



ASC 320™ Solid Carbide



ASC 320™ has been specifically designed to deliver the highest metal removal rates and longest tool life in stainless steel, Inconel, Hastelloy and Titanium

Features and Benefits

- High productivity in difficult to machine materials
- Excellent chip control and hole quality
- Parallel core for optimum reconditioning opportunities
- Through coolant design as standard

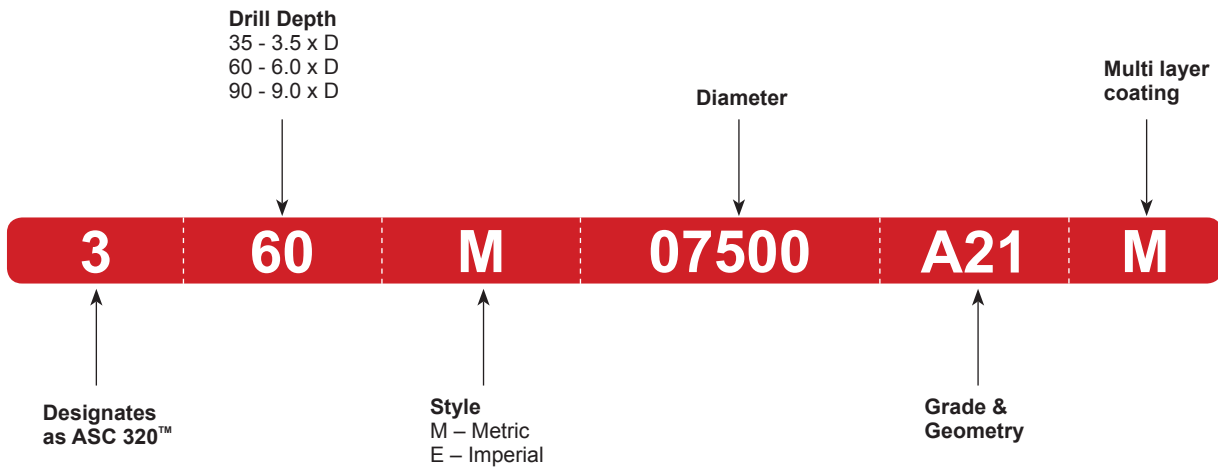
CONTENTS

How to identify & Drill Information	Page 194
3.5 x Diameter Drills	Page 195
6 x Diameter Drills	Page 197
9 x Diameter Drills	Page 199
Technical Section	Page 201
Guaranteed Application Request Form	Page 299



ASC 320™ How to Identify Information

How to identify ASC 320™ Solid Carbide Drill



Innovative high performance drilling systems

The ASC 320™ range of solid carbide high penetration drills has been specifically engineered to deliver high productivity in difficult to machine materials, including stainless steels, Inconel, Hastelloy and Titanium.

The unique combination of cutting edge geometry and high performance coatings provide excellent chip control, hole quality and extended tool life, making them ideal for use in a wide range of challenging applications and 'markets sectors'.

Further benefits of the drill design include a parallel core for optimum regrinding and a reinforced shank for added durability, as well as incorporating ports for through coolant. The AMEC ASC 320™ drilling solution covers diameters ranging from 3.0mm to 20mm in drill length to diameter ratios of 3.5x, 6x and 9x.

Material selection guide

P	M	K	N	S	H
●	●	○	○	●	○

- First Choice
- Alternative Choice

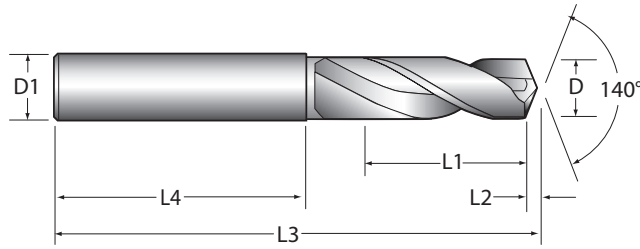
P	M	K	N	S	H
Steel N/mm ²	Stainless Steel N/mm ²	Cast and Ductile Iron N/mm ²	Non-ferrous Material N/mm ²	High Temperature Materials N/mm ²	Hardened Materials N/mm ²
<1365	<940	<1020	<855	<990	<1365

For further information on Material, Hardness and Cutting Data, please refer to the Technical Section from page 201.



ASC 320™ Solid Carbide Drills

3.5 x Diameter



Item Number	D Drill Diameter		L1 Drill Depth (mm)	L2 Point Length (mm)	L3 Overall Length (mm)	L4 Shank Length (mm)	D1 Shank Dia. (mm)	Stk.
	Ø Metric	Ø Inch						
335M03000A21M	3.00	0.1181"	14	0.5	62.7	36	4	○
335E01250A21M	3.18	0.1250"	14	0.5	62.7	36	4	○
335M03200A21M	3.20	0.1260"	14	0.5	62.7	36	4	○
335M03300A21M	3.30	0.1299"	14	0.5	62.7	36	4	○
335M03500A21M	3.50	0.1378"	14	0.5	62.7	36	4	○
335M03650A21M	3.65	0.1437"	14	0.5	62.7	36	4	○
335M03700A21M	3.70	0.1457"	14	0.5	62.7	36	4	○
335M03800A21M	3.80	0.1497"	14	0.5	62.7	36	4	○
335M03900A21M	3.90	0.1535"	14	0.5	62.7	36	4	○
335M04000A21M	4.00	0.1575"	14	0.6	62.7	36	4	○
335M04100A21M	4.10	0.1614"	21	0.7	67.1	36	6	○
335M04200A21M	4.20	0.1653"	21	0.7	67.1	36	6	○
335E01719A21M	4.37	0.1719"	21	0.7	67.1	36	6	○
335M04500A21M	4.50	0.1771"	21	0.7	67.1	36	6	○
335M04600A21M	4.60	0.1811"	21	0.7	67.1	36	6	○
335E01875A21M	4.76	0.1875"	21	0.8	67.1	36	6	○
335M05000A21M	5.00	0.1968"	21	0.8	67.1	36	6	○
335E02031A21M	5.16	0.2031"	21	0.8	67.1	36	6	○
335M05200A21M	5.20	0.2047"	21	0.8	67.1	36	6	○
335E02130A21M	5.41	0.2130"	21	0.8	67.1	36	6	○
335M05500A21M	5.50	0.2165"	21	0.8	67.1	36	6	○
335E02188A21M	5.56	0.2188"	21	0.8	67.1	36	6	○
335M05630A21M	5.63	0.2216"	21	0.9	67.1	36	6	○
335E02280A21M	5.79	0.2279"	21	0.9	67.1	36	6	○
335E02344A21M	5.95	0.2344"	21	1.0	67.1	36	6	○
335M06000A21M	6.00	0.2362"	21	1.0	67.1	36	6	○
335E02460A21M	6.25	0.2460"	28	1.0	79.4	36	8	○
335E02500A21M	6.35	0.2500"	28	1.0	79.4	36	8	○
335M06500A21M	6.50	0.2559"	28	1.1	79.4	36	8	○
335E02656A21M	6.75	0.2656"	28	1.1	79.4	36	8	○
335M06800A21M	6.80	0.2677"	28	1.1	79.4	36	8	○
335E02720A21M	6.91	0.2720"	28	1.1	79.4	36	8	○
335M07000A21M	7.00	0.2756"	28	1.1	79.4	36	8	○
335E02812A21M	7.14	0.2812"	28	1.2	79.4	36	8	○
335M07400A21M	7.40	0.2913"	28	1.2	79.4	36	8	○
335M07500A21M	7.50	0.2953"	28	1.2	79.4	36	8	○
335E02969A21M	7.54	0.2969"	28	1.2	79.4	36	8	○
335E03071A21M	7.80	0.3071"	28	1.3	79.4	36	8	○
335E03125A21M	7.94	0.3125"	28	1.3	79.4	36	8	○
335M08000A21M	8.00	0.3150"	28	1.3	79.4	36	8	○
335E03281A21M	8.33	0.3281"	35	1.4	90.7	40	10	○
335M08500A21M	8.50	0.3346"	35	1.4	90.7	40	10	○
335E03438A21M	8.73	0.3438"	35	1.4	90.7	40	10	○
335M08800A21M	8.80	0.3464"	35	1.4	90.7	40	10	○
335M09000A21M	9.00	0.3543"	35	1.5	90.7	40	10	○
335E03594A21M	9.13	0.3594"	35	1.5	90.7	40	10	○

Stk. - Stock Availability.

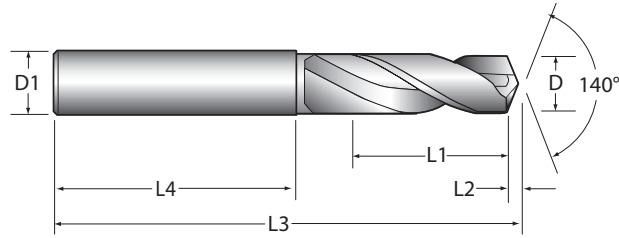
- Stock Item.
- Stocked in limited quantities, advanced planning is recommended.
- ◆ Non-stock standard. Normal delivery 15 to 20 days.

Any non-standard size available.



ASC 320™ Solid Carbide Drills

3.5 x Diameter

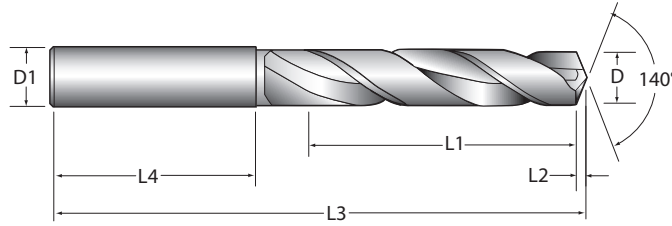


Item Number	D Drill Diameter		L1 Drill Depth (mm)	L2 Point Length (mm)	L3 Overall Length (mm)	L4 Shank Length (mm)	D1 Shank Dia. (mm)	Stk.
	Ø Metric	Ø Inch						
335M09300A21M	9.30	0.3661"	35	1.5	90.7	40	10	○
335E03680A21M	9.34	0.3677"	35	1.5	90.7	40	10	○
335M09500A21M	9.50	0.3740"	35	1.5	90.7	40	10	○
335E03750A21M	9.53	0.3750"	35	1.5	90.7	40	10	○
335E03858A21M	9.80	0.3858"	35	1.6	90.7	40	10	○
335E03906A21M	9.92	0.3906"	35	1.6	90.7	40	10	○
335M10000A21M	10.00	0.3937"	35	1.6	90.7	40	10	○
335M10200A21M	10.20	0.4016"	42	1.7	106.1	45	12	○
335E04062A21M	10.32	0.4062"	42	1.7	106.1	45	12	○
335M10500A21M	10.50	0.4134"	42	1.7	106.1	45	12	○
335E04219A21M	10.72	0.4219"	42	1.7	106.1	45	12	○
335M11000A21M	11.00	0.4331"	42	1.8	106.1	45	12	○
335E04375A21M	11.11	0.4375"	42	1.8	106.1	45	12	○
335M01120A21M	11.20	0.4409"	42	1.8	106.1	45	12	○
335M11500A21M	11.50	0.4527"	42	1.9	106.1	45	12	○
335E04688A21M	11.91	0.4688"	42	1.9	106.1	45	12	○
335M1200A21M	12.00	0.4724"	42	1.9	106.1	45	12	○
335E04844A21M	12.30	0.4844"	49	2.0	115.6	45	14	○
335M12500A21M	12.50	0.4921"	49	2.0	115.6	45	14	○
335E05000A21M	12.70	0.5000"	49	2.1	115.6	45	14	○
335M13000A21M	13.00	0.5118"	49	2.1	115.6	45	14	○
335E05156A21M	13.10	0.5156"	49	2.1	115.6	45	14	○
335E05312A21M	13.49	0.5312"	49	2.2	115.6	45	14	○
335M13500A21M	13.50	0.5315"	49	2.2	115.6	45	14	○
335M13700A21M	13.70	0.5394"	49	2.2	115.6	45	14	○
335E05469A21M	13.89	0.5469"	49	2.2	115.6	45	14	○
335M14000A21M	14.00	0.5512"	49	2.4	115.6	45	14	○
335E05625A21M	14.29	0.5625"	56	2.4	128.8	48	16	○
335M14500A21M	14.50	0.5709"	56	2.4	128.8	48	16	○
335E05781A21M	14.68	0.5781"	56	2.4	128.8	48	16	○
335M15000A21M	15.00	0.5906"	56	2.4	128.8	48	16	○
335E05938A21M	15.08	0.5938"	56	2.4	128.8	48	16	○
335E06094A21M	15.48	0.6094"	56	2.4	128.8	48	16	○
335M15500A21M	15.50	0.6102"	56	2.5	128.8	48	16	○
335E06250A21M	15.88	0.6250"	56	2.6	128.8	48	16	○
335M16000A21M	16.00	0.6299"	56	2.6	128.8	48	16	○
335M16500A21M	16.50	0.6496"	63	2.7	138.2	48	18	○
335E06562A21M	16.67	0.6563"	63	2.7	138.2	48	18	○
335M17000A21M	17.00	0.6693"	63	2.8	138.2	48	18	○
335E06719A21M	17.07	0.6719"	63	2.8	138.2	48	18	○
335E06875A21M	17.46	0.6875"	63	2.8	138.2	48	18	○
335M17500A21M	17.50	0.6890"	63	2.8	138.2	48	18	○
335E07031A21M	17.86	0.7031"	63	2.8	138.2	48	18	○
335M18000A21M	18.00	0.7087"	63	2.9	138.2	48	18	○
335M18500A21M	18.50	0.7283"	70	3.0	149.5	50	20	○
335E07344A21M	18.65	0.7344"	70	3.0	149.5	50	20	○
335M19000A21M	19.00	0.7480"	70	3.1	149.5	50	20	○
335M19260A21M	19.26	0.7583"	70	3.1	149.5	50	20	○
335M19500A21M	19.50	0.7677"	70	3.2	149.5	50	20	○
335E07813A21M	19.84	0.7813"	70	3.2	149.5	50	20	○
335M20000A21M	20.00	0.7874"	70	3.2	149.5	50	20	○



ASC 320™ Solid Carbide Drills

6 x Diameter



Item Number	D Drill Diameter		L1 Drill Depth (mm)	L2 Point Length (mm)	L3 Overall Length (mm)	L4 Shank Length (mm)	D1 Shank Dia. (mm)	Stk.
	Ø Metric	Ø Inch						
360M03000A21M	3.00	0.1181"	24	0.5	72.7	36	4	○
360E01250A21M	3.18	0.1250"	24	0.5	72.7	36	4	○
360M03500A21M	3.50	0.1378"	24	0.5	72.7	36	4	○
360E01406A21M	3.57	0.1406"	24	0.5	72.7	36	4	○
360E01563A21M	3.97	0.1563"	24	0.5	72.7	36	4	○
360M04000A21M	4.00	0.1575"	24	0.5	72.7	36	4	○
360M04200A21M	4.20	0.1653"	36	0.7	83.1	36	6	○
360E01719A21M	4.37	0.1719"	36	0.7	83.1	36	6	○
360M04500A21M	4.50	0.1772"	36	0.7	83.1	36	6	○
360M04600A21M	4.60	0.1811"	36	0.7	83.1	36	6	○
360E01875A21M	4.76	0.1875"	36	0.8	83.1	36	6	○
360M04800A21M	4.80	0.1890"	36	0.8	83.1	36	6	○
360M05000A21M	5.00	0.1969"	36	0.8	83.1	36	6	○
360E01990A21M	5.05	0.1990"	36	0.8	83.1	36	6	○
360E02010A21M	5.11	0.2010"	36	0.8	83.1	36	6	○
360E02031A21M	5.16	0.2031"	36	0.8	83.1	36	6	○
360E02130A21M	5.41	0.2130"	36	0.8	83.1	36	6	○
360M05500A21M	5.50	0.2165"	36	0.9	83.1	36	6	○
360E02188A21M	5.56	0.2188"	36	0.9	83.1	36	6	○
360E02280A21M	5.79	0.2280"	36	0.9	83.1	36	6	○
360E02344A21M	5.95	0.2344"	36	0.9	83.1	36	6	○
360M06000A21M	6.00	0.2362"	36	0.9	83.1	36	6	○
360E02500A21M	6.35	0.2500"	48	1.0	109.4	36	8	○
360M06500A21M	6.50	0.2559"	48	1.1	109.4	36	8	○
360E02656A21M	6.75	0.2656"	48	1.1	109.4	36	8	○
360M06800A21M	6.80	0.2677"	48	1.1	109.4	36	8	○
360E02720A21M	6.91	0.2720"	48	1.1	109.4	36	8	○
360M07000A21M	7.00	0.2756"	48	1.1	109.4	36	8	○
360E02810A21M	7.14	0.2810"	48	1.2	109.4	36	8	○
360M07400A21M	7.40	0.2913"	48	1.2	109.4	36	8	○
360M07500A21M	7.50	0.2953"	48	1.2	109.4	36	8	○
360E02969A21M	7.54	0.2969"	48	1.2	109.4	36	8	○
360E03125A21M	7.94	0.3125"	48	1.2	109.4	36	8	○
360M08000A21M	8.00	0.3150"	48	1.2	109.4	36	8	○
360E03281A21M	8.33	0.3281"	60	1.4	115.8	40	10	○
360M08500A21M	8.50	0.3346"	60	1.4	115.8	40	10	○
360E03438A21M	8.73	0.3438"	60	1.4	115.8	40	10	○
360M08800A21M	8.80	0.3465"	60	1.5	115.8	40	10	○
360M09000A21M	9.00	0.3543"	60	1.5	115.8	40	10	○
360E03594A21M	9.13	0.3594"	60	1.5	115.8	40	10	○
360M09300A21M	9.30	0.3661"	60	1.5	115.8	40	10	○
360M09500A21M	9.50	0.3740"	60	1.5	115.8	40	10	○
360E03750A21M	9.53	0.3750"	60	1.5	115.8	40	10	○
360M09800A21M	9.80	0.3858"	60	1.6	115.8	40	10	○
360E03906A21M	9.92	0.3906"	60	1.6	115.8	40	10	○
360M10000A21M	10.00	0.3937"	60	1.6	115.8	40	10	○

Stk. - Stock Availability.

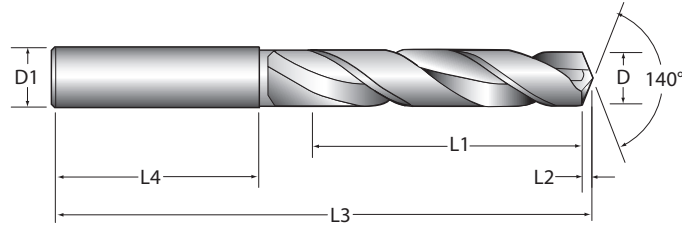
- Stock Item.
- Stocked in limited quantities, advanced planning is recommended.
- ◆ Non-stock standard. Normal delivery 15 to 20 days.

Any non-standard size available.



ASC 320™ Solid Carbide Drills

6 x Diameter



Item Number	D Drill Diameter		L1 Drill Depth (mm)	L2 Point Length (mm)	L3 Overall Length (mm)	L4 Shank Length (mm)	D1 Shank Dia. (mm)	Stk.
	Ø Metric	Ø Inch						
360M10200A21M	10.20	0.4016"	72	1.7	136.2	45	12	○
360E04062A21M	10.32	0.4062"	72	1.7	136.2	45	12	○
360M10500A21M	10.50	0.4134"	72	1.7	136.2	45	12	○
360E04219A21M	10.72	0.4219"	72	1.7	136.2	45	12	○
360M11000A21M	11.00	0.4331"	72	1.8	136.2	45	12	○
360E04375A21M	11.11	0.4375"	72	1.8	136.2	45	12	○
360M11200A21M	11.20	0.4409"	72	1.8	136.2	45	12	○
360M11500A21M	11.50	0.4528"	72	1.9	136.2	45	12	○
360M11700A21M	11.70	0.4607"	72	1.9	136.2	45	12	○
360E04688A21M	11.91	0.4688"	72	1.9	136.2	45	12	○
360M12000A21M	12.00	0.4724"	72	1.9	136.2	45	12	○
360E04844A21M	12.30	0.4844"	84	2.0	150.5	45	14	○
360M12500A21M	12.50	0.4921"	84	2.0	150.5	45	14	○
360E05000A21M	12.70	0.5000"	84	2.1	150.5	45	14	○
360M13000A21M	13.00	0.5118"	84	2.1	150.5	45	14	○
360E05156A21M	13.10	0.5156"	84	2.2	150.5	45	14	○
360E05312A21M	13.49	0.5312"	84	2.2	150.5	45	14	○
360M13500A21M	13.50	0.5315"	84	2.2	150.5	45	14	○
360E05469A21M	13.89	0.5469"	84	2.3	150.5	45	14	○
360M14000A21M	14.00	0.5512"	84	2.3	150.5	45	14	○
360E05625A21M	14.29	0.5625"	96	2.3	168.9	48	16	○
360M14500A21M	14.50	0.5709"	96	2.3	168.9	48	16	○
360E05781A21M	14.68	0.5781"	96	2.3	168.9	48	16	○
360M15000A21M	15.00	0.5906"	96	2.4	168.9	48	16	○
360E05938A21M	15.08	0.5938"	96	2.4	168.9	48	16	○
360E06094A21M	15.48	0.6094"	96	2.4	168.9	48	16	○
360M15500A21M	15.50	0.6102"	96	2.5	168.9	48	16	○
360M15700A21M	15.70	0.6181"	96	2.5	168.9	48	16	○
360E06250A21M	15.88	0.6250"	96	2.6	168.9	48	16	○
360M16000A21M	16.00	0.6299"	96	2.6	168.9	48	16	○
360E06406A21M	16.27	0.6406"	96	2.6	168.9	48	16	○
360M16500A21M	16.50	0.6496"	108	2.7	183.3	48	18	○
360E06562A21M	16.67	0.6563"	108	2.7	183.3	48	18	○
360M17000A21M	17.00	0.6693"	108	2.8	183.3	48	18	○
360E06719A21M	17.07	0.6719"	108	2.8	183.3	48	18	○
360E06875A21M	17.46	0.6875"	108	2.8	183.3	48	18	○
360M17500A21M	17.50	0.6890"	108	2.8	183.3	48	18	○
360M18000A21M	18.00	0.7087"	108	2.9	183.3	48	18	○
360E07188A21M	18.26	0.7188"	120	3.0	199.6	50	20	○
360M18500A21M	18.50	0.7283"	120	3.0	199.6	50	20	○
360E07344A21M	18.65	0.7344"	120	3.0	199.6	50	20	○
360M19000A21M	19.00	0.7480"	120	3.1	199.6	50	20	○
360E07500A21M	19.05	0.7500"	120	3.1	199.6	50	20	○
360E07656A21M	19.45	0.7656"	120	3.1	199.6	50	20	○
360M19500A21M	19.50	0.7677"	120	3.2	199.6	50	20	○
360E07813A21M	19.84	0.7813"	120	3.2	199.6	50	20	○
360M20000A21M	20.00	0.7874"	120	3.2	199.6	50	20	○

Stk. - Stock Availability.

- Stock Item.
- Stocked in limited quantities, advanced planning is recommended.
- ◆ Non-stock standard. Normal delivery 15 to 20 days.

Any non-standard size available.



+44 (0)1384 400 900



+44 (0)1384 400 105



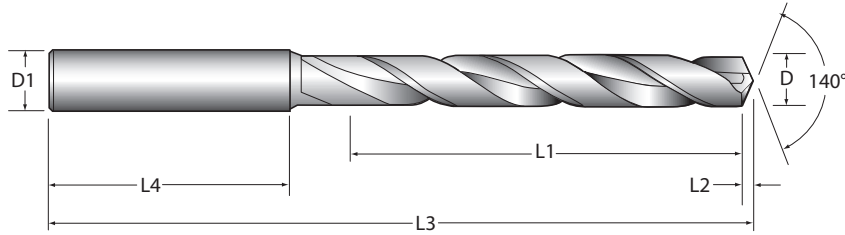
enquiries@alliedmaxcut.com



www.alliedmaxcut.com

ASC 320™ Solid Carbide Drills

9 x Diameter



Item Number	D Drill Diameter		L1 Drill Depth (mm)	L2 Point Length (mm)	L3 Overall Length (mm)	L4 Shank Length (mm)	D1 Shank Dia. (mm)	Stk.
	Ø Metric	Ø Inch						
390E01969A21M	5.00	0.1969"	54	0.8	101.1	36	6	○
390M05500A21M	5.50	0.2165"	54	0.8	101.1	36	6	○
390M06000A21M	6.00	0.2362"	54	1.0	101.1	36	6	○
390E02500A21M	6.35	0.2500"	72	1.0	123.4	36	8	○
390M06500A21M	6.50	0.2559"	72	1.1	123.4	36	8	○
390E02656A21M	6.75	0.2656"	72	1.1	123.4	36	8	○
390M07000A21M	7.00	0.2756"	72	1.1	123.4	36	8	○
390M07500A21M	7.50	0.2953"	72	1.2	123.4	36	8	○
390E02969A21M	7.54	0.2969"	72	1.2	123.4	36	8	○
390M07800A21M	7.80	0.3071"	72	1.2	123.4	36	8	○
390E03125A21M	7.94	0.3125"	72	1.2	123.4	36	8	○
390M08000A21M	8.00	0.3150"	72	1.3	123.4	36	8	○
390E03281A21M	8.33	0.3281"	72	1.3	123.4	36	8	○
390M08500A21M	8.50	0.3346"	90	1.4	145.8	40	10	○
390E03438A21M	8.73	0.3438"	90	1.4	145.8	40	10	○
390M09000A21M	9.00	0.3543"	90	1.5	145.8	40	10	○
390E03594A21M	9.13	0.3594"	90	1.5	145.8	40	10	○
390M09500A21M	9.50	0.3740"	90	1.5	145.8	40	10	○
390M09600A21M	9.53	0.3750"	90	1.5	145.8	40	10	○
390E03906A21M	9.92	0.3906"	90	1.5	145.8	40	10	○
390M10000A21M	10.00	0.3937"	90	1.6	145.8	40	10	○
390M10200A21M	10.20	0.4016"	108	1.6	172.2	45	12	○
390E04062A21M	10.32	0.4062"	108	1.6	172.2	45	12	○
390M10500A21M	10.50	0.4134"	108	1.7	172.2	45	12	○
390E04219A21M	10.72	0.4219"	108	1.7	172.2	45	12	○
390M01100A21M	11.00	0.4331"	108	1.8	172.2	45	12	○
390E04375A21M	11.11	0.4374"	108	1.8	172.2	45	12	○
390M11500A21M	11.50	0.4528"	108	1.9	172.2	45	12	○
390E04531A21M	11.51	0.4531"	108	1.9	172.2	45	12	○
390E04688A21M	11.91	0.4688"	108	1.9	172.2	45	12	○
390M1200A21M	12.00	0.4724"	108	1.9	172.2	45	12	○
390E04844A21M	12.30	0.4844"	108	1.9	172.2	45	12	○
390M12500A21M	12.50	0.4921"	126	2.0	192.5	45	14	○
390E05000A21M	12.70	0.5000"	126	2.1	192.5	45	14	○
390M13000A21M	13.00	0.5118"	126	2.1	192.5	45	14	○
390E05156A21M	13.10	0.5156"	126	2.1	192.5	45	14	○
390E05312A21M	13.49	0.5312"	126	2.1	192.5	45	14	○
390M13500A21M	13.50	0.5315"	126	2.2	192.5	45	14	○
390E05469A21M	13.89	0.5469"	126	2.2	192.5	45	14	○
390M14000A21M	14.00	0.5512"	126	2.3	192.5	45	14	○
390E05625A21M	14.29	0.5625"	144	2.3	216.9	48	16	○
390M14500A21M	14.50	0.5709"	144	2.4	216.9	48	16	○
390E05781A21M	14.68	0.5781"	144	2.4	216.9	48	16	○
390M15000A21M	15.00	0.5906"	144	2.4	216.9	48	16	○
390E05938A21M	15.08	0.5938"	144	2.4	216.9	48	16	○
390E06094A21M	15.48	0.6094"	144	2.4	216.9	48	16	○

Stk. - Stock Availability.

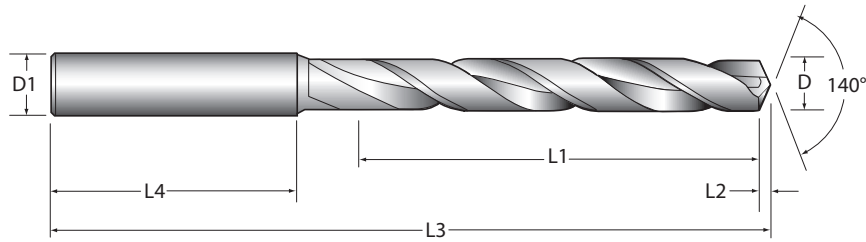
- Stock Item.
- Stocked in limited quantities, advanced planning is recommended.
- ◆ Non-stock standard. Normal delivery 15 to 20 days.

Any non-standard size available.



ASC 320™ Solid Carbide Drills

9 x Diameter



Item Number	D Drill Diameter		L1 Drill Depth (mm)	L2 Point Length (mm)	L3 Overall Length (mm)	L4 Shank Length (mm)	D1 Shank Dia. (mm)	Stk.
	Ø Metric	Ø Inch						
390M15500A21M	15.50	0.6102"	144	2.5	216.9	48	16	○
390E06250A21M	15.88	0.6250"	144	2.5	216.9	48	16	○
390M16000A21M	16.00	0.6299"	144	2.6	216.9	48	16	○
390E06406A21M	16.27	0.6406"	144	2.6	216.9	48	16	○
390M16500A21M	16.50	0.6496"	162	2.7	237.3	50	18	○
390E06563A21M	16.67	0.6563"	162	2.7	237.3	50	18	○
390M17000A21M	17.00	0.6693"	162	2.8	237.3	50	18	○
390E06719A21M	17.07	0.6719"	162	2.8	237.3	50	18	○
390E06875A21M	17.46	0.6875"	162	2.8	237.3	50	18	○
390M17500A21M	17.50	0.6890"	162	2.8	237.3	50	18	○
390E07031A21M	17.86	0.7031"	162	2.8	237.3	50	18	○
390M18000A21M	18.00	0.7087"	162	2.9	237.3	50	18	○
390E07188A21M	18.26	0.7188"	162	2.9	237.3	50	18	○
390M18500A21M	18.50	0.7283"	180	3.0	259.6	50	20	○
390E07344A21M	18.65	0.7344"	180	3.0	259.6	50	20	○
390M19000A21M	19.00	0.7480"	180	3.1	259.6	50	20	○
390E07500A21M	19.05	0.7500"	180	3.1	259.6	50	20	○
390E07656A21M	19.45	0.7656"	180	3.1	259.6	50	20	○
390M19500A21M	19.50	0.7677"	180	3.2	259.6	50	20	○
390E07813A21M	19.84	0.7813"	180	3.2	259.6	50	20	○
390M20000A21M	20.00	0.7874"	180	3.2	259.6	50	20	○

Stk. - Stock Availability.

- Stock Item.
- Stocked in limited quantities, advanced planning is recommended.
- ◆ Non-stock standard. Normal delivery 15 to 20 days.

Any non-standard size available.

T-A & GENZ T-A
GENSYS
APX
Revolution & Core Drill
ASC 320 Solid Carbide
AccuPort 432
Criterion
Thread Milling
Special Tooling



+44 (0)1384 400 900



+44 (0)1384 400 105



enquiries@alliedmaxcut.com



www.alliedmaxcut.com

Technical Section - ASC 320™

Recommended Cutting Data



Material	Material Hardness (BHN)	3.5 x Diameter Solid Carbide										
		Speed m/min	FEED mm/rev									
			3 - 4.0mm	4.1 - 6.0mm	6.1 - 8.0mm	8.1 - 10.0mm	10.1 - 12.0mm	12.1 - 14.0mm	14.1 - 16.0mm	16.1 - 18.0mm	18.1 - 20.0mm	
Free Machining Steel	100 - 150	135	0.18	0.23	0.28	0.33	0.36	0.41	0.46	0.51	0.56	
	150 - 200	120	0.13	0.20	0.23	0.28	0.30	0.36	0.41	0.46	0.51	
	200 - 250	115	0.10	0.15	0.18	0.23	0.25	0.30	0.36	0.41	0.46	
Low Carbon Steel	85 - 125	130	0.18	0.23	0.28	0.33	0.38	0.43	0.48	0.48	0.53	
	125 - 175	120	0.15	0.20	0.25	0.30	0.36	0.41	0.46	0.46	0.51	
	175 - 225	110	0.13	0.20	0.25	0.28	0.33	0.38	0.43	0.43	0.48	
Medium Carbon Steel	225 - 275	100	0.10	0.18	0.23	0.25	0.30	0.36	0.41	0.41	0.46	
	125 - 175	120	0.15	0.20	0.25	0.30	0.33	0.36	0.41	0.46	0.51	
	175 - 225	110	0.13	0.18	0.25	0.30	0.30	0.33	0.38	0.43	0.48	
Alloy Steel	225 - 275	95	0.10	0.15	0.23	0.28	0.28	0.30	0.36	0.41	0.46	
	275 - 325	85	0.08	0.15	0.20	0.25	0.25	0.28	0.33	0.38	0.43	
	175 - 225	115	0.15	0.20	0.25	0.30	0.33	0.36	0.41	0.46	0.51	
High Strength Alloy Steel	225 - 275	105	0.13	0.18	0.23	0.28	0.30	0.33	0.38	0.43	0.48	
	275 - 325	90	0.10	0.15	0.20	0.25	0.28	0.30	0.33	0.41	0.46	
	325 - 375	85	0.08	0.13	0.18	0.23	0.25	0.25	0.30	0.36	0.41	
Structural Steel	225 - 300	80	0.13	0.18	0.20	0.28	0.28	0.30	0.33	0.36	0.41	
	300 - 350	65	0.10	0.15	0.18	0.23	0.25	0.28	0.30	0.33	0.38	
	350 - 400	50	0.08	0.13	0.15	0.20	0.23	0.25	0.28	0.30	0.33	
Tool Steel	100 - 150	110	0.13	0.20	0.23	0.28	0.30	0.33	0.36	0.41	0.46	
	150 - 250	95	0.10	0.18	0.20	0.25	0.28	0.30	0.33	0.38	0.43	
	250 - 350	80	0.08	0.13	0.18	0.20	0.23	0.25	0.28	0.33	0.38	
High Temp Alloy	150 - 200	80	0.08	0.10	0.13	0.15	0.18	0.20	0.23	0.25	0.28	
	200 - 250	65	0.05	0.08	0.10	0.13	0.15	0.18	0.20	0.23	0.25	
Stainless Steel	140 - 220	35	0.08	0.10	0.13	0.15	0.18	0.20	0.23	0.25	0.28	
	220 - 310	25	0.05	0.08	0.08	0.10	0.13	0.15	0.18	0.20	0.23	
Cast Iron Gray, Ductile, Nodular	135 - 185	60	0.10	0.13	0.15	0.18	0.20	0.23	0.28	0.30	0.33	
	185 - 275	40	0.08	0.10	0.10	0.13	0.15	0.18	0.23	0.25	0.28	
	120 - 150	165	0.20	0.25	0.30	0.36	0.40	0.46	0.51	0.56	0.61	
	150 - 200	150	0.20	0.25	0.30	0.36	0.40	0.46	0.51	0.56	0.61	
Aluminium	200 - 220	145	0.18	0.23	0.28	0.33	0.38	0.43	0.48	0.53	0.58	
	220 - 260	130	0.18	0.23	0.28	0.33	0.38	0.43	0.48	0.53	0.58	
	260 - 320	120	0.15	0.20	0.25	0.30	0.36	0.41	0.46	0.51	0.56	
Aluminium	30	450	0.20	0.25	0.33	0.38	0.43	0.51	0.56	0.61	0.66	
	180	300	0.15	0.20	0.28	0.33	0.38	0.46	0.51	0.56	0.61	

Formulae: mm/min = RPM x mm/rev

$$m/min = \frac{(RPM) \times (3.14) \times (Dia)}{1000}$$

$$RPM = \frac{(M/min) \times (1000)}{(3.14) \cdot (DIA)}$$

To calculate speeds and feeds for 6 and 9 x diameter ASC320 Solid Carbide High Performance Drills use the following:

SPEED AND FEED MULTIPLIER		
3.5 x Diameter	6 x Diameter	9 x Diameter
See above chart	0.90	0.75

The speeds recommended for coated tools are based on empirical data obtained under "Optimum Conditions". Many applications do not exhibit "Optimum Conditions", reductions in speed parameters may be required due to excessive tool wear generated in the application.

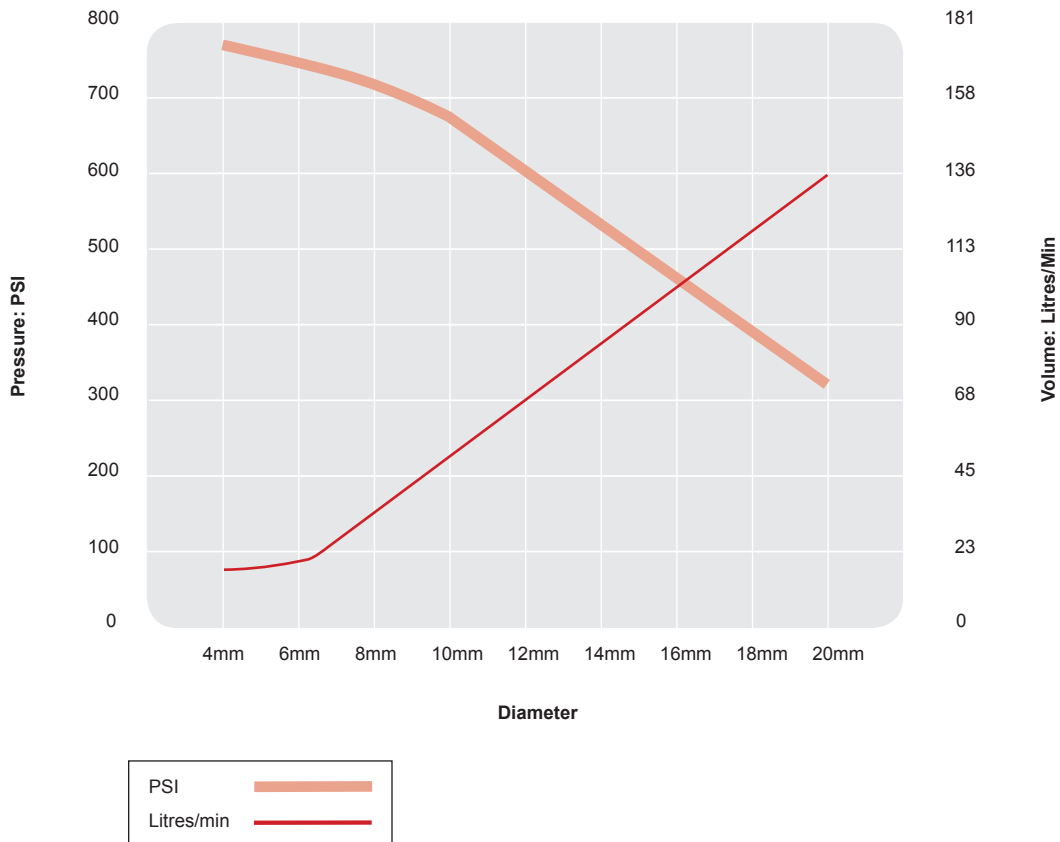
The speeds and feeds listed above are considered a general starting point for all applications. Factory technical assistance is also available for your specific applications through our Application Engineering Team. Please have item number, hole diameter, depth, material grade, BHN hardness, and coolant pressure information available when you call. Additional information such as part and machine rigidity, horsepower and thrust limits, vertical or horizontal spindle, revolving or stationary tool, flood or through holder coolant are also very helpful to our Application Engineers.

P	M	K	N	S	H
Steel N/mm ²	Stainless Steel N/mm ²	Cast and Ductile Iron N/mm ²	Non-ferrous Material N/mm ²	High Temperature Materials N/mm ²	Hardened Materials N/mm ²
<1365	<940	<1020	<855	<990	<1365



Technical Section - ASC 320™

Coolant Recommendations



SPEED AND FEED MULTIPLIER

Coolant Multiplier		
3.5 x Diameter	6 x Diameter	9 x Diameter
See above chart	1.5	2

The coolant pressure and flow rate recommendations above represents a good approximation to obtain optimum tool life and chip evacuation at AMEC® recommended speeds and feeds. For a more specific approximation of coolant requirements, consult the AMEC® Application Engineering Department. Although the above pressure and flow recommendations produce attractive tool life and chip evacuation, the ASC 320™ Solid Carbide High Penetration Drills will still function quite adequately if lower coolant capabilities exist. Call our Application Engineering Department for specific recommendations.

APPLICATION GUIDELINES

Always use the shortest drill the application will permit.
 When using 9 x diameter drills reduce feed rate on entry by 25%.
 Ensure work pieces and/or fixtures are secure and rigid – particularly on through hole operations.
 AMEC® recommends the use of hydraulic or collet chucks with precision sealed collets to hold its ASC320™ Solid Carbide Drill.
 Maximum TIR should be in the range of 0.006mm to 0.012mm.
 Please refer to our tool holding catalogue available on request or contact our **Application Helpline Tel: +44 (0)1384 400900**