92
6120248R	2.48	0.0976		3	12	38	\$13.92
6120249R	2.49	0.0980	40	3	12	38	\$13.92
6120250R	2.50	0.0984		3	14	38	\$13.92
6120251R	2.51	0.0988		3	14	38	\$13.92
6120252R	2.52	0.0992		3	14	38	\$13.92
6120253R	2.53	0.0996	39	3	14	38	\$13.92
6120254R	2.54	0.1000		3	14	38	\$13.92
6120255R	2.55	0.1004		3	14	38	\$13.92
6120256R	2.56	0.1008		3	14	38	\$13.92
6120257R	2.57	0.1012		3	14	38	\$13.92
6120258R	2.58	0.1016	38	3	14	38	\$13.92
6120259R	2.59	0.1020		3	14	38	\$13.92

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6120 Series Continued

6120 Series Solid Carbide

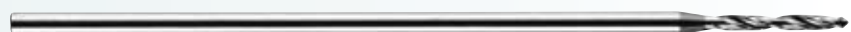
Drill Sizes 2.60 - 3.00 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6120260R	2.60	0.1024		3	14	38	\$13.92
6120261R	2.61	0.1028		3	14	38	\$13.92
6120262R	2.62	0.1031		3	14	38	\$13.92
6120263R	2.63	0.1035		3	14	38	\$13.92
6120264R	2.64	0.1039	37	3	14	38	\$13.92
6120265R	2.65	0.1043		3	14	38	\$13.92
6120266R	2.66	0.1047		3	14	38	\$13.92
6120267R	2.67	0.1051		3	14	38	\$13.92
6120268R	2.68	0.1055		3	14	38	\$13.92
6120269R	2.69	0.1059		3	14	38	\$13.92
6120270R	2.70	0.1063	36	3	14	38	\$13.92
6120271R	2.71	0.1067		3	14	38	\$13.92
6120272R	2.72	0.1071		3	14	38	\$13.92
6120273R	2.73	0.1075		3	14	38	\$13.92
6120274R	2.74	0.1079		3	14	38	\$13.92
6120275R	2.75	0.1083		3	14	38	\$13.92
6120276R	2.76	0.1087		3	14	38	\$13.92
6120277R	2.77	0.1091		3	14	38	\$13.92
6120278R	2.78	0.1094	7/64	3	14	38	\$13.92
6120279R	2.79	0.1098	35	3	14	38	\$13.92
6120280R	2.80	0.1102		3	14	38	\$13.92

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6120281R	2.81	0.1106		3	14	38	\$13.92
6120282R	2.82	0.1110	34	3	14	38	\$13.92
6120283R	2.83	0.1114		3	14	38	\$13.92
6120284R	2.84	0.1118		3	14	38	\$13.92
6120285R	2.85	0.1122		3	14	38	\$13.92
6120286R	2.86	0.1126		3	14	38	\$13.92
6120287R	2.87	0.1130	33	3	14	38	\$13.92
6120288R	2.88	0.1134		3	14	38	\$13.92
6120289R	2.89	0.1138		3	14	38	\$13.92
6120290R	2.90	0.1142		3	14	38	\$13.92
6120291R	2.91	0.1146		3	14	38	\$13.92
6120292R	2.92	0.1150		3	14	38	\$13.92
6120293R	2.93	0.1154		3	14	38	\$13.92
6120294R	2.94	0.1157		3	14	38	\$13.92
6120295R	2.95	0.1161	32	3	14	38	\$13.92
6120296R	2.96	0.1165		3	14	38	\$13.92
6120297R	2.97	0.1169		3	14	38	\$13.92
6120298R	2.98	0.1173		3	14	38	\$13.92
6120299R	2.99	0.1177		3	14	38	\$13.92
6120300R	3.00	0.1181		3	14	38	\$13.92

SOLD IN 10 PIECE PACKAGES ONLY

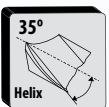
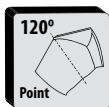
6120 Series Solid Carbide



- For medium to high tensile strength Steel, Stainless, Titanium Alloys and Cast Iron
- Amazing dimension control at h6, h4 & h3 μm tolerances
- Ultra-fine surface finish for smooth operation
- Micro Grain Carbide with 10% Cobalt Content for outstanding performance & long tool life
- Coatings available upon request

6100 Series

Solid Carbide 5-7 x D – Depth of Cut 120°

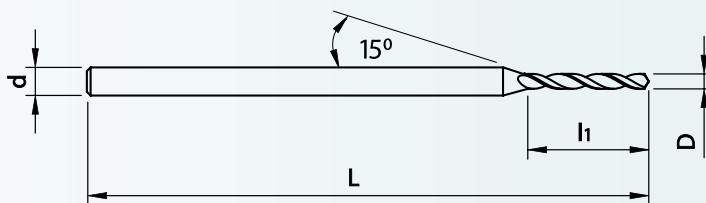


h6 + 0.000
- 0.006 mm

FOR MEDIUM TO HIGH TENSILE STRENGTH STEEL, STAINLESS, TITANIUM ALLOYS & CAST IRON
ALL ITEMS CAN BE ORDERED AS LEFT HAND AT SAME PRICING
SPECIAL, CUSTOM SPECIFICATION ITEMS AVAILABLE

CUSTOM SPECIFICATIONS SUCH AS:

- Helix angle of 15°, 24°, 30° or other.
- Point Angles of 90°, 110°, 130°, 140° or other.
- Special Diameters as 1.255 mm or other.
- Special Tolerances as +/- 0.001 mm or other.
- Coolant Through Drills at 3 & 4 mm shanks & 1.25 to 3 mm flute diameters.
- Coatings available upon request
- Minimum Special Order is 10 Pieces / Spec.
- Lead-Time on Specials – 3 Weeks ARO.



OAL Range 25 - 38 mm

SOLD IN 10 PIECE PACKAGES ONLY

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6100010R	0.10	0.0039		1	0.5	25	\$14.26
6100011R	0.11	0.0043		1	0.5	25	\$14.26
6100012R	0.12	0.0047		1	0.5	25	\$14.26
6100013R	0.13	0.0051		1	0.6	25	\$14.26
6100014R	0.14	0.0055		1	0.7	25	\$14.26
6100015R	0.15	0.0059	97	1	1	25	\$14.26
6100016R	0.16	0.0063	96	1	1	25	\$14.26
6100017R	0.17	0.0067	95	1	1	25	\$14.26
6100018R	0.18	0.0071	94	1	1	25	\$14.26
6100019R	0.19	0.0075	93	1	1	25	\$14.26
6100020R	0.20	0.0079	92	1	1.8	25	\$11.60
6100021R	0.21	0.0083	91	1	1.8	25	\$11.60
6100022R	0.22	0.0087	90	1	1.8	25	\$11.60
6100023R	0.23	0.0091	89	1	1.8	25	\$11.60
6100024R	0.24	0.0094	88	1	1.8	25	\$11.60
6100025R	0.25	0.0098		1	2.2	25	\$11.60
6100026R	0.26	0.0102		1	2.2	25	\$11.60
6100027R	0.27	0.0106	86	1	2.2	25	\$11.60
6100028R	0.28	0.0110	85	1	2.2	25	\$11.60
6100029R	0.29	0.0114	84	1	2.2	25	\$11.60
6100030R	0.30	0.0118		1	2.2	25	\$11.60
6100031R	0.31	0.0122		1	2.8	25	\$11.60
6100032R	0.32	0.0126	82	1	2.8	25	\$11.60
6100033R	0.33	0.0130	81	1	2.8	25	\$11.60
6100034R	0.34	0.0134	80	1	2.8	25	\$11.60
6100035R	0.35	0.0138		1	2.8	25	\$11.60

Drill Sizes 0.10 - 0.61 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6100036R	0.36	0.0142		1	2.8	25	\$11.60
6100037R	0.37	0.0146	79	1	2.8	25	\$11.60
6100038R	0.38	0.0150		1	2.8	25	\$11.60
6100039R	0.39	0.0154		1	3.6	25	\$11.60
6100040R	0.40	0.0157		1	3.6	25	\$11.12
6100041R	0.41	0.0161	78	1	3.6	25	\$11.12
6100042R	0.42	0.0165		1	3.6	25	\$11.12
6100043R	0.43	0.0169		1	3.6	25	\$11.12
6100044R	0.44	0.0173		1	3.6	25	\$11.12
6100045R	0.45	0.0177		1	3.6	25	\$11.12
6100046R	0.46	0.0181	77	1	3.6	25	\$11.12
6100047R	0.47	0.0185		1	3.6	25	\$11.12
6100048R	0.48	0.0189		1	3.6	25	\$11.12
6100049R	0.49	0.0193		1	4	25	\$11.12
6100050R	0.50	0.0197		1	4	25	\$11.12
6100051R	0.51	0.0201	76	1	4	25	\$11.12
6100052R	0.52	0.0205		1	4	25	\$11.12
6100053R	0.53	0.0209	75	1	4	25	\$11.12
6100054R	0.54	0.0213		1	4	25	\$11.12
6100055R	0.55	0.0217		1	4.5	25	\$11.12
6100056R	0.56	0.0220		1	4.5	25	\$11.12
6100057R	0.57	0.0224	74	1	4.5	25	\$11.12
6100058R	0.58	0.0228		1	4.5	25	\$11.12
6100059R	0.59	0.0232		1	4.5	25	\$11.12
6100060R	0.60	0.0236		1.5	4.5	30	\$10.98
6100061R	0.61	0.0240	73	1.5	5	30	\$10.98

6100 Series Continued

6100 Series Solid Carbide

Drill Sizes 0.62 - 1.53 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6100062R	0.62	0.0244		1.5	5	30	\$10.98
6100063R	0.63	0.0248	72	1.5	5	30	\$10.98
6100064R	0.64	0.0252		1.5	5	30	\$10.98
6100065R	0.65	0.0256		1.5	5	30	\$10.98
6100066R	0.66	0.0260	71	1.5	5	30	\$10.98
6100067R	0.67	0.0264		1.5	5	30	\$10.98
6100068R	0.68	0.0268		1.5	5	30	\$10.98
6100069R	0.69	0.0272		1.5	5.6	30	\$10.98
6100070R	0.70	0.0276		1.5	5.6	30	\$10.98
6100071R	0.71	0.0280	70	1.5	5.6	30	\$10.98
6100072R	0.72	0.0283		1.5	5.6	30	\$10.98
6100073R	0.73	0.0287		1.5	5.6	30	\$10.98
6100074R	0.74	0.0291	69	1.5	5.6	30	\$10.98
6100075R	0.75	0.0295		1.5	5.6	30	\$10.98
6100076R	0.76	0.0299		1.5	6.3	30	\$10.98
6100077R	0.77	0.0303		1.5	6.3	30	\$10.98
6100078R	0.78	0.0307		1.5	6.3	30	\$10.98
6100079R	0.79	0.0311	68 - 1/32	1.5	6.3	30	\$10.98
6100080R	0.80	0.0315		1.5	6.3	30	\$10.98
6100081R	0.81	0.0319	67	1.5	6.3	30	\$10.98
6100082R	0.82	0.0323		1.5	6.3	30	\$10.98
6100083R	0.83	0.0327		1.5	6.3	30	\$10.98
6100084R	0.84	0.0331	66	1.5	6.3	30	\$10.98
6100085R	0.85	0.0335		1.5	6.3	30	\$10.98
6100086R	0.86	0.0339		1.5	7.1	30	\$10.98
6100087R	0.87	0.0343		1.5	7.1	30	\$10.98
6100088R	0.88	0.0346		1.5	7.1	30	\$10.98
6100089R	0.89	0.0350	65	1.5	7.1	30	\$10.98
6100090R	0.90	0.0354		1.5	7.1	30	\$10.98
6100091R	0.91	0.0358	64	1.5	7.1	30	\$10.98
6100092R	0.92	0.0362		1.5	7.1	30	\$10.98
6100093R	0.93	0.0366		1.5	7.1	30	\$10.98
6100094R	0.94	0.0370	63	1.5	7.1	30	\$10.98
6100095R	0.95	0.0374		1.5	7.1	30	\$10.98
6100096R	0.96	0.0378	62	1.5	8	30	\$10.98
6100097R	0.97	0.0382		1.5	8	30	\$10.98
6100098R	0.98	0.0386		1.5	8	30	\$10.98
6100099R	0.99	0.0390	61	1.5	8	30	\$10.98
6100100R	1.00	0.0394		1.5	8	30	\$10.98
6100101R	1.01	0.0398	60	1.5	8	30	\$10.98
6100102R	1.02	0.0402		1.5	8	30	\$10.98
6100103R	1.03	0.0406		1.5	8	30	\$10.98
6100104R	1.04	0.0409	59	1.5	8	30	\$10.98
6100105R	1.05	0.0413		1.5	8	30	\$10.98
6100106R	1.06	0.0417		1.5	9	30	\$10.98
6100107R	1.07	0.0421	58	1.5	9	30	\$10.98

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6100108R	1.08	0.0425		1.5	9	30	\$10.98
6100109R	1.09	0.0429	57	1.5	9	30	\$10.98
6100110R	1.10	0.0433		1.5	9	30	\$10.98
6100111R	1.11	0.0437		1.5	9	30	\$10.98
6100112R	1.12	0.0441		1.5	9	30	\$10.98
6100113R	1.13	0.0445		1.5	9	30	\$10.98
6100114R	1.14	0.0449		1.5	9	30	\$10.98
6100115R	1.15	0.0453		1.5	9	30	\$10.98
6100116R	1.16	0.0457		1.5	10	30	\$10.98
6100117R	1.17	0.0461		1.5	10	30	\$10.98
6100118R	1.18	0.0465	56	1.5	10	30	\$10.98
6100119R	1.19	0.0469	3/64	1.5	10	30	\$10.98
6100120R	1.20	0.0472		1.5	10	30	\$10.98
6100121R	1.21	0.0476		1.5	10	30	\$10.98
6100122R	1.22	0.0480		1.5	10	30	\$10.98
6100123R	1.23	0.0484		1.5	10	30	\$10.98
6100124R	1.24	0.0488		1.5	10	30	\$10.98
6100125R	1.25	0.0492		1.5	10	30	\$10.98
6100126R	1.26	0.0496		1.5	10	30	\$10.98
6100127R	1.27	0.0500		1.5	10	30	\$10.98
6100128R	1.28	0.0504		1.5	10	30	\$10.98
6100129R	1.29	0.0508		1.5	10	30	\$10.98
6100130R	1.30	0.0512		1.5	10	30	\$10.98
6100131R	1.31	0.0516		1.5	11.2	30	\$10.98
6100132R	1.32	0.0520	55	1.5	11.2	30	\$10.98
6100133R	1.33	0.0524		1.5	11.2	30	\$10.98
6100134R	1.34	0.0528		1.5	11.2	30	\$10.98
6100135R	1.35	0.0531		1.5	11.2	30	\$10.98
6100136R	1.36	0.0535		1.5	11.2	30	\$10.98
6100137R	1.37	0.0539		1.5	11.2	30	\$10.98
6100138R	1.38	0.0543		1.5	11.2	30	\$10.98
6100139R	1.39	0.0547		1.5	11.2	30	\$10.98
6100140R	1.40	0.0551	54	1.5	11.2	30	\$10.98
6100141R	1.41	0.0555		1.5	11.2	30	\$10.98
6100142R	1.42	0.0559		1.5	11.2	30	\$10.98
6100143R	1.43	0.0563		1.5	11.2	30	\$10.98
6100144R	1.44	0.0567		1.5	11.2	30	\$10.98
6100145R	1.45	0.0571		1.5	11.2	30	\$10.98
6100146R	1.46	0.0575		1.5	11.2	30	\$10.98
6100147R	1.47	0.0579		1.5	11.2	30	\$10.98
6100148R	1.48	0.0583		1.5	11.2	30	\$10.98
6100149R	1.49	0.0587		1.5	11.2	30	\$10.98
6100150R	1.50	0.0591		2	12	38	\$12.22
6100151R	1.51	0.0594	53	2	12	38	\$12.22
6100152R	1.52	0.0598		2	12	38	\$12.22
6100153R	1.53	0.0602		2	12	38	\$12.22

SOLD IN 10 PIECE PACKAGES ONLY

6100 Series Continued

6100 Series Solid Carbide

Drill Sizes 1.54 - 1.99 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6100154R	1.54	0.0606		2	12	38	\$12.22
6100155R	1.55	0.0610		2	12	38	\$12.22
6100156R	1.56	0.0614		2	12	38	\$12.22
6100157R	1.57	0.0618		2	12	38	\$12.22
6100158R	1.58	0.0622		2	12	38	\$12.22
6100159R	1.59	0.0626	1/16	2	12	38	\$12.22
6100160R	1.60	0.0630		2	12	38	\$12.22
6100161R	1.61	0.0634	52	2	12	38	\$12.22
6100162R	1.62	0.0638		2	12	38	\$12.22
6100163R	1.63	0.0642		2	12	38	\$12.22
6100164R	1.64	0.0646		2	12	38	\$12.22
6100165R	1.65	0.0650		2	12	38	\$12.22
6100166R	1.66	0.0654		2	12	38	\$12.22
6100167R	1.67	0.0657		2	12	38	\$12.22
6100168R	1.68	0.0661		2	12	38	\$12.22
6100169R	1.69	0.0665		2	12	38	\$12.22
6100170R	1.70	0.0669	51	2	12	38	\$12.22
6100171R	1.71	0.0673		2	12	38	\$13.57
6100172R	1.72	0.0677		2	12	38	\$13.57
6100173R	1.73	0.0681		2	12	38	\$13.57
6100174R	1.74	0.0685		2	12	38	\$13.57
6100175R	1.75	0.0689		2	12	38	\$13.57
6100176R	1.76	0.0693		2	12	38	\$13.57

SOLD IN 10 PIECE PACKAGES ONLY

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire # Frac	d shank dia. (mm)	l1 flute length (mm)	L overall length OAL (mm)	List Price Each
6100177R	1.77	0.0697		2	12	38	\$13.57
6100178R	1.78	0.0701	50	2	12	38	\$13.57
6100179R	1.79	0.0705		2	12	38	\$13.57
6100180R	1.80	0.0709		2	12	38	\$13.57
6100181R	1.81	0.0713		2	12	38	\$13.57
6100182R	1.82	0.0717		2	12	38	\$13.57
6100183R	1.83	0.0720		2	12	38	\$13.57
6100184R	1.84	0.0724		2	12	38	\$13.57
6100185R	1.85	0.0728	49	2	12	38	\$13.57
6100186R	1.86	0.0732		2	12	38	\$13.57
6100187R	1.87	0.0736		2	12	38	\$13.57
6100188R	1.88	0.0740		2	12	38	\$13.57
6100189R	1.89	0.0744		2	12	38	\$13.57
6100190R	1.90	0.0748		2	12	38	\$13.57
6100191R	1.91	0.0752		2	12	38	\$13.57
6100192R	1.92	0.0756		2	12	38	\$13.57
6100193R	1.93	0.0760	48	2	12	38	\$13.57
6100194R	1.94	0.0764		2	12	38	\$13.57
6100195R	1.95	0.0768		2	12	38	\$13.57
6100196R	1.96	0.0772		2	12	38	\$13.57
6100197R	1.97	0.0776		2	12	38	\$13.57
6100198R	1.98	0.0780	5/64	2	12	38	\$13.57
6100199R	1.99	0.0783	47	2	12	38	\$13.57

For drill sizes 2.00 mm and larger see our 6120 or 6200 Series

6100 Series Solid Carbide



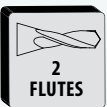
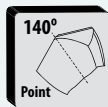
- For medium to high tensile strength Steel, Stainless, Titanium Alloys and Cast Iron
- Amazing dimension control at h6, h4 & h3 tolerances
- Ultra-fine surface finish for smooth operation
- Micro Grain Carbide with 10% Cobalt Content for outstanding performance & long tool life
- Coatings available upon request

6200 HP Series



Solid Carbide 6-7 x D - Depth of Cut

h4 Tolerance
Reinforced Shank d 3.0 mm
HIGH PERFORMANCE!

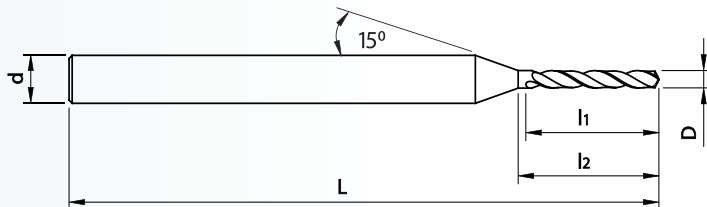


h4 + 0.000
- 0.004 mm

HIGH PERFORMANCE DRILL, WIDE RANGE APPLICATIONS, STEELS, CAST IRON & NON-FERROUS METALS
ALL ITEMS CAN BE ORDERED AS LEFT HAND AT SAME PRICING
SPECIAL, CUSTOM SPECIFICATION ITEMS AVAILABLE

CUSTOM SPECIFICATIONS SUCH AS:

- Helix angle of 15°, 24°, 35° or other.
- Point Angles of 90°, 110°, 120°, 130° or other.
- Special Diameters as 0.92 mm or other.
- Special Tolerances as +/- 0.001 mm or other.
- Coolant Through Drills at 3 & 4 mm shanks & 1.25 to 3 mm flute diameters.
- Coatings available upon request.
- Minimum Special Order is 10 Pieces / Spec.
- Lead-Time on Specials – 3 Weeks ARO.



OAL 50 mm

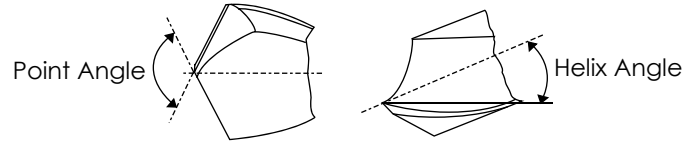
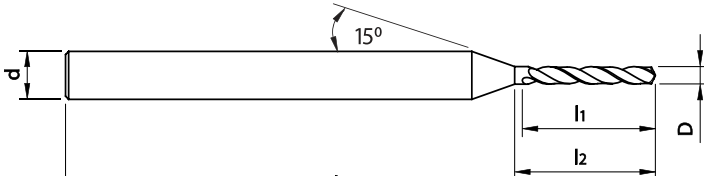
Drill Sizes 0.50 - 3.00 mm

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	l2 Dlength (mm)	L overall length OAL (mm)	List Price Each
6200050R	0.50	0.0197		3	3.5	4.4	50	\$16.23
6200055R	0.55	0.0217		3	4	5	50	\$16.23
6200060R	0.60	0.0236		3	4.5	5.6	50	\$16.23
6200065R	0.65	0.0256		3	5	6.3	50	\$16.23
6200070R	0.70	0.0276		3	5	6.3	50	\$16.23
6200075R	0.75	0.0295		3	5.5	6.9	50	\$16.23
6200080R	0.80	0.0315		3	5.6	7.2	50	\$16.23
6200085R	0.85	0.0335		3	6	7.6	50	\$16.23
6200090R	0.90	0.0354		3	6.5	8.1	50	\$16.23
6200095R	0.95	0.0374		3	6.7	8.5	50	\$16.23
6200100R	1.00	0.0394		3	7	8.8	50	\$16.23
6200105R	1.05	0.0413		3	7.5	9.4	50	\$15.45
6200110R	1.10	0.0433		3	8	10.1	50	\$15.45
6200115R	1.15	0.0453		3	8.1	10.4	50	\$15.45
6200120R	1.20	0.0472		3	8.5	11	50	\$15.45
6200125R	1.25	0.0492		3	8.9	11.3	50	\$15.45
6200130R	1.30	0.0512		3	9.2	11.7	50	\$15.45
6200135R	1.35	0.0531		3	9.6	12.2	50	\$15.45
6200140R	1.40	0.0551	54	3	10	12.5	50	\$15.45
6200145R	1.45	0.0571		3	10.5	13	50	\$15.45
6200150R	1.50	0.0591		3	10.5	13	50	\$15.45
6200155R	1.55	0.0610		3	11	13.5	50	\$15.76
6200160R	1.60	0.0630		3	11.5	14	50	\$15.76
6200165R	1.65	0.0650		3	12	15	50	\$15.76
6200170R	1.70	0.0669	51	3	12	15	50	\$15.76
6200175R	1.75	0.0689		3	12.5	15.5	50	\$17.51

Order Number	D flute dia. (mm)	D dec. equiv. flute dia. (inch)	Wire #	d shank dia. (mm)	l1 flute length (mm)	l2 Dlength (mm)	L overall length OAL (mm)	List Price Each
6200180R	1.80	0.0709		3	13	16	50	\$17.51
6200185R	1.85	0.0728	49	3	13	16	50	\$17.51
6200190R	1.90	0.0748		3	13.5	17.5	50	\$17.51
6200195R	1.95	0.0768		3	14	18	50	\$17.51
6200200R	2.00	0.0787		3	14	18	50	\$17.51
6200205R	2.05	0.0807		3	14.5	18.5	50	\$18.54
6200210R	2.10	0.0827		3	15	19	50	\$18.54
6200215R	2.15	0.0846		3	15	19	50	\$18.54
6200220R	2.20	0.0866		3	16	20	50	\$18.54
6200225R	2.25	0.0886		3	16	20	50	\$18.54
6200230R	2.30	0.0906		3	16.5	21	50	\$18.54
6200235R	2.35	0.0925		3	16.5	21	50	\$18.54
6200240R	2.40	0.0945		3	17	22	50	\$18.54
6200245R	2.45	0.0965		3	17.5	22.5	50	\$18.54
6200250R	2.50	0.0984		3	18	23	50	\$18.54
6200255R	2.55	0.1004		3	18	23	50	\$18.88
6200260R	2.60	0.1024		3	18.5	23.5	50	\$18.88
6200265R	2.65	0.1043		3	18.5	23.5	50	\$18.88
6200270R	2.70	0.1063	36	3	19	24	50	\$18.88
6200275R	2.75	0.1083		3	19	24	50	\$18.88
6200280R	2.80	0.1102		3	20	25	50	\$18.88
6200285R	2.85	0.1122		3	20	25	50	\$18.88
6200290R	2.90	0.1142		3	21	26	50	\$18.88
6200295R	2.95	0.1161	32	3	21	26	50	\$18.88
6200300R	3.00	0.1181		3	21	26	50	\$18.88

SOLD IN 10 PIECE PACKAGES ONLY

REQUEST FOR QUOTATION FORM



CUSTOM SPECIFICATIONS:

_____ Right or Left Cutting

_____ "D" flute diameter

_____ "d" shank diameter

_____ "l1" flute length

_____ "L" overall length OAL

_____ Special Coating

_____ Helix Angle of 15°, 24°, 35° or other.

_____ Point Angles of 90°, 110°, 120°, 130° or other.

_____ Special Diameters as 0.92 mm or other.

_____ Special Tolerances as +/- 0.001 mm or other.

_____ Coolant Through Drills at 3 & 4 mm shanks & 1.25 to 3 mm flute diameters.

Please check one:

Solid Carbide HSS-E Cobalt %

Supply Tool Print/Drawing if Possible • Minimum Special Order is 10 Pieces / per Specification

Lead-Time on Specials – 3 Weeks ARO • SOLD IN 10 PIECE PACKAGES ONLY

Date: _____

Name: _____

Title: _____

Company Name: _____

Street Address: _____

Address-line 2: _____

City: _____ State: _____ Zip: _____

Telephone: _____ Fax: _____

E-mail: _____ Country: _____

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