

S M P K

High Performance End Mills

X9C BALIQ® ALCRONOS Coating (AlCrN)

G9C BALIQ® TISINOS PRO Coating (AlTiSiN)

X9C Target Materials:

Stainless Steel (Inox, Austenitic/Martensitic)

Carbon Tools Steels (Up to 50 HRC)

Cast Iron

G9C Target Materials:

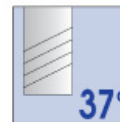
Heat Resistant Super Alloys

PH Stainless Steels (Inox, 13-8, 15-5, 17-4, Martensitic)

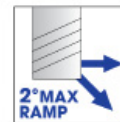
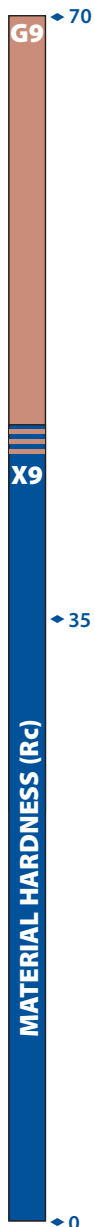
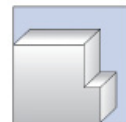
Conditioned Tool Steels (50-70 HRC)



Z=9



37°

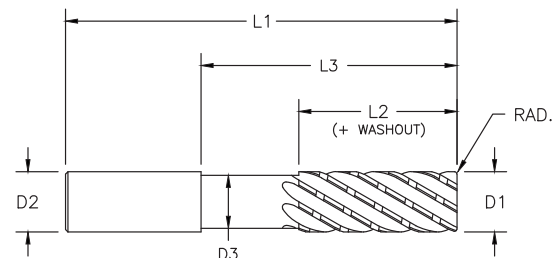
2° MAX
RAMP

X9C

G9C



CALCULATE IDEAL PARAMETERS
FOR THE X9C AND G9C IN YOUR
APPLICATION WITH THE GARR
TECHNICAL ADVISOR



← View the X9C

View the G9C →



TOLERANCES

d_1	$+0.000" - .002" (+.000\text{mm} - .050\text{mm})$
d_2	$h6$
r	$+0.001" - .001" (+.025 - .025\text{mm})$

THE NEXT GENERATION

Series X9C, G9C



TECH
PAGES
306-307

.5000" - .7500"
(12.700mm - 19.050mm)

X9C Recommended for Low, Medium, and High Carbon Tool Steels (up to 50 HRC), cast iron, and stainless steel (Inox).

G9C Recommended for tough machining materials such as Heat Resistant Super Alloys,
PH Stainless steels (Inox), and conditioned tool steels. (50-70 HRC)

9 Flute High Performance End Mills

X9C BALIQ® ALCRONOS Coating (AlCrN-based)

G9C BALIQ® TISINOS PRO Coating (AlTiSiN)

Solid submicron grain carbide - non-center cutting

Chip splitters

h6 shank tolerance

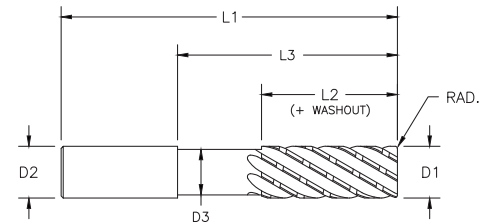
Engineered for High Efficiency Milling

Variable flute grind

Honed edge treatment

Polished fluting

Material and condition specific coatings



X9C EDP#	G9C EDP#	d_1 †			d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	r Corner Radius	d_3 Neck Diameter	l_3 Reach Length
		Decimal	Diameter	Metric						
31168	31167	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.015"	-	-
31172	31169	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.030"	-	-
31174	31171	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.015"	-	-
31176	31173	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.030"	-	-
31178	31175	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.060"	-	-
31182	31177	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.090"	-	-
31184	31179	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/2"	.020"	-	-
31186	31181	.6250	5/8"	15.875	5/8"	3-1/2"	1-5/8"	.020"	-	-
31188	31183	.6250	5/8"	15.875	5/8"	4"	1-7/8"	.030"	-	-
31190	31185	.6299		16.000	16	100	42	1.00	-	-
31192	31187	.6299		16.000	16	120	65	0.50	-	-
31194	31189	.6299		16.000	16	120	40	0.50	15.2	65
31196	31191	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.015"	-	-
31198	31193	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.030"	-	-
31200	31195	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.060"	-	-
31202	31197	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.120"	-	-
31204	31199	.7500	3/4"	19.050	3/4"	5"	2-1/4"	.030"	-	-

HIGH PERFORMANCE
END MILLS

70
G9
X9
35
MATERIAL HARDNESS (Rc)
0