



RHINO ROUNDS™

MILLING PRODUCTS



Series

- RH1: RhinoRound Square-End
- RHB: RhinoRound Ball Nose

Info

- 4-Flutes
- Variable pitch
- Center cutting
- Stub, standard, long, XL, XXL and XXXL
- With & without relieved neck
- 38° helix
- Grade IN2205 - Nano-layered PVD-TiAlCN

Diameters

- .125", .187", .250", .312", .375", .437", .500", .625", .750", 1.000"

Corner Radii

- .000 (Sharp)
- .015, .030, .060, .090, .125, .250

Shanks

- Cylindrical (standard)
- Weldon Flat or Whistle Notch on request

Applications & Materials

- Conventional Milling
- High Efficiency Milling
- Steel, Stainless Steel & Cast Iron <= HRc 32

4-Flute Solid Carbide End Mills for General Machining

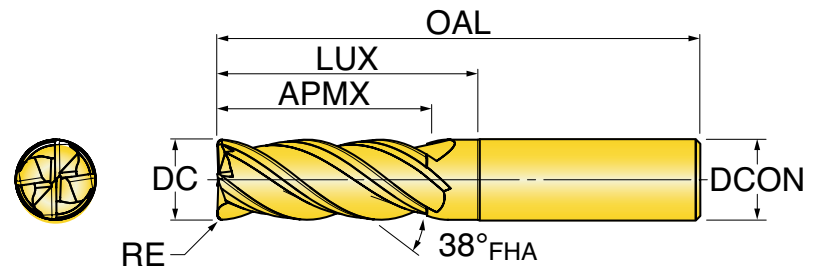
Ingersoll is pleased to introduce a new line of economically priced 4-flute solid carbide end mills for general purpose use. These 4-flute, variable pitch endmills are perfect for day-to-day or high production applications in steels, stainless steels and cast irons with hardness up to 32 HRc. The variable pitch design reduces vibration and a 38° helix provides a balance of strength, low cutting forces and excellent chip evacuation.

RhinoRound 4-flute tools are available as square end or ball nose, and all feature a perfectly balanced substrate that provides toughness and wear resistance. The unique slate-blue colored PVD-TiAlCN coating provides an excellent barrier against heat and wear, and acts as a lubricant to minimize build-up on the cutting edge.

Features & Benefits:

- 4-Flute, center-cutting, variable pitch with a 38° helix
- Square-end and ball nose options
- Very large selection including stub, standard, long, XL, XXL and XXXL, with & without relieved neck, and many corner radius options
- Grade IN2205 - Nano-layered PVD-TiAlCN features a unique slate blue color on a submicron substrate
- Economically priced!

RHINOROUNDS™ PART NUMBER IDENTIFICATION (AND TOLERANCES)



	Series	DC Cut Diameter	APMX Flute Length	LUX Usable Length Max.	No. of Flutes	RE Corner Radius	Shank Style	OAL Overall Length
		.000" / -.002"	+.062" / -.000"			+/- .003"		+/- .062"
Ex. 1	RH1-	.250	.750	.750	24	000	C	25
Ex. 2	RHB-	1.00	1.50	3.00	24	500	W	5

Example 1: RH1-.250.750.750Z4000C25

- RhinoRound RH1 series (square end)
- .250" Cutting Dia
- .750" Flute Length
- .750" Usable Length
- 4 Flutes
- Sharp Corner
- (C)ylindrical Shank
- 2.5" Overall Length

Example 2: RHB-1.001.503.00Z4500W5

- RhinoRound RHB series (ball nose)
- 1.00" Cutting Dia
- 1.50" Flute Length
- 3.00" Usable Length
- 4 Flutes
- .500" Corner Radius
- (W)eldon Flat
- 5" Overall Length

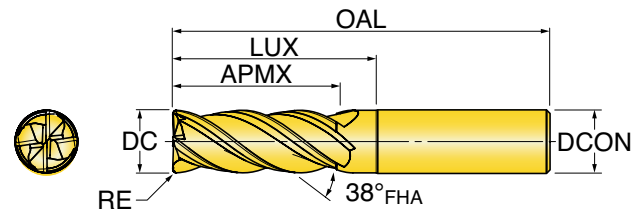
Additional Tolerances:

Shank Diameter: +.0001" / -.0004"
 TIR (Total Indicated Runout): .0005" max



RHINO ROUNDS™ SERIES RH1_4 (4-FLUTE, SQUARE END)

4 FLUTE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	RE Corner Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RH1-.125.500.500Z4000C15	RH1-.125.500.500Z4000W15	0.125	0.500	0.500	0.000	0.125	1.5	3.0
RH1-.125.500.500Z4015C15	RH1-.125.500.500Z4015W15	0.125	0.500	0.500	0.015	0.125	1.5	3.0
RH1-.125.500.500Z4030C15	RH1-.125.500.500Z4030W15	0.125	0.500	0.500	0.030	0.125	1.5	3.0
RH1-.187.625.625Z4000C2	RH1-.187.625.625Z4000W2	0.187	0.625	0.625	0.000	0.187	2.0	3.0
RH1-.187.625.625Z4015C2	RH1-.187.625.625Z4015W2	0.187	0.625	0.625	0.015	0.187	2.0	3.0
RH1-.187.625.625Z4030C2	RH1-.187.625.625Z4030W2	0.187	0.625	0.625	0.030	0.187	2.0	3.0
RH1-.250.375.375Z4000C2	RH1-.250.375.375Z4000W2	0.250	0.375	0.375	0.000	0.250	2.0	3.0
RH1-.250.375.375Z4015C2	RH1-.250.375.375Z4015W2	0.250	0.375	0.375	0.015	0.250	2.0	3.0
RH1-.250.375.375Z4030C2	RH1-.250.375.375Z4030W2	0.250	0.375	0.375	0.030	0.250	2.0	3.0
RH1-.250.375.375Z4060C2	RH1-.250.375.375Z4060W2	0.250	0.375	0.375	0.060	0.250	2.0	3.0
RH1-.250.5001.25Z4000C3	RH1-.250.5001.25Z4000W3	0.250	0.500	1.250	0.000	0.250	3.0	3.0
RH1-.250.5001.25Z4015C3	RH1-.250.5001.25Z4015W3	0.250	0.500	1.250	0.015	0.250	3.0	3.0
RH1-.250.5001.25Z4030C3	RH1-.250.5001.25Z4030W3	0.250	0.500	1.250	0.030	0.250	3.0	3.0
RH1-.250.5001.25Z4060C3	RH1-.250.5001.25Z4060W3	0.250	0.500	1.250	0.060	0.250	3.0	3.0
RH1-.250.5002.12Z4000C4	RH1-.250.5002.12Z4000W4	0.250	0.500	2.125	0.000	0.250	4.0	3.0
RH1-.250.5002.12Z4015C4	RH1-.250.5002.12Z4015W4	0.250	0.500	2.125	0.015	0.250	4.0	3.0
RH1-.250.5002.12Z4030C4	RH1-.250.5002.12Z4030W4	0.250	0.500	2.125	0.030	0.250	4.0	3.0
RH1-.250.5002.12Z4060C4	RH1-.250.5002.12Z4060W4	0.250	0.500	2.125	0.060	0.250	4.0	3.0
RH1-.250.750.750Z4000C25	RH1-.250.750.750Z4000W25	0.250	0.750	0.750	0.000	0.250	2.5	3.0
RH1-.250.750.750Z4015C25	RH1-.250.750.750Z4015W25	0.250	0.750	0.750	0.015	0.250	2.5	3.0
RH1-.250.750.750Z4030C25	RH1-.250.750.750Z4030W25	0.250	0.750	0.750	0.030	0.250	2.5	3.0
RH1-.250.750.750Z4060C25	RH1-.250.750.750Z4060W25	0.250	0.750	0.750	0.060	0.250	2.5	3.0
RH1-.2501.00.100Z4000C3	RH1-.2501.00.100Z4000W3	0.250	1.000	1.000	0.000	0.250	3.0	3.0
RH1-.2501.00.100Z4015C3	RH1-.2501.00.100Z4015W3	0.250	1.000	1.000	0.015	0.250	3.0	3.0
RH1-.2501.00.100Z4030C3	RH1-.2501.00.100Z4030W3	0.250	1.000	1.000	0.030	0.250	3.0	3.0
RH1-.2501.00.100Z4060C3	RH1-.2501.00.100Z4060W3	0.250	1.000	1.000	0.060	0.250	3.0	3.0
RH1-.2501.251.25Z4000C4	RH1-.2501.251.25Z4000W4	0.250	1.250	1.250	0.000	0.250	4.0	3.0
RH1-.2501.251.25Z4015C4	RH1-.2501.251.25Z4015W4	0.250	1.250	1.250	0.015	0.250	4.0	3.0
RH1-.2501.251.25Z4030C4	RH1-.2501.251.25Z4030W4	0.250	1.250	1.250	0.030	0.250	4.0	3.0
RH1-.2501.251.25Z4060C4	RH1-.2501.251.25Z4060W4	0.250	1.250	1.250	0.060	0.250	4.0	3.0

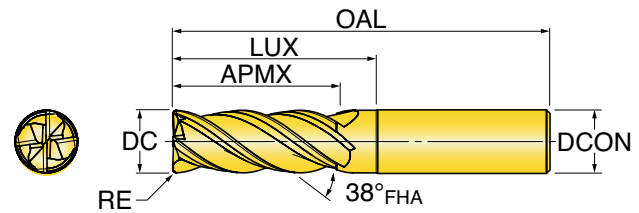
*Non-stock item. Built on request.

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RHINO ROUNDS™ SERIES RH1_4 (4-FLUTE, SQUARE END)

4 FLUTE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	RE Corner Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RH1-.2501.751.75Z4000C4	RH1-.2501.751.75Z4000W4	0.250	1.750	1.750	0.000	0.250	4.0	3.0
RH1-.2501.751.75Z4015C4	RH1-.2501.751.75Z4015W4	0.250	1.750	1.750	0.015	0.250	4.0	3.0
RH1-.2501.751.75Z4030C4	RH1-.2501.751.75Z4030W4	0.250	1.750	1.750	0.030	0.250	4.0	3.0
RH1-.2501.751.75Z4060C4	RH1-.2501.751.75Z4060W4	0.250	1.750	1.750	0.060	0.250	4.0	3.0
RH1-.312.500.500Z4000C2	RH1-.312.500.500Z4000W2	0.312	0.500	0.500	0.000	0.312	2.0	3.0
RH1-.312.500.500Z4015C2	RH1-.312.500.500Z4015W2	0.312	0.500	0.500	0.015	0.312	2.0	3.0
RH1-.312.500.500Z4030C2	RH1-.312.500.500Z4030W2	0.312	0.500	0.500	0.030	0.312	2.0	3.0
RH1-.312.500.500Z4060C2	RH1-.312.500.500Z4060W2	0.312	0.500	0.500	0.060	0.312	2.0	3.0
RH1-.312.875.875Z4000C25	RH1-.312.875.875Z4000W25	0.312	0.875	0.875	0.000	0.312	2.5	3.0
RH1-.312.875.875Z4015C25	RH1-.312.875.875Z4015W25	0.312	0.875	0.875	0.015	0.312	2.5	3.0
RH1-.312.875.875Z4030C25	RH1-.312.875.875Z4030W25	0.312	0.875	0.875	0.030	0.312	2.5	3.0
RH1-.312.875.875Z4060C25	RH1-.312.875.875Z4060W25	0.312	0.875	0.875	0.060	0.312	2.5	3.0
RH1-.3121.001.00Z4000C3	RH1-.3121.001.00Z4000W3	0.312	1.000	1.000	0.000	0.312	3.0	3.0
RH1-.3121.001.00Z4015C3	RH1-.3121.001.00Z4015W3	0.312	1.000	1.000	0.015	0.312	3.0	3.0
RH1-.3121.001.00Z4030C3	RH1-.3121.001.00Z4030W3	0.312	1.000	1.000	0.030	0.312	3.0	3.0
RH1-.3121.001.00Z4060C3	RH1-.3121.001.00Z4060W3	0.312	1.000	1.000	0.060	0.312	3.0	3.0
RH1-.3121.251.25Z4000C4	RH1-.3121.251.25Z4000W4	0.312	1.250	1.250	0.000	0.312	4.0	3.0
RH1-.3121.251.25Z4015C4	RH1-.3121.251.25Z4015W4	0.312	1.250	1.250	0.015	0.312	4.0	3.0
RH1-.3121.251.25Z4030C4	RH1-.3121.251.25Z4030W4	0.312	1.250	1.250	0.030	0.312	4.0	3.0
RH1-.3121.251.25Z4060C4	RH1-.3121.251.25Z4060W4	0.312	1.250	1.250	0.060	0.312	4.0	3.0
RH1-.3121.621.62Z4000C4	RH1-.3121.621.62Z4000W4	0.312	1.625	1.625	0.000	0.312	4.0	3.0
RH1-.3121.621.62Z4015C4	RH1-.3121.621.62Z4015W4	0.312	1.625	1.625	0.015	0.312	4.0	3.0
RH1-.3121.621.62Z4030C4	RH1-.3121.621.62Z4030W4	0.312	1.625	1.625	0.030	0.312	4.0	3.0
RH1-.3121.621.62Z4060C4	RH1-.3121.621.62Z4060W4	0.312	1.625	1.625	0.060	0.312	4.0	3.0
RH1-.375.500.500Z4000C2	RH1-.375.500.500Z4000W2	0.375	0.500	0.500	0.000	0.375	2.0	3.0
RH1-.375.500.500Z4015C2	RH1-.375.500.500Z4015W2	0.375	0.500	0.500	0.015	0.375	2.0	3.0
RH1-.375.500.500Z4030C2	RH1-.375.500.500Z4030W2	0.375	0.500	0.500	0.030	0.375	2.0	3.0
RH1-.375.500.500Z4060C2	RH1-.375.500.500Z4060W2	0.375	0.500	0.500	0.060	0.375	2.0	3.0
RH1-.375.7501.25Z4000C3	RH1-.375.7501.25Z4000W3	0.375	0.750	1.250	0.000	0.375	3.0	3.0
RH1-.375.7501.25Z4015C3	RH1-.375.7501.25Z4015W3	0.375	0.750	1.250	0.015	0.375	3.0	3.0

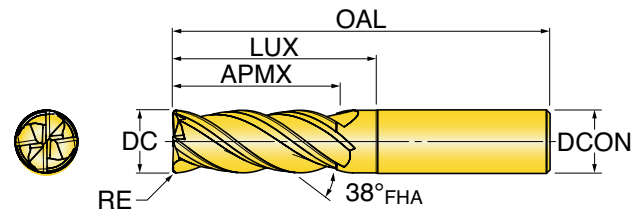
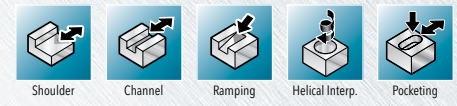
*Non-stock item. Built on request.

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RHINO ROUNDS™ SERIES RH1_4 (4-FLUTE, SQUARE END)

4 FLUTE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	RE Corner Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RH1-.375.7501.25Z4030C3	RH1-.375.7501.25Z4030W3	0.375	0.750	1.250	0.030	0.375	3.0	3.0
RH1-.375.7501.25Z4060C3	RH1-.375.7501.25Z4060W3	0.375	0.750	1.250	0.060	0.375	3.0	3.0
RH1-.375.7502.12Z4000C4	RH1-.375.7502.12Z4000W4	0.375	0.750	2.125	0.000	0.375	4.0	3.0
RH1-.375.7502.12Z4015C4	RH1-.375.7502.12Z4015W4	0.375	0.750	2.125	0.015	0.375	4.0	3.0
RH1-.375.7502.12Z4030C4	RH1-.375.7502.12Z4030W4	0.375	0.750	2.125	0.030	0.375	4.0	3.0
RH1-.375.7502.12Z4060C4	RH1-.375.7502.12Z4060W4	0.375	0.750	2.125	0.060	0.375	4.0	3.0
RH1-.3751.001.00Z4000C25	RH1-.3751.001.00Z4000W25	0.375	1.000	1.000	0.000	0.375	2.5	3.0
RH1-.3751.001.00Z4000C3	RH1-.3751.001.00Z4000W3	0.375	1.000	1.000	0.000	0.375	3.0	3.0
RH1-.3751.001.00Z4015C25	RH1-.3751.001.00Z4015W25	0.375	1.000	1.000	0.015	0.375	2.5	3.0
RH1-.3751.001.00Z4015C3	RH1-.3751.001.00Z4015W3	0.375	1.000	1.000	0.015	0.375	3.0	3.0
RH1-.3751.001.00Z4030C25	RH1-.3751.001.00Z4030W25	0.375	1.000	1.000	0.030	0.375	2.5	3.0
RH1-.3751.001.00Z4030C3	RH1-.3751.001.00Z4030W3	0.375	1.000	1.000	0.030	0.375	3.0	3.0
RH1-.3751.001.00Z4060C25	RH1-.3751.001.00Z4060W25	0.375	1.000	1.000	0.060	0.375	2.5	3.0
RH1-.3751.001.00Z4060C3	RH1-.3751.001.00Z4060W3	0.375	1.000	1.000	0.060	0.375	3.0	3.0
RH1-.3751.501.50Z4000C4	RH1-.3751.501.50Z4000W4	0.375	1.500	1.500	0.000	0.375	4.0	3.0
RH1-.3751.501.50Z4015C4	RH1-.3751.501.50Z4015W4	0.375	1.500	1.500	0.015	0.375	4.0	3.0
RH1-.3751.501.50Z4030C4	RH1-.3751.501.50Z4030W4	0.375	1.500	1.500	0.030	0.375	4.0	3.0
RH1-.3751.501.50Z4060C4	RH1-.3751.501.50Z4060W4	0.375	1.500	1.500	0.060	0.375	4.0	3.0
RH1-.3752.502.50Z4000C5	RH1-.3752.502.50Z4000W5	0.375	2.500	2.500	0.000	0.375	5.0	3.0
RH1-.3752.502.50Z4015C5	RH1-.3752.502.50Z4015W5	0.375	2.500	2.500	0.015	0.375	5.0	3.0
RH1-.3752.502.50Z4030C5	RH1-.3752.502.50Z4030W5	0.375	2.500	2.500	0.030	0.375	5.0	3.0
RH1-.3752.502.50Z4060C5	RH1-.3752.502.50Z4060W5	0.375	2.500	2.500	0.060	0.375	5.0	3.0
RH1-.437.625.625Z4000C27	RH1-.437.625.625Z4000W27	0.437	0.625	0.625	0.000	0.437	2.8	3.0
RH1-.437.625.625Z4015C27	RH1-.437.625.625Z4015W27	0.437	0.625	0.625	0.015	0.437	2.8	3.0
RH1-.437.625.625Z4030C27	RH1-.437.625.625Z4030W27	0.437	0.625	0.625	0.030	0.437	2.8	3.0
RH1-.437.625.625Z4060C27	RH1-.437.625.625Z4060W27	0.437	0.625	0.625	0.060	0.437	2.8	3.0
RH1-.4371.001.00Z4000C27	RH1-.4371.001.00Z4000W27	0.437	1.000	1.000	0.000	0.437	2.8	3.0
RH1-.4371.001.00Z4015C27	RH1-.4371.001.00Z4015W27	0.437	1.000	1.000	0.015	0.437	2.8	3.0
RH1-.4371.001.00Z4030C27	RH1-.4371.001.00Z4030W27	0.437	1.000	1.000	0.030	0.437	2.8	3.0
RH1-.4371.001.00Z4060C27	RH1-.4371.001.00Z4060W27	0.437	1.000	1.000	0.060	0.437	2.8	3.0

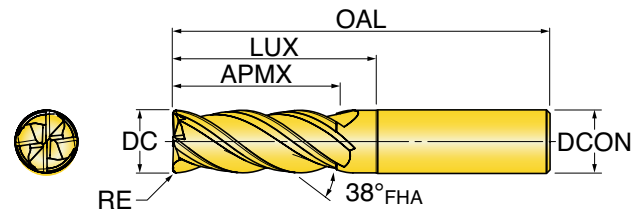
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RHINO ROUNDS™ SERIES RH1_4 (4-FLUTE, SQUARE END)

4 FLUTE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	RE Corner Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RH1-.4371.501.50Z4000C4	RH1-.4371.501.50Z4000W4	0.437	1.500	1.500	0.000	0.437	4.0	3.0
RH1-.4371.501.50Z4015C4	RH1-.4371.501.50Z4015W4	0.437	1.500	1.500	0.015	0.437	4.0	3.0
RH1-.4371.501.50Z4030C4	RH1-.4371.501.50Z4030W4	0.437	1.500	1.500	0.030	0.437	4.0	3.0
RH1-.4371.501.50Z4060C4	RH1-.4371.501.50Z4060W4	0.437	1.500	1.500	0.060	0.437	4.0	3.0
RH1-.4373.003.00Z4000C6	RH1-.4373.003.00Z4000W6	0.437	3.000	3.000	0.000	0.437	6.0	3.0
RH1-.4373.003.00Z4015C6	RH1-.4373.003.00Z4015W6	0.437	3.000	3.000	0.015	0.437	6.0	3.0
RH1-.4373.003.00Z4030C6	RH1-.4373.003.00Z4030W6	0.437	3.000	3.000	0.030	0.437	6.0	3.0
RH1-.4373.003.00Z4060C6	RH1-.4373.003.00Z4060W6	0.437	3.000	3.000	0.060	0.437	6.0	3.0
RH1-.500.625.625Z4000C25	RH1-.500.625.625Z4000W25	0.500	0.625	0.625	0.000	0.500	2.5	3.0
RH1-.500.625.625Z4015C25	RH1-.500.625.625Z4015W25	0.500	0.625	0.625	0.015	0.500	2.5	3.0
RH1-.500.625.625Z4030C25	RH1-.500.625.625Z4030W25	0.500	0.625	0.625	0.030	0.500	2.5	3.0
RH1-.500.625.625Z4060C25	RH1-.500.625.625Z4060W25	0.500	0.625	0.625	0.060	0.500	2.5	3.0
RH1-.500.625.625Z4090C25	RH1-.500.625.625Z4090W25	0.500	0.625	0.625	0.090	0.500	2.5	3.0
RH1-.500.625.625Z4125C25	RH1-.500.625.625Z4125W25	0.500	0.625	0.625	0.125	0.500	2.5	3.0
RH1-.500.8751.37Z4000C3	RH1-.500.8751.37Z4000W3	0.500	0.875	1.375	0.000	0.500	3.0	3.0
RH1-.500.8751.37Z4015C3	RH1-.500.8751.37Z4015W3	0.500	0.875	1.375	0.015	0.500	3.0	3.0
RH1-.500.8751.37Z4030C3	RH1-.500.8751.37Z4030W3	0.500	0.875	1.375	0.030	0.500	3.0	3.0
RH1-.500.8751.37Z4060C3	RH1-.500.8751.37Z4060W3	0.500	0.875	1.375	0.060	0.500	3.0	3.0
RH1-.500.8751.37Z4090C3	RH1-.500.8751.37Z4090W3	0.500	0.875	1.375	0.090	0.500	3.0	3.0
RH1-.500.8751.37Z4125C3	RH1-.500.8751.37Z4125W3	0.500	0.875	1.375	0.125	0.500	3.0	3.0
RH1-.500.8752.12Z4000C4	RH1-.500.8752.12Z4000W4	0.500	0.875	2.125	0.000	0.500	4.0	3.0
RH1-.500.8752.12Z4015C4	RH1-.500.8752.12Z4015W4	0.500	0.875	2.125	0.015	0.500	4.0	3.0
RH1-.500.8752.12Z4030C4	RH1-.500.8752.12Z4030W4	0.500	0.875	2.125	0.030	0.500	4.0	3.0
RH1-.500.8752.12Z4060C4	RH1-.500.8752.12Z4060W4	0.500	0.875	2.125	0.060	0.500	4.0	3.0
RH1-.500.8752.12Z4090C4	RH1-.500.8752.12Z4090W4	0.500	0.875	2.125	0.090	0.500	4.0	3.0
RH1-.500.8752.12Z4125C4	RH1-.500.8752.12Z4125W4	0.500	0.875	2.125	0.125	0.500	4.0	3.0
RH1-.500.8753.12Z4000C5	RH1-.500.8753.12Z4000W5	0.500	0.875	3.125	0.000	0.500	5.0	3.0
RH1-.500.8753.12Z4015C5	RH1-.500.8753.12Z4015W5	0.500	0.875	3.125	0.015	0.500	5.0	3.0
RH1-.500.8753.12Z4030C5	RH1-.500.8753.12Z4030W5	0.500	0.875	3.125	0.030	0.500	5.0	3.0
RH1-.500.8753.12Z4060C5	RH1-.500.8753.12Z4060W5	0.500	0.875	3.125	0.060	0.500	5.0	3.0

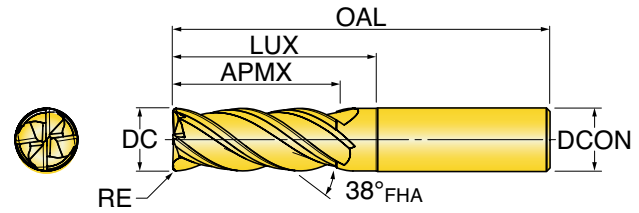
*Non-stock item. Built on request.

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RHINO ROUNDS™ SERIES RH1_4 (4-FLUTE, SQUARE END)

4 FLUTE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	RE Corner Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RH1-.500.8753.12Z4090C5	RH1-.500.8753.12Z4090W5	0.500	0.875	3.125	0.090	0.500	5.0	3.0
RH1-.500.8753.12Z4125C5	RH1-.500.8753.12Z4125W5	0.500	0.875	3.125	0.125	0.500	5.0	3.0
RH1-.500.8754.12Z4000C6	RH1-.500.8754.12Z4000W6	0.500	0.875	4.125	0.000	0.500	6.0	3.0
RH1-.500.8754.12Z4015C6	RH1-.500.8754.12Z4015W6	0.500	0.875	4.125	0.015	0.500	6.0	3.0
RH1-.500.8754.12Z4030C6	RH1-.500.8754.12Z4030W6	0.500	0.875	4.125	0.030	0.500	6.0	3.0
RH1-.500.8754.12Z4060C6	RH1-.500.8754.12Z4060W6	0.500	0.875	4.125	0.060	0.500	6.0	3.0
RH1-.500.8754.12Z4090C6	RH1-.500.8754.12Z4090W6	0.500	0.875	4.125	0.090	0.500	6.0	3.0
RH1-.500.8754.12Z4125C6	RH1-.500.8754.12Z4125W6	0.500	0.875	4.125	0.125	0.500	6.0	3.0
RH1-.5001.001.00Z4000C3	RH1-.5001.001.00Z4000W3	0.500	1.000	1.000	0.000	0.500	3.0	3.0
RH1-.5001.001.00Z4015C3	RH1-.5001.001.00Z4015W3	0.500	1.000	1.000	0.015	0.500	3.0	3.0
RH1-.5001.001.00Z4030C3	RH1-.5001.001.00Z4030W3	0.500	1.000	1.000	0.030	0.500	3.0	3.0
RH1-.5001.001.00Z4060C3	RH1-.5001.001.00Z4060W3	0.500	1.000	1.000	0.060	0.500	3.0	3.0
RH1-.5001.001.00Z4090C3	RH1-.5001.001.00Z4090W3	0.500	1.000	1.000	0.090	0.500	3.0	3.0
RH1-.5001.001.00Z4125C3	RH1-.5001.001.00Z4125W3	0.500	1.000	1.000	0.125	0.500	3.0	3.0
RH1-.5001.251.25Z4000C3	RH1-.5001.251.25Z4000W3	0.500	1.250	1.250	0.000	0.500	3.0	3.0
RH1-.5001.251.25Z4015C3	RH1-.5001.251.25Z4015W3	0.500	1.250	1.250	0.015	0.500	3.0	3.0
RH1-.5001.251.25Z4030C3	RH1-.5001.251.25Z4030W3	0.500	1.250	1.250	0.030	0.500	3.0	3.0
RH1-.5001.251.25Z4060C3	RH1-.5001.251.25Z4060W3	0.500	1.250	1.250	0.060	0.500	3.0	3.0
RH1-.5001.251.25Z4090C3	RH1-.5001.251.25Z4090W3	0.500	1.250	1.250	0.090	0.500	3.0	3.0
RH1-.5001.251.25Z4125C3	RH1-.5001.251.25Z4125W3	0.500	1.250	1.250	0.125	0.500	3.0	3.0
RH1-.5001.501.50Z4000C4	RH1-.5001.501.50Z4000W4	0.500	1.500	1.500	0.000	0.500	4.0	3.0
RH1-.5001.501.50Z4015C4	RH1-.5001.501.50Z4015W4	0.500	1.500	1.500	0.015	0.500	4.0	3.0
RH1-.5001.501.50Z4030C4	RH1-.5001.501.50Z4030W4	0.500	1.500	1.500	0.030	0.500	4.0	3.0
RH1-.5001.501.50Z4060C4	RH1-.5001.501.50Z4060W4	0.500	1.500	1.500	0.060	0.500	4.0	3.0
RH1-.5001.501.50Z4090C4	RH1-.5001.501.50Z4090W4	0.500	1.500	1.500	0.090	0.500	4.0	3.0
RH1-.5001.501.50Z4125C4	RH1-.5001.501.50Z4125W4	0.500	1.500	1.500	0.125	0.500	4.0	3.0
RH1-.5002.002.00Z4000C4	RH1-.5002.002.00Z4000W4	0.500	2.000	2.000	0.000	0.500	4.0	3.0
RH1-.5002.002.00Z4015C4	RH1-.5002.002.00Z4015W4	0.500	2.000	2.000	0.015	0.500	4.0	3.0
RH1-.5002.002.00Z4030C4	RH1-.5002.002.00Z4030W4	0.500	2.000	2.000	0.030	0.500	4.0	3.0
RH1-.5002.002.00Z4060C4	RH1-.5002.002.00Z4060W4	0.500	2.000	2.000	0.060	0.500	4.0	3.0

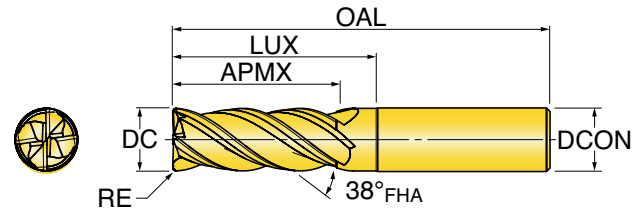
*Non-stock item. Built on request.

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RHINO ROUNDS™ SERIES RH1_4 (4-FLUTE, SQUARE END)

4 FLUTE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	RE Corner Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RH1-.5002.002.00Z4090C4	RH1-.5002.002.00Z4090W4	0.500	2.000	2.000	0.090	0.500	4.0	3.0
RH1-.5002.002.00Z4125C4	RH1-.5002.002.00Z4125W4	0.500	2.000	2.000	0.125	0.500	4.0	3.0
RH1-.5002.502.50Z4000C5	RH1-.5002.502.50Z4000W5	0.500	2.500	2.500	0.000	0.500	5.0	3.0
RH1-.5002.502.50Z4015C5	RH1-.5002.502.50Z4015W5	0.500	2.500	2.500	0.015	0.500	5.0	3.0
RH1-.5002.502.50Z4030C5	RH1-.5002.502.50Z4030W5	0.500	2.500	2.500	0.030	0.500	5.0	3.0
RH1-.5002.502.50Z4060C5	RH1-.5002.502.50Z4060W5	0.500	2.500	2.500	0.060	0.500	5.0	3.0
RH1-.5002.502.50Z4090C5	RH1-.5002.502.50Z4090W5	0.500	2.500	2.500	0.090	0.500	5.0	3.0
RH1-.5002.502.50Z4125C5	RH1-.5002.502.50Z4125W5	0.500	2.500	2.500	0.125	0.500	5.0	3.0
RH1-.5003.003.00Z4000C6	RH1-.5003.003.00Z4000W6	0.500	3.000	3.000	0.000	0.500	6.0	3.0
RH1-.5003.003.00Z4015C6	RH1-.5003.003.00Z4015W6	0.500	3.000	3.000	0.015	0.500	6.0	3.0
RH1-.5003.003.00Z4030C6	RH1-.5003.003.00Z4030W6	0.500	3.000	3.000	0.030	0.500	6.0	3.0
RH1-.5003.003.00Z4060C6	RH1-.5003.003.00Z4060W6	0.500	3.000	3.000	0.060	0.500	6.0	3.0
RH1-.5003.003.00Z4090C6	RH1-.5003.003.00Z4090W6	0.500	3.000	3.000	0.090	0.500	6.0	3.0
RH1-.5003.003.00Z4125C6	RH1-.5003.003.00Z4125W6	0.500	3.000	3.000	0.125	0.500	6.0	3.0
RH1-.625.750.750Z4000C3	RH1-.625.750.750Z4000W3	0.625	0.750	0.750	0.000	0.625	3.0	3.0
RH1-.625.750.750Z4015C3	RH1-.625.750.750Z4015W3	0.625	0.750	0.750	0.015	0.625	3.0	3.0
RH1-.625.750.750Z4030C3	RH1-.625.750.750Z4030W3	0.625	0.750	0.750	0.030	0.625	3.0	3.0
RH1-.625.750.750Z4060C3	RH1-.625.750.750Z4060W3	0.625	0.750	0.750	0.060	0.625	3.0	3.0
RH1-.625.750.750Z4090C3	RH1-.625.750.750Z4090W3	0.625	0.750	0.750	0.090	0.625	3.0	3.0
RH1-.625.750.750Z4125C3	RH1-.625.750.750Z4125W3	0.625	0.750	0.750	0.125	0.625	3.0	3.0
RH1-.6251.002.00Z4000C4	RH1-.6251.002.00Z4000W4	0.625	1.000	2.000	0.000	0.625	4.0	3.0
RH1-.6251.002.00Z4015C4	RH1-.6251.002.00Z4015W4	0.625	1.000	2.000	0.015	0.625	4.0	3.0
RH1-.6251.002.00Z4030C4	RH1-.6251.002.00Z4030W4	0.625	1.000	2.000	0.030	0.625	4.0	3.0
RH1-.6251.002.00Z4060C4	RH1-.6251.002.00Z4060W4	0.625	1.000	2.000	0.060	0.625	4.0	3.0
RH1-.6251.002.00Z4090C4	RH1-.6251.002.00Z4090W4	0.625	1.000	2.000	0.090	0.625	4.0	3.0
RH1-.6251.002.00Z4125C4	RH1-.6251.002.00Z4125W4	0.625	1.000	2.000	0.125	0.625	4.0	3.0
RH1-.6251.003.00Z4000C5	RH1-.6251.003.00Z4000W5	0.625	1.000	3.000	0.000	0.625	5.0	3.0
RH1-.6251.003.00Z4015C5	RH1-.6251.003.00Z4015W5	0.625	1.000	3.000	0.015	0.625	5.0	3.0
RH1-.6251.003.00Z4030C5	RH1-.6251.003.00Z4030W5	0.625	1.000	3.000	0.030	0.625	5.0	3.0
RH1-.6251.003.00Z4060C5	RH1-.6251.003.00Z4060W5	0.625	1.000	3.000	0.060	0.625	5.0	3.0

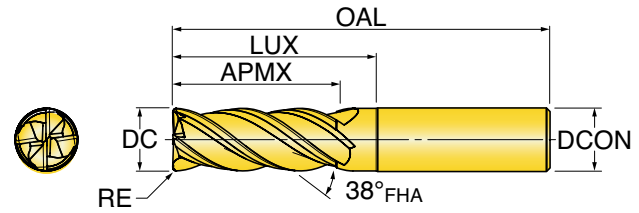
*Non-stock item. Built on request.

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RHINO ROUNDS™ SERIES RH1_4 (4-FLUTE, SQUARE END)

4 FLUTE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	RE Corner Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RH1-.6251.003.00Z4090C5	RH1-.6251.003.00Z4090W5	0.625	1.000	3.000	0.090	0.625	5.0	3.0
RH1-.6251.003.00Z4125C5	RH1-.6251.003.00Z4125W5	0.625	1.000	3.000	0.125	0.625	5.0	3.0
RH1-.6251.004.00Z4000C6	RH1-.6251.004.00Z4000W6	0.625	1.000	4.000	0.000	0.625	6.0	3.0
RH1-.6251.004.00Z4015C6	RH1-.6251.004.00Z4015W6	0.625	1.000	4.000	0.015	0.625	6.0	3.0
RH1-.6251.004.00Z4030C6	RH1-.6251.004.00Z4030W6	0.625	1.000	4.000	0.030	0.625	6.0	3.0
RH1-.6251.004.00Z4060C6	RH1-.6251.004.00Z4060W6	0.625	1.000	4.000	0.060	0.625	6.0	3.0
RH1-.6251.004.00Z4090C6	RH1-.6251.004.00Z4090W6	0.625	1.000	4.000	0.090	0.625	6.0	3.0
RH1-.6251.004.00Z4125C6	RH1-.6251.004.00Z4125W6	0.625	1.000	4.000	0.125	0.625	6.0	3.0
RH1-.6251.251.25Z4000C35	RH1-.6251.251.25Z4000W35	0.625	1.250	1.250	0.000	0.625	3.5	3.0
RH1-.6251.251.25Z4015C35	RH1-.6251.251.25Z4015W35	0.625	1.250	1.250	0.015	0.625	3.5	3.0
RH1-.6251.251.25Z4030C35	RH1-.6251.251.25Z4030W35	0.625	1.250	1.250	0.030	0.625	3.5	3.0
RH1-.6251.251.25Z4060C35	RH1-.6251.251.25Z4060W35	0.625	1.250	1.250	0.060	0.625	3.5	3.0
RH1-.6251.251.25Z4090C35	RH1-.6251.251.25Z4090W35	0.625	1.250	1.250	0.090	0.625	3.5	3.0
RH1-.6251.251.25Z4125C35	RH1-.6251.251.25Z4125W35	0.625	1.250	1.250	0.125	0.625	3.5	3.0
RH1-.6251.751.75Z4000C4	RH1-.6251.751.75Z4000W4	0.625	1.750	1.750	0.000	0.625	4.0	3.0
RH1-.6251.751.75Z4015C4	RH1-.6251.751.75Z4015W4	0.625	1.750	1.750	0.015	0.625	4.0	3.0
RH1-.6251.751.75Z4030C4	RH1-.6251.751.75Z4030W4	0.625	1.750	1.750	0.030	0.625	4.0	3.0
RH1-.6251.751.75Z4060C4	RH1-.6251.751.75Z4060W4	0.625	1.750	1.750	0.060	0.625	4.0	3.0
RH1-.6251.751.75Z4090C4	RH1-.6251.751.75Z4090W4	0.625	1.750	1.750	0.090	0.625	4.0	3.0
RH1-.6251.751.75Z4125C4	RH1-.6251.751.75Z4125W4	0.625	1.750	1.750	0.125	0.625	4.0	3.0
RH1-.6252.252.25Z4000C5	RH1-.6252.252.25Z4000W5	0.625	2.250	2.250	0.000	0.625	5.0	3.0
RH1-.6252.252.25Z4015C5	RH1-.6252.252.25Z4015W5	0.625	2.250	2.250	0.015	0.625	5.0	3.0
RH1-.6252.252.25Z4030C5	RH1-.6252.252.25Z4030W5	0.625	2.250	2.250	0.030	0.625	5.0	3.0
RH1-.6252.252.25Z4060C5	RH1-.6252.252.25Z4060W5	0.625	2.250	2.250	0.060	0.625	5.0	3.0
RH1-.6252.252.25Z4090C5	RH1-.6252.252.25Z4090W5	0.625	2.250	2.250	0.090	0.625	5.0	3.0
RH1-.6252.252.25Z4125C5	RH1-.6252.252.25Z4125W5	0.625	2.250	2.250	0.125	0.625	5.0	3.0
RH1-.6253.003.00Z4000C6	RH1-.6253.003.00Z4000W6	0.625	3.000	3.000	0.000	0.625	6.0	3.0
RH1-.6253.003.00Z4015C6	RH1-.6253.003.00Z4015W6	0.625	3.000	3.000	0.015	0.625	6.0	3.0
RH1-.6253.003.00Z4030C6	RH1-.6253.003.00Z4030W6	0.625	3.000	3.000	0.030	0.625	6.0	3.0
RH1-.6253.003.00Z4060C6	RH1-.6253.003.00Z4060W6	0.625	3.000	3.000	0.060	0.625	6.0	3.0

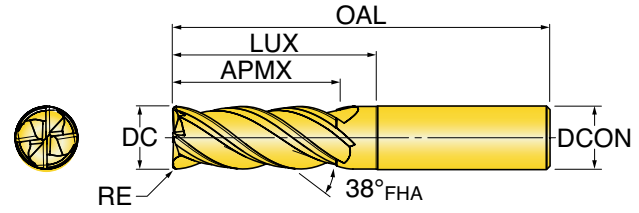
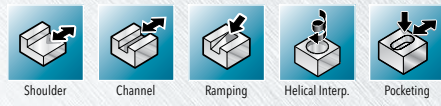
*Non-stock item. Built on request.

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RHINO ROUNDS™ SERIES RH1_4 (4-FLUTE, SQUARE END)

4 FLUTE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	RE Corner Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RH1-.6253.003.00Z4090C6	RH1-.6253.003.00Z4090W6	0.625	3.000	3.000	0.090	0.625	6.0	3.0
RH1-.6253.003.00Z4125C6	RH1-.6253.003.00Z4125W6	0.625	3.000	3.000	0.125	0.625	6.0	3.0
RH1-.750.875.875Z4000C3	RH1-.750.875.875Z4000W3	0.750	0.875	0.875	0.000	0.750	3.0	3.0
RH1-.750.875.875Z4015C3	RH1-.750.875.875Z4015W3	0.750	0.875	0.875	0.015	0.750	3.0	3.0
RH1-.750.875.875Z4030C3	RH1-.750.875.875Z4030W3	0.750	0.875	0.875	0.030	0.750	3.0	3.0
RH1-.750.875.875Z4060C3	RH1-.750.875.875Z4060W3	0.750	0.875	0.875	0.060	0.750	3.0	3.0
RH1-.750.875.875Z4090C3	RH1-.750.875.875Z4090W3	0.750	0.875	0.875	0.090	0.750	3.0	3.0
RH1-.750.875.875Z4125C3	RH1-.750.875.875Z4125W3	0.750	0.875	0.875	0.125	0.750	3.0	3.0
RH1-.7501.252.00Z4000C4	RH1-.7501.252.00Z4000W4	0.750	1.250	2.000	0.000	0.750	4.0	3.0
RH1-.7501.252.00Z4015C4	RH1-.7501.252.00Z4015W4	0.750	1.250	2.000	0.015	0.750	4.0	3.0
RH1-.7501.252.00Z4030C4	RH1-.7501.252.00Z4030W4	0.750	1.250	2.000	0.030	0.750	4.0	3.0
RH1-.7501.252.00Z4060C4	RH1-.7501.252.00Z4060W4	0.750	1.250	2.000	0.060	0.750	4.0	3.0
RH1-.7501.252.00Z4090C4	RH1-.7501.252.00Z4090W4	0.750	1.250	2.000	0.090	0.750	4.0	3.0
RH1-.7501.252.00Z4125C4	RH1-.7501.252.00Z4125W4	0.750	1.250	2.000	0.125	0.750	4.0	3.0
RH1-.7501.253.00Z4000C5	RH1-.7501.253.00Z4000W5	0.750	1.250	3.000	0.000	0.750	5.0	3.0
RH1-.7501.253.00Z4015C5	RH1-.7501.253.00Z4015W5	0.750	1.250	3.000	0.015	0.750	5.0	3.0
RH1-.7501.253.00Z4030C5	RH1-.7501.253.00Z4030W5	0.750	1.250	3.000	0.030	0.750	5.0	3.0
RH1-.7501.253.00Z4060C5	RH1-.7501.253.00Z4060W5	0.750	1.250	3.000	0.060	0.750	5.0	3.0
RH1-.7501.253.00Z4090C5	RH1-.7501.253.00Z4090W5	0.750	1.250	3.000	0.090	0.750	5.0	3.0
RH1-.7501.253.00Z4125C5	RH1-.7501.253.00Z4125W5	0.750	1.250	3.000	0.125	0.750	5.0	3.0
RH1-.7501.254.00Z4000C6	RH1-.7501.254.00Z4000W6	0.750	1.250	4.000	0.000	0.750	6.0	3.0
RH1-.7501.254.00Z4015C6	RH1-.7501.254.00Z4015W6	0.750	1.250	4.000	0.015	0.750	6.0	3.0
RH1-.7501.254.00Z4030C6	RH1-.7501.254.00Z4030W6	0.750	1.250	4.000	0.030	0.750	6.0	3.0
RH1-.7501.254.00Z4060C6	RH1-.7501.254.00Z4060W6	0.750	1.250	4.000	0.060	0.750	6.0	3.0
RH1-.7501.254.00Z4090C6	RH1-.7501.254.00Z4090W6	0.750	1.250	4.000	0.090	0.750	6.0	3.0
RH1-.7501.254.00Z4125C6	RH1-.7501.254.00Z4125W6	0.750	1.250	4.000	0.125	0.750	6.0	3.0
RH1-.7501.501.50Z4000C4	RH1-.7501.501.50Z4000W4	0.750	1.500	1.500	0.000	0.750	4.0	3.0
RH1-.7501.501.50Z4015C4	RH1-.7501.501.50Z4015W4	0.750	1.500	1.500	0.015	0.750	4.0	3.0
RH1-.7501.501.50Z4030C4	RH1-.7501.501.50Z4030W4	0.750	1.500	1.500	0.030	0.750	4.0	3.0
RH1-.7501.501.50Z4060C4	RH1-.7501.501.50Z4060W4	0.750	1.500	1.500	0.060	0.750	4.0	3.0

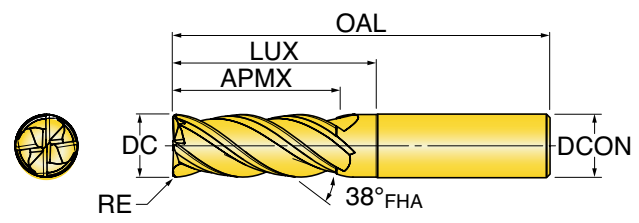
*Non-stock item. Built on request.

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RHINO ROUNDS™ SERIES RH1_4 (4-FLUTE, SQUARE END)

4 FLUTE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	RE Corner Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RH1-.7501.501.50Z4090C4	RH1-.7501.501.50Z4090W4	0.750	1.500	1.500	0.090	0.750	4.0	3.0
RH1-.7501.501.50Z4125C4	RH1-.7501.501.50Z4125W4	0.750	1.500	1.500	0.125	0.750	4.0	3.0
RH1-.7501.621.62Z4000C4	RH1-.7501.621.62Z4000W4	0.750	1.625	1.625	0.000	0.750	4.0	3.0
RH1-.7501.621.62Z4015C4	RH1-.7501.621.62Z4015W4	0.750	1.625	1.625	0.015	0.750	4.0	3.0
RH1-.7501.621.62Z4030C4	RH1-.7501.621.62Z4030W4	0.750	1.625	1.625	0.030	0.750	4.0	3.0
RH1-.7501.621.62Z4060C4	RH1-.7501.621.62Z4060W4	0.750	1.625	1.625	0.060	0.750	4.0	3.0
RH1-.7501.621.62Z4090C4	RH1-.7501.621.62Z4090W4	0.750	1.625	1.625	0.090	0.750	4.0	3.0
RH1-.7501.621.62Z4125C4	RH1-.7501.621.62Z4125W4	0.750	1.625	1.625	0.125	0.750	4.0	3.0
RH1-.7502.252.25Z4000C5	RH1-.7502.252.25Z4000W5	0.750	2.250	2.250	0.000	0.750	5.0	3.0
RH1-.7502.252.25Z4015C5	RH1-.7502.252.25Z4015W5	0.750	2.250	2.250	0.015	0.750	5.0	3.0
RH1-.7502.252.25Z4030C5	RH1-.7502.252.25Z4030W5	0.750	2.250	2.250	0.030	0.750	5.0	3.0
RH1-.7502.252.25Z4060C5	RH1-.7502.252.25Z4060W5	0.750	2.250	2.250	0.060	0.750	5.0	3.0
RH1-.7502.252.25Z4090C5	RH1-.7502.252.25Z4090W5	0.750	2.250	2.250	0.090	0.750	5.0	3.0
RH1-.7502.252.25Z4125C5	RH1-.7502.252.25Z4125W5	0.750	2.250	2.250	0.125	0.750	5.0	3.0
RH1-.7503.003.00Z4000C6	RH1-.7503.003.00Z4000W6	0.750	3.000	3.000	0.000	0.750	6.0	3.0
RH1-.7503.003.00Z4015C6	RH1-.7503.003.00Z4015W6	0.750	3.000	3.000	0.015	0.750	6.0	3.0
RH1-.7503.003.00Z4030C6	RH1-.7503.003.00Z4030W6	0.750	3.000	3.000	0.030	0.750	6.0	3.0
RH1-.7503.003.00Z4060C6	RH1-.7503.003.00Z4060W6	0.750	3.000	3.000	0.060	0.750	6.0	3.0
RH1-.7503.003.00Z4090C6	RH1-.7503.003.00Z4090W6	0.750	3.000	3.000	0.090	0.750	6.0	3.0
RH1-.7503.003.00Z4125C6	RH1-.7503.003.00Z4125W6	0.750	3.000	3.000	0.125	0.750	6.0	3.0
RH1-.7504.004.00Z4000C7	RH1-.7504.004.00Z4000W7	0.750	4.000	4.000	0.000	0.750	7.0	3.0
RH1-.7504.004.00Z4015C7	RH1-.7504.004.00Z4015W7	0.750	4.000	4.000	0.015	0.750	7.0	3.0
RH1-.7504.004.00Z4030C7	RH1-.7504.004.00Z4030W7	0.750	4.000	4.000	0.030	0.750	7.0	3.0
RH1-.7504.004.00Z4060C7	RH1-.7504.004.00Z4060W7	0.750	4.000	4.000	0.060	0.750	7.0	3.0
RH1-.7504.004.00Z4090C7	RH1-.7504.004.00Z4090W7	0.750	4.000	4.000	0.090	0.750	7.0	3.0
RH1-.7504.004.00Z4125C7	RH1-.7504.004.00Z4125W7	0.750	4.000	4.000	0.125	0.750	7.0	3.0
RH1-1.001.501.50Z4000C4	RH1-1.001.501.50Z4000W4	1.000	1.500	1.500	0.000	1.000	4.0	3.0
RH1-1.001.501.50Z4015C4	RH1-1.001.501.50Z4015W4	1.000	1.500	1.500	0.015	1.000	4.0	3.0
RH1-1.001.501.50Z4030C4	RH1-1.001.501.50Z4030W4	1.000	1.500	1.500	0.030	1.000	4.0	3.0
RH1-1.001.501.50Z4060C4	RH1-1.001.501.50Z4060W4	1.000	1.500	1.500	0.060	1.000	4.0	3.0

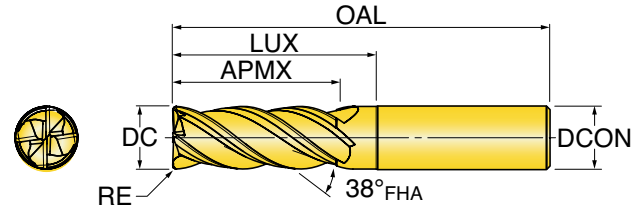
*Non-stock item. Built on request.

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RHINO ROUNDS™ SERIES RH1_4 (4-FLUTE, SQUARE END)

4 FLUTE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	RE Corner Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RH1-1.001.501.50Z4090C4	RH1-1.001.501.50Z4090W4	1.000	1.500	1.500	0.090	1.000	4.0	3.0
RH1-1.001.501.50Z4125C4	RH1-1.001.501.50Z4125W4	1.000	1.500	1.500	0.125	1.000	4.0	3.0
RH1-1.001.503.00Z4000C5	RH1-1.001.503.00Z4000W5	1.000	1.500	3.000	0.000	1.000	5.0	3.0
RH1-1.001.503.00Z4015C5	RH1-1.001.503.00Z4015W5	1.000	1.500	3.000	0.015	1.000	5.0	3.0
RH1-1.001.503.00Z4030C5	RH1-1.001.503.00Z4030W5	1.000	1.500	3.000	0.030	1.000	5.0	3.0
RH1-1.001.503.00Z4060C5	RH1-1.001.503.00Z4060W5	1.000	1.500	3.000	0.060	1.000	5.0	3.0
RH1-1.001.503.00Z4090C5	RH1-1.001.503.00Z4090W5	1.000	1.500	3.000	0.090	1.000	5.0	3.0
RH1-1.001.503.00Z4125C5	RH1-1.001.503.00Z4125W5	1.000	1.500	3.000	0.125	1.000	5.0	3.0
RH1-1.001.504.00Z4000C6	RH1-1.001.504.00Z4000W6	1.000	1.500	4.000	0.000	1.000	6.0	3.0
RH1-1.001.504.00Z4015C6	RH1-1.001.504.00Z4015W6	1.000	1.500	4.000	0.015	1.000	6.0	3.0
RH1-1.001.504.00Z4030C6	RH1-1.001.504.00Z4030W6	1.000	1.500	4.000	0.030	1.000	6.0	3.0
RH1-1.001.504.00Z4060C6	RH1-1.001.504.00Z4060W6	1.000	1.500	4.000	0.060	1.000	6.0	3.0
RH1-1.001.504.00Z4090C6	RH1-1.001.504.00Z4090W6	1.000	1.500	4.000	0.090	1.000	6.0	3.0
RH1-1.001.504.00Z4125C6	RH1-1.001.504.00Z4125W6	1.000	1.500	4.000	0.125	1.000	6.0	3.0
RH1-1.001.505.00Z4000C7	RH1-1.001.505.00Z4000W7	1.000	1.500	5.000	0.000	1.000	7.0	3.0
RH1-1.001.505.00Z4015C7	RH1-1.001.505.00Z4015W7	1.000	1.500	5.000	0.015	1.000	7.0	3.0
RH1-1.001.505.00Z4030C7	RH1-1.001.505.00Z4030W7	1.000	1.500	5.000	0.030	1.000	7.0	3.0
RH1-1.001.505.00Z4060C7	RH1-1.001.505.00Z4060W7	1.000	1.500	5.000	0.060	1.000	7.0	3.0
RH1-1.001.505.00Z4090C7	RH1-1.001.505.00Z4090W7	1.000	1.500	5.000	0.090	1.000	7.0	3.0
RH1-1.001.505.00Z4125C7	RH1-1.001.505.00Z4125W7	1.000	1.500	5.000	0.125	1.000	7.0	3.0
RH1-1.002.002.00Z4000C45	RH1-1.002.002.00Z4000W45	1.000	2.000	2.000	0.000	1.000	4.5	3.0
RH1-1.002.002.00Z4015C45	RH1-1.002.002.00Z4015W45	1.000	2.000	2.000	0.015	1.000	4.5	3.0
RH1-1.002.002.00Z4030C45	RH1-1.002.002.00Z4030W45	1.000	2.000	2.000	0.030	1.000	4.5	3.0
RH1-1.002.002.00Z4060C45	RH1-1.002.002.00Z4060W45	1.000	2.000	2.000	0.060	1.000	4.5	3.0
RH1-1.002.002.00Z4090C45	RH1-1.002.002.00Z4090W45	1.000	2.000	2.000	0.090	1.000	4.5	3.0
RH1-1.002.002.00Z4125C45	RH1-1.002.002.00Z4125W45	1.000	2.000	2.000	0.125	1.000	4.5	3.0
RH1-1.002.252.25Z4000C5	RH1-1.002.252.25Z4000W5	1.000	2.250	2.250	0.000	1.000	5.0	3.0
RH1-1.002.252.25Z4015C5	RH1-1.002.252.25Z4015W5	1.000	2.250	2.250	0.015	1.000	5.0	3.0
RH1-1.002.252.25Z4030C5	RH1-1.002.252.25Z4030W5	1.000	2.250	2.250	0.030	1.000	5.0	3.0
RH1-1.002.252.25Z4060C5	RH1-1.002.252.25Z4060W5	1.000	2.250	2.250	0.060	1.000	5.0	3.0

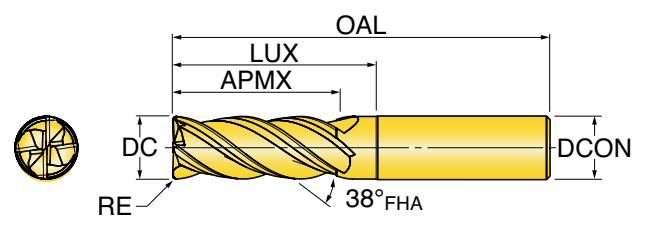
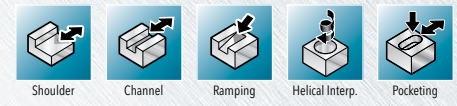
*Non-stock item. Built on request.

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RHINO ROUNDS™ SERIES RH1_4 (4-FLUTE, SQUARE END)

4 FLUTE ENDMILLS, 38° HELIX, VARIABLE PITCH



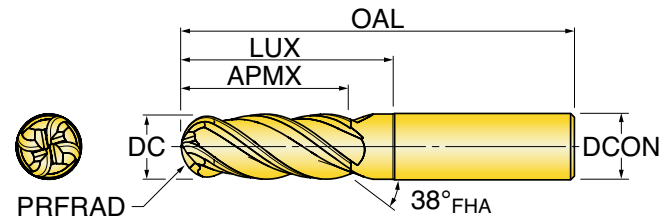
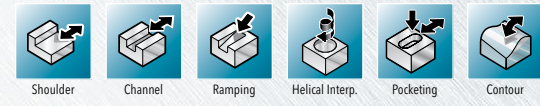
Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	RE Corner Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RH1-1.002.252.25Z4090C5	RH1-1.002.252.25Z4090W5	1.000	2.250	2.250	0.090	1.000	5.0	3.0
RH1-1.002.252.25Z4125C5	RH1-1.002.252.25Z4125W5	1.000	2.250	2.250	0.125	1.000	5.0	3.0
RH1-1.003.003.00Z4000C6	RH1-1.003.003.00Z4000W6	1.000	3.000	3.000	0.000	1.000	6.0	3.0
RH1-1.003.003.00Z4015C6	RH1-1.003.003.00Z4015W6	1.000	3.000	3.000	0.015	1.000	6.0	3.0
RH1-1.003.003.00Z4030C6	RH1-1.003.003.00Z4030W6	1.000	3.000	3.000	0.030	1.000	6.0	3.0
RH1-1.003.003.00Z4060C6	RH1-1.003.003.00Z4060W6	1.000	3.000	3.000	0.060	1.000	6.0	3.0
RH1-1.003.003.00Z4090C6	RH1-1.003.003.00Z4090W6	1.000	3.000	3.000	0.090	1.000	6.0	3.0
RH1-1.003.003.00Z4125C6	RH1-1.003.003.00Z4125W6	1.000	3.000	3.000	0.125	1.000	6.0	3.0
RH1-1.004.004.00Z4000C7	RH1-1.004.004.00Z4000W7	1.000	4.000	4.000	0.000	1.000	7.0	3.0
RH1-1.004.004.00Z4015C7	RH1-1.004.004.00Z4015W7	1.000	4.000	4.000	0.015	1.000	7.0	3.0
RH1-1.004.004.00Z4030C7	RH1-1.004.004.00Z4030W7	1.000	4.000	4.000	0.030	1.000	7.0	3.0
RH1-1.004.004.00Z4060C7	RH1-1.004.004.00Z4060W7	1.000	4.000	4.000	0.060	1.000	7.0	3.0
RH1-1.004.004.00Z4090C7	RH1-1.004.004.00Z4090W7	1.000	4.000	4.000	0.090	1.000	7.0	3.0
RH1-1.004.004.00Z4125C7	RH1-1.004.004.00Z4125W7	1.000	4.000	4.000	0.125	1.000	7.0	3.0

*Non-stock item. Built on request.



RHINOROUNDS™ SERIES RHB_4 (4-FLUTE, BALLNOSE)

4 FLUTE BALLNOSE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	PRFRAD Profile Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RHB-.125.500.500Z4625C15	RHB-.125.500.500Z4625W15	0.125	0.500	0.500	0.063	0.125	1.5	3.0
RHB-.187.625.625Z4094C2	RHB-.187.625.625Z4094W2	0.187	0.625	0.625	0.094	0.187	2.0	3.0
RHB-.250.375.375Z4125C2	RHB-.250.375.375Z4125W2	0.250	0.375	0.375	0.125	0.250	2.0	3.0
RHB-.250.5001.25Z4125C3	RHB-.250.5001.25Z4125W3	0.250	0.500	1.250	0.125	0.250	3.0	3.0
RHB-.250.5002.12Z4125C4	RHB-.250.5002.12Z4125W4	0.250	0.500	2.125	0.125	0.250	4.0	3.0
RHB-.250.750.750Z4125C25	RHB-.250.750.750Z4125W25	0.250	0.750	0.750	0.125	0.250	2.5	3.0
RHB-.2501.00.100Z4125C3	RHB-.2501.00.100Z4125W3	0.250	1.000	1.000	0.125	0.250	3.0	3.0
RHB-.2501.251.25Z4125C4	RHB-.2501.251.25Z4125W4	0.250	1.250	1.250	0.125	0.250	4.0	3.0
RHB-.2501.751.75Z4125C4	RHB-.2501.751.75Z4125W4	0.250	1.750	1.750	0.125	0.250	4.0	3.0
RHB-.312.500.500Z4156C2	RHB-.312.500.500Z4156W2	0.312	0.500	0.500	0.156	0.312	2.0	3.0
RHB-.312.875.875Z4156C25	RHB-.312.875.875Z4156W25	0.312	0.875	0.875	0.156	0.312	2.5	3.0
RHB-.3121.001.00Z4156C3	RHB-.3121.001.00Z4156W3	0.312	1.000	1.000	0.156	0.312	3.0	3.0
RHB-.3121.251.25Z4156C4	RHB-.3121.251.25Z4156W4	0.312	1.250	1.250	0.156	0.312	4.0	3.0
RHB-.3121.621.62Z4156C4	RHB-.3121.621.62Z4156W4	0.312	1.625	1.625	0.156	0.312	4.0	3.0
RHB-.375.500.500Z4187C2	RHB-.375.500.500Z4187W2	0.375	0.500	0.500	0.188	0.375	2.0	3.0
RHB-.375.7501.25Z4187C3	RHB-.375.7501.25Z4187W3	0.375	0.750	1.250	0.188	0.375	3.0	3.0
RHB-.375.7502.12Z4187C4	RHB-.375.7502.12Z4187W4	0.375	0.750	2.125	0.188	0.375	4.0	3.0
RHB-.3751.001.00Z4187C25	RHB-.3751.001.00Z4187W25	0.375	1.000	1.000	0.188	0.375	2.5	3.0
RHB-.3751.001.00Z4187C3	RHB-.3751.001.00Z4187W3	0.375	1.000	1.000	0.188	0.375	3.0	3.0
RHB-.3751.501.50Z4187C4	RHB-.3751.501.50Z4187W4	0.375	1.500	1.500	0.188	0.375	4.0	3.0
RHB-.3752.502.50Z4187C5	RHB-.3752.502.50Z4187W5	0.375	2.500	2.500	0.188	0.375	5.0	3.0
RHB-.437.625.625Z4218C27	RHB-.437.625.625Z4218W27	0.437	0.625	0.625	0.219	0.437	2.8	3.0
RHB-.4371.001.00Z4218C27	RHB-.4371.001.00Z4218W27	0.437	1.000	1.000	0.219	0.437	2.8	3.0
RHB-.4371.501.50Z4218C4	RHB-.4371.501.50Z4218W4	0.437	1.500	1.500	0.219	0.437	4.0	3.0
RHB-.4373.003.00Z4218C6	RHB-.4373.003.00Z4218W6	0.437	3.000	3.000	0.219	0.437	6.0	3.0
RHB-.500.625.625Z4250C25	RHB-.500.625.625Z4250W25	0.500	0.625	0.625	0.250	0.500	2.5	3.0
RHB-.500.8751.37Z4250C3	RHB-.500.8751.37Z4250W3	0.500	0.875	1.375	0.250	0.500	3.0	3.0
RHB-.500.8752.12Z4250C4	RHB-.500.8752.12Z4250W4	0.500	0.875	2.125	0.250	0.500	4.0	3.0
RHB-.500.8753.12Z4250C5	RHB-.500.8753.12Z4250W5	0.500	0.875	3.125	0.250	0.500	5.0	3.0
RHB-.500.8754.12Z4250C6	RHB-.500.8754.12Z4250W6	0.500	0.875	4.125	0.250	0.500	6.0	3.0

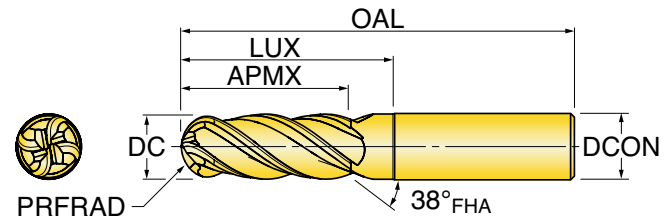
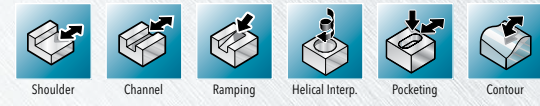
*Non-stock item. Built on request.

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RHINOROUNDS™ SERIES RHB_4 (4-FLUTE, BALLNOSE)

4 FLUTE BALLNOSE ENDMILLS, 38° HELIX, VARIABLE PITCH



Part Number Cylindrical Shank	Part Number Weldon Shank*	DC Cutting Diameter	APMX Flute Length	LUX Usable Length	PRFRAD Profile Radius	DCON Shank Diameter	OAL Overall Length	RPMX Ramp Angle Max.
RHB-.5001.001.00Z4250C3	RHB-.5001.001.00Z4250W3	0.500	1.000	1.000	0.250	0.500	3.0	3.0
RHB-.5001.251.25Z4250C3	RHB-.5001.251.25Z4250W3	0.500	1.250	1.250	0.250	0.500	3.0	3.0
RHB-.5001.501.50Z4250C4	RHB-.5001.501.50Z4250W4	0.500	1.500	1.500	0.250	0.500	4.0	3.0
RHB-.5002.002.00Z4250C4	RHB-.5002.002.00Z4250W4	0.500	2.000	2.000	0.250	0.500	4.0	3.0
RHB-.5002.502.50Z4250C5	RHB-.5002.502.50Z4250W5	0.500	2.500	2.500	0.250	0.500	5.0	3.0
RHB-.5003.003.00Z4250C6	RHB-.5003.003.00Z4250W6	0.500	3.000	3.000	0.250	0.500	6.0	3.0
RHB-.625.750.75Z4312C3	RHB-.625.750.75Z4312W3	0.625	0.750	0.750	0.313	0.625	3.0	3.0
RHB-.6251.002.00Z4312C4	RHB-.6251.002.00Z4312W4	0.625	1.000	2.000	0.313	0.625	4.0	3.0
RHB-.6251.003.00Z4312C5	RHB-.6251.003.00Z4312W5	0.625	1.000	3.000	0.313	0.625	5.0	3.0
RHB-.6251.004.00Z4312C6	RHB-.6251.004.00Z4312W6	0.625	1.000	4.000	0.313	0.625	6.0	3.0
RHB-.6251.251.25Z4312C35	RHB-.6251.251.25Z4312W35	0.625	1.250	1.250	0.313	0.625	3.5	3.0
RHB-.6251.751.75Z4312C4	RHB-.6251.751.75Z4312W4	0.625	1.750	1.750	0.313	0.625	4.0	3.0
RHB-.6252.252.25Z4312C5	RHB-.6252.252.25Z4312W5	0.625	2.250	2.250	0.313	0.625	5.0	3.0
RHB-.6253.003.00Z4312C6	RHB-.6253.003.00Z4312W6	0.625	3.000	3.000	0.313	0.625	6.0	3.0
RHB-.750.875.875Z4375C3	RHB-.750.875.875Z4375W3	0.750	0.875	0.875	0.375	0.750	3.0	3.0
RHB-.7501.252.00Z4375C4	RHB-.7501.252.00Z4375W4	0.750	1.250	2.000	0.375	0.750	4.0	3.0
RHB-.7501.253.00Z4375C5	RHB-.7501.253.00Z4375W5	0.750	1.250	3.000	0.375	0.750	5.0	3.0
RHB-.7501.254.00Z4375C6	RHB-.7501.254.00Z4375W6	0.750	1.250	4.000	0.375	0.750	6.0	3.0
RHB-.7501.501.50Z4375C4	RHB-.7501.501.50Z4375W4	0.750	1.500	1.500	0.375	0.750	4.0	3.0
RHB-.7501.621.62Z4375C4	RHB-.7501.621.62Z4375W4	0.750	1.625	1.625	0.375	0.750	4.0	3.0
RHB-.7502.252.25Z4375C5	RHB-.7502.252.25Z4375W5	0.750	2.250	2.250	0.375	0.750	5.0	3.0
RHB-.7503.003.00Z4375C6	RHB-.7503.003.00Z4375W6	0.750	3.000	3.000	0.375	0.750	6.0	3.0
RHB-.7504.004.00Z4375C7	RHB-.7504.004.00Z4375W7	0.750	4.000	4.000	0.375	0.750	7.0	3.0
RHB-1.001.501.50Z4500C4	RHB-1.001.501.50Z4500W4	1.000	1.500	1.500	0.500	1.000	4.0	3.0
RHB-1.001.503.00Z4500C5	RHB-1.001.503.00Z4500W5	1.000	1.500	3.000	0.500	1.000	5.0	3.0
RHB-1.001.504.00Z4500C6	RHB-1.001.504.00Z4500W6	1.000	1.500	4.000	0.500	1.000	6.0	3.0
RHB-1.001.505.00Z4500C7	RHB-1.001.505.00Z4500W7	1.000	1.500	5.000	0.500	1.000	7.0	3.0
RHB-1.002.002.00Z4500C45	RHB-1.002.002.00Z4500W45	1.000	2.000	2.000	0.500	1.000	4.5	3.0
RHB-1.002.252.25Z4500C5	RHB-1.002.252.25Z4500W5	1.000	2.250	2.250	0.500	1.000	5.0	3.0
RHB-1.003.003.00Z4500C6	RHB-1.003.003.00Z4500W6	1.000	3.000	3.000	0.500	1.000	6.0	3.0
RHB-1.004.004.00Z4500C7	RHB-1.004.004.00Z4500W7	1.000	4.000	4.000	0.500	1.000	7.0	3.0

*Non-stock item. Built on request.



RHINOROUNDS™ OPERATING GUIDELINES

ISO	Material	Condition	SFM ¹	TYPE OF CUT	AXIAL DOC	RADIAL DOC	IPT Ø 0.250	IPT Ø 0.375	IPT Ø 0.500	IPT Ø 0.625	IPT Ø 0.750	IPT Ø 1.000
P	Low-Carbon Steels	1018, 1108, 1117, A36, 12L14, 1200's, 1500's	300 - 460	SLOTTING	0.5xD - 1xD	100%	0.0009	0.0018	0.0020	0.0029	0.0033	0.0037
			375 - 600	ROUGHING	2xD	30-40%	0.0016	0.0026	0.0028	0.0041	0.0053	0.0064
			350 - 900	FINISH OR HIGH EFFICIENCY ²	2.25 x D	2-15%	0.0015	0.0021	0.0026	0.0027	0.0028	0.0029
	Medium & High-Carbon Steels	1000-1200 Series	200 - 350	SLOTTING	0.5xD - 1xD	100%	0.0010	0.0013	0.0016	0.0019	0.0023	0.0026
			300 - 500	ROUGHING	2xD	30-40%	0.0012	0.0017	0.0021	0.0029	0.0037	0.0045
			350 - 850	FINISH OR HIGH EFFICIENCY ²	2.25 x D	2-15%	0.0014	0.0019	0.0023	0.0026	0.0028	0.0030
	Alloy Steels	4130, 4140, 5140, 6150, 8620	250 - 350	SLOTTING	0.5xD - 1xD	100%	0.0009	0.0013	0.0016	0.0023	0.0026	0.0029
			300 - 450	ROUGHING	2xD	30-40%	0.0012	0.0017	0.0022	0.0030	0.0039	0.0048
			350 - 1200	FINISH OR HIGH EFFICIENCY ²	2.25 x D	2-15%	0.0014	0.0019	0.0023	0.0027	0.0030	0.0033
	Tool Steel	A2, P20, S7, H13, L6	150 - 300	SLOTTING	0.5xD - 1xD	100%	0.0009	0.0013	0.0016	0.0020	0.0024	0.0028
			250 - 400	ROUGHING	2xD	30-40%	0.0011	0.0016	0.0021	0.0030	0.0039	0.0047
			350 - 650	FINISH OR HIGH EFFICIENCY ²	2.25 x D	2-15%	0.0013	0.0018	0.0022	0.0025	0.0028	0.0031
M	Austenitic Stainless Steels	INOX, 200 Series, 300 Series and 304L	180 - 280	SLOTTING	0.5xD - 1xD	100%	0.0008	0.0012	0.0015	0.0019	0.0025	0.0028
			180 - 375	ROUGHING	2xD	30-40%	0.0012	0.0017	0.0022	0.0030	0.0040	0.0050
			300 - 900	FINISH OR HIGH EFFICIENCY ²	2.25xD	2-15%	0.0018	0.0022	0.0025	0.0026	0.0027	0.0029
K	Cast Iron - Gray Low Strength	Class 20, 25, 30, 35 Grade G1800	250 - 450	SLOTTING	0.5xD - 1xD	100%	0.0011	0.0016	0.0020	0.0024	0.0027	0.0030
			350 - 550	ROUGHING	2xD	30-40%	0.0013	0.0019	0.0024	0.0036	0.0048	0.0060
			350 - 600	FINISH OR HIGH EFFICIENCY ²	2.25xD	2-15%	0.0015	0.0021	0.0027	0.0032	0.0037	0.0040
	Cast Iron - Malleable Medium Strength	60-14-18, 65-45-12, M3210, M4504	200 - 425	SLOTTING	0.5xD - 1xD	100%	0.0010	0.0013	0.0016	0.0021	0.0026	0.0030
			300 - 500	ROUGHING	2xD	30-40%	0.0012	0.0018	0.0023	0.0032	0.0041	0.0050
			350 - 600	FINISH OR HIGH EFFICIENCY ²	2.25xD	2-15%	0.0014	0.0020	0.0025	0.0027	0.0029	0.0032

¹When SFM exceeds 500 use air blast to cool the tool.

²Must use chip thinning calculations when developing feedrates for FINISH OR HIGH EFFICIENCY toolpaths.