

HIGH PERFORMANCE  
END MILLS

Series X9C, G9C

NEW  
SERIES

# SERIES HIGHLIGHT

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)

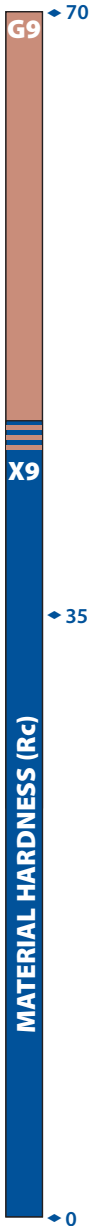
Cast Iron

### G9C Target Materials:

Heat Resistant Super Alloys

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

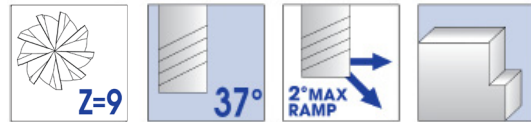
Conditioned Tool Steels (50-70 HRC)



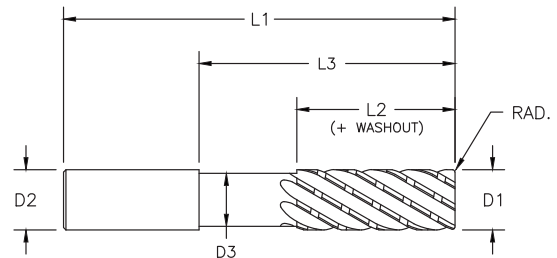
X9C



G9C



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



← View the X9C

View the G9C →



**TOLERANCES**

<i>d1</i>	+ .000" - .002" (+.000mm - .050mm)
<i>d2</i>	h6
<i>r</i>	+ .001" - .001" (+.025 - .025mm)

**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 - center cutting

Chip splitters

h6 shank tolerance

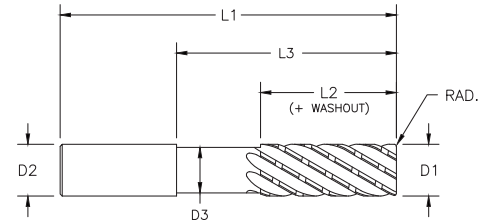
Engineered for High Efficiency Milling

Variable flute grind

Honed edge treatment

Polished fluting

Material and condition specific coatings



X9C EDP#	G9C EDP#	<i>d1</i> † Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>r</i> Corner Radius	<i>d3</i> Neck Diameter	<i>l3</i> Reach Length	LIST PRICE
		Decimal	Metric							
31168	31167	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.015"	-	100.29
31172	31169	.5000	1/2"	12.700	1/2"	3"	1-1/4"	.030"	-	100.29
31174	31171	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.015"	-	150.23
31176	31173	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.030"	-	150.23
31178	31175	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.060"	-	150.23
31182	31177	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/4"	.090"	-	150.23
31184	31179	.6250	5/8"	15.875	5/8"	3-1/2"	1-1/2"	.020"	-	150.23
31186	31181	.6250	5/8"	15.875	5/8"	3-1/2"	1-5/8"	.020"	-	150.23
31188	31183	.6250	5/8"	15.875	5/8"	4"	1-7/8"	.030"	-	158.25
31190	31185	.6299		16.000	16	100	42	1.00	-	167.51
31192	31187	.6299		16.000	16	120	65	0.50	-	207.75
31194	31189	.6299		16.000	16	120	40	0.50	15.2	211.65
31196	31191	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.015"	-	204.17
31198	31193	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.030"	-	204.17
31200	31195	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.060"	-	204.17
31202	31197	.7500	3/4"	19.050	3/4"	4"	1-1/2"	.120"	-	204.17
31204	31199	.7500	3/4"	19.050	3/4"	5"	2-1/4"	.030"	-	272.53

HIGH PERFORMANCE  
END MILLS

70  
G9  
X9  
35  
MATERIAL HARDNESS (Rc)  
0