



Diameters:
0.250" - 1.00"

Cutting Edge Length:
0.500" - 2.00"

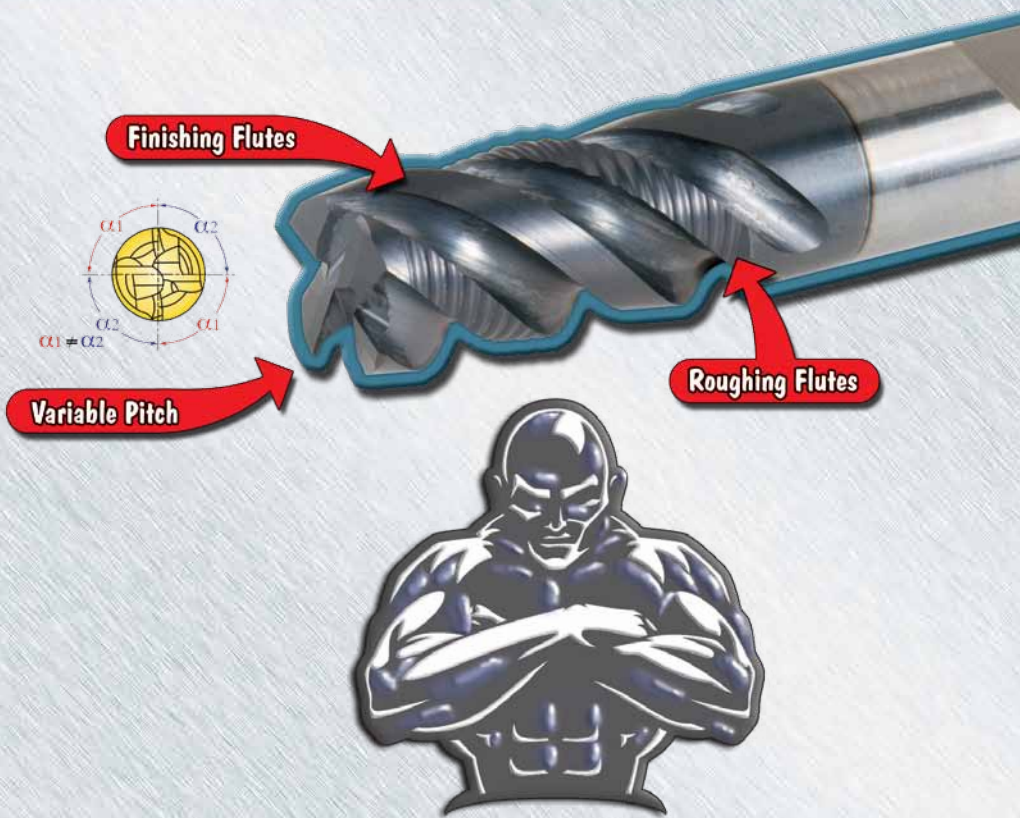
Overall Length:
2.50" - 5.00"

Number of Flutes:
4

Corner Configurations:
0.010" x 45° - 0.024" x 45°

Helix Angle:
45°

Grade:
IN2005
IN1005



Series 47C...RU 4-Flute 45° Rough-Fin Variable Pitch Endmill

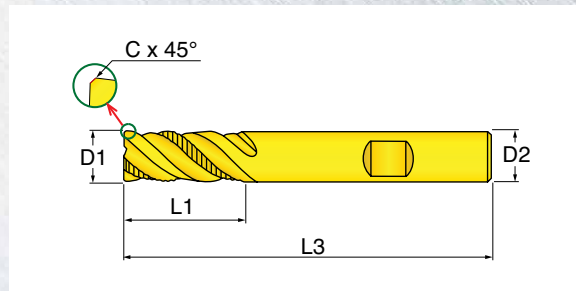
Ingersoll Series 47C...RU variable pitch endmills combine roughing and finishing endmills in a single tool. This unique tool design is equipped with two serrated flutes for roughing and two continuous flutes for finishing. This design results in a cutter that is capable of running at rough machining parameters and produces a finished quality surface.

Features and Benefits:

- 4 flutes with a 45° helix - two serrated flutes and two continuous flutes
- Excellent design to combat chatter and vibration
- All-effective flutes enable running at rough machining parameters, yet resulting in finish surface quality
- Reduces power consumption by 25-30%
- Suitable for all types of steel and high temperature alloys
- Up to 2XD in a full slot

ROUGHFIN® ROUNDS™ SERIES 47C...RU

SOLID CARBIDE END MILLS, COMBINATION ROUGHING/FINISHING



Grade	
IN2005	IN1005

P	M	K	N _(K)	S _(M)	H _(P/K)
+	+	+		+	



e9
h6



⊕ Preferred choice ○ Second choice

Cutter Number	Helix (deg)	D1 Diameter	Z Flutes	C Chamfer	L3 Overall Length	L1 Cut Length	D2 Shank Size/Style
47C-2550R6RU01	45	0.250	4	.010x45deg	2.50	0.50	.250" C
47C-3162R7RU01	45	0.312	4	.012x45deg	2.50	0.63	.312" C
47C-3775R8RU01	45	0.375	4	.012x45deg	3.00	0.75	.375" C
47C-377577RU01	45	0.375	4	.012x45deg	3.00	0.75	.375" W
47C-5010S4RU01	45	0.500	4	.016x45deg	3.00	1.00	.500" C
47C-501078RU01	45	0.500	4	.016x45deg	3.00	1.00	.500" W
47C-6212S6RU02	45	0.625	4	.024x45deg	3.50	1.25	.625" C
47C-621279RU02	45	0.625	4	.024x45deg	3.50	1.25	.625" W
47C-7515S7RU02	45	0.750	4	.024x45deg	4.00	1.50	.750" C
47C-751584RU02	45	0.750	4	.024x45deg	4.00	1.50	.750" W
47C-1020S1RU02	45	1.000	4	.024x45deg	5.00	2.00	1.000" C
47C-102080RU02	45	1.000	4	.024x45deg	5.00	2.00	1.000" W

ROUGHFIN® ROUNDS™ OPERATING GUIDELINES

ROUND LINE - STANDARD END MILLS - Series 47C

Workpiece Material	DC in	Cutting speed vc in/min		Feed rate per tooth fz ft/min		Cutting depth ap recomm. for	Cutting Width
		End mill		End mill		End mill in	Recommended ae %
		Full slot	Shoulder	Full slot	Shoulder		
Unalloyed steel P	.125-.250	300-600	450-800	.0006 - .0010	.0018 - .0030	.0500 x D	40%
	.312-.500	300-600	450-800	.0025 - .0040	.0040 - .0055	.0500 x D	40%
	.625-1.00	300-600	450-800	.0030 - .0040	.0060 - .0090	.0500 x D	40%
High Carbon steel < 1100N/mm ² P	.125-.250	250-500	325-725	.0006 - .0018	.0007 - .0025	.030 x D	30%
	.312-.500	300-600	400-650	.0020 - .0030	.0030 - .0040	.030 x D	30%
	.625-1.00	300-600	400-650	.0025 - .0040	.0040 - .0080	.030 x D	30%
Alloyed / Tool steel < 1400N/mm ² P	.125-.250	250-450	325-525	.0006 - .0018	.0007 - .0020	.030 x D	25%
	.312-.500	250-450	325-600	.0015 - .0028	.0028 - .0040	.030 x D	25%
	.625-1.00	250-450	325-600	.0020 - .0030	.0040 - .0070	.030 x D	25%
Stainless steel M	.125-.250	165-300	250-450	.0040 - .0007	.0040 - .0013	.030 x D	30%
	.312-.500	165-300	250-450	.0015 - .0025	.0028 - .0040	.030 x D	30%
	.625-1.00	165-300	250-450	.0025 - .0040	.0040 - .0080	.030 x D	30%
Gray cast iron K	.125-.250	325-525	500-975	.0006 - .0010	.0018 - .0030	.030 x D	40%
	.312-.500	325-525	500-900	.0025 - .0040	.0040 - .0055	.030 x D	40%
	.625-1.00	250-550	500-900	.0030 - .0040	.0060 - .0090	.030 x D	40%
Cast alloys K	.125-.250	250-550	400-650	.0006 - .0018	.0007 - .0025	.030 x D	30%
	.312-.500	250-550	400-650	.0020 - .0030	.0030 - .0040	.030 x D	30%
	.625-1.00	250-550	400-650	.0025 - .0040	.0040 - .0080	.030 x D	30%
Super alloys S	.125-.250	65-165	100-200	.0040 - .0060	.0040 - .0010	.020 x D	10%
	.312-.500	65-165	100-200	.0010 - .0020	.0020 - .0040	.020 x D	10%
	.625-1.00	65-165	100-200	.0020 - .0030	.0040 - .0070	.020 x D	10%
Hardened steel 48 - 54 HRC	.125-.250	130-325	200-400	.0006 - .0018	.0007 - .0020	.030 x D	25%
	.312-.500	130-325	200-400	.0015 - .0028	.0028 - .0040	.030 x D	25%
	.625-1.00	130-325	200-400	.0020 - .0030	.0040 - .0070	.030 x D	25%
Hardened steel 54 - 63 HRC	.125-.250	65-165	150-250	.0040 - .0007	.0040 - .0015	.027 x D	20%
	.312-.500	65-200	150-250	.0010 - .0020	.0020 - .0030	.027 x D	20%
	.625-1.00	65-200	150-250	.0015 - .0028	.0030 - .0060	.027 x D	20%
Hardened steel > 63 HRC	.125-.250	65-100	100-200	.0040 - .0040	.0040 - .0010	.024 x D	10%
	.312-.500	65-130	100-200	.0007 - .0015	.0015 - .0025	.024 x D	10%
	.625-1.00	65-130	100-200	.0010 - .0025	.0025 - .0060	.024 x D	10%