



MASTER CATALOG 2018

VOLUME TWO | **ROTATING TOOLS**



HOLEMAKING | TAPPING | SOLID END MILLING | INDEXABLE MILLING

➤ SE 4-Margin Drills with Through Coolant for Steel

High-performance platform for mid-L/D applications in steel.

Primary Application

B256 series solid carbide drills are the high-performance platform for mid-L/D applications in steel that require high accuracy and consistent hole straightness combined with excellent metal removal rates and long tool life.

Features and Benefits

SE Drill-Point Design

- Sculptured edge enables high feed rates.

Four-Margin Lands

- Improves hole straightness.
- Improves hole alignment when drilling through cross holes.

KC7315™ Grade

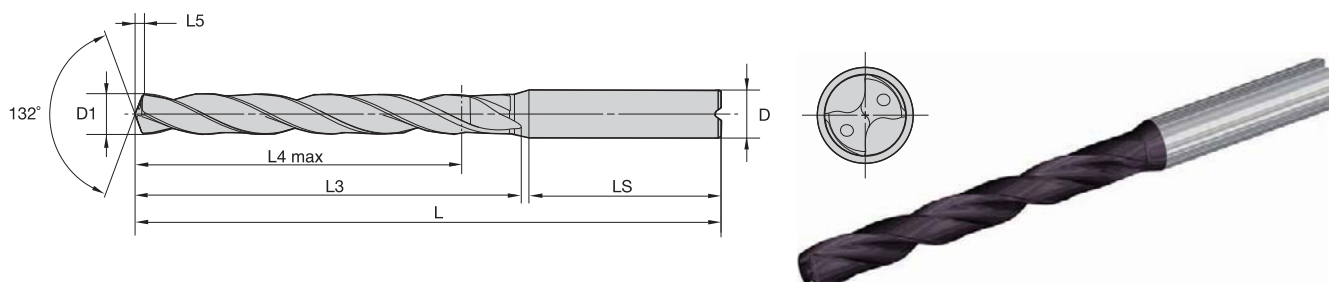
- Multilayer, TiAlN-based coating with high hot hardness allows 30% higher cutting speeds and constant tool life.
- Optimized tool surface finish ensures chip evacuation when drilling deeper holes.



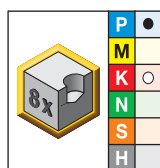
Customization

- Intermediate diameters available as semi-standards.
- Length variations and step drills available as engineered solutions.
- For follow-up operations, such as machining screw holes in connecting rods, the point angle of the step drill for the screw head should be adjusted.





B256 • ~8 x D



- first choice
- alternate choice

D1 diameter										
extra long • KC7315	mm	in	fraction	wire size	L	L3	L4 max	L5	LS	D
B256A05000	5,000	.1969	—	—	94	56	48	1,0	36	6
B256A05100	5,100	.2008	—	—	94	56	48	1,0	36	6
B256A05500	5,500	.2165	—	—	94	56	48	1,1	36	6
B256A05800	5,800	.2283	—	—	94	56	48	1,2	36	6
B256A06000	6,000	.2362	—	—	94	56	48	1,2	36	6
B256A06500	6,500	.2559	—	—	105	67	57	1,3	36	8
B256A06800	6,800	.2677	—	—	105	67	57	1,4	36	8
B256A07000	7,000	.2756	—	—	105	67	57	1,4	36	8
B256A07800	7,800	.3071	—	—	110	72	61	1,6	36	8
B256A08000	8,000	.3150	—	—	110	72	61	1,6	36	8
B256A08400	8,400	.3307	—	—	122	80	68	1,7	40	10
B256A08500	8,500	.3346	—	—	122	80	68	1,7	40	10
B256A08800	8,800	.3465	—	—	122	80	68	1,8	40	10
B256A09000	9,000	.3543	—	—	122	80	68	1,8	40	10
B256A09500	9,500	.3740	—	—	122	80	68	1,9	40	10
B256A10000	10,000	.3937	—	—	122	80	68	2,0	40	10
B256A10200	10,200	.4016	—	—	141	94	79	2,0	45	12
B256A10500	10,500	.4134	—	—	141	94	79	2,1	45	12
B256A11000	11,000	.4331	—	—	141	94	79	2,2	45	12
B256A11800	11,800	.4646	—	—	141	94	79	2,3	45	12
B256A12000	12,000	.4724	—	—	141	94	79	2,4	45	12
B256A12500	12,500	.4921	—	—	155	108	91	2,5	45	14
B256A13000	13,000	.5118	—	—	155	108	91	2,6	45	14
B256A13500	13,500	.5315	—	—	155	108	91	2,7	45	14
B256A14000	14,000	.5512	—	—	155	108	91	2,8	45	14
B256A15000	15,000	.5906	—	—	171	121	101	3,0	48	16
B256A16000	16,000	.6299	—	—	171	121	101	3,2	48	16

Tolerance • Metric		
nominal size range	D1 tolerance m7	D tolerance h6
>3-6	0,004/0,016	0,000/-0,008
>6-10	0,006/0,021	0,000/-0,009
>10-18	0,007/0,025	0,000/-0,011
>18-25,4	0,008/0,029	0,000/-0,013

Tolerance • Inch		
nominal size range	D1 tolerance m7	D tolerance h6
>.1181 to .2362	.0002/.0006	.0000/-0.0003
>.2362 to .3937	.0002/.0008	.0000/-0.0004
>.3937 to .7087	.0003/.0010	.0000/-0.0004
>.7087 to 1.0000	.0003/.0011	.0000/-0.0005

■ SE Drills • B256 Series • Grade KC7315™ • Through Coolant • Drill Diameters 3–20mm (.1181–.7874")

Material Group													
		Cutting Speed — vc			Metric								
		Range — m/min			Recommended Feed Rate (f) by Diameter								
		min	Starting Value	max		3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
P	0	130	145	200	mm/r	0,07–0,09	0,08–0,13	0,09–0,13	0,11–0,16	0,11–0,19	0,13–0,23	0,15–0,28	0,19–0,31
	1	120	145	175	mm/r	0,08–0,11	0,09–0,15	0,11–0,15	0,13–0,19	0,13–0,22	0,15–0,27	0,18–0,33	0,22–0,37
	2	80	100	120	mm/r	0,08–0,11	0,08–0,13	0,09–0,17	0,15–0,21	0,16–0,25	0,18–0,33	0,22–0,42	0,26–0,50
	3	80	90	120	mm/r	0,08–0,11	0,09–0,15	0,11–0,15	0,13–0,19	0,13–0,22	0,15–0,27	0,18–0,33	0,22–0,37
	4	60	70	80	mm/r	0,06–0,09	0,07–0,13	0,09–0,13	0,11–0,15	0,11–0,17	0,13–0,22	0,15–0,27	0,17–0,30
K	1	120	150	200	mm/r	0,08–0,11	0,14–0,20	0,20–0,28	0,25–0,35	0,29–0,40	0,32–0,43	0,36–0,50	0,40–0,55
	2	80	120	160	mm/r	0,08–0,11	0,13–0,17	0,19–0,26	0,23–0,30	0,25–0,36	0,30–0,40	0,34–0,46	0,37–0,50
	3	60	80	120	mm/r	0,07–0,10	0,10–0,14	0,15–0,21	0,19–0,26	0,22–0,30	0,24–0,33	0,28–0,38	0,30–0,41
Material Group		Cutting Speed — vc			Inch								
		Range — SFM			Recommended Feed Rate (f) by Diameter								
		min	Starting Value	max		1/8 .125	3/16 .188	1/4 .250	5/16 .313	3/8 .375	1/2 .500	5/8 .625	3/4 .750
P	0	430	480	660	IPR	.003–.004	.003–.005	.004–.005	.004–.006	.004–.008	.005–.009	.006–.011	.008–.012
	1	390	480	570	IPR	.003–.004	.004–.006	.004–.006	.005–.008	.005–.009	.006–.011	.007–.013	.009–.015
	2	260	330	390	IPR	.003–.004	.003–.005	.004–.007	.006–.008	.006–.010	.007–.013	.009–.017	.010–.020
	3	260	300	390	IPR	.003–.004	.004–.006	.004–.006	.005–.008	.005–.009	.006–.011	.007–.013	.009–.015
	4	200	230	260	IPR	.002–.004	.003–.005	.004–.005	.004–.006	.004–.007	.005–.009	.006–.011	.007–.012
K	1	390	490	660	IPR	.003–.004	.006–.008	.008–.011	.010–.014	.011–.016	.013–.017	.014–.020	.016–.022
	2	260	390	520	IPR	.003–.004	.005–.007	.008–.010	.009–.012	.010–.014	.012–.016	.013–.018	.015–.020
	3	200	260	390	IPR	.003–.004	.004–.006	.006–.008	.008–.010	.009–.012	.009–.013	.011–.015	.012–.016