

MILD STEEL ENDMILLS

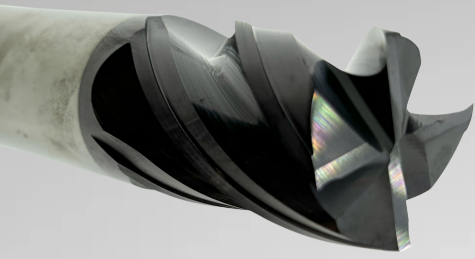
**FOR HIGH PERFORMANCE
MACHINING**

**4
Flute**

- ◆ **STANDARD LENGTH**
- ◆ **STUB LENGTH**
- ◆ **LONG LENGTH**
- ◆ **RADIUS TOOL**
- ◆ **BALL NOSE**

607-331-4834





***ALL TOOLS CAN BE CUSTOMIZED
TO CHANGE LENGTH OF CUT,
OVERALL LENGTH, RADIUS,
CHIPBREAKER, WELDEN FLAT,
EDGE PREP AND MORE. CONTACT
US TO HELP MAKE THE TOOL THAT
WORKS BEST FOR YOU!***



Our 4-flute end mills perform exceptionally well in most types of steel. For **common mild steel** applications, we recommend our ALTiN based coating called **HYPERLOX™** (HP). This is a really solid combination that works well for machine shops milling smaller lot sizes in many varieties of steel. The tool's geometry, identified in the box to the right, is designed to perform exceptionally well with High-Speed Machining tool paths. The tool can also be used with great efficiency in both traditional tool paths and on manual machines.

HYPERLOX™ is applied with a “sputter” coating application method which is superior to the more common “arc” application method.

FEATURES OF FACTOOLING'S END MILLS

- MADE IN AMERICA
- 40 DEGREE HELIX ANGLE
- VARIABLE INDEX
- ECCENTRIC RELIEF
- SOLID CARBIDE TOOLING THAT ALLOWS FOR RESHARPENING
- DESIGNED TO BE AGGRESSIVE TO ALLOW FOR INCREASED SPEEDS AND FEED
- HEAL GRIND TO IMPROVE CHIP CLEARANCE
- CENTER CUTTING
- COMES UNCOATED AND COATED IN HYPERLOX™ (HP)

Speeds and Feeds

4
FLUTE

Material Group		ISO Group		Coolant preferred		Contour Milling					
						AP=1 x D		AP=1.5 x D		AP=2 x D	
						vc-SFM					
Mild-1018		P		Yes		1475		1150		500	
Mild-4140		P		Yes		1130		900		250	
Tool Steel		P		Yes		1036		840		250	
	Diameter	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	
	FZ= in/tooth	0.0012	0.002	0.0024	0.0031	0.0039	0.0047	0.006	0.0078	0.01	

Material Group		ISO Group		Coolant preferred		Slotting				
						AP=.5x D	AP=1 x D			
						vc-SFM				
Mild-1018		P		Yes		500	475			
Mild-4140		P		Yes		250	225			
Tool Steel		P		Yes		250	225			
	Diameter	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1
	FZ= in/tooth	0.0004	0.001	0.0012	0.0016	0.002	0.0025	0.0031	0.004	0.005

PLEASE NOTE: THE INFORMATION ABOVE SHOULD BE CONSIDERED AS ONLY A STARTING POINT. FINE TUNING MAY BE REQUIRED IN ORDER TO GET THE BEST PERFORMANCE OF THE TOOL. EVERY MACHINE , ENVIRONMENT AND FIXTURE CAN PLAY A CRUCIAL PART IN THE PERFORMANCE OF THE TOO

ISO GROUP P

MILD STEEL END MILLS

**40 °
HELIX**

**HP
HYPERLOX™**

**4
FLUTE**

Standard Length

Part Number	# of Flutes	Shank Diameter		OAL	Flute Length	Radius	Coating
		Inch	Decimal				
FT4-125	4	1/8	0.125	1-1/2	1/2		Uncoated
FT4-125-HP	4	1/8	0.125	1-1/2	1/2		Hyperlox™
FT4-187	4	3/16	0.1875	1-1/2	5/8		Uncoated
FT4-187-HP	4	3/16	0.1875	1-1/2	5/8		Hyperlox™
FT4-250	4	1/4	0.25	2-1/2	3/4		Uncoated
FT4-250-HP	4	1/4	0.25	2-1/2	3/4		Hyperlox™
FT4-312	4	5/16	0.312	2-1/2	3/4		Uncoated
FT4-312-HP	4	5/16	0.312	2-1/2	3/4		Hyperlox™
FT4-375	4	3/8	0.375	2-1/2	7/8		Uncoated
FT4-375-HP	4	3/8	0.375	2-1/2	7/8		Hyperlox™
FT4-500	4	1/2	0.5	3	1-1/4		Uncoated
FT4-500-HP	4	1/2	0.5	3	1-1/4		Hyperlox™
FT4-625	4	5/8	0.625	3-1/2	1-1/4		Uncoated
FT4-625-HP	4	5/8	0.625	3-1/2	1-1/4		Hyperlox™
FT4-750	4	3/4	0.75	4	1-1/2		Uncoated
FT4-750-HP	4	3/4	0.75	4	1-1/2		Hyperlox™
FT4-1000	4	1	1	4	1-1/2		Uncoated
FT4-1000-HP	4	1	1	4	1-1/2		Hyperlox™

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Stub Length

Part Number	# of Flutes	Shank Diameter		OAL	Flute Length	Radius	Coating
		Inch	Decimal				
S-FT4-187	4	1/8	0.1875	1-1/2	1/4		Uncoated
S-FT4-187-HP	4	1/8	0.1875	1-1/2	1/4		Hyperlox™
S-FT4-250	4	1/4	0.25	2-1/2	3/8		Uncoated
S-FT4-250-HP	4	1/4	0.25	2-1/2	3/8		Hyperlox™
S-FT4-312	4	5/16	0.312	2-1/2	3/8		Uncoated
S-FT4-312-HP	4	5/16	0.312	2-1/2	3/8		Hyperlox™
S-FT4-375	4	3/8	0.375	2-1/2	1/2		Uncoated
S-FT4-375-HP	4	3/8	0.375	2-1/2	1/2		Hyperlox™
S-FT4-500	4	1/2	0.5	3	5/8		Uncoated
S-FT4-500-HP	4	1/2	0.5	3	5/8		Hyperlox™
S-FT4-625	4	5/8	0.625	3-1/2	3/4		Uncoated
S-FT4-625-HP	4	5/8	0.625	3-1/2	3/4		Hyperlox™
S-FT4-750	4	3/4	0.75	4	3/4		Uncoated
S-FT4-750-HP	4	3/4	0.75	4	3/4		Hyperlox™
S-FT4-1000	4	1	1	4	3/4		Uncoated
S-FT4-1000-HP	4	1	1	4	3/4		Hyperlox™

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Long Length



Part Number	# of Flutes	Shank Diameter		OAL	Flute Length	Radius	Coating
		Inch	Decimal				
L-FT4-125	4	1/8	0.125	2	1		Uncoated
L-FT4-125-HP	4	1/8	0.125	2	1		Hyperlox™
L-FT4-187	4	3/16	0.1875	2	1		Uncoated
L-FT4-187-HP	4	3/16	0.1875	2	1		Hyperlox™
L-FT4-250	4	1/4	0.25	2-1/2	1-1/4		Uncoated
L-FT4-250-F	4	1/4	0.25	2-1/2	1-1/4		Hyperlox™
L-FT4-312	4	5/16	0.312	2-1/2	1-1/4		Uncoated
L-FT4-312-HP	4	5/16	0.312	2-1/2	1-1/4		Hyperlox™
L-FT4-375	4	3/8	0.375	2-1/2	1-1/4		Uncoated
L-FT4-375-HP	4	3/8	0.375	2-1/2	1-1/4		Hyperlox™
L-FT4-500	4	1/2	0.5	3	1-1/2		Uncoated
L-FT4-500-HP	4	1/2	0.5	3	1-1/2		Hyperlox™
L-FT4-625	4	5/8	0.625	3-1/2	1-3/4		Uncoated
L-FT4-625-HP	4	2/8	0.625	3-1/2	1-3/4		Hyperlox™
L-FT4-750	4	3/4	0.75	4	2		Uncoated
L-FT4-750-HP	4	3/4	0.75	4	2		Hyperlox™
L-FT4-1000	4	1	1	4	2		Uncoated
L-FT4-1000-HP	4	1	1	4	2		Hyperlox™

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Radius Tool



Part Number	# of Flutes	Shank Diameter		OAL	Flute Length	Radius	Coating
		Inch	Decimal				
R-FT4-125-010	4	1/8	0.125	1-1/2	1/2	0.01	Uncoated
R-FT4-125-HP-010	4	1/8	0.125	1-1/2	1/2	0.01	Hyperlox™
R-FT4-187-010	4	3/16	0.1875	1-1/2	5/8	0.01	Uncoated
R-FT4-187-HP-010	4	3/16	0.1875	1-1/2	5/8	0.01	Hyperlox™
R-FT4-250-020	4	1/4	0.250	2-1/2	3/4	0.02	Uncoated
R-FT4-250-HP-020	4	1/4	0.250	2-1/2	3/4	0.02	Hyperlox™
R-FT4-312-020	4	5/16	0.312	2-1/2	3/4	0.02	Uncoated
R-FT4-312-HP-020	4	5/16	0.312	2-1/2	3/4	0.02	Hyperlox™
R-FT4-375-.030	4	3/8	0.375	2-1/2	7/8	0.03	Uncoated
R-FT4-375-HP-030	4	3/8	0.375	2-1/2	7/8	0.03	Hyperlox™
R-FT4-500-030	4	1/2	0.500	3	1-1/4	0.03	Uncoated
R-FT4-500-HP-030	4	1/2	0.500	3	1-1/4	0.03	Hyperlox™
R-FT4-500-060	4	1/2	0.500	3	1-1/4	0.06	Uncoated
R-FT4-500-HP-060	4	1/2	0.500	3	1-1/4	0.06	Hyperlox™
R-FT4-625-030	4	5/8	0.625	3-1/2	1-1/4	0.03	Uncoated
R-FT4-625-HP-030	4	5/8	0.625	3-1/2	1-1/4	0.03	Hyperlox™
R-FT4-625-060	4	5/8	0.625	3-1/2	1-1/4	0.06	Uncoated
R-FT4-625-HP-060	4	5/8	0.625	3-1/2	1-1/4	0.06	Hyperlox™
R-FT4-750-030	4	3/4	0.750	4	1-1/2	0.03	Uncoated
R-FT4-750-HP-030	4	3/4	0.750	4	1-1/2	0.03	Hyperlox™
R-FT4-750-060	4	3/4	0.750	4	1-1/2	0.06	Uncoated
R-FT4-750-HP-060	4	3/4	0.750	4	1-1/2	0.06	Hyperlox™
R-FT4-1000-030	4	1	1	4	1-1/2	0.03	Uncoated
R-FT4-1000-HP-030	4	1	1	4	1-1/2	0.03	Hyperlox™
R-FT4-1000-060	4	1	1	4	1-1/2	0.06	Uncoated
R-FT4-1000-HP-060	4	1	1	4	1-1/2	0.06	Hyperlox™

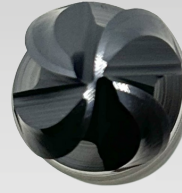
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**4
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Ball Nose



Part Number	# of Flutes	Shank Diameter		OAL	Flute Length	Radius	Coating
		Inch	Decimal				
B-FT4-125	4	1/8	0.125	1-1/2	1/2		Uncoated
B-FT4-125-HP	4	1/8	0.125	1-1/2	1/2		Hyperlox™
B-FT4-187	4	3/16	0.1875	1-1/2	5/8		Uncoated
B-FT4-187-HP	4	3/16	0.1875	1-1/2	5/8		Hyperlox™
B-FT4-250	4	1/4	0.25	2-1/2	3/4		Uncoated
B-FT4-250-HP	4	1/4	0.25	2-1/2	3/4		Hyperlox™
B-FT4-312	4	5/16	0.312	2-1/2	3/4		Uncoated
B-FT4-312-HP	4	5/16	0.312	2-1/2	3/4		Hyperlox™
B-FT4-375	4	3/8	0.375	2-1/2	7/8		Uncoated
B-FT4-375-HP	4	3/8	0.375	2-1/2	7/8		Hyperlox™
B-FT4-500	4	1/2	0.5	3	1-1/4		Uncoated
B-FT4-500-HP	4	1/2	0.5	3	1-1/4		Hyperlox™
B-FT4-625	4	5/8	0.625	3-1/2	1-1/4		Uncoated
B-FT4-625-HP	4	5/8	0.625	3-1/2	1-1/4		Hyperlox™
B-FT4-750	4	3/4	0.75	4	1-1/2		Uncoated
B-FT4-750-HP	4	3/4	0.75	4	1-1/2		Hyperlox™
B-FT4-1000	4	1	1	4	1-1/2		Uncoated
B-FT4-1000-HP	4	1	1	4	1-1/2		Hyperlox™

**USING A BALL NOSE ALLOWS FOR INCREASED LONGEVITY OF
TOOLS BY REMOVING THE SQUARE END OF THE END MILL
DECREASES THE WEAR OF THE TOOL**

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**4
FLUTE**

BENEFITS TO 4 FLUTE

**STABLE CUTS
REDUCED CHATTER
COMMON END MILL EVERY MACHINIST HAS USED**

CALL US TODAY FOR MORE HELP

FACTooling

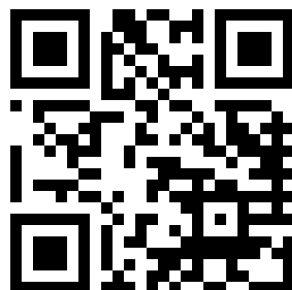
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INFROMATION
ABOUT HYPERLOX**



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