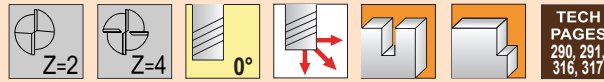


## Series 222M, 234M, 334MA

**TOLERANCES**

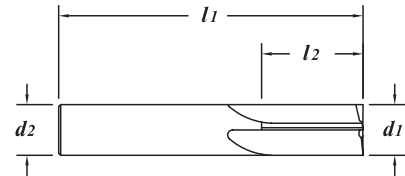
$d_1$	+0.000" - .002" (+.000 - .050mm)
$d_2$	h6
ball radius	+0.000" - .001" (+.000 - .025mm)



TECH PAGES  
290, 291,  
316, 317

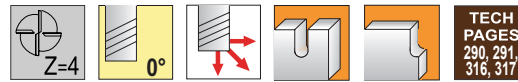
### Standard Length - Straight Flute - Square End

Solid submicron grain carbide end mill - center cutting  
For cutting high Rc materials  
Helps to hold perpendicularity



(222M) 2 Flute EDP#	(234M) 4 Flute EDP#	$d_1$ †		$d_2$ Shank Diameter	$l_1$ Overall Length	$l_2$ Flute Length	LIST PRICE
		Decimal	Diameter Metric				
81070	82070	.1250	1/8"	3.175	1/8"	1-1/2"	9.55
81110	82110	.1875	3/16"	4.763	3/16"	2"	13.39
81150	82150	.2500	1/4"	6.350	1/4"	2-1/2"	16.14
81190	82190	.3125	5/16"	7.938	5/16"	2-1/2"	22.63
81230	82230	.3750	3/8"	9.525	3/8"	2-1/2"	28.19
81270	82270	.4375	7/16"	11.113	7/16"	2-3/4"	34.40
81310	82310	.5000	1/2"	12.700	1/2"	3"	45.12
81330	82330	.6250	5/8"	15.875	5/8"	3-1/2"	87.08
81350	82350	.7500	3/4"	19.050	3/4"	4"	127.66
81370	82370	1.000	1"	25.400	1"	4"	210.05

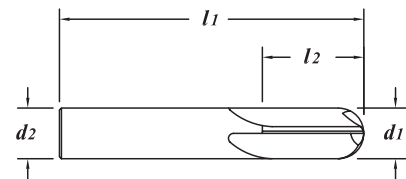
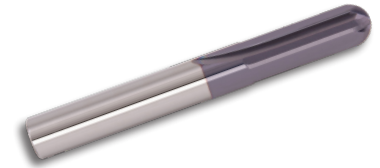
MATERIAL HARDNESS (Rc)  
70  
35  
0



TECH PAGES  
290, 291,  
316, 317

### Standard Length - Straight Flute - Ball End TiAlN Coating

Solid submicron grain carbide end mill - center cutting  
For cutting high Rc materials  
Helps to hold perpendicularity



(334MA) 4 Flute EDP#	$d_1$ †		$d_2$ Shank Diameter	$l_1$ Overall Length	$l_2$ Flute Length	LIST PRICE
	Decimal	Diameter Metric				
84077	.1250	1/8"	3.175	1/8"	1-1/2"	14.12
84115	.1875	3/16"	4.763	3/16"	2"	18.03
84157	.2500	1/4"	6.350	1/4"	2-1/2"	23.87
84237	.3750	3/8"	9.525	3/8"	2-1/2"	37.92