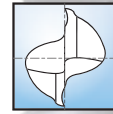
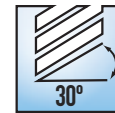
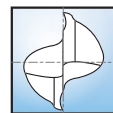


# 2 FLUTE LONG & X-LONG LENGTH TIALN COATED CARBIDE ENDMILLS - INCH



Long reach endmills combine added flute and overall length for greater reach capabilities when deep slotting or milling. TIALN coating increase speed and feed capabilities while enhancing tool life.

2 FLUTE LONG LENGTH - TIALN COATED					
Cutting Diameter (in.)	Shank Diameter (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
1/8	1/8	3/4	2-1/4	102-902	16.60
3/16	3/16	3/4	2-1/2	102-904	18.00
1/4	1/4	1-1/8	3	102-906	21.60
5/16	5/16	1-1/8	3	102-908	28.40
3/8	3/8	1-1/8	3	102-910	37.90
7/16	7/16	2	4	102-912	57.30
1/2	1/2	2	4	102-914	65.80
5/8	5/8	2-1/4	5	102-916	119.20
3/4	3/4	2-1/4	5	102-918	156.50
1	1	2-1/4	5	102-920	297.50



Extra Long reach endmills combine added flute and overall length for greater reach capabilities when deep slotting or milling. TIALN coating increase speed and feed capabilities while enhancing tool life.

2 FLUTE X-LONG LENGTH - TIALN COATED					
Cutting Diameter (in.)	Shank Diameter (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
1/8	1/8	1	3	102-500	17.10
3/16	3/16	1-1/8	3	102-502	18.80
1/4	1/4	1-1/2	4	102-504	23.80
5/16	5/16	1-5/8	4	102-506	34.00
3/8	3/8	1-3/4	4	102-508	40.60
7/16	7/16	3	6	102-510	83.90
1/2	1/2	3	6	102-512	86.10
5/8	5/8	3	6	102-514	140.10
3/4	3/4	3	6	102-516	183.70
1	1	3	6	102-518	412.20

cutting conditions				
Materials				Cutting Speed (SFM)
Main Group	Sub-Group	Condition	Hardness (HRC)	Cutting Speed (SFM)
Stainless Steels	300 Series,	Annealed	<29	200-350
	400 Series	Annealed	<29	200-350
Tool steels	01, A-2, D-2	Annealed	<35	150-250
	H-13, P-20			
Medium Carbon	1030, 1035, 1038, 1040, 1045, 1050	Normalized	<28	190-275
Alloyed high carbon	1065, 1070, 1080, 1090, 1095, 1561, 1572	Normalized	<32	150-250
High strength Titanium	4140, 4340	Normalized	<32	150-250
	Commercially pure	Annealed	<32	150-250

tolerances		
Size	Diameter	Shank Diameter
3/32 thru 1"	+ .000" - .002"	+ .0000" - .0005"

cutting speed (sfm)	
	100 150 200 250 300 350 400 450 500 550
Stainless Steel	100-350
Tool Steels	150-350
Medium Carbon	100-350
Alloyed High Carbon	100-350
High Strength	100-350
Titanium	100-350

hardness (hrc)	
	0 5 10 15 20 25 30 35 35 40
Stainless Steel	up to 29
Tool Steels	up to 35
Medium Carbon	up to 28
Alloyed High Carbon	up to 32
High Strength	up to 32
Titanium	up to 32

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