



*sutton*tools

REAMERS

- Hand
- Machine (Morse Taper & Chucking)
- Bridge
- Taper Pin
- Morse Taper Socket
- Taper Pipe
- Adjustable



AlCrN: G6 generation coatings... a quantum leap in tool wear resistance

Aluminium Chromium Nitride

The latest tool coating formula is Aluminium Chromium Nitride (AlCrN). Coatings of this G6 generation developed, markedly expand the performance envelope versus conventional titanium based coatings (such as TiAlN, AlTiN or TiCN).

Unique coating properties

The AlCrN coating exhibits until now, an unmatched degree of oxidation resistance and hot hardness. These properties have triggered a quantum leap in tool wear resistance.

The bottom line: greater productivity!

Tools coated with AlCrN let you choose noticeably higher cutting speeds and allow you to more effectively exploit the potential of modern machine tools. You can produce more parts per time / unit to decisively boost the productivity of your manufacturing resources and hone your competitive edge.

Extraordinary performance gains have been demonstrated in dry and wet machining processes involving:










- Unalloyed steels
- High strength steels
- High hardness steels (up to 54 HRC)

Coating properties:

- Very high abrasion resistance
- High and constant temperature resistance
- Unrivalled oxidation resistance
- Titanium free coating

ISO	VDI	Material Group	Sutton
P	A	Steel	N
M	R	Stainless Steel	VA
K	F	Cast Iron	GG
N	N	Non-Ferrous Metals, Aluminiums & Coppers	Al W
S	S	Titaniums & Super Alloys	Ti Ni
H	H	Hard Materials (≥ 45 HRC)	H

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156	158	161	162	163	164	164	165	166
								
R100	R101	R102	R104	R105	R106	R107	R108	R109
HSS	HSS	HSS Co	HSS	HSS	HSS	HSS	HSS	TCA
Brt	Brt	Brt	Brt	Brt	Brt	Brt	Brt	Brt
N	N	N	N	N	Roughing	Finishing	Tapered Pipe	N
DIN 206 / ISO 236	DIN 208	DIN 212 / ISO 521	-	-	-	-	-	-
L10	L10	L10	L15	L7	L7	L7	L15	Straight

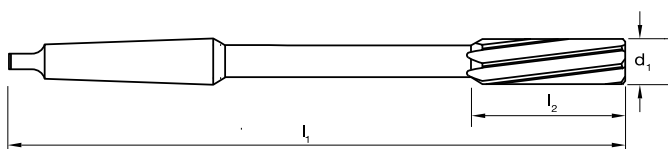
Catalogue Code
Material
Surface Finish
Sutton Designation
Standard
Geometry

ISO	VDI ³³²³	Material	Condition	HB	N/mm ²										
P	1	Steel - Non-alloy, cast & free cutting	~ 0.15 %C	A	125	440	●	●	●	●	●	●	●	●	●
	2			A	190	640	●	●	●	●	●	●	●	●	
	3		QT	250	840	●	●	●	●	●	●	●	○		
	4		A	270	910	●	●	●	●	●	●	●	○		
	5		QT	300	1010	○	○	○	○	○	○	○	○		
	6	Steel - Low alloy & cast < 5% of alloying elements		A	180	610	●	●	●	●	●	●	●	●	●
	7			QT	275	930	○	○	○	○	○	○	○	○	
	8			QT	300	1010	○	○	○	○	○	○	○	○	
	9			QT	350	1180	○	○	○	○	○	○	○	○	
	10	Steel - High alloy, cast & tool		A	200	680	○	○	○	○	○	○	○	○	
	11			HT	325	1100	○	○	○	○	○	○	○	○	
12	Steel - Corrosion resistant & cast	Ferritic / Martensitic	A	200	680	○	○	○	○	○	○	○	○		
13		Martensitic	QT	240	810	○	○	○	○	○	○	○	○		
M	14.1	Stainless Steel	Austenitic	AH	180	610	○	○	○	○	○	○	○	○	
	14.2		Duplex	250	840	○	○	○	○	○	○	○	○		
	14.3		Precipitation Hardening	250	840	○	○	○	○	○	○	○	○		
K	15	Cast Iron - Grey (GG)	Ferritic / Pearlitic		180	610	●	●	●	●	●	●	●	○	
	16		Pearlitic		260	880	○	○	○	○	○	○	○		
	17	Cast Iron - Nodular (GGG)	Ferritic		160	570	○	○	○	○	○	○	○		
	18		Pearlitic		250	840	○	○	○	○	○	○	○		
	19		Ferritic		130	460	○	○	○	○	○	○	○		
20	Cast Iron - Malleable	Pearlitic		230	780	○	○	○	○	○	○	○			
N	21	Aluminum & Magnesium - wrought alloy	Non Heat Treatable		60	210	○	○	○	○	○	○	○	○	
	22		Heat Treatable	AH	100	360	○	○	○	○	○	○	○		
	23	Aluminum & Magnesium - cast alloy ≤ 12% Si	Non Heat Treatable		75	270	○	○	○	○	○	○	○		
	24		Heat Treatable	AH	90	320	○	○	○	○	○	○	○		
	25		Non Heat Treatable		130	460	○	○	○	○	○	○	○		
	26	Copper & Cu alloys (Brass/Bronze)	Free cutting, Pb > 1%		110	390	○	○	○	○	○	○	○		
	27		Brass (CuZn, CuSnZn)		90	320	○	○	○	○	○	○	○		
	28		Bronze (CuSn)		100	360	○	○	○	○	○	○	○		
	29	Non-metallic - Thermosetting & fiber-reinforced plastics													
30	Non-metallic - Hard rubber, wood etc.														
S	31	High temp. alloys	Fe based	A	200	680									
	32			AH	280	950									
	33		Ni / Co based	A	250	840									
	34			AH	350	1180									
	35			C	320	1080									
	36	Titanium & Ti alloys	CP Titanium		400 MPa										
	37.1		Alpha alloys		860 MPa										
	37.2		Alpha / Beta alloys	A	960 MPa										
	37.3			AH	1170 MPa										
	37.4		Beta alloys	A	830 MPa										
37.5	AH			1400 MPa											
H	38.1	Hardened steel		HT	45 HRC										
	38.2			HT	55 HRC										
	39.1			HT	58 HRC										
	39.2			HT	62 HRC										
	40	Cast Iron	Chilled	C	400	1350	○	○	○	○	○	○	○		
41	HT			55 HRC											

Condition: A (Annealed), AH (Age Hardened), C (Cast), HT (Hardened & Tempered), QT (Quenched & Tempered)

● Optimal ○ Effective

- Machine use
- Suitable for toolroom & workshop use
- Produces clean, accurate holes, to a H7 tolerance



Catalogue Code	R101
Discount Group	B0302
Material	HSS
Surface Finish	Br
Sutton Designation	N
Geometry	L10

Size Ref.	d ₁	l ₁	l ₂	l ₃	d ₂	z	MT #	Item #	List Price
0600	6.000	138	26	-	-	6	1	R101 0600	\$95.62
0635	6.350	144	28	-	-	6	1	R101 0635	\$96.60
0650	6.500	144	28	-	-	6	1	R101 0650	\$100.05
0675	6.747	144	28	-	-	6	1	R101 0675	\$100.05
0700	7.000	150	31	-	-	6	1	R101 0700	\$100.05
0714	7.144	150	31	-	-	6	1	R101 0714	\$100.05
0750	7.500	150	31	-	-	6	1	R101 0750	\$100.05
0754	7.541	150	31	-	-	6	1	R101 0754	\$100.05
0794	7.938	156	33	-	-	6	1	R101 0794	\$100.05
0800	8.000	156	33	-	-	6	1	R101 0800	\$100.05
0833	8.334	156	33	-	-	6	1	R101 0833	\$100.05
0850	8.500	156	33	-	-	6	1	R101 0850	\$106.52
0873	8.731	162	36	-	-	6	1	R101 0873	\$106.52
0900	9.000	162	36	-	-	6	1	R101 0900	\$106.52
0913	9.128	162	36	-	-	6	1	R101 0913	\$109.30
0950	9.500	162	36	-	-	6	1	R101 0950	\$102.50
0953	9.525	162	36	-	-	6	1	R101 0953	\$109.30
0992	9.922	168	38	-	-	6	1	R101 0992	\$112.55
1000	10.000	168	38	-	-	6	1	R101 1000	\$102.50
1032	10.319	168	38	-	-	6	1	R101 1032	\$113.41
1050	10.500	168	38	-	-	6	1	R101 1050	\$129.71
1072	10.716	175	41	-	-	6	1	R101 1072	\$146.52
1100	11.000	175	41	-	-	6	1	R101 1100	\$129.71
1111	11.112	175	41	-	-	6	1	R101 1111	\$115.02
1150	11.500	175	41	-	-	6	1	R101 1150	\$139.91
1151	11.509	175	41	-	-	6	1	R101 1151	\$129.71
1191	11.906	175	41	-	-	6	1	R101 1191	\$119.47
1200	12.000	182	44	-	-	6	1	R101 1200	\$123.95
1230	12.303	182	44	-	-	6	1	R101 1230	\$169.01
1250	12.500	182	44	-	-	6	1	R101 1250	\$134.48
1270	12.700	182	44	-	-	6	1	R101 1270	\$119.47
1300	13.000	182	44	-	-	6	1	R101 1300	\$149.66
1310	13.097	182	44	-	-	6	1	R101 1310	\$169.01
1349	13.494	189	47	-	-	6	1	R101 1349	\$135.19
1350	13.500	189	47	-	-	6	1	R101 1350	\$182.82
1389	13.891	189	47	-	-	6	1	R101 1389	\$182.51
1400	14.000	189	47	-	-	8	1	R101 1400	\$149.66
1429	14.288	204	50	-	-	8	2	R101 1429	\$150.31
1450	14.500	204	50	-	-	8	2	R101 1450	\$201.52
1468	14.684	204	50	-	-	8	2	R101 1468	\$201.52

ISO	P										M			K			N							S							H																					
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41			
R101	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials ● Optimal ○ Effective

Reamers Adjustable

suttontools

- For use by hand with suitable wrench
- General purpose
- Adjustable size range
- TCA (Tungsten Chrome Alloy)



Catalogue Code
Discount Group
Material
Surface Finish
Sutton Designation
Geometry

R111	R112
B0304	B0304
TCA	TCA
Brt	Brt
-	-
Pilots	Nuts

Size Ref.	Size	Range (mm)	Range (inch)	Item #	List Price	Item #	List Price
1200	MA	12.00–13.50	15/32–17/32	R111 1200	\$179.24	R112 1200	\$16.35
1350	MB	13.50–15.00	17/32–19/32	R111 1350	\$191.61	R112 1350	\$16.35
1500	MC	15.00–16.75	19/32–21/32	R111 1500	\$197.79	R112 1500	\$21.95
1675	MD	16.75–18.25	21/32–23/32	R111 1675	\$210.09	R112 1675	\$21.95
1825	ME	18.25–19.75	23/32–25/32	R111 1825	\$219.43	R112 1825	\$21.95
1975	MF	19.75–21.50	25/32–27/32	R111 1975	\$228.71	R112 1975	\$21.95
2150	MG	21.50–23.75	27/32–15/16	R111 2150	\$241.06	R112 2150	\$24.12
2375	MH	23.75–27.00	15/16–1-1/16	R111 2375	\$253.43	R112 2375	\$27.51
2700	MI	27.00–30.25	1-1/16–1-3/16	R111 2700	\$268.91	R112 2700	\$31.53
3025	MJ	30.25–34.25	1-3/16–1-11/32	R111 3025	\$281.24	R112 3025	\$38.01
3425	MK	34.25–38.00	1-11/32–1-1/2	R111 3425	\$299.78	R112 3425	\$45.71
3800	ML	38.00–46.00	1-1/2–1-13/16	R111 3800	\$349.25	R112 3800	\$65.79
4600	MM	46.00–56.00	1-13/16–2-7/32			R112 4600	\$106.31
5600	MN	56.00–69.75	2-7/32–2-3/4			R112 5600	\$153.93
6975	MO	69.75–85.00	2-3/4–3-11/32			R112 6975	\$234.87

MA1 Adjustable Reamer Pilot Set

MA to MI (Pilots Only)

Pieces

9

R111 MA1

\$2,064.48



R111 MA1

