

# Solid Carbide End Mills

Metric

**MICRO 100<sup>®</sup>**  
super carbide tools

**Proprietary Micro Grain Carbide  
with the Highest Transverse Rupture Strength**

**MICRO 100<sup>®</sup>**

**are Unmatched in Toughness and  
Application Versatility with  
Superior Material Removal and Tool Life.**



**Hard Milling Miniature End Mills**  
**Miniature End Mills**  
**2, 3, 4, 5, & 6 Flute End Mills**  
**End Mills for Hard Milling Applications**  
**Stub Length End Mills**  
**the "SHREDDER"**  
**the "V-HEMOTH"**  
**Long Length End Mills**  
**Mold Making End Mills**  
**Corner Rounding End Mills**  
**Tapered End Mills**  
**Drill Mills**  
**Ball Nose End Mills**  
**Spherical Ball Nose End Mills**



**WILL NOT CHIP OR BREAK  
UNDER NORMAL MACHINING CONDITIONS**



**MICRO 100<sup>®</sup>**  
super carbide tools

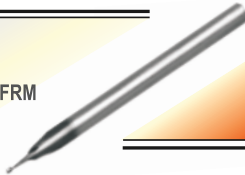
**Miniature End Mills**  
Styles MEFM for Hard Milling  
pages 258-262



**the "SHREDDER"**  
Styles SALM, SARM, SHLM, & SHRM  
pages 281-284



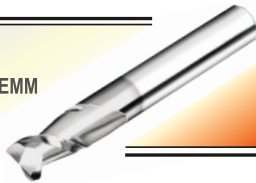
**Miniature End Mills**  
Mold Making and Shrink Fit  
Styles AMRM, RMEM, MMRM, & SFRM  
pages 263-268



**the "V-HEMOTH" 4 Flutes**  
Styles VHSM, VHMM & VLRM  
pages 285-287



**2/3/4 Flute End Mills**  
Styles AECM, AEMM, EMSM, & GEMM  
pages 269-272



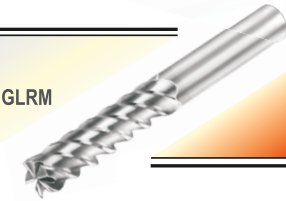
**the "V-HEMOTH" 5 Flutes**  
Styles VHSM, VHMM & VLRM  
pages 288-290



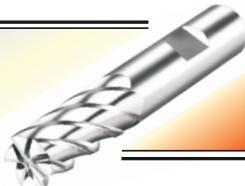
**2/3/4 Flute End Mills**  
Styles ARMM & ASMM  
pages 273-274



**Long Length End Mills**  
Styles AELM, ALMM, GELM & GLRM  
pages 291-294



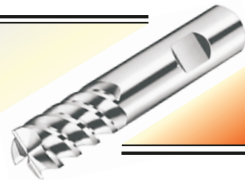
**2/4/6 Flute End Mills**  
Style EMHM  
page 275



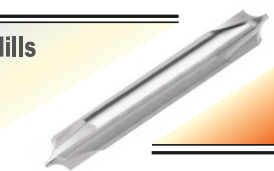
**Tapered End Mills**  
Styles TEMM  
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**3/4 Flute End Mills**  
Style SDHM  
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**Corner Rounding End Mills**  
Style CREM  
page 296



**Hard Milling End Mills**  
Styles HMCM, HMRM, HMSM, & HMUM  
pages 277-280



**Drill Mills**  
Style DMM  
pages 297-298



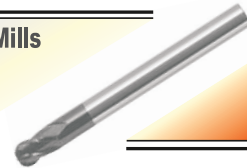
**Miniature Ball Nose End Mills**

Styles BEFM for Hard Milling  
pages 299-300



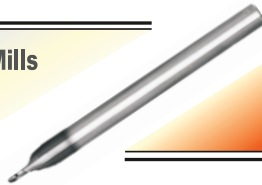
**Universal Ball Nose End Mills**

For Hard Milling  
Style HMBM  
pages 308



**Miniature Ball Nose End Mills**

Styles BMRM & BMSM  
pages 301-302



**the V-HEMOTH Ball Nose End Mills**

Styles VSBM, VHBM & VLBM  
pages 309-311



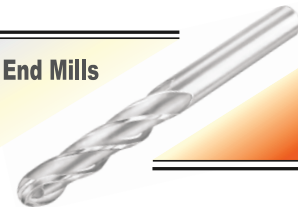
**Miniature Ball Nose End Mills**

Mold Making and Shrink Fit  
Styles MMBM & SFBM  
pages 303-306



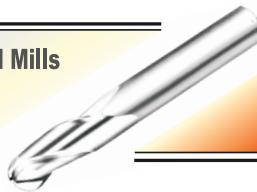
**Long Length Ball Nose End Mills**

Styles BELM & BLRM  
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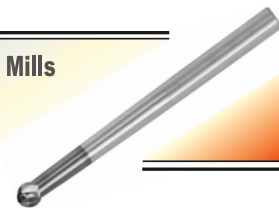
**2/3/4 Flute Ball Nose End Mills**

Style BEMM  
pages 307



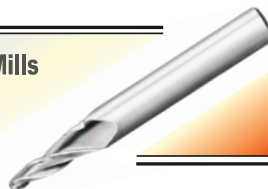
**Spherical Ball Nose End Mills**

Style SBMM  
pages 314-316



**Tapered Ball Nose End Mills**

Styles TEBM  
page 317



**Superior rupture strength  
for exceptional machining  
versatility.**



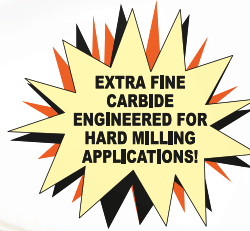
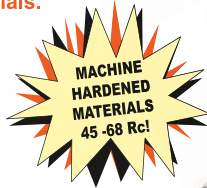
**K**

# MEFM-2

Metric, 2 Flute, Center Cutting, Hard Milling, Miniature End Mills

**Featuring:**

- These precision miniature end mills are ideal for finishing, and semi-finishing cuts and universal milling applications in soft, medium, and hard materials.



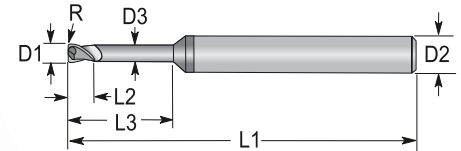
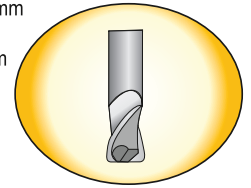
MEFM Metric, Miniature, Hard Milling, End Mill

**Tolerances:**

Shank Diameter: -.0025mm to -.0076mm

Cutter Diameter: +.0000mm -.0127mm

T.I.R. Maximum: .0127mm



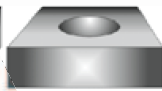
End Mills Coated with:  
**nACRo®**  
(Nanotech "CR")  
OTHER COATINGS AVAILABLE UPON REQUEST  
SEE PAGE 326



Side Milling



Open End Slot Milling



Plunging



Open End Slot Milling



Closed End Slot Milling

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

MEFM-2 Catalog No.		Cutter Diameter (D1)	Flute Length (L2)	Overall Reach (L3)	Neck Diameter (D3)	Tool Radius (R)	Overall Length (L1)	Shank Diameter (D2)	
Uncoated	Coated	metric	metric	metric	metric	metric	metric	metric	
<b>3mm Shanks</b>									
MEFM-001-015	MEFM-001-015K	0.1	0.15	0.15	0.00	0.00	38	3	
MEFM-0015-025	MEFM-0015-025K	0.15	0.25	0.25					
MEFM-002-030	MEFM-002-030K	0.2	0.3	0.3					
MEFM-003-045	MEFM-003-045K	0.3	0.45	0.45					
MEFM-004-060	MEFM-004-060K	0.4	0.6	0.6					
MEFM-005-070-05	MEFM-005-070-05K	0.5	0.7	0.7	0.00	0.05	38	3	
MEFM-005-300-05	MEFM-005-300-05K			3.0					
MEFM-005-600-05	MEFM-005-600-05K			6.0					
MEFM-006-090	MEFM-006-090K	0.6	0.9	0.9	0.00	0.00	38	3	
MEFM-006-300	MEFM-006-300K			3.0					
MEFM-006-500	MEFM-006-500K			5.0					
MEFM-006-600	MEFM-006-600K			6.0					
MEFM-006-090-05	MEFM-006-090-05K			0.9	0.00				0.05
MEFM-006-300-05	MEFM-006-300-05K			3.0					
MEFM-006-500-05	MEFM-006-500-05K			5.0					
MEFM-006-600-05	MEFM-006-600-05K			6.0					
MEFM-008-120	MEFM-008-120K	0.8	1.2	1.2	0.00	0.00	38	3	
MEFM-008-400	MEFM-008-400K			4.0					
MEFM-008-700	MEFM-008-700K			7.0					
MEFM-008-900	MEFM-008-900K			9.0					
MEFM-008-120-05	MEFM-008-120-05K			1.2	0.00				0.05
MEFM-008-400-05	MEFM-008-400-05K			4.0					
MEFM-008-700-05	MEFM-008-700-05K			7.0					
MEFM-008-900-05	MEFM-008-900-05K			9.0					
MEFM-010-150	MEFM-010-150K	1.0	1.5	1.5	0.00	0.00	38	3	
MEFM-010-400	MEFM-010-400K			4.0					
MEFM-010-700	MEFM-010-700K			7.0					
MEFM-010-900	MEFM-010-900K			9.0					
MEFM-010-150-10	MEFM-010-150-10K			1.5	0.00				0.10
MEFM-010-150-20	MEFM-010-150-20K			1.5					
MEFM-010-400-10	MEFM-010-400-10K			4.0					
MEFM-010-400-20	MEFM-010-400-20K			4.0					

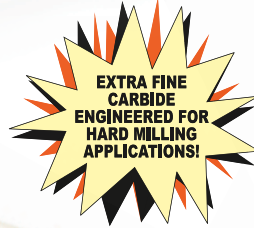
Refer to pages 323-363 for Technical Data.

# MEFM-2

Metric, 2 Flute, Center Cutting, Hard Milling, Miniature End Mills

**Featuring:**

- These precision miniature end mills are ideal for finishing, and semi-finishing cuts and universal milling applications in soft, medium, and hard materials.

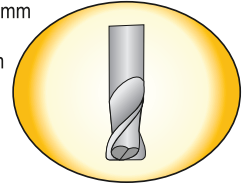


**MEFM Metric, Miniature, Hard Milling, End Mill Tolerances:**

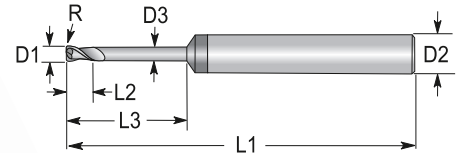
Shank Diameter: -.0025mm to -.0076mm

Cutter Diameter: +.000mm -.0127 mm

T.I.R. Maximum: .013mm



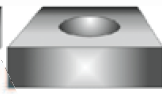
End Mills Coated with:  
**nACRo®**  
(Nanotech "CR")  
OTHER COATINGS AVAILABLE UPON REQUEST  
SEE PAGE 326



Side Milling



Open End Slot Milling



Plunging



Open End Slot Milling



Closed End Slot Milling

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

MEFM-2 Catalog No.		Cutter Diameter (D1)	Flute Length (L2)	Overall Reach (L3)	Neck Diameter (D3)	Tool Radius (R)	Overall Length (L1)	Shank Diameter (D2)			
Uncoated	Coated	metric	metric	metric	metric	metric	metric	metric			
<b>3mm Shanks</b>											
MEFM-010-700-10	MEFM-010-700-10K	1.0	1.5	7.0	0.95	0.10	38	3			
MEFM-010-700-20	MEFM-010-700-20K					0.20					
MEFM-010-900-10	MEFM-010-900-10K			9.0		0.10					
MEFM-010-900-20	MEFM-010-900-20K					0.20					
MEFM-012-180	MEFM-012-180K	1.2	1.8	1.8	1.10	0.00					
MEFM-012-600	MEFM-012-600K			6.0		0.00					
MEFM-012-1000	MEFM-012-1000K			10.0							
MEFM-012-1200	MEFM-012-1200K			12.0							
MEFM-012-180-10	MEFM-012-180-10K			1.2	1.8		1.8	1.10	0.10		
MEFM-012-180-20	MEFM-012-180-20K					0.20					
MEFM-012-600-10	MEFM-012-600-10K					6.0	0.00		0.10		
MEFM-012-600-20	MEFM-012-600-20K								0.20		
MEFM-012-1000-10	MEFM-012-1000-10K					10.0			1.10	0.10	
MEFM-012-1000-20	MEFM-012-1000-20K									0.20	
MEFM-012-1200-10	MEFM-012-1200-10K					12.0	1.10			0.10	
MEFM-012-1200-20	MEFM-012-1200-20K									0.20	
MEFM-015-220	MEFM-015-220K	1.5	2.2	2.2	1.40	0.00		50			
MEFM-015-600	MEFM-015-600K			6.0		0.00					
MEFM-015-1000	MEFM-015-1000K			10.0							
MEFM-015-1200	MEFM-015-1200K			12.0							
MEFM-015-1500	MEFM-015-1500K			15.0							
MEFM-015-2000	MEFM-015-2000K			20.0							
MEFM-015-220-15	MEFM-015-220-15K			1.5	2.2		2.2	1.40	0.15	38	
MEFM-015-220-25	MEFM-015-220-25K					0.25					
MEFM-015-600-15	MEFM-015-600-15K					6.0	0.00		0.15		
MEFM-015-600-25	MEFM-015-600-25K								0.25		
MEFM-015-1000-15	MEFM-015-1000-15K					10.0			1.40		0.15
MEFM-015-1000-25	MEFM-015-1000-25K										0.25
MEFM-015-1200-15	MEFM-015-1200-15K					12.0	1.40				0.15
MEFM-015-1200-25	MEFM-015-1200-25K										0.25
MEFM-015-1500-15	MEFM-015-1500-15K			15.0	1.40	0.15					
MEFM-015-1500-25	MEFM-015-1500-25K					0.25					

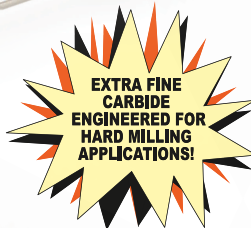
Refer to pages 323-363 for Technical Data.

# MEFM-2

Metric, 2 Flute, Center Cutting, Hard Milling, Miniature End Mills

**Featuring:**

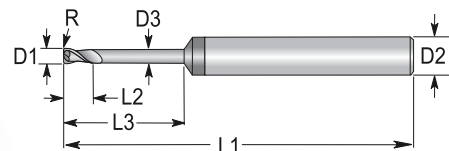
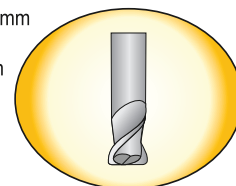
- These precision miniature end mills are ideal for finishing, and semi-finishing cuts and universal milling applications in soft, medium, and hard materials.



End Mills Coated with:  
**nACRo®**  
(Nanotech "CR")  
OTHER COATINGS AVAILABLE UPON REQUEST  
SEE PAGE 326

**MEFM Metric, Miniature, Hard Milling, End Mill Tolerances:**

Shank Diameter: -.0025mm to -.0076mm  
Cutter Diameter: +.000mm -.0127mm  
T.I.R. Maximum: .0127mm



Side Milling



Open End Slot Milling



Plunging



Open End Slot Milling



Closed End Slot Milling

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

MEFM-2 Catalog No.		Cutter Diameter (D1)	Flute Length (L2)	Overall Reach (L3)	Neck Diameter (D3)	Tool Radius (R)	Overall Length (L1)	Shank Diameter (D2)	
Uncoated	Coated	metric	metric	metric	metric	metric	metric	metric	
<b>3mm Shanks</b>									
MEFM-020-250	MEFM-020-250K	2.0	2.5	2.5	1.90	0.00	38	3	
MEFM-020-700	MEFM-020-700K			7.0					
MEFM-020-1200	MEFM-020-1200K			12.0					
MEFM-020-1600	MEFM-020-1600K			16.0					
MEFM-020-2000	MEFM-020-2000K			20.0					
MEFM-020-2500	MEFM-020-2500K			25.0	0.00	38			
MEFM-020-250-15	MEFM-020-250-15K			2.5					
MEFM-020-250-25	MEFM-020-250-25K			2.5					
MEFM-020-700-15	MEFM-020-700-15K			7.0					
MEFM-020-700-25	MEFM-020-700-25K			7.0					
MEFM-020-1200-15	MEFM-020-1200-15K			12.0	1.90	50			
MEFM-020-1200-25	MEFM-020-1200-25K			12.0					
MEFM-020-1600-15	MEFM-020-1600-15K			16.0					
MEFM-020-1600-25	MEFM-020-1600-25K			16.0					
MEFM-020-2000-15	MEFM-020-2000-15K			20.0					
MEFM-020-2000-25	MEFM-020-2000-25K			20.0	0.00	60			
MEFM-020-2500-15	MEFM-020-2500-15K			25.0					
MEFM-020-2500-25	MEFM-020-2500-25K			25.0					
MEFM-025-300	MEFM-025-300K			3.0			2.40		38
MEFM-025-1000	MEFM-025-1000K			10.0					
MEFM-025-1500	MEFM-025-1500K	15.0							
MEFM-025-2000	MEFM-025-2000K	20.0							
MEFM-025-2500	MEFM-025-2500K	25.0							
MEFM-025-3000	MEFM-025-3000K	30.0	0.00	50					
MEFM-025-300-15	MEFM-025-300-15K	3.0							
MEFM-025-300-25	MEFM-025-300-25K	3.0							
MEFM-025-1000-15	MEFM-025-1000-15K	10.0							
MEFM-025-1000-25	MEFM-025-1000-25K	10.0							
MEFM-025-1500-15	MEFM-025-1500-15K	15.0	2.40	38					
MEFM-025-1500-25	MEFM-025-1500-25K	15.0							
MEFM-025-2000-15	MEFM-025-2000-15K	20.0							
MEFM-025-2000-25	MEFM-025-2000-25K	20.0							
MEFM-025-2000-25	MEFM-025-2000-25K	20.0			0.00	50			
MEFM-025-2500-15	MEFM-025-2500-15K	25.0							
MEFM-025-2500-25	MEFM-025-2500-25K	25.0							

Refer to pages 323-363 for Technical Data.

# MEFM-2

Metric, 2 Flute, Center Cutting, Hard Milling, Miniature End Mills

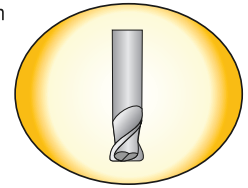
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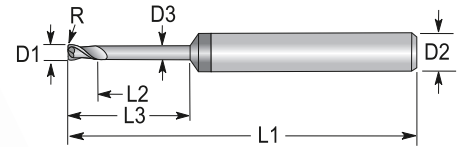


**MEFM Metric, Miniature, Hard Milling, End Mill Tolerances:**

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Cutter Diameter: +.000mm -.0127mm  
T.I.R. Maximum: .0127mm



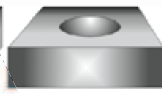
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Side Milling



Open End Slot Milling



Plunging



Open End Slot Milling



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MEFM-2 Catalog No.		Cutter Diameter (D1)	Flute Length (L2)	Overall Reach (L3)	Neck Diameter (D3)	Tool Radius (R)	Overall Length (L1)	Shank Diameter (D2)			
Uncoated	Coated	metric	metric	metric	metric	metric	metric	metric			
<b>3mm Shanks</b>											
MEFM-025-2500-15	MEFM-025-2500-15K	2.5	3.0	25.0	2.40	0.15	50	3			
MEFM-025-2500-25	MEFM-025-2500-25K					0.25					
MEFM-025-3000-15	MEFM-025-3000-15K			30.0		60	0.15				
MEFM-025-3000-25	MEFM-025-3000-25K						0.25				
<b>6mm Shanks</b>											
MEFM-030-300	MEFM-030-300K	3.0	3.0	3.0	2.90	0.00	57	6			
MEFM-030-1000	MEFM-030-1000K			10.0							
MEFM-030-1500	MEFM-030-1500K			15.0							
MEFM-030-2500	MEFM-030-2500K			25.0							
MEFM-030-3000	MEFM-030-3000K			20.0							
MEFM-030-300-15	MEFM-030-300-15K			3.0	0.00	0.15					
MEFM-030-300-25	MEFM-030-300-25K								0.25		
MEFM-030-1000-15	MEFM-030-1000-15K			10.0	2.90	0.15					
MEFM-030-1000-25	MEFM-030-1000-25K								0.25		
MEFM-030-1500-15	MEFM-030-1500-15K								15.0	0.15	
MEFM-030-1500-25	MEFM-030-1500-25K										0.25
MEFM-030-2500-15	MEFM-030-2500-15K										25.0
MEFM-030-2500-25	MEFM-030-2500-25K	0.25									
MEFM-030-3000-15	MEFM-030-3000-15K	30.0	0.15								
MEFM-030-3000-25	MEFM-030-3000-25K			0.25							
MEFM-040-500	MEFM-040-500K	4.0	5.0	5.0	3.90	0.00	57	6			
MEFM-040-1500	MEFM-040-1500K			15.0							
MEFM-040-2500	MEFM-040-2500K			25.0							
MEFM-040-3000	MEFM-040-3000K			30.0							
MEFM-040-500-25	MEFM-040-500-25K			5.0	0.00	0.25					
MEFM-040-500-50	MEFM-040-500-50K								0.50		
MEFM-040-500-100	MEFM-040-500-100K								1.00		
MEFM-040-1500-25	MEFM-040-1500-25K			15.0	3.90	0.25					
MEFM-040-1500-50	MEFM-040-1500-50K								0.50		
MEFM-040-1500-100	MEFM-040-1500-100K								1.00		

Refer to pages 323-363 for Technical Data.

# MEFM-2

Metric, 2 Flute, Center Cutting, Hard Milling, Miniature End Mills

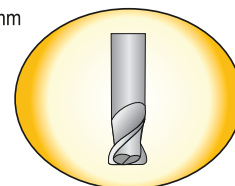
**Featuring:**

- These precision miniature end mills are ideal for finishing, and semi-finishing cuts and universal milling applications in soft, medium, and hard materials.

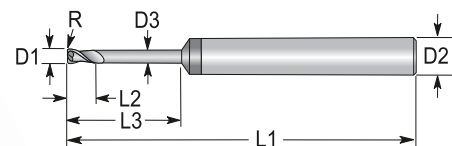


**MEFM Metric, Miniature, Hard Milling, End Mill Tolerances:**

Shank Diameter: -.0025mm to -.0076mm  
Cutter Diameter: +.000mm -.0127mm  
T.I.R. Maximum: .0127mm



End Mills Coated with:  
**nACRo**<sup>®</sup>  
(Nanotech "CR")  
OTHER COATINGS AVAILABLE UPON REQUEST  
SEE PAGE 326



Side Milling



Open End Slot Milling



Plunging



Open End Slot Milling



Closed End Slot Milling

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

MEFM-2 Catalog No.		Cutter Diameter (D1)	Flute Length (L2)	Overall Reach (L3)	Neck Diameter (D3)	Tool Radius (R)	Overall Length (L1)	Shank Diameter (D2)	
Uncoated	Coated	metric	metric	metric	metric	metric	metric	metric	
<b>6mm Shanks</b>									
MEFM-040-2500-25	MEFM-040-2500-25K	4.0	5.0	25.0	3.90	0.25	57	6	
MEFM-040-2500-50	MEFM-040-2500-50K					0.50			
MEFM-040-2500-100	MEFM-040-2500-100K					1.00			
MEFM-040-3000-25	MEFM-040-3000-25K			30.0		0.25			
MEFM-040-3000-50	MEFM-040-3000-50K					0.50			
MEFM-040-3000-100	MEFM-040-3000-100K					1.00			
MEFM-050-600	MEFM-050-600K	5.0	6.0	6.0	4.90	0.00			
MEFM-050-1500	MEFM-050-1500K			15.0		0.00			
MEFM-050-2500	MEFM-050-2500K			25.0					
MEFM-050-3000	MEFM-050-3000K			30.0					
MEFM-050-600-15	MEFM-050-600-15K			6.0		0.00			0.25
MEFM-050-600-50	MEFM-050-600-50K								0.50
MEFM-050-600-100	MEFM-050-600-100K				1.00				
MEFM-050-1500-25	MEFM-050-1500-25K			4.90	15.0	0.25			
MEFM-050-1500-50	MEFM-050-1500-50K					0.50			
MEFM-050-1500-100	MEFM-050-1500-100K					1.00			
MEFM-050-2500-25	MEFM-050-2500-25K					25.0	0.25		
MEFM-050-2500-50	MEFM-050-2500-50K						0.50		
MEFM-050-2500-100	MEFM-050-2500-100K	1.00							
MEFM-050-3000-25	MEFM-050-3000-25K	30.0	30.0	0.25					
MEFM-050-3000-50	MEFM-050-3000-50K			0.50					
MEFM-050-3000-100	MEFM-050-3000-100K			1.00					

Refer to pages 323-363 for Technical Data.

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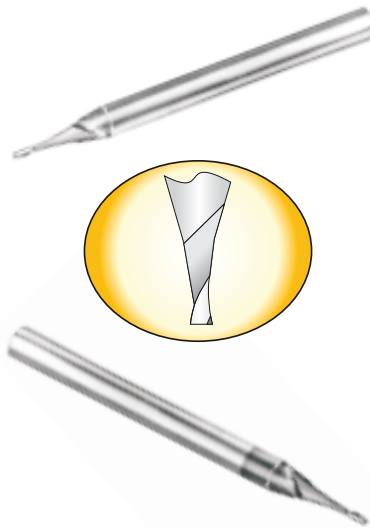


# AMRM-2

Metric, 2 Flute, Center Cutting - 30° Helix,  
Miniature End Mills

**Featuring:**

- These precision miniature end mills are ideal for finishing and semi-finishing cuts and universal milling applications in soft, medium, and hard materials.



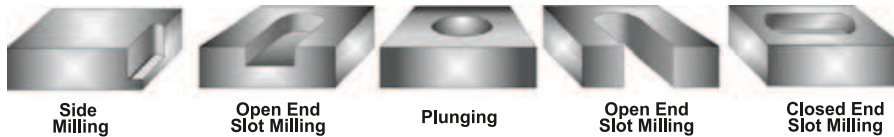
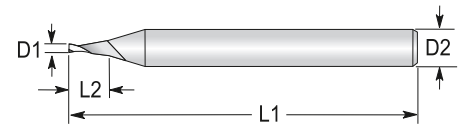
**AMRM Metric Miniature End Mill Tolerances:**

Shank Diameter:  
-0.0025mm to -0.0076mm  
Cutter Diameter:  
0.2mm - 3mm: +.000mm -.014mm  
3.5mm: +.000mm -.018mm  
T.I.R. Maximum:  
0.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

AMRM-2 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>2-Flute</b>				
<b>4mm Shanks</b>				
AMRM-002-2	0.2	0.4	50	4
AMRM-003-2	0.3	0.9		
AMRM-004-2	0.4	1.2		
AMRM-005-2	0.5	1.5		
AMRM-006-2	0.6	1.8		
AMRM-007-2	0.7	2.1		
AMRM-008-2	0.8	2.4		
AMRM-009-2	0.9	2.7		
AMRM-010-2	1.0	3.0		
AMRM-011-2	1.1	3.3		
AMRM-012-2	1.2	3.8		
AMRM-013-2	1.3	3.9		
AMRM-014-2	1.4	4.2		
AMRM-015-2	1.5	4.8		
AMRM-016-2	1.6	5.1		
AMRM-017-2	1.7	5.3		
AMRM-018-2	1.8	5.7		
AMRM-019-2	1.9	6.0		
AMRM-020-2	2.0	8.0		
AMRM-025-2	2.5	9.0		
AMRM-030-2	3.0	10.5		
AMRM-035-2	3.5			

Refer to pages 323-363 for Technical Data.

**K**

# RMEM-2

Metric, 2 Flute, Center Cutting, 30° Helix, Miniature End Mills

**Featuring:**

- These precision miniature end mills are ideal for finishing and semi-finishing cuts and universal milling applications in soft, medium, and hard materials.



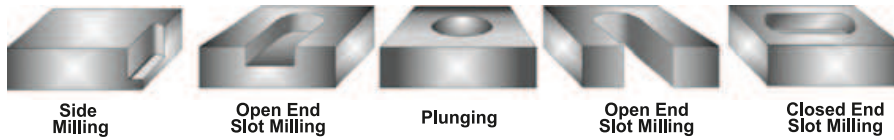
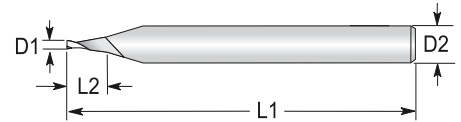
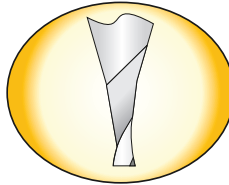
**RMEM Metric Miniature End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
0.2mm - 2.5mm: +.000mm -.014mm  
T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AITiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

<b>RMEM-2</b> Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) fraction	Shank Diameter (D2) fraction
<b>2-Flute</b>				
<b>3 mm Shanks</b>				
RMEM-002-2	0.2	0.4	38	3
RMEM-003-2	0.3	0.9		
RMEM-004-2	0.4	1.2		
RMEM-005-2	0.5	1.5		
RMEM-006-2	0.6	1.8		
RMEM-007-2	0.7	2.1		
RMEM-008-2	0.8	2.4		
RMEM-009-2	0.9	2.7		
RMEM-010-2	1.0	3.0		
RMEM-011-2	1.1	3.3		
RMEM-012-2	1.2	3.8		
RMEM-013-2	1.3	3.9		
RMEM-014-2	1.4	4.2		
RMEM-015-2	1.5	4.8		
RMEM-016-2	1.6	4.8		
RMEM-017-2	1.7	5.1		
RMEM-018-2	1.8	5.3		
RMEM-019-2	1.9	5.7		
RMEM-020-2	2.0	6.0		
RMEM-025-2	2.5	8.0		

**K**

Refer to pages 323-363 for Technical Data.

# MMRM-2

Metric, 2 Flute, Center Cutting - 30° Helix, Mold Making End Mills

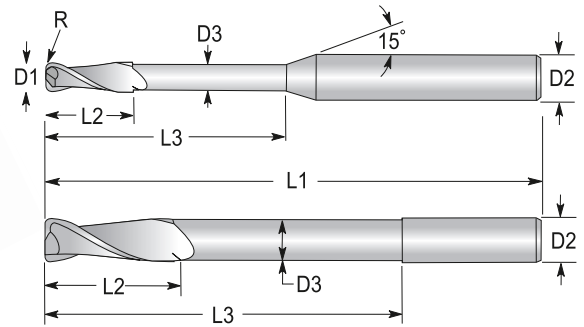
**Featuring:**

- These high precision end mills feature multiple corner radii and multiple neck length dimensions in a wide range of cutting diameters to provide the best available geometry for finishing cuts in mold making applications.
- A positive rake angle supports maximum cutting performance in medium and hard materials for conventional side milling and slotting.



**MMRM Metric Mold Making End Mill Tolerances:**

Shank Diameter: -.0025mm to -.0076mm  
 Cutter Diameter: 0.5mm - 1.5mm: +.000mm -.014mm  
 Tool Radius: ±.013mm  
 T.I.R. Maximum: .013mm



**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

MMRM-2 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Reduced Neck Diameter (D3)	Reduced Neck Length (L3)	Tool Radius (R)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	metric	metric	metric	metric	metric	metric	metric
<b>4mm Shanks</b>							
MMRM-005-5	0.5	0.5	.048	5	0.05	50	4
MMRM-005-10				10			
MMRM-006-5	0.6	0.6	.058	5			
MMRM-006-12				12			
MMRM-007-5	0.7	0.7	.068	5			
MMRM-007-12				12			
MMRM-008-5	0.8	0.8	.078	5	0.10		
MMRM-008-10				10			
MMRM-008-16				12			
MMRM-009-5	0.9	0.9	.088	5			
MMRM-009-10				10			
MMRM-009-16				16			
<b>6mm Shanks</b>							
MMRM-010-5	1.0	1.0	.095	5	0.10	57	6
MMRM-010-8				8			
MMRM-010-10				10			
MMRM-010-12				12			
MMRM-010-15				15			
MMRM-010-20				20			
MMRM-012-7	1.2	1.2	1.15	7			
MMRM-012-15				15			
MMRM-012-20				20			
MMRM-015-7	1.5	1.5	1.45	7	0.15	72	
MMRM-015-15				15			
MMRM-015-25				25			

Refer to pages 323-363 for Technical Data.

**K**

# MMRM-2

Metric, 2 Flute, Center Cutting - 30° Helix,  
Mold Making End Mills



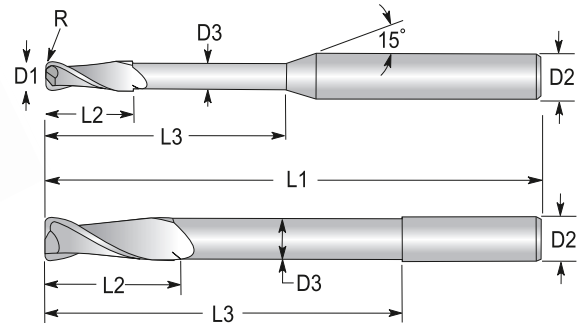
**Featuring:**

- These high precision end mills feature **multiple corner radii** and **multiple neck length dimensions** in a wide range of cutting diameters to provide the best available geometry for finishing cuts in mold making applications.
- A positive rake angle supports **maximum cutting performance** in medium and hard materials for conventional side milling and slotting.



**MMRM Metric Mold Making End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
2mm - 3mm: +.000mm -.014mm  
4mm - 6mm: +.000mm -.018mm  
8mm - 10mm: +.000mm -.022mm  
12mm: +.000mm -.027mm  
Tool Radius:  
+.013mm  
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

MMRM-2 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Reduced Diameter (D3)	Reduced Neck Length (L3)	Tool Radius (R)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	metric	metric	metric	metric	metric	metric	metric
<b>6mm Shanks</b>							
MMRM-020-7	2	2	1.90	7	0.20	57	6
MMRM-020-15				5		72	
MMRM-020-30				30		72	
MMRM-030-8	3	3	2.90	8	0.25	57	
MMRM-030-15				15		72	
MMRM-030-30				30		72	
MMRM-040-9	4	4	3.80	9	0.50	57	
MMRM-040-15				15		72	
MMRM-040-30				30		72	
MMRM-050-10	5	5	4.80	10	1.00	57	
MMRM-050-15				15		72	
MMRM-050-30				30		72	
MMRM-060-10	6	6	5.80	10	1.00	57	
MMRM-060-16				16		72	
MMRM-060-30				30		72	
<b>8mm Shanks</b>							
MMRM-080-16	8	8	7.80	16	1.00	63	8
MMRM-080-25				25		72	
<b>10mm Shanks</b>							
MMRM-100-20	10	10	9.80	20	1.00	72	10
MMRM-100-25				25			
<b>12mm Shanks</b>							
MMRM-120-25	12	12	11.80	25	1.50	83	12

Refer to pages 323-363 for Technical Data.

K

# SFRM-2

Metric, 2 Flute, Center Cutting - 30° Helix,  
HSC Shrink Fit End Mills

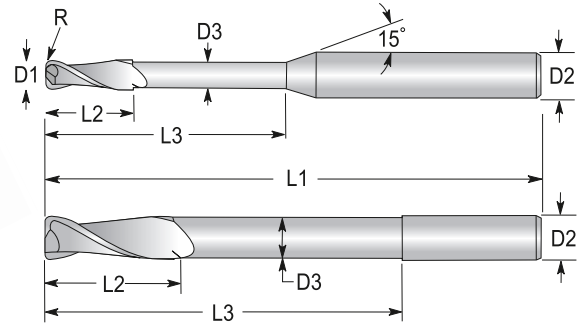
**Featuring:**

- These highest precision finishing end mills are suitable for HSC applications and are engineered for shrink-fit tool holding.
- A positive rake angle supports maximum cutting performance in soft, medium and hard materials for conventional side milling and slotting.



**SFRM Metric HSC Shrink Fit End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
0.2mm - 1.4mm+.000mm -.014mm  
Tool Radius:  
±.013mm  
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**  
**AITiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

SFRM-2 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Reduced Neck Diameter (D3) metric	Reduced Neck Length (L3) metric	Radius metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>6mm Shanks</b>							
SFRM-002-0	0.2	0.3	0.00	0.0	0.0	57	6
SFRM-003-0	0.3	0.4					
SFRM-003-1	0.3	0.4	0.25	1.0			
SFRM-004-0	0.4	0.5	0.00	0.0			
SFRM-004-1	0.4	0.5	0.35	1.2			
SFRM-005-1	0.5	0.6	0.45	1.6			
SFRM-005-3		0.5		3.3			
SFRM-005-5		0.5		5.1			
SFRM-006-2	0.6	0.7	0.55	1.7			
SFRM-006-4		0.6		4.5			
SFRM-006-6		0.6		6.2			
SFRM-008-2	0.8	1.0	0.75	2.5			
SFRM-008-5		0.8		5.2			
SFRM-008-8		0.8		8.0			
SFRM-010-3	1.0	1.3	0.95	3.3			
SFRM-010-8				8.0			
SFRM-012-3	1.2	1.5	1.15	3.5			
SFRM-012-8		1.2		8.0			
SFRM-014-3	1.4	1.8	1.35	3.8			
SFRM-014-15		2.3		15.0			

Refer to pages 323-363 for Technical Data.

**K**

# SFRM-2

Metric, 2 Flute, Center Cutting - 30° Helix,  
HSC Shrink Fit End Mills



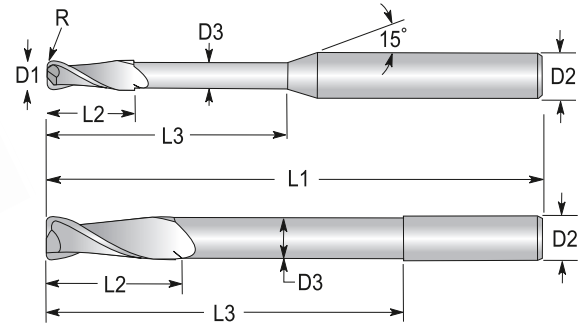
**Featuring:**

- These highest precision finishing end mills are suitable for HSC applications and are engineered for shrink-fit tool holding.
- A positive rake angle supports maximum cutting performance in soft, medium and hard materials for conventional side milling and slotting.



**SFRM Metric HSC Shrink Fit End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
1.5mm - 3mm: +.000mm -.014mm  
3.5mm - 6mm: +.000mm -.018mm  
Tool Radius:  
±.013mm  
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

SFRM-2 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Reduced Neck Diameter (D3) metric	Reduced Neck Length (L3) metric	Radius metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>6mm Shanks</b>							
SFRM-015-4	1.5	1.9	1.45	4.9	0.1	57	6
SFRM-015-9		1.5		9.5			
SFRM-016-5	1.6	2.0	1.55	5.0			
SFRM-016-22		2.3		22.0			
SFRM-018-5	1.8	2.5	1.75	5.3			
SFRM-020-5	2.0			5.5			
SFRM-020-9	2.0	9.5					
SFRM-025-6	2.5	3.0	2.40	6.0			
SFRM-025-9		2.5		9.5			
SFRM-030-8	3.0	4.0	2.90	8.0	0.2		
SFRM-030-15		4.0		15.0			
SFRM-035-9	3.5	4.5	3.40	9.5			
SFRM-040-10	4.0	5.0	3.90	10.0			
SFRM-040-20				20.0			
SFRM-050-11	5.0	6.0	4.90	11.0			
SFRM-050-25				25.0			
SFRM-060-12	6.0	7.5	5.90	12.5			
SFRM-060-25				25.0			

Refer to pages 323-363 for Technical Data.

K

# AECM-2/-3/-4

Metric, 2, 3, & 4 Flute, Center Cutting,  
30° Helix End Mills with Corner Radius

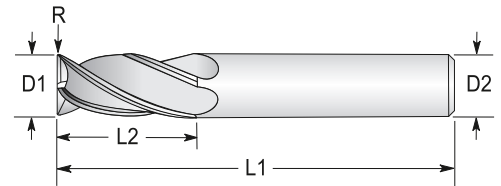
**Featuring:**

- These universal application type end mills feature a slightly increased flute and overall length for greatest versatility
- Engineered with various corner radii per cutting diameter, these end mills are **ideally suited for heavier cuts in medium and hard materials.**



**AECM Metric End Mill Tolerances:**

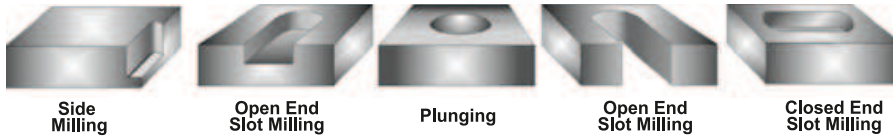
Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
1mm - 3mm: +.000mm -.014mm  
4mm - 6mm: +.000mm -.018mm  
8mm - 10mm: +.000mm -.036mm  
12mm: +.000mm -.043mm  
Corner Radius:  
±.013mm  
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

AECM-2 Catalog No.	AECM-3 Catalog No.	AECM-4 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Corner Radius (R)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	3-Flute	4-Flute	metric	metric	metric	metric	metric
<b>4mm Shanks</b>							
AECM-0101-2	AECM-0101-3	AECM-0101-4	1	4	0.1	50	4
AECM-0102-2	AECM-0102-3	AECM-0102-4			0.2		
AECM-0202-2	AECM-0202-3	AECM-0202-4			0.5		
AECM-0205-2	AECM-0205-3	AECM-0205-4	2	5			
<b>6mm Shanks</b>							
AECM-0302-2	AECM-0302-3	AECM-0302-4	3	8	0.2	57	6
AECM-0305-2	AECM-0305-3	AECM-0305-4			0.5		
AECM-0402-2	AECM-0402-3	AECM-0402-4	4	11	0.2		
AECM-0405-2	AECM-0405-3	AECM-0405-4			0.5		
AECM-0410-2	AECM-0410-3	AECM-0410-4			1.0		
AECM-0502-2	AECM-0502-3	AECM-0502-4	5	16	0.2		
AECM-0505-2	AECM-0505-3	AECM-0505-4			0.5		
AECM-0510-2	AECM-0510-3	AECM-0510-4			1.0		
AECM-0603-2	AECM-0603-3	AECM-0603-4	6	16	0.3		
AECM-0605-2	AECM-0605-3	AECM-0605-4			0.5		
ACEM-0610-2	ACEM-0610-3	ACEM-0610-4			1.0		
<b>8mm Shanks</b>							
AECM-0805-2	AECM-0805-3	AECM-0805-4	8	22	0.5	63	8
AECM-0810-2	AECM-0810-3	AECM-0810-4			1.0		
AECM-0815-2	AECM-0815-3	AECM-0815-4			1.5		
<b>10mm Shanks</b>							
AECM-1005-2	AECM-1005-3	AECM-1005-4	10	25	0.5	72	10
AECM-1010-2	AECM-1010-3	AECM-1010-4			1.0		
AECM-1015-2	AECM-1015-3	AECM-1015-4			1.5		
<b>12mm Shanks</b>							
AECM-1205-2	AECM-1205-3	AECM-1205-4	12	30	0.5	83	12
AECM-1210-2	AECM-1210-3	AECM-1210-4			1.0		
AECM-1215-2	AECM-1215-3	AECM-1215-4			1.5		

Refer to pages 323-363 for Technical Data.

# AEMM-2/-3/-4

Metric, 2, 3, & 4 Flute, Center Cutting,  
30° Helix End Mills



**Featuring:**

- These universal application type end mills feature a slightly increased flute and overall length for greatest versatility.
- The conventional tool geometry supports applications in a wide scope of different materials, ranging from soft to hard.



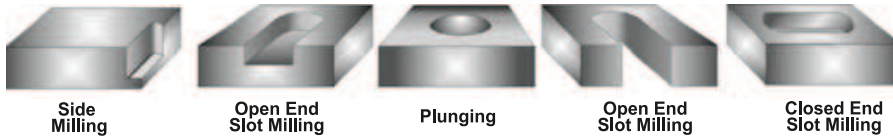
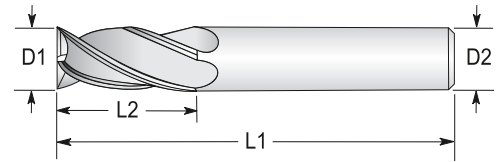
**AEMM Metric End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
1mm - 3mm: +.000mm -.014mm  
3.5mm - 6mm: +.000mm -.018mm  
7mm - 10mm: +.000mm -.022mm  
T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

AEMM-2 Catalog No.	AEMM-3 Catalog No.	AEMM-4 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	3-Flute	4-Flute	metric		metric	metric
AEMM-010-2	AEMM-010-3	AEMM-010-4	1.0	4	50	4
AEMM-015-2	AEMM-015-3	AEMM-015-4	1.5			
AEMM-020-2	AEMM-020-3	AEMM-020-4	2.0			
AEMM-025-2	AEMM-025-3	AEMM-025-4	2.5			
AEMM-030-2	AEMM-030-3	AEMM-030-4	3.0	8	57	6
AEMM-035-2	AEMM-035-3	AEMM-035-4	3.5			
AEMM-040-2	AEMM-040-3	AEMM-040-4	4.0	11		
AEMM-045-2	AEMM-045-3	AEMM-045-4	4.5			
AEMM-050-2	AEMM-050-3	AEMM-050-4	5.0	16		
AEMM-055-2	AEMM-055-3	AEMM-055-4	5.5			
AEMM-060-2	AEMM-060-3	AEMM-060-4	6.0	22	63	8
AEMM-070-2	AEMM-070-3	AEMM-070-4	7.0			
AEMM-080-2	AEMM-080-3	AEMM-080-4	8.0	22	72	10
AEMM-090-2	AEMM-090-3	AEMM-090-4	9.0			
AEMM-100-2	AEMM-100-3	AEMM-100-4	10.0	30	83	12
AEMM-110-2	AEMM-110-3	AEMM-110-4	11.0			
AEMM-120-2	AEMM-120-3	AEMM-120-4	12.0	35	83	14
AEMM-140-2	AEMM-140-3	AEMM-140-4	14.0			
AEMM-160-2	AEMM-160-3	AEMM-160-4	16.0	35	92	16
AEMM-180-2	AEMM-180-3	AEMM-180-4	18.0			
AEMM-200-2	AEMM-200-3	AEMM-200-4	20.0	45	92	18
AEMM-250-2	AEMM-250-3	AEMM-250-4	25.0			
AEMM-200-2	AEMM-200-3	AEMM-200-4	20.0	45	104	20
AEMM-250-2	AEMM-250-3	AEMM-250-4	25.0			
AEMM-250-2	AEMM-250-3	AEMM-250-4	25.0	50	127	25

Refer to pages 323-363 for Technical Data.

K



# EMSM-2/-3/-4

Metric, 2, 3, & 4 Flute, Center Cutting,  
30° Helix End Mills



**Featuring:**

- These end mills feature a plus tolerance on the cutting diameter. **Tools are suitable for multiple resharpening.**



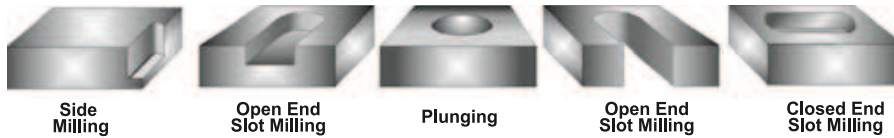
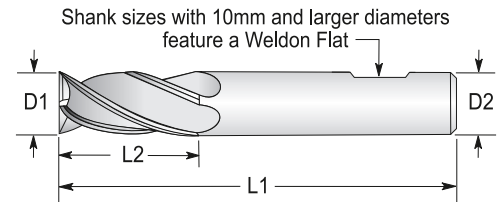
**EMSM Metric End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
+.025mm - .000mm  
T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

EMSM-2 Catalog No.	EMSM-3 Catalog No.	EMSM-4 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	3-Flute	4-Flute	metric	metric	metric	metric
<b>2mm Shanks</b>						
EMSM-020-2	EMSM-020-3	EMSM-020-4	2	10	38	2
<b>3mm Shanks</b>						
EMSM-030-2	EMSM-030-3	EMSM-030-4	3	15	38	3
<b>4mm Shanks</b>						
EMSM-040-2	EMSM-040-3	EMSM-040-4	4	18	50	4
<b>5mm Shanks</b>						
EMSM-050-2	EMSM-050-3	EMSM-050-4	5	18	50	5
<b>6mm Shanks</b>						
EMSM-060-2	EMSM-060-3	EMSM-060-4	6	18	57	6
<b>8mm Shanks</b>						
EMSM-080-2	EMSM-080-3	EMSM-080-4	8	22	63	8
<b>10mm Shanks</b>						
EMSM-100-2	EMSM-100-3	EMSM-100-4	10	25	72	10
<b>12mm Shanks</b>						
EMSM-120-2	EMSM-120-3	EMSM-120-4	12	30	83	12
<b>14mm Shanks</b>						
EMSM-140-2	EMSM-140-3	EMSM-140-4	14	35	83	14
<b>16mm Shanks</b>						
EMSM-160-2	EMSM-160-3	EMSM-160-4	16	35	92	16
<b>18mm Shanks</b>						
EMSM-180-2	EMSM-180-3	EMSM-180-4	18	45	92	18
<b>20mm Shanks</b>						
EMSM-200-2	EMSM-200-3	EMSM-200-4	20	45	104	20

Refer to pages 323-363 for Technical Data.

# GEMM-2/-3/-4

Metric, 2, 3, & 4 Flute, Center Cutting,  
30° Helix End Mills

**MICRO 100**<sup>®</sup>  
super carbide tools

**Featuring:**

- These universal application type end mills feature a slightly increased flute and overall length for greatest versatility.
- The conventional tool geometry supports applications in a wide scope of different materials, ranging from soft to hard.



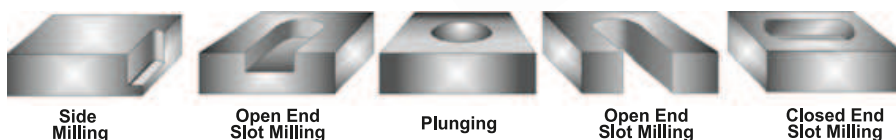
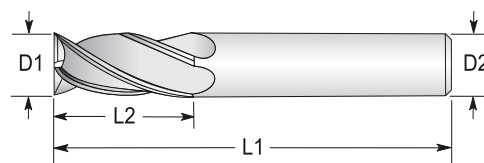
**GEMM Metric End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
1mm - 3mm: +.000mm -.04mm  
4mm - 6mm: +.000mm -.018mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 18mm: +.000mm -.043mm  
20mm: +.000mm -.052mm  
T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

GEMM-2 Catalog No.	GEMM-3 Catalog No.	GEMM-4 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric		Overall Length (L1) metric	Shank Diameter (D2) metric
				2/3 flute	4 flute		
<b>3mm Shanks</b>							
GEMM-010-2	GEMM-010-3	GEMM-010-4	1	3	3	38	3
GEMM-020-2	GEMM-020-3	GEMM-020-4	2	6	7		
GEMM-030-2	GEMM-030-3	GEMM-030-4	3	7	8		
<b>4mm Shanks</b>							
GEMM-040-2	GEMM-040-3	GEMM-040-4	4	8	11	50	4
<b>5mm Shanks</b>							
GEMM-050-2	GEMM-050-3	GEMM-050-4	5	10	13	50	5
<b>6mm Shanks</b>							
GEMM-060-2	GEMM-060-3	GEMM-060-4	6	10	13	57	6
<b>8mm Shanks</b>							
GEMM-080-2	GEMM-080-3	GEMM-080-4	8	16	19	63	8
<b>10mm Shanks</b>							
GEMM-100-2	GEMM-100-3	GEMM-100-4	10	19	22	72	10
<b>12mm Shanks</b>							
GEMM-120-2	GEMM-120-3	GEMM-120-4	12	22	26	83	12
<b>14mm Shanks</b>							
GEMM-140-2	GEMM-140-3	GEMM-140-4	14	22	26	83	14
<b>16mm Shanks</b>							
GEMM-160-2	GEMM-160-3	GEMM-160-4	16	26	32	92	16
<b>18mm Shanks</b>							
GEMM-180-2	GEMM-180-3	GEMM-180-4	18	26	32	92	18
<b>20mm Shanks</b>							
GEMM-200-2	GEMM-200-3	GEMM-200-4	20	32	38	104	20

Refer to pages 323-363 for Technical Data.

K

# ARMM-2/-3/-5

Metric, 2, 3, & 5 Flute, Center Cutting,  
45° Helix End Mills

**Featuring:**

- These end mills feature a 45° helix for **roughing, finishing, and slotting** in medium to hard steels, stainless steels, and high temperature alloys.
- The high helix angle **aids in reducing chatter** and helps to increase metal removal rates, while **providing the highest surface finish quality.**



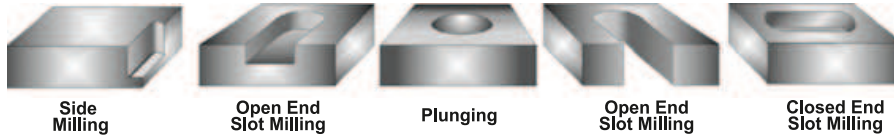
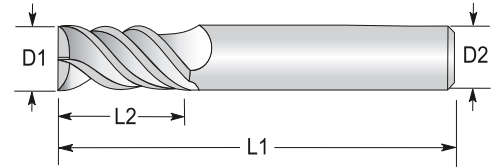
**ARMM Metric End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
1mm - 3mm: +.000mm -.014mm  
4mm - 6mm: +.000mm -.018mm  
8mm - 10mm: +.000mm -.022mm  
12mm - 18mm: +.000mm -.027mm  
20mm: +.000mm -.033mm  
T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

ARMM-2 Catalog No.	ARMM-3 Catalog No.	ARMM-5 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>4mm Shanks</b>						
ARMM-010-2	_____	_____	1	3	50	4
ARMM-020-2	_____	_____	2	6		
<b>6mm Shanks</b>						
ARMM-030-2	_____	ARMM-030-5	3	10	57	6
ARMM-040-2	_____	ARMM-040-5	4	15		
ARMM-050-2	_____	ARMM-050-5	5	20		
ARMM-060-2	ARMM-060-3	ARMM-060-5	6			
<b>8mm Shanks</b>						
ARMM-080-2	ARMM-080-3	ARMM-080-5	8	25	63	8
<b>10mm Shanks</b>						
ARMM-100-2	ARMM-100-3	ARMM-100-5	10	25	72	10
<b>12mm Shanks</b>						
ARMM-120-2	ARMM-120-3	ARMM-120-5	12	30	83	12
<b>14m Shanks</b>						
ARMM-140-2	ARMM-140-3	ARMM-140-5	14	30	83	14
<b>16mm Shanks</b>						
ARMM-160-2	ARMM-160-3	ARMM-160-5	16	35	92	16
<b>18mm Shanks</b>						
ARMM-180-2	ARMM-180-3	ARMM-180-5	18	45	92	18
<b>20m Shanks</b>						
ARMM-200-2	ARMM-200-3	ARMM-200-5	20	45	104	20

Refer to pages 323-363 for Technical Data.

# ASMM-2/-5

Metric, 2 & 5 Flute, Center Cutting,  
45° Helix End Mills

**Featuring:**

- These high performance end mills feature a 45° helix and are engineered for high speed cutting in aluminum, nonferrous and soft materials.
- The special flute geometry provides an extremely smooth and silent cutting action for an exceptional surface finish.

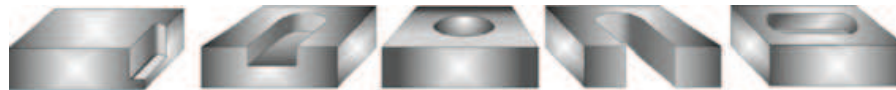
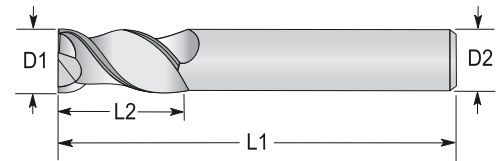


**ASMM Metric End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
1mm - 3mm: +.000mm -.014mm  
4mm - 6mm: +.000mm -.018mm  
8mm - 10mm: +.000mm -.022mm  
12mm - 18mm: +.000mm -.027mm  
20mm: +.000mm -.033mm  
T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGES 326



Side Milling

Open End Slot Milling

Plunging

Open End Slot Milling

Closed End Slot Milling

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

ASMM-2 Catalog No.	ASMM-5 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	5-Flute	metric	metric	metric	metric
<b>4mm Shanks</b>					
ASMM-010-2	_____	1	2	50	4
ASMM-020-2	_____	2	4		
<b>6mm Shanks</b>					
ASMM-030-2	ASMM-030-5	3	6	57	6
ASMM-040-2	ASMM-040-5	4	8		
ASMM-050-2	ASMM-050-5	5	10		
ASMM-060-2	ASMM-060-5	6			
<b>8mm Shanks</b>					
ASMM-080-5	ASMM-080-5	8	16	63	8
<b>10mm Shanks</b>					
ASMM-100-5	ASMM-100-5	10	19	72	10
<b>12mm Shanks</b>					
ASMM-120-2	ASMM-120-5	12	22	83	12

Refer to pages 323-363 for Technical Data.

**K**

# EMHM-2/-4/-6

Metric, 2, 4, & 6 Flute, Center Cutting,  
38° Helix End Mills

**Featuring:**

- These 38° helix end mills provide a superior work piece finish in all milling applications.
- These end mills are very suitable for milling steels, stainless steels, and heat treated materials.
- The 6 flute geometry provides excellent shearing action, resulting in the highest dimensional accuracy and reduced work piece distortion, especially in thin wall slotting applications.



**EMHM Metric End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm

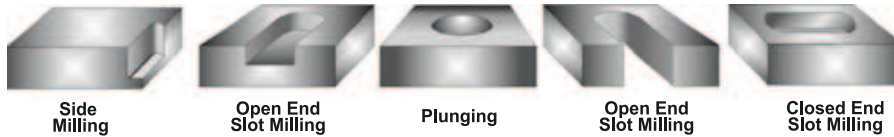
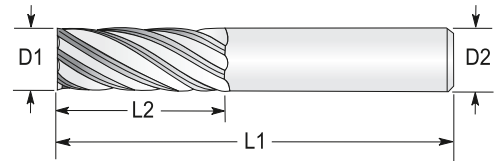
Cutter Diameter:  
4mm - 6mm: +.000mm -.030mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 18mm: +.000mm -.043mm  
20mm: +.000mm -.052mm

T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

EMHM-2 Catalog No.	EMHM-4 Catalog No.	EMHM-6 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
2 Flute	4 Flute	6 Flute	metric	metric	metric	metric
<b>4mm Shanks</b>						
EMHM-030-2	EMHM-030-4	_____	3	8	50	4
EMHM-040-2	EMHM-040-4	_____	4	12		
<b>6mm Shanks</b>						
EMHM-050-2	EMHM-050-4	_____	5	15	57	6
EMHM-060-2	EMHM-060-4	EMHM-060-6	6	18		
<b>8mm Shanks</b>						
EMHM-080-2	EMHM-080-4	EMHM-080-6	8	20	63	8
<b>10mm Shanks</b>						
EMHM-100-2	EMHM-100-4	EMHM-100-6	10	22	72	10
<b>12mm Shanks</b>						
EMHM-120-2	EMHM-120-4	EMHM-120-6	12	25	83	12
<b>14mm Shanks</b>						
_____	_____	EMHM-140-6	14	30	83	14
<b>16mm Shanks</b>						
_____	_____	EMHM-160-6	16	35	92	16
<b>18mm Shanks</b>						
_____	_____	EMHM-180-6	18	45	92	18
<b>20mm Shanks</b>						
_____	EMHM-200-4	EMHM-200-6	20	45	104	20

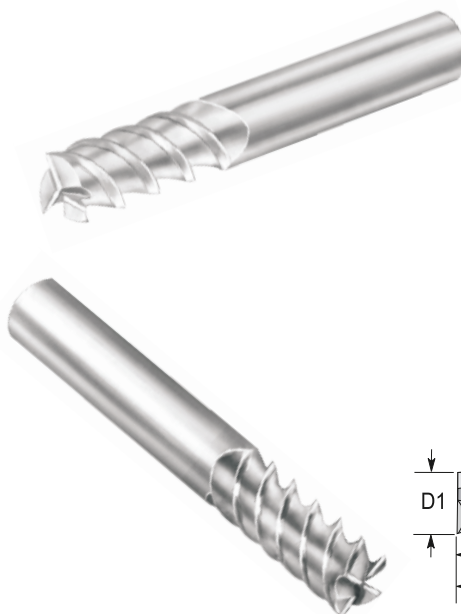
Refer to pages 323-363 for Technical Data.

# SDHM-3/-4

Metric, 3 & 4 Flute,  
60° Helix End Mills

**Featuring:**

- These 60° high helix end mills generate the highest metal removal rate in most applications.
- The 3 flute geometry is ideal for roughing and slotting in all mild steels and stainless steels.
- The 4 flute geometry is ideally suited for milling inconel, waspalloy, titanium, and high temperature alloys.

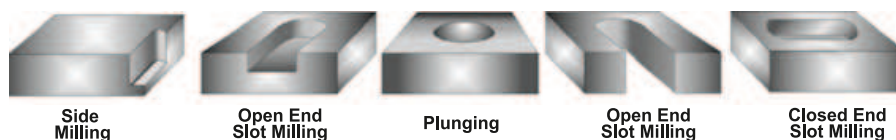
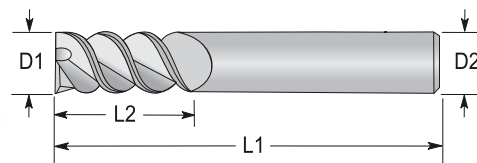


**SDHM Metric End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
5mm - 6mm : +.000mm -.030mm  
8mm - 10mm : +.000mm -.036mm  
12mm - 18mm : +.000mm -.043mm  
20mm : +.000mm -.052mm  
T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

SDHM-3 Catalog No.	SDHM-4 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>6mm Shanks</b>					
SDHM-050-03	_____	5	15	57	6
SDHM-060-03	_____	6	18		
<b>8mm Shanks</b>					
SDHM-080-03	SDHM-080-04	8	22	63	8
<b>10mm Shanks</b>					
SDHM-100-03	SDHM-100-04	10	25	72	10
<b>12mm Shanks</b>					
SDHM-120-03	SDHM-120-04	12	30	83	12
<b>14mm Shanks</b>					
SDHM-140-03	SDHM-140-04	14	35	83	14
<b>16mm Shanks</b>					
SDHM-160-03	SDHM-160-04	16	35	92	16
<b>18mm Shanks</b>					
SDHM-180-03	SDHM-180-04	18	45	92	18
<b>20mm Shanks</b>					
SDHM-200-03	SDHM-200-04	20	45	104	20

Refer to pages 323-363 for Technical Data.

K

# HMCM-4

Metric, 4 Flute, Center Cutting - Hard Milling,  
End Mills with Corner Radius



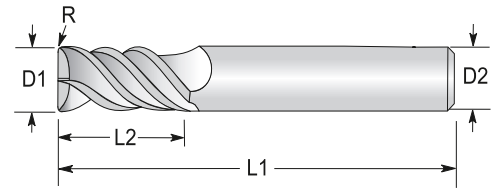
**Featuring:**

- Engineered with multiple corner radii per cutting diameter and a special 4-flute geometry, these high tech end mills are **designed for hard material milling applications.**
- The various corner radii reduce cutting forces on the tip of the cutting edge and therefore support **heavier cuts and longer tool life.**
- Unique tool geometry provides **maximum milling performance in semi-finishing and finishing as well as in rough cuts.**



**HMCM Metric End Mill Tolerances:**

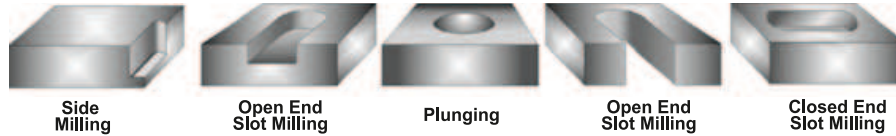
Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
3mm: +.000mm -.014mm  
4mm - 6mm: +.000mm -.018mm  
8mm: +.000mm -.022mm  
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

HMCM-4 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Radius (R) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>4-Flute</b>					
<b>6mm Shanks</b>					
HMCM-0302-4	3	8	0.2	57	6
HMCM-0305-4			0.5		
HMCM-0402-4	4	11	0.2		
HMCM-0405-4			0.5		
HMCM-0410-4			1.0		
HMCM-0502-4	5	13	0.2		
HMCM-0505-4			0.5		
HMCM-0510-4			1.0		
HMCM-0603-4	6	13	0.3		
HMCM-0605-4			0.5		
HMCM-0610-4			1.0		
HMCM-0615-4			1.5		
<b>8mm Shanks</b>					
HMCM-0803-4	8	19	0.3	75	8
HMCM-0805-4			0.5		
HMCM-0810-4			1.0		
HMCM-0815-4			1.5		
HMCM-0820-4			2.0		

Refer to pages 323-363 for Technical Data.

**K**

# HMRM-4

Metric, 4 Flute, Center Cutting - Hard Milling,  
High Performance End Mills



**Featuring:**

- These high performance end mills feature a special 4-flute geometry and are specifically engineered for numerous milling applications in hard materials.
- The unique tool geometry provides maximum milling performance in semi-finishing and finishing as well as in roughing cuts.



**HMRM Metric End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm

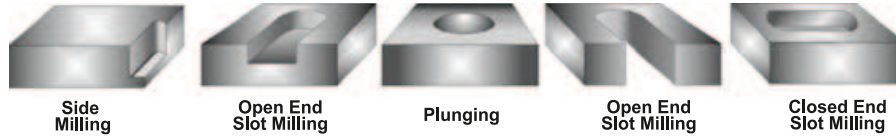
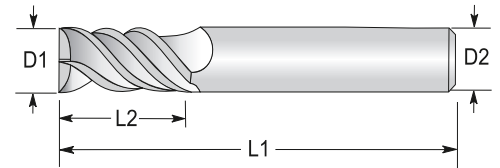
Cutter Diameter:  
3mm: +.000mm -.014mm  
6mm - 8mm: +.000mm -.018mm  
8mm - 10mm: +.000mm -.022mm  
12mm - 18mm: +.000mm -.027mm  
20mm: +.000mm -.033mm

T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

HMRM-4 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>4-Flute</b>				
<b>6mm Shanks</b>				
HMRM-030-4	3	8	57	6
HMRM-040-4	4	11		
HMRM-050-4	5	13		
HMRM-060-4	6			
<b>8mm Shanks</b>				
HMRM-080-4	8	19	75	8
<b>10mm Shanks</b>				
HMRM-100-4	10	22	80	10
<b>12mm Shanks</b>				
HMRM-120-4	12	26	100	12
<b>16mm Shanks</b>				
HMRM-160-4	16	32	110	16
<b>20mm Shanks</b>				
HMRM-200-4	20	38	125	20

Refer to pages 323-363 for Technical Data.

K



# HMSM-4

Metric, 4 Flute, Center Cutting - Hard Milling,  
Stub Length End Mills

**Featuring:**

- Engineered with a special 4 flute stub length tool geometry, specifically suitable for milling operations with a shallow cutting depth in hard materials.
- The unique tool geometry provides maximum milling performance in semi-finishing and finishing as well as in roughing cuts.



**HMSM Metric End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm

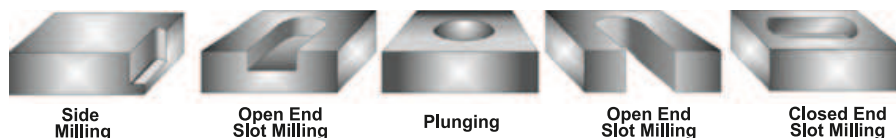
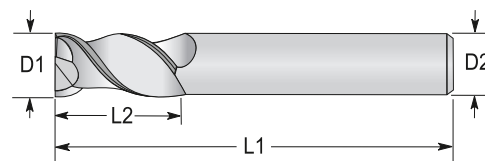
Cutter Diameter:  
3mm: +.000mm -.014mm  
4mm - 6mm: +.000mm -.018mm  
8mm - 10mm: +.000mm -.022mm  
12mm - 16mm: +.000mm -.027mm  
20mm: +.000mm -.033mm

T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

HMSM-4 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>4-Flute</b>				
<b>6mm Shanks</b>				
HMSM-030-4	3	4.5	57	6
HMSM-040-4	4	6.0		
HMSM-050-4	5	7.5		
HMSM-060-4	6	9.0		
<b>8mm Shanks</b>				
HMSM-080-4	8	12.0	75	8
<b>10mm Shanks</b>				
HMSM-100-4	10	15.0	80	10
<b>12mm Shanks</b>				
HMSM-120-4	12	18.0	100	12
<b>16mm Shanks</b>				
HMSM-160-4	16	24.0	110	16
<b>20mm Shanks</b>				
HMSM-200-4	20	30.0	125	20

Refer to pages 323-363 for Technical Data.

**K**

# HMUM-4

Metric, 4 Flute, Center Cutting,  
Universal Hard Milling End Mills



**Featuring:**

- Engineered with a negative rake angle, these high-tech end mills are specifically engineered for numerous milling applications in hard materials.
- The unique tool geometry provides maximum milling performance in semi-finishing and finishing as well as in roughing cuts.



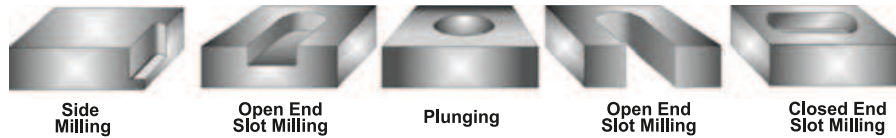
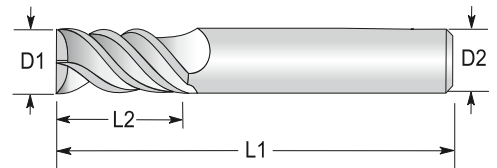
**HMUM Metric End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
4mm - 6mm : +.000mm -.018mm  
8mm - 10mm : +.000mm -.022mm  
12mm - 16mm : +.000mm -.027mm  
20mm : +.000mm -.033mm  
T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

HMUM-4 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>4-Flute</b>				
<b>6mm Shanks</b>				
HMUM-040-4	4	12	57	6
HMUM-060-4	6	15		
<b>8mm Shanks</b>				
HMUM-080-4	8	20	75	8
<b>10mm Shanks</b>				
HMUM-100-4	10	25	80	10
<b>12mm Shanks</b>				
HMUM-120-4	12	30	100	12
<b>16mm Shanks</b>				
HMUM-160-4	16	40	110	16
<b>20mm Shanks</b>				
HMUM-200-4	20	45	125	20

Refer to pages 323-363 for Technical Data.

K

# SALM-3

Metric, 3 Flute, 38° Helix, Longer Length,  
Roughing End Mills for Aluminum

**Featuring:**

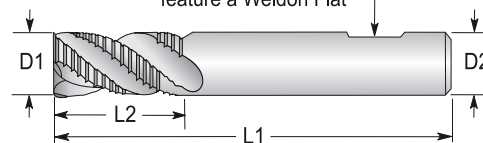
- Designed and engineered to generate **maximum metal removal rates in aluminum applications.**



**SALM Metric Roughing End Mill Tolerances:**

- Shank Diameter:  
-.0025mm to -.0076mm
- Cutter Diameter:  
6mm: +.000mm -.018mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 18mm: +.000mm -.043mm  
20mm: +.000mm -.052mm  
25mm: +.000mm -.062mm
- T.I.R. Maximum:  
.013mm

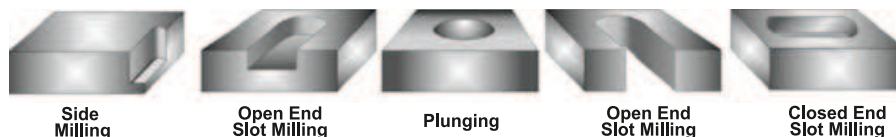
Shank sizes with 10mm and larger diameters feature a Weldon Flat



**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

<b>SALM-3</b> Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
3-Flute	metric	metric	metric	metric
<b>6mm Shanks</b>				
SALM-060-3	6	25	75	6
<b>8mm Shanks</b>				
SALM-080-3	8	30	75	8
<b>10mm Shanks</b>				
SALM-100-3	10	38	100	10
<b>12mm Shanks</b>				
SALM-120-3	12	50	100	12
<b>14mm Shanks</b>				
SALM-140-3	14	75	150	14
<b>16mm Shanks</b>				
SALM-160-3	16	75	150	16
<b>18mm Shanks</b>				
SALM-180-3	18	75	150	18
<b>20mm Shanks</b>				
SALM-200-3	20	75	150	20
<b>25mm Shanks</b>				
SALM-250-3	25	75	150	25

Refer to pages 323-363 for Technical Data.

**K**

# SARM-3

Metric, 3 Flute, 38° Helix,  
Roughing End Mills for Aluminum



**Featuring:**

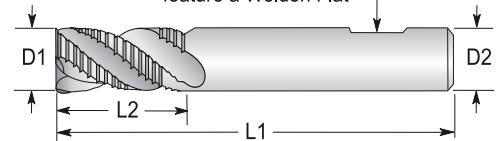
- Designed and engineered to generate **maximum metal removal rates in aluminum applications.**



**SARM Metric Roughing End Mill Tolerances:**

- Shank Diameter:  
-.0025mm to -.0076mm
- Cutter Diameter:  
6mm: +.000mm -.018mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 18mm: +.000mm -.043mm  
20mm: +.000mm -.052mm  
25mm: +.000mm -.062mm
- T.I.R. Maximum:  
.013mm

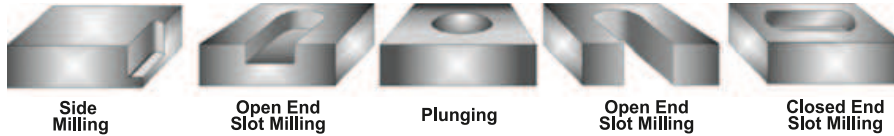
Shank sizes with 10mm and larger diameters feature a Weldon Flat



**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

SARM-3 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
3-Flute	metric	metric	metric	metric
<b>6mm Shanks</b>				
SARM-060-3	6	16	57	6
<b>8mm Shanks</b>				
SARM-080-3	8	22	63	8
<b>10mm Shanks</b>				
SARM-100-3	10	25	72	10
<b>12mm Shanks</b>				
SARM-120-3	12	30	83	12
<b>14mm Shanks</b>				
SARM-140-3	14	35	83	14
<b>16mm Shanks</b>				
SARM-160-3	16	35	92	16
<b>18mm Shanks</b>				
SARM-180-3	18	45	92	18
<b>20mm Shanks</b>				
SARM-200-3	20	45	104	20
<b>25mm Shanks</b>				
SARM-250-3	25	50	127	25

Refer to pages 323-363 for Technical Data.

K

# SHLM-4

Metric, 4 Flute, 38° Helix,  
Roughing End Mills

**Featuring:**

- Designed and engineered to generate **maximum metal removal rates in aluminum applications.**



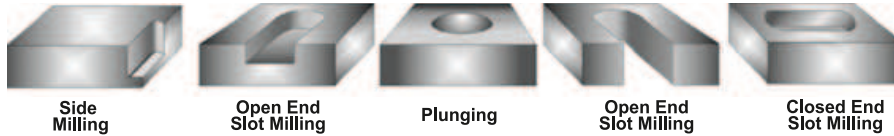
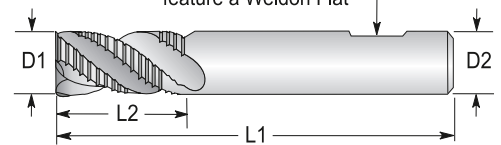
End Mills Coated with:  
**AlTiN**  
OTHER COATINGS UPON REQUEST  
SEE PAGE 326



**SHLM Metric Roughing End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
6mm: +.000mm -.018mm  
8mm -10mm: +.000mm -.036mm  
12mm -18mm: +.000mm -.043mm  
20mm: +.000mm -.052mm  
25mm: +.000mm -.062mm  
T.I.R. Maximum:  
.013mm

Shank sizes with 10mm and larger diameters feature a Weldon Flat



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

SHLM-4 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
4-Flute	metric	metric	metric	metric
<b>6mm Shanks</b>				
SHLM-060-4X	6	25	75	6
<b>8mm Shanks</b>				
SHLM-080-4X	8	30	75	8
<b>10mm Shanks</b>				
SHLM-100-4X	10	38	100	10
<b>12mm Shanks</b>				
SHLM-120-4X	12	50	100	12
<b>14mm Shanks</b>				
SHLM-140-4X	14	75	150	14
<b>16mm Shanks</b>				
SHLM-160-4X	16	75	150	16
<b>18mm Shanks</b>				
SHLM-180-4X	18	75	150	18
<b>20mm Shanks</b>				
SHLM-200-4X	20	75	150	20
<b>25mm Shanks</b>				
SHLM-250-4X	25	75	150	25

Refer to pages 323-363 for Technical Data.

**K**

# SHRM-4

Metric, 4 Flute, 38° Helix,  
Roughing End Mills

**Featuring:**

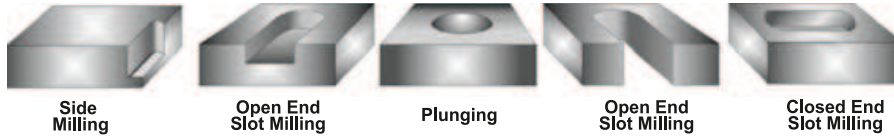
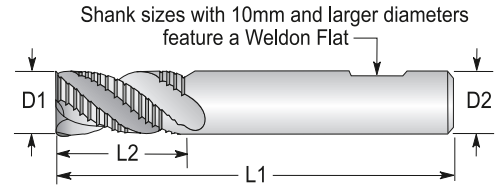
- Designed and engineered to generate **maximum metal removal rates in aluminum applications.**



End Mills Coated with:  
**AlTiN**  
OTHER COATINGS UPON REQUEST  
SEE PAGE 326

**SHRM Metric Roughing End Mill Tolerances:**

- Shank Diameter:  
-.0025mm to -.0076mm
- Cutter Diameter:  
6mm: +.000mm -.018mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 18mm: +.000mm -.043mm  
20mm: +.000mm -.052mm  
25mm: +.000mm -.062mm
- T.I.R. Maximum:  
.013mm



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

SHRM-4 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
4-Flute	metric	metric	metric	metric
<b>6mm Shanks</b>				
SHRM-060-4X	6	16	57	6
<b>8mm Shanks</b>				
SHRM-080-4X	8	22	63	8
<b>10mm Shanks</b>				
SHRM-100-4X	10	25	72	10
<b>12mm Shanks</b>				
SHRM-120-4X	12	30	83	12
<b>14mm Shanks</b>				
SHRM-140-4X	14	35	83	14
<b>16mm Shanks</b>				
SHRM-160-4X	16	35	92	16
<b>18mm Shanks</b>				
SHRM-180-4X	18	45	92	18
<b>20mm Shanks</b>				
SHRM-200-4X	20	45	104	20
<b>25mm Shanks</b>				
SHRM-250-4X	25	50	127	25

Refer to pages 323-363 for Technical Data.

K

# VHSM-4

Metric, 4 Flute, Variable Helix,  
High Velocity, Stub Length, End Mills

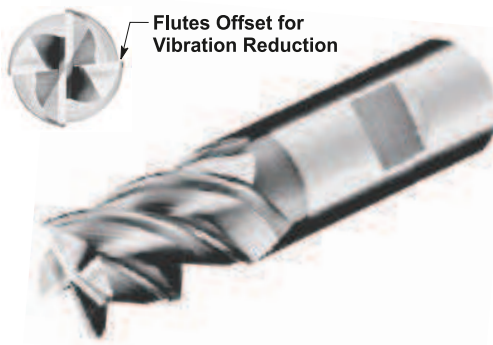
**Featuring:**

- Stub Length
- Variable Pitch
- High-Production / High Speed Milling
- Excellent Surface Finish
- Eliminates Chatter
- Reduces Machine Vibration



**VHSM Stub Length Metric Variable Pitch  
End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
4mm : +.000mm -.050mm  
6mm to 25mm : +.000mm -.080mm  
Corner Radius:  
±.013mm  
T.I.R. Maximum:  
.013mm

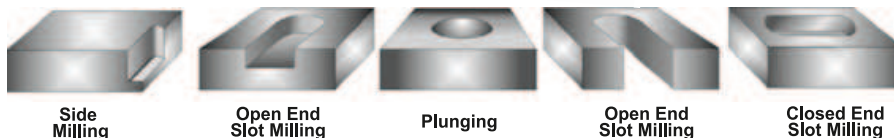
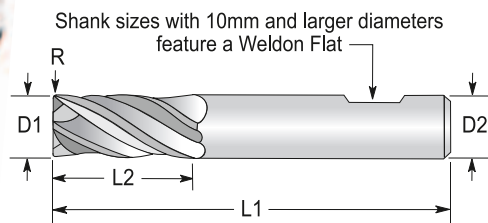


Flutes Offset for  
Vibration Reduction

End Mills Coated with:

**AlTiN**

OTHER COATINGS UPON REQUEST  
SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

<b>VHSM-4 Catalog No.</b>	<b>Cutter Diameter (D1)</b>	<b>Flute Length (L2)</b>	<b>Corner Radius (R)</b>	<b>Overall Length (L1)</b>	<b>Shank Diameter (D2)</b>
4-Flute	metric	metric	metric	metric	metric
<b>4mm Shanks</b>					
VHSM-030-4X	3	6	0.3	50	4
VHSM-040-4X	4	8			
<b>6mm Shanks</b>					
VHSM-050-4X	5	10	0.5	57	6
VHSM-060-4X	6				
<b>8mm Shanks</b>					
VHSM-080-4X	8	16	0.5	63	8
<b>10mm Shanks</b>					
VHSM-100-4X	10	19	0.5	72	10
<b>12mm Shanks</b>					
VHSM-120-4X	12	22	0.5	83	12
<b>16mm Shanks</b>					
VHSM-160-4X	16	25	0.8	92	16

Refer to pages 323-363 for Technical Data.



# VHMM-4

Metric, 4 Flute, Variable Helix, High Velocity End Mills

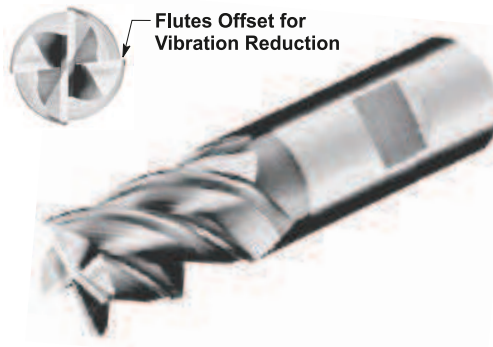
**Featuring:**

- Variable Pitch
- High-Production / High Speed Milling
- Excellent Surface Finish
- Eliminates Chatter
- Reduces Machine Vibration

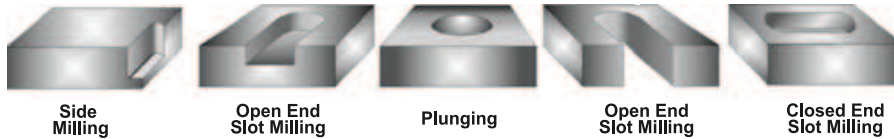
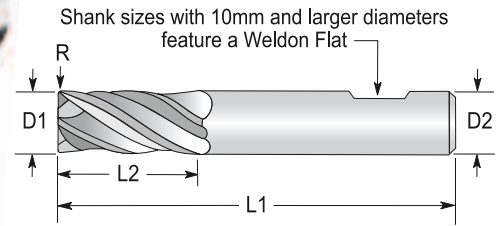


**VHMM Metric Variable Pitch End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
4mm : +.000mm -.050mm  
6mm to 25mm : +.000mm -.080mm  
Corner Radius:  
±.013mm  
T.I.R. Maximum:  
.013mm



End Mills Coated with:  
**AlTiN**  
OTHER COATINGS UPON REQUEST  
SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

<b>VHMM-4</b> Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Corner Radius (R)	Overall Length (L1)	Shank Diameter (D2)
4-Flute	metric	metric	metric	metric	metric
<b>4mm Shanks</b>					
VHMM-030-4X	3	8	0.5	50	4
VHMM-040-4X	4	11			
<b>6mm Shanks</b>					
VHMM-050-4X	5	16	0.5	57	6
VHMM-060-4X	6				
<b>8mm Shanks</b>					
VHMM-080-4X	8	19	0.5	63	8
<b>10mm Shanks</b>					
VHMM-100-4X	10	22	0.6	72	10
<b>12mm Shanks</b>					
VHMM-120-4X	12	26	0.6	83	12
<b>14mm Shanks</b>					
VHMM-140-4X	14	26	0.7	83	14
<b>16mm Shanks</b>					
VHMM-160-4X	16	32	0.7	92	16
<b>18mm Shanks</b>					
VHMM-180-4X	18	32	0.7	92	18
<b>20mm Shanks</b>					
VHMM-200-4X	20	38	0.8	104	20
<b>25mm Shanks</b>					
VHMM-250-4X	25	38	0.8	127	25

Refer to pages 323-363 for Technical Data.

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# VLRM-4

Metric, 4 Flute, Variable Helix, High Velocity,  
Long Length, Reduced Neck, End Mills



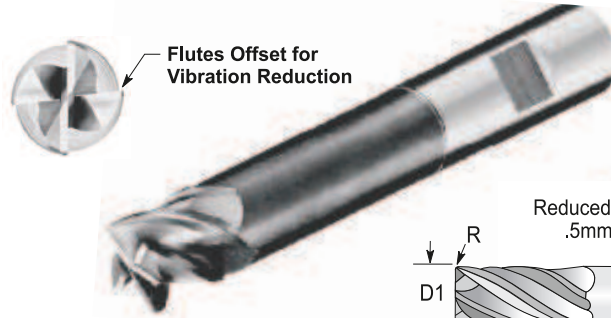
**Featuring:**

- Variable Pitch
- High-Production / High Speed Milling
- Reduced Neck for Greater Clearance
- Excellent Surface Finish
- Eliminates Chatter
- Reduces Machine Vibration

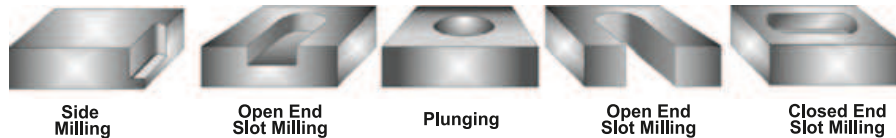
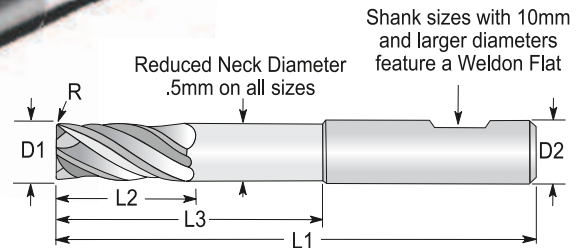


VLRM Metric Variable Pitch, Long Length,  
Reduced Neck, End Mill Tolerances:

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
4mm : +.000mm -.050mm  
6mm - 25mm : +.000mm -.080mm  
Corner Radius:  
±.013mm  
T.I.R. Maximum:  
.013mm



End Mills Coated with:  
**AlTiN**  
OTHER COATINGS UPON REQUEST  
SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

VLRM-4 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Corner Radius (R) metric	Reduced Neck Length (L3) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>6mm Shanks</b>						
VLRM-040-4X	4	5	.030	15	57	6
VLRM-050-4X	5	8	.050	30	75	
VLRM-060-4X	6					
<b>8mm Shanks</b>						
VLRM-080-4X	8	10	.050	50	100	8
<b>10mm Shanks</b>						
VLRM-100-4X	10	12	.050	50	100	10
<b>12mm Shanks</b>						
VLRM-120-4X	12	14	.050	50	100	12
<b>14mm Shanks</b>						
VLRM-140-4X	14	18	.080	65	120	14
<b>16mm Shanks</b>						
VLRM-160-4X	16	22	.080	80	130	16
<b>20mm Shanks</b>						
VLRM-200-4X	20	30	.080	100	150	20
<b>25mm Shanks</b>						
VLRM-250-4X	25	38	.080	110	150	25

Refer to pages 323-363 for Technical Data.

K

# VHSM-5

Metric, 5 Flute, Variable Helix,  
High Velocity, Stub Length, End Mills

**Featuring:**

- Stub Length
- Variable Pitch
- High-Production / High Speed Milling
- Excellent Surface Finish
- Eliminates Chatter
- Reduces Machine Vibration



**VHSM Stub Length Metric Variable Pitch End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm

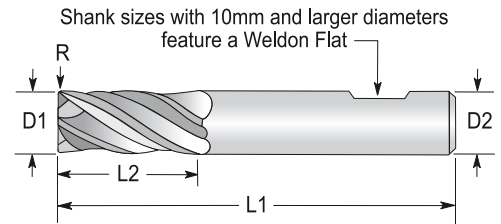
Cutter Diameter:  
4mm : +.000mm -.050mm  
6mm to 25mm : +.000mm -.080mm

Corner Radius:  
±.013mm

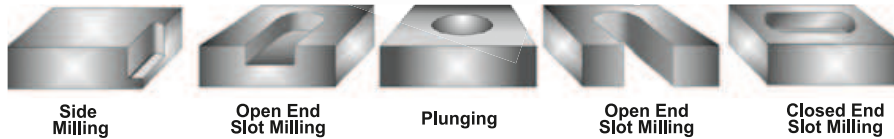
T.I.R. Maximum:  
.013mm



Flutes Offset for Vibration Reduction



End Mills Coated with:  
**nACRo**<sup>®</sup>  
(Nanotech "CR")  
OTHER COATINGS UPON REQUEST  
SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

VHSM-5 Catalog No.		Cutter Diameter (D1)	Flute Length (L2)	Corner Radius (R)	Overall Length (L1)	Shank Diameter (D2)
Uncoated	Coated	metric	metric	metric	metric	metric
<b>4mm Shanks</b>						
VHSM-030-5	VHSM-030-5K	3	6	0.3	50	4
VHSM-040-5	VHSM-040-5K	4	8			
<b>6mm Shanks</b>						
VHSM-050-5	VHSM-050-5K	5	10	0.5	57	6
VHSM-060-5	VHSM-060-5K	6				
<b>8mm Shanks</b>						
VHSM-080-5	VHSM-080-5K	8	16	0.5	63	8
<b>10mm Shanks</b>						
VHSM-100-5	VHSM-100-5K	10	19	0.5	72	10
<b>12mm Shanks</b>						
VHSM-120-5	VHSM-120-5K	12	22	0.5	83	12
<b>16mm Shanks</b>						
VHSM-160-5	VHSM-160-5K	16	25	0.8	92	16

Refer to pages 323-363 for Technical Data.

K

# VHMM-5

Metric, 5 Flute, Variable Helix,  
High Velocity, End Mills

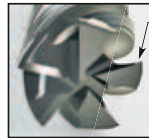
**Featuring:**

- Variable Pitch
- High-Production / High Speed Milling
- Excellent Surface Finish
- Eliminates Chatter
- Reduces Machine Vibration



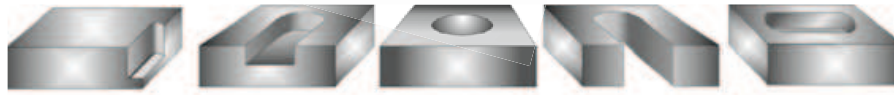
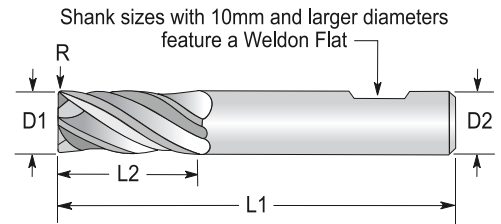
**VHMM Metric Variable Pitch End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
4mm : +.000mm -.050mm  
6mm to 25mm : +.000mm -.080mm  
Corner Radius:  
±.013mm  
T.I.R. Maximum:  
.013mm



Flutes Offset for  
Vibration Reduction

End Mills Coated with:  
**nACRo**<sup>®</sup>  
(Nanotech "CR")  
OTHER COATINGS UPON REQUEST  
SEE PAGE 326



Side Milling

Open End Slot Milling

Plunging

Open End Slot Milling

Closed End Slot Milling

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

VHMM-5 Catalog No.		Cutter Diameter (D1)	Flute Length (L2)	Corner Radius (R)	Overall Length (L1)	Shank Diameter (D2)
Uncoated	Coated	metric	metric	metric	metric	metric
<b>4mm Shanks</b>						
VHMM-030-5	VHMM-030-5K	3	8	0.3	50	4
VHMM-040-5	VHMM-040-5K	4	11			
<b>6mm Shanks</b>						
VHMM-050-5	VHMM-050-5K	5	16	0.5	57	6
VHMM-060-5	VHMM-060-5K	6				
<b>8mm Shanks</b>						
VHMM-080-5	VHMM-080-5K	8	19	0.5	63	8
<b>10mm Shanks</b>						
VHMM-100-5	VHMM-100-5K	10	22	0.5	72	10
<b>12mm Shanks</b>						
VHMM-120-5	VHMM-120-5K	12	26	0.5	83	12
<b>14mm Shanks</b>						
VHMM-140-5	VHMM-140-5K	14	26	0.8	83	14
<b>16mm Shanks</b>						
VHMM-160-5	VHMM-160-5K	16	32	0.8	92	16
<b>18mm Shanks</b>						
VHMM-180-5	VHMM-180-5K	18	32	0.8	92	18
<b>20mm Shanks</b>						
VHMM-200-5	VHMM-200-5K	20	38	0.8	104	20
<b>25mm Shanks</b>						
VHMM-250-5	VHMM-250-5K	25	38	0.8	127	25

Refer to pages 323-363 for Technical Data.

# VLRM-5

Metric, 5 Flute, Variable Helix, High Velocity,  
Long Length, Reduced Neck, End Mills

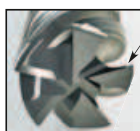
**Featuring:**

- Variable pitch
- High-Production / High Speed Milling
- Reduced Neck for Greater Clearance
- Excellent Surface Finish
- Eliminates Chatter
- Reduces Machine Vibration

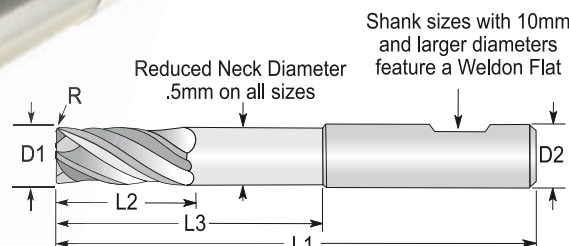
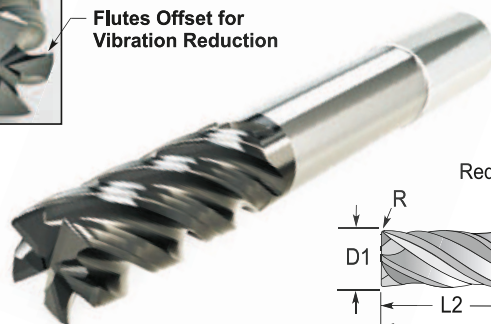


VLRM Metric Variable Pitch, Long Length,  
Reduced Neck, End Mill Tolerances:

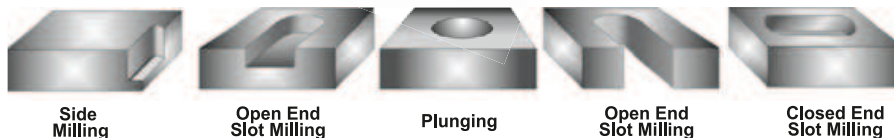
Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
4mm : +.000mm -.050mm  
6mm - 25mm : +.000mm -.080mm  
Corner Radius:  
±.013mm  
T.I.R. Maximum:  
.013mm



Flutes Offset for  
Vibration Reduction



End Mills Coated with:  
**nACRo**<sup>®</sup>  
(Nanotech "CR")  
OTHER COATINGS UPON REQUEST  
SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

VLRM-5 Catalog No.		Cutter Diameter (D1)	Flute Length (L2)	Corner Radius (R)	Reduced Neck Length (L3)	Overall Length (L1)	Shank Diameter (D2)
Uncoated	Coated	metric	metric	metric	metric	metric	metric
<b>6mm Shanks</b>							
VLRM-040-5	VLRM-040-5K	4	5	0.3	15	57	6
VLRM-050-5	VLRM-050-5K	5	8	0.5	30	75	
VLRM-060-5	VLRM-060-5K	6					
<b>8mm Shanks</b>							
VLRM-080-5	VLRM-080-5K	8	10	0.5	50	100	8
<b>10mm Shanks</b>							
VLRM-100-5	VLRM-100-5K	10	12	0.5	50	100	10
<b>12mm Shanks</b>							
VLRM-120-5	VLRM-120-5K	12	14	0.5	50	100	12
<b>14mm Shanks</b>							
VLRM-140-5	VLRM-140-5K	14	18	0.8	65	120	14
<b>16mm Shanks</b>							
VLRM-160-5	VLRM-160-5K	16	22	0.8	80	130	16
<b>20mm Shanks</b>							
VLRM-200-5	VLRM-200-5K	20	30	0.8	100	150	20
<b>25mm Shanks</b>							
VLRM-250-5	VLRM-250-5K	25	38	0.8	110	150	25

Refer to pages 323-363 for Technical Data.

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# AELM-2/-4

Metric, 2 & 4 Flute, Center Cutting,  
30° Helix, Long Length End Mills



**AELM Metric End Mill Tolerances:**

Shank Diameter:

-.0025mm to -.0076mm

Cutter Diameter:

2mm - 3mm: +.000mm -.025mm

4mm - 6mm: +.000mm -.030mm

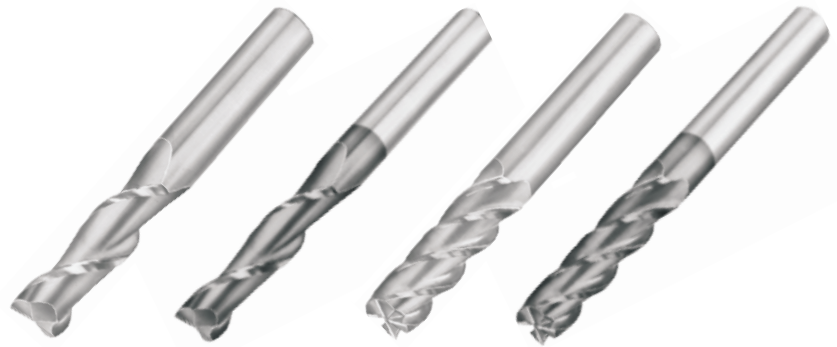
7mm - 10mm: +.000mm -.036mm

11mm - 18mm: +.000mm -.043mm

20mm: +.000mm -.052mm

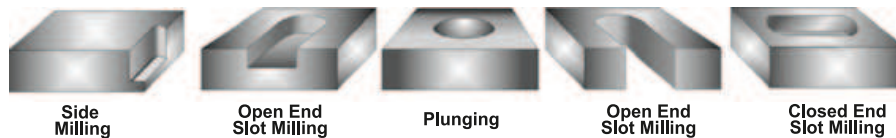
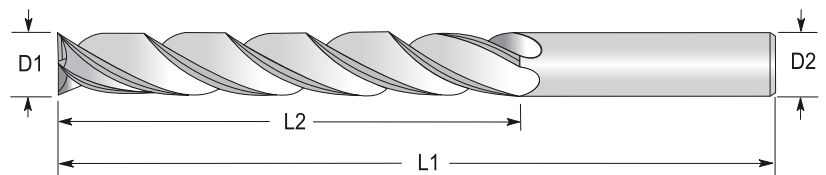
T.I.R. Maximum:

.013mm



**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

AELM-2 Catalog No.	AELM-4 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>6mm Shanks</b>					
AELM-020-2	AELM-020-4	2	10	75	6
AELM-030-2	AELM-030-4	3	15		
AELM-040-2	AELM-040-4	4	20		
AELM-050-2	AELM-050-4	5	25	100	
AELM-060-2	AELM-060-4	6	30		
AELM-070-2	AELM-070-4	7	35		
<b>8mm Shanks</b>					
AELM-080-2	AELM-080-4	8	40	100	8
AELM-090-2	AELM-090-4	9	45		
<b>10mm Shanks</b>					
AELM-100-2	AELM-100-4	10	50	120	10
AELM-110-2	AELM-110-4	11			
<b>12mm Shanks</b>					
AELM-120-2	AELM-120-4	12	55	130	12
AELM-130-2	AELM-130-4	13			
AELM-140-2	AELM-140-4	14	60	140	
AELM-150-2	AELM-150-4	15			
<b>16mm Shanks</b>					
AELM-160-2	AELM-160-4	16	65	150	16
AELM-170-2	AELM-170-4	17			
AELM-180-2	AELM-180-4	18			
<b>20mm Shanks</b>					
AELM-200-2	AELM-200-4	20	75	150	20

Refer to pages 323-363 for Technical Data.

# ALMM-5

Metric, 5 Flute, Center Cutting  
45° Helix, Long Length End Mills



**Featuring:**

- These 5 flute high tech end mills feature a 45° Helix for roughing, finishing, and slotting in medium to hard steels, stainless steels, and high temperature alloys.
- Ideal for continuous full depth milling.
- Higher metal removal rates as well as excellent finishes are achieved with these 5 flute end mills.
- 45° Helix diminishes chatter corner milling applications.



**ALMM Metric Long Length End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm

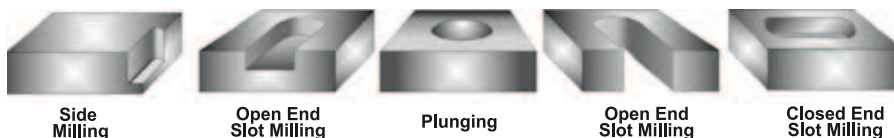
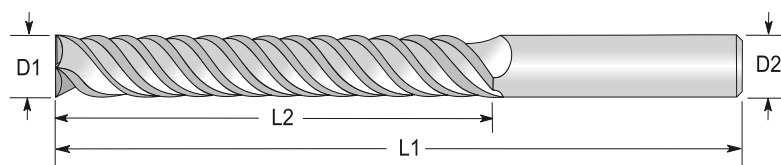
Cutter Diameter:  
3mm: +.000mm - .025mm  
4mm - 6mm: +.000mm -.030mm  
6mm - 10mm: +.000mm -.036mm  
12mm - 16mm: +.000m -.042mm  
20mm: +.000mm -.052mm

T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

ALMM-5 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>5-Flute</b>				
<b>6mm Shanks</b>				
ALMM-030-5	3	25	75	6
ALMM-040-5	4			
ALMM-050-5	5			
ALMM-060-5	6			
<b>8mm Shanks</b>				
ALMM-080-5	8	30	75	8
<b>10mm Shanks</b>				
ALMM-100-5	10	38	100	10
<b>12mm Shanks</b>				
ALMM-120-5	12	50	100	12
<b>16mm Shanks</b>				
ALMM-160-5	16	75	150	16
<b>20mm Shanks</b>				
ALMM-200-5	20	75	150	20

Refer to pages 323-363 for Technical Data.

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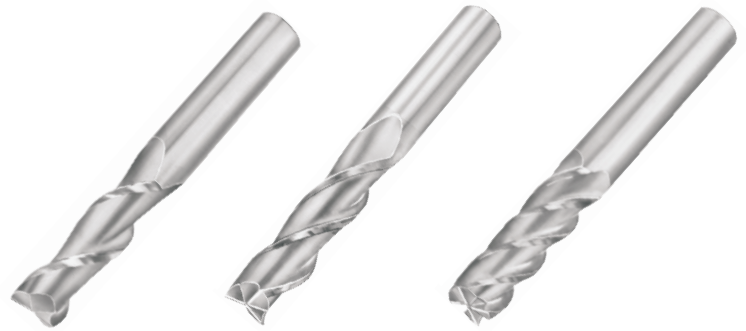
# GELM-2/-3/-4

Metric, 2, 3 & 4 Flute, Center Cutting,  
30° Helix, Extra Long Length End Mills



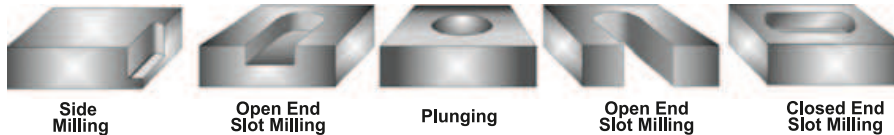
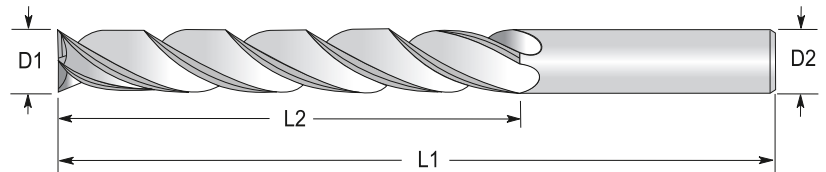
**GELM Metric End Mill Tolerances:**

- Shank Diameter:  
-.0025mm to -.0076mm
- Cutter Diameter:  
3mm: +.000mm -.025mm  
4mm - 6mm: +.000mm -.030mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 18mm: +.000mm -.042mm  
20mm: +.000mm -.052mm  
25mm: +.000mm -.062mm
- T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**  
**AITiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

GELM-2 Catalog No.	GELM-3 Catalog No.	GELM-4 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	3-Flute	4-Flute	metric	metric	metric	metric
<b>3mm Shanks</b>						
GELM-030-2	GELM-030-3	GELM-030-4	3	25	75	3
<b>4mm Shanks</b>						
GELM-040-2	GELM-040-3	GELM-040-4	4	25	75	4
<b>5mm Shanks</b>						
GELM-050-2	GELM-050-3	GELM-050-4	5	25	75	5
<b>6mm Shanks</b>						
GELM-060-2	GELM-060-3	GELM-060-4	6	25	75	6
<b>8mm Shanks</b>						
GELM-080-2	GELM-080-3	GELM-080-4	8	30	75	8
<b>10mm Shanks</b>						
GELM-100-2	GELM-100-3	GELM-100-4	10	38	100	10
<b>12mm Shanks</b>						
GELM-120-2	GELM-120-3	GELM-120-4	12	50	100	12
<b>14mm Shanks</b>						
GELM-140-2	GELM-140-3	GELM-140-4	14	75	150	14
<b>16mm Shanks</b>						
GELM-160-2	GELM-160-3	GELM-160-4	16	75	150	16
<b>18mm Shanks</b>						
GELM-180-2	GELM-180-3	GELM-180-4	18	75	150	18
<b>20mm Shanks</b>						
GELM-200-2	GELM-200-3	GELM-200-4	20	75	150	20
<b>25mm Shanks</b>						
GELM-250-2	GELM-250-3	GELM-250-4	25	75	150	25

Refer to pages 323-363 for Technical Data.



super carbide tools  
**FOR HIGHER PERFORMANCE**

# GLRM-2/-4

Metric, 2 & 4 Flute, Center Cutting,  
30° Helix, Reduced Neck, End Mills

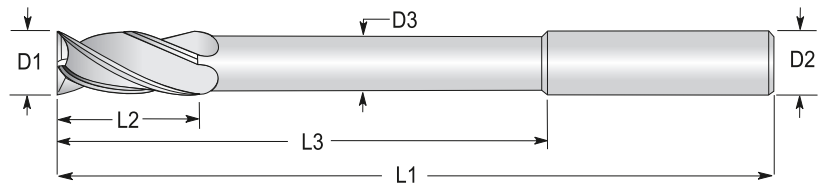


**GLRM Meric End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm

Cutter Diameter:  
2mm - 3mm: +.000mm -.025mm  
4mm - 6mm: +.000mm -.030mm  
8mm - 10mm: +.000mm -.036mm  
12mm -16mm: +.000mm -.043mm  
20mm: +.000mm -.052mm

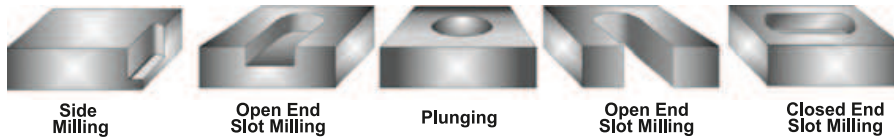
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**

**AITiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

GLRM-2 Catalog No.	GLRM-4 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Reduced Neck Diameter (D3)	Reduced Neck Length (L3)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	4-Flute	metric	metric	metric	metric	metric	metric
<b>6mm Shanks</b>							
GLRM-020-2	GLRM-020-4	2	5	1.5	15	57	6
GLRM-030-2	GLRM-030-4	3	8	2.5	30	75	
GLRM-040-2	GLRM-040-4	4		3.5			
GLRM-050-2	GLRM-050-4	5	10	4.5	50	100	
GLRM-060-2	GLRM-060-4	6	12	5.5			
<b>8mm Shanks</b>							
GLRM-080-2	GLRM-080-4	8	14	7.5	50	100	8
<b>10mm Shanks</b>							
GLRM-100-2	GLRM-100-4	10	18	9.5	65	120	10
<b>12mm Shanks</b>							
GLRM-120-2	GLRM-120-4	12	22	11.5	80	130	12
<b>16mm Shanks</b>							
GLRM-160-2	GLRM-160-4	16	30	15.5	100	150	16
<b>20mm Shanks</b>							
GLRM-200-2	GLRM-200-4	20	38	19.5	100	150	20

Refer to pages 323-363 for Technical Data.

K



# TEMM-3

Metric, 3 Flute, Center Cutting  
30° Helix, Tapered End Mills

TEMM Metric Tapered End Mill Tolerance:

Shank Diameter:  
-.0025mm to -.0076mm

Small Diameter:  
+.076mm -.000"

T.I.R. Maximum:  
.013mm

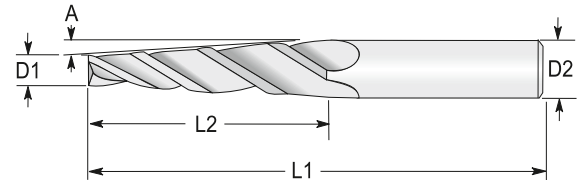


Style "TEMM"  
by SPECIAL ORDER  
once current inventories  
are depleted!

Coated End Mills **AVAILABLE!**

**AlTiN** Add an "X" to end of  
Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

TEMM-3 Catalog No.	Small Diameter (D1) metric	Flute Length (L2) metric	Angle Per Side (A) degree	Overall Length (L1) metric	Shank Diameter (D2) metric	
<b>3-Flute</b>						
<b>6mm Shanks</b>						
TEMM-060-0.5	3	15	0° 30'	57	6	
TEMM-060-1			1°			
TEMM-060-1.5			1° 30'			
TEMM-060-5		17	5°			
<b>8mm Shanks</b>						
TEMM-080-1.5	5	25	1° 30'	63	8	
TEMM-080-2			2°			
TEMM-080-3			3°			
<b>10mm Shanks</b>						
TEMM-100-0.5	5	35	0° 30'	72	10	
TEMM-100-1.5			1° 30'			
<b>12mm Shanks</b>						
TEMM-120-2.5	8	40	2° 30'	83	12	
TEMM-120-4		29	4°			
TEMM-120-5		23	5°			
<b>16mm Shanks</b>						
TEMM-160-2	12	50	2°	92	16	
TEMM-160-2.5		46	2° 30'			
TEMM-160-3		38	3°			
TEMM-160-4		23				4°
TEMM-160-5						5°

Refer to pages 323-363 for Technical Data.

K

# CREM-3

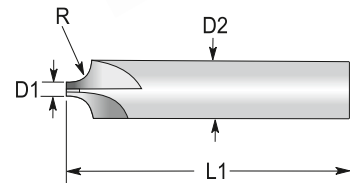
Metric, 3 Flute, Corner Rounding,  
Single End, End Mills

**CREM Metric Corner Rounding End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm

Cutter Diameter:  
+.000mm - .076mm

Tool Radius:  
+.000mm -.013mm



**Coated End Mills AVAILABLE!**

**AITiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

CREM-3 Catalog No.	Minor Diameter (D1)	Radius (R)	Overall Length (L1)	Shank Diameter (D2)
3-Flute	metric	metric	metric	metric
<b>6mm Shanks</b>				
CREM-060-030	1.5	0.30	57	6
CREM-060-050		0.50		
CREM-060-080		0.80		
CREM-060-100		1.00		
CREM-060-125		1.25		
CREM-060-150		1.50		
CREM-060-200		2.00		
<b>8mm Shanks</b>				
CREM-080-250	1.5	2.50	63	8
CREM-080-300		3.00		
<b>10mm Shanks</b>				
CREM-100-350	1.5	3.50	73	10
CREM-100-400		4.00		
<b>12mm Shanks</b>				
CREM-120-450	1.5	4.50	83	12
<b>16mm Shanks</b>				
CREM-160-500	3	5.00	92	16
CREM-160-600		6.00		
<b>18mm Shanks</b>				
CREM-180-700	3	7.00	92	18
<b>20mm Shanks</b>				
CREM-200-800	3	8.00	104	20

Refer to pages 323-363 for Technical Data.

K

# DMM-90

Metric, 2 & 4 Flute,  
90° Included Point Angle, Drill Mills



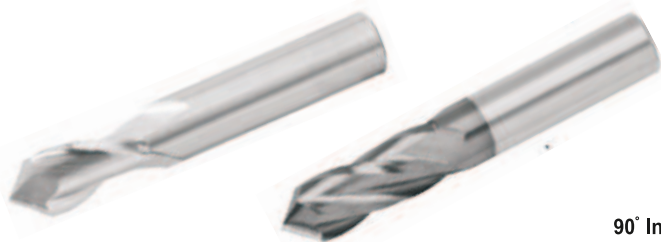
**Featuring:**

- Multi-purpose Drill-Mills for:

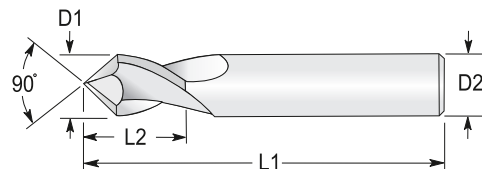
- Drilling
- Milling
- Spotting
- Chamfering
- Countersinking

**DMM Metric Drill-Mill Tolerances:**

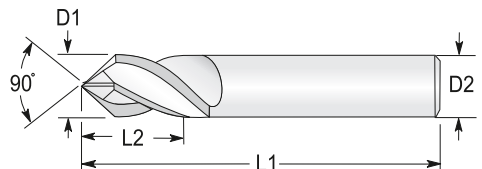
Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
3mm: +.000mm -.025mm  
4mm - 6mm : +.000mm -.030mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 18mm: +.000mm -.043mm  
20mm: +.000mm -.052mm  
25mm: +.000mm -.062mm  
T.I.R. Maximum:  
.013mm



2 Flute  
90° Included Point Angle

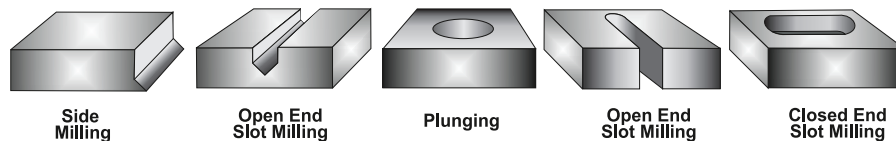


4 Flute  
90° Included Point Angle



**Coated Drill-Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

DMM-290 Catalog No.	DMM-490 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	4-Flute	metric	metric	metric	metric
<b>3mm Shanks</b>					
DMM-030-290	DMM-030-490	3	8	38	3
<b>4mm Shanks</b>					
DMM-040-290	DMM-040-490	4	11	50	4
<b>6mm Shanks</b>					
DMM-050-290	DMM-050-490	5	13	57	6
DMM-060-290	DMM-060-490	6	16		
<b>8mm Shanks</b>					
DMM-080-290	DMM-080-490	8	22	63	8
<b>10mm Shanks</b>					
DMM-100-290	DMM-100-490	10	25	72	10
<b>12mm Shanks</b>					
DMM-120-290	DMM-120-490	12	30	83	12
<b>16mm Shanks</b>					
DMM-160-290	DMM-160-490	16	35	92	16
<b>18mm Shanks</b>					
DMM-180-290	DMM-180-490	18	45	92	18
<b>20mm Shanks</b>					
DMM-200-290	DMM-200-490	20	45	104	20
<b>25mm Shanks</b>					
DMM-250-290	DMM-250-490	25	50	127	25

Refer to pages 323-363 for Technical Data.



super carbide tools  
**FOR HIGHER PERFORMANCE**

# DMM-120

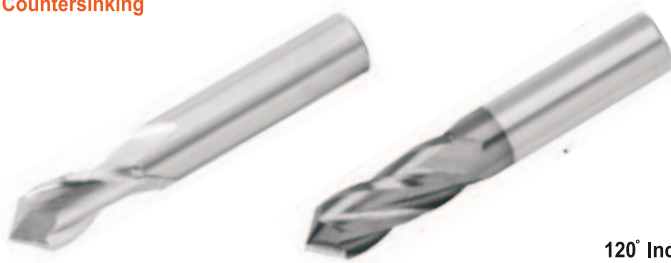
Metric, 2 & 4 Flute,  
120° Included Point Angle, Drill Mills

**MICRO 100**<sup>®</sup>  
super carbide tools

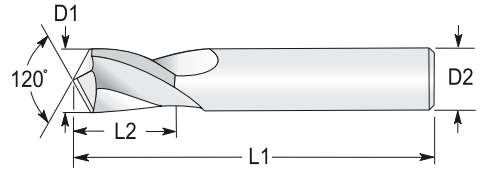
**Featuring:**

- Multi-purpose Drill-Mills for:

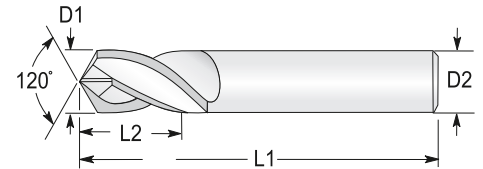
- Drilling
- Milling
- Spotting
- Chamfering
- Countersinking



2 Flute  
120° Included Point Angle



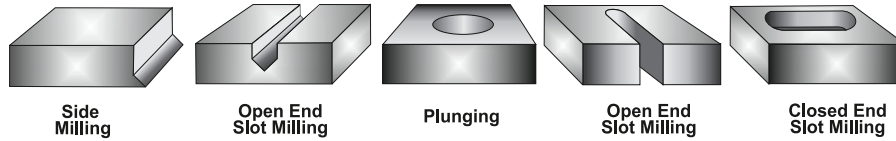
4 Flute  
120° Included Point Angle



**Coated Drill-Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

DMM-2120 Catalog No.	DMM-4120 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
2-Flute	4-Flute				
<b>3mm Shanks</b>					
DMM-030-2120	DMM-030-4120	3	8	38	3
<b>4mm Shanks</b>					
DMM-040-2120	DMM-040-4120	4	11	50	4
<b>6mm Shanks</b>					
DMM-050-2120	DMM-050-4120	5	13	57	6
DMM-060-2120	DMM-060-4120	6	16		
<b>8mm Shanks</b>					
DMM-080-2120	DMM-080-4120	8	22	63	8
<b>10mm Shanks</b>					
DMM-100-2120	DMM-100-4120	10	25	72	10
<b>12mm Shanks</b>					
DMM-120-2120	DMM-120-4120	12	30	83	12
<b>16mm Shanks</b>					
DMM-160-2120	DMM-160-4120	16	35	92	16
<b>18mm Shanks</b>					
DMM-180-2120	DMM-180-4120	18	45	92	18
<b>20mm Shanks</b>					
DMM-200-2120	DMM-200-4120	20	45	104	20
<b>25mm Shanks</b>					
DMM-250-2120	DMM-250-4120	25	50	127	25

Refer to pages 323-363 for Technical Data.

# BEFM-2

Metric, 2 Flute, Center Cutting,  
20° Helix, Ball Nose, Miniature End Mills

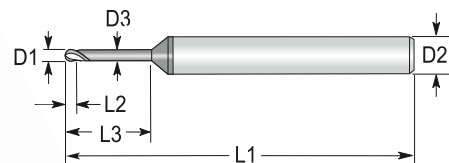
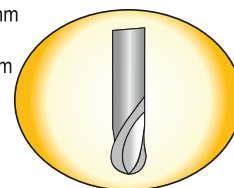
**Featuring:**

- These precision miniature end mills are ideal for finishing, and semi-finishing cuts and universal milling applications in soft, medium, and hard materials.



**BEFM Metric, Ball Nose, Hard Milling, Miniature End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
3mm: +.000 -.0127mm  
T.I.R. Maximum:  
.013mm



End Mills Coated with:  
**nACRO**<sup>®</sup>  
(Nanotech "CR")  
OTHER COATINGS UPON REQUEST  
SEE PAGE 326



Side Milling



Open End Slot Milling



Plunging



Open End Slot Milling



Closed End Slot Milling

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

BEFM-2 Catalog No.		Cutter Diameter (D1)	Length of Cut (L2)	Overall Reach (L3)	Neck Diameter (D3)	Overall Length (L1)	Shank Diameter (D2)			
Uncoated	Coated	metric	metric	metric	metric	metric	metric			
<b>3mm Shanks</b>										
BEFM-002-030	BEFM-002-030K	0.2	0.3	0.3	0.00					
BEFM-003-045	BEFM-003-045K	0.3	0.45	0.45						
BEFM-004-060	BEFM-004-060K	0.4	0.6	0.6						
BEFM-005-070	BEFM-005-070K	0.5	0.7	0.7	0.45					
BEFM-005-300	BEFM-005-300K			3.0						
BEFM-005-600	BEFM-005-600K			6.0						
BEFM-006-090	BEFM-006-090K	0.6	0.9	0.9	0.00					
BEFM-006-300	BEFM-006-300K			3.0						
BEFM-006-500	BEFM-006-500K			5.0						
BEFM-006-600	BEFM-006-600K			6.0	0.45					
BEFM-008-120	BEFM-008-120K	0.8	1.2	1.2				0.00		
BEFM-008-400	BEFM-008-400K			4.0						
BEFM-008-700	BEFM-008-700K			7.0						
BEFM-008-900	BEFM-008-900K			9.0						
BEFM-010-150	BEFM-010-150K	1.0	1.5	1.5	0.00					
BEFM-010-400	BEFM-010-400K			4.0						
BEFM-010-700	BEFM-010-700K			7.0						
BEFM-010-900	BEFM-010-900K			9.0						
BEFM-012-180	BEFM-012-180K	1.2	1.8	1.8	0.00					
BEFM-012-600	BEFM-012-600K			6.0						
BEFM-012-1000	BEFM-012-1000K			10.0						
BEFM-012-1200	BEFM-012-1200K			12.0						
BEFM-015-220	BEFM-015-220K	1.5	2.2	2.2	0.00					
BEFM-015-600	BEFM-015-600K			6.0						
BEFM-015-1000	BEFM-015-1000K			10.0						
BEFM-015-1200	BEFM-015-1200K			12.0						
BEFM-015-1500	BEFM-015-1500K			15.0						
BEFM-015-2000	BEFM-015-2000K			20.0	1.40					
								50		

Refer to pages 323-363 for Technical Data.

**K**

# BEFM-2

Metric, 2 Flute, Center Cutting  
20° Helix, Ball Nose, Miniature End Mills

**MICRO 100**<sup>®</sup>  
super carbide tools

**Featuring:**

- These precision miniature end mills are ideal for finishing, and semi-finishing cuts and universal milling applications in medium to hard materials.

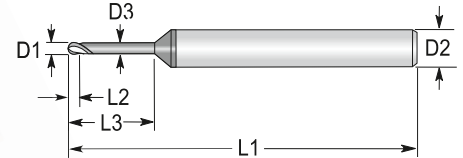
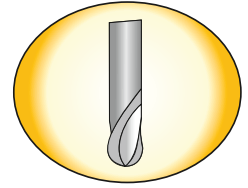


**BEFM Metric, Ball Nose, Hard Milling, Miniature End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm

Cutter Diameter:  
+.000mm -.0127mm

T.I.R. Maximum:  
.013mm



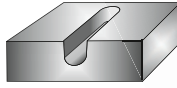
End Mills Coated with:

**nACRo**<sup>®</sup>  
(Nanotech "CR")

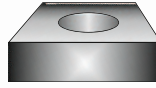
OTHER COATINGS UPON REQUEST  
SEE PAGE 326



Side Milling



Open End Slot Milling



Plunging



Open End Slot Milling



Closed End Slot Milling

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

BEFM-2 Catalog No.		Cutter Diameter (D1)	Length of Cut (L2)	Overall Reach (L3)	Neck Diameter (D3)	Overall Length (L1)	Shank Diameter (D2)
Uncoated	Coated	metric	metric	metric	metric	metric	metric
<b>3mm Shanks</b>							
BEFM-020-250	BEFM-020-250K	2.0	2.5	2.5	0.00	38	3
BEFM-020-700	BEFM-020-700K			7.0			
BEFM-020-1200	BEFM-020-1200K			12.0			
BEFM-020-1500	BEFM-020-1500K			15.0	1.90		
BEFM-020-2000	BEFM-020-2000K			20.0			
BEFM-020-2500	BEFM-020-2500K			25.0			
BEFM-025-300	BEFM-025-300K	2.5	3.0	3.0	0.00	38	
BEFM-025-1000	BEFM-025-1000K			10.0			
BEFM-025-1500	BEFM-025-1500K			15.0			
BEFM-025-2000	BEFM-025-2000K			20.0	2.40		
BEFM-025-2500	BEFM-025-2500K			25.0			
BEFM-025-3000	BEFM-025-3000K			30.0			
<b>6mm Shanks</b>							
BEFM-030-300	BEFM-030-300K	3.0	3.0	3.0	0.00	57	6
BEFM-030-1000	BEFM-030-1000K			10.0			
BEFM-030-1500	BEFM-030-1500K			15.0			
BEFM-030-2500	BEFM-030-2500K			25.0	2.90		
BEFM-030-3000	BEFM-030-3000K			30.0			
BEFM-040-500	BEFM-040-500K	4.0	5.0	5.0	0.00		
BEFM-040-1500	BEFM-040-1500K			15.0			
BEFM-040-2500	BEFM-040-2500K			25.0	3.90		
BEFM-040-3000	BEFM-040-3000K			30.0			
BEFM-050-600	BEFM-050-600K	5.0	6.0	6.0	0.00		
BEFM-050-1500	BEFM-050-1500K			15.0			
BEFM-050-2500	BEFM-050-2500K			25.0	4.90		
BEFM-050-3000	BEFM-050-3000K			30.0			

Refer to pages 323-363 for Technical Data.

# BMRM-2

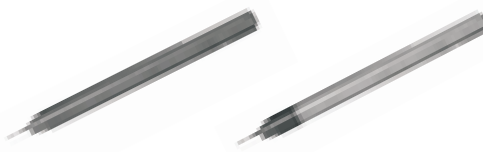
Metric, 2 Flute, Center Cutting,  
30° Helix, Ball Nose, Miniature End Mills

**BMRM Metric, Ball Nose, Miniature End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm

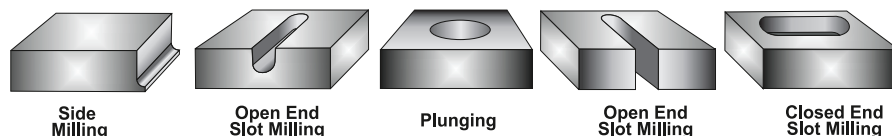
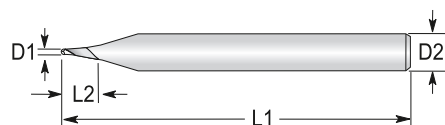
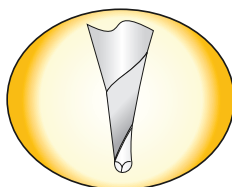
Cutter Diameter:  
0.5mm - 3mm: +.000mm -.014mm  
3.5mm: +.000mm -.018mm

T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



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<b>BMRM-2</b> Catalog No.	<b>BMRM-4</b> Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	4-Flute	metric	metric	metric	metric
<b>4mm Shanks</b>					
BMRM-005-2	_____	0.5	1.5	50	4
BMRM-006-2	_____	0.6	1.8		
BMRM-007-2	_____	0.7	2.1		
BMRM-008-2	_____	0.8	2.4		
BMRM-009-2	_____	0.9	2.7		
BMRM-010-2	BMRM-010-2	1.0	3.0		
BMRM-011-2	BMRM-011-2	1.1	3.3		
BMRM-012-2	BMRM-012-2	1.2	3.8		
BMRM-013-2	BMRM-013-2	1.3	3.9		
BMRM-014-2	BMRM-014-2	1.4	4.2		
BMRM-015-2	BMRM-015-2	1.5	4.8		
BMRM-016-2	BMRM-016-2	1.6	5.3		
BMRM-018-2	BMRM-018-2	1.8	6.0		
BMRM-020-2	BMRM-020-2	2.0	8.0		
BMRM-025-2	BMRM-025-2	2.5	9.0		
BMRM-030-2	BMRM-030-2	3.0	10.5		
BMRM-035-2	BMRM-035-2	3.5			

Refer to pages 323-363 for Technical Data.

**K**

# BMSM-2

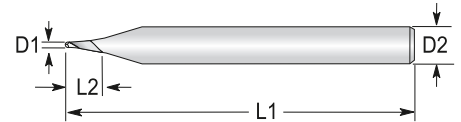
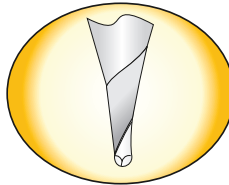
2 Flute, Center Cutting - 30° Helix, Stub Length,  
Ball Nose, Miniature End Mills

**BMSM Metric, Stub Length, Ball Nose, Miniature End Mill Tolerances:**

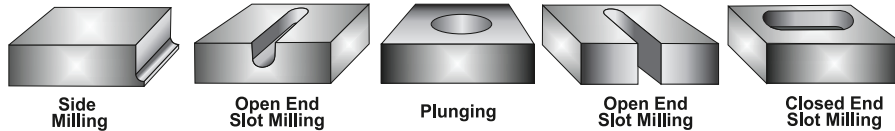
Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
0.3mm - 2.5mm: +.000mm -.014mm  
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.



OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

BMSM-2 Catalog No.	BMSM-4 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	4-Flute	metric	metric	metric	metric
<b>3mm Shanks</b>					
BMSM-003-2	_____	0.3	0.5	38	3
BMSM-004-2	_____	0.4	0.6		
BMSM-005-2	_____	0.5	0.8		
BMSM-006-2	_____	0.6	0.9		
BMSM-007-2	_____	0.7	1.1		
BMSM-008-2	_____	0.8	1.2		
BMSM-009-2	_____	0.9	1.4		
BMSM-010-2	BMSM-010-4	1.0	1.5		
BMSM-011-2	BMSM-011-4	1.1	1.7		
BMSM-012-2	BMSM-012-4	1.2	1.8		
BMSM-013-2	BMSM-013-4	1.3	2.0		
BMSM-014-2	BMSM-014-4	1.4	2.1		
BMSM-015-2	BMSM-015-4	1.5	2.3		
BMSM-016-2	BMSM-016-4	1.6	2.4		
BMSM-017-2	BMSM-017-4	1.7	2.5		
BMSM-018-2	BMSM-018-4	1.8	2.7		
BMSM-019-2	BMSM-019-4	1.9	2.8		
BMSM-020-2	BMSM-020-4	2.0	3.0		
BMSM-025-2	BMSM-025-4	2.5	3.8		

Refer to pages 323-363 for Technical Data.

K



# MMBM-2

2 Flute, Center Cutting,  
30° Helix, Mold Making, Ball Nose End Mills

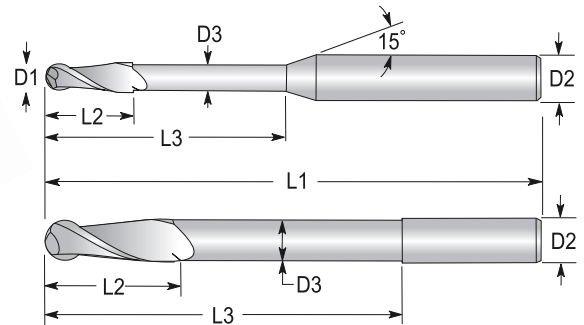
**Featuring:**

- These high precision ball nose end mills feature multiple neck length dimensions in a wide range of cutting diameters to provide the best available geometry for finishing cuts in mold making applications.
- A positive rake angle supports maximum cutting performance in medium and hard materials for conventional side milling and slotting.



**MMBM Metric, Mold Making, Ball Nose End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
0.3mm - 0.9mm: +.000mm -.04mm  
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

MMBM-2 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Reduced Neck Diameter (D3) metric	Reduced Neck Length (L3) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>4mm Shanks</b>						
MMBM-003-3	0.3	0.3	0.28	3	50	4
MMBM-003-6				6		
MMBM-004-3	0.4	0.4	0.38	3		
MMBM-004-8				8		
MMBM-005-5	0.5	0.5	0.48	5		
MMBM-005-10				10		
MMBM-006-5	0.6	0.6	0.58	5		
MMBM-006-12				12		
MMBM-007-5	0.7	0.7	0.68	5		
MMBM-007-12				12		
MMBM-008-5	0.8	0.8	0.78	5		
MMBM-008-10				10		
MMBM-008-16				16		
MMBM-009-5	0.9	0.9	0.88	5		
MMBM-009-10				10		
MMBM-009-16				16		

Refer to pages 323-363 for Technical Data.

**K**

# MMBM-2

Metric, 2 Flute, Center Cutting,  
30° Helix, Mold Making, Ball Nose End Mills

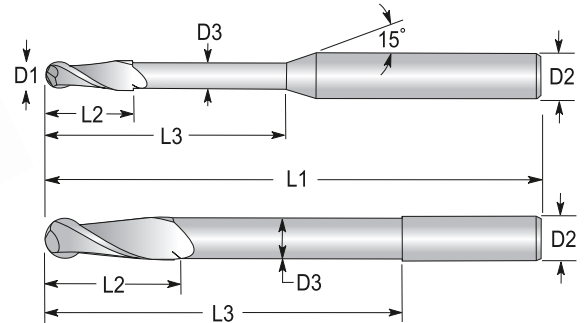
**Featuring:**

- These high precision ball nose end mills feature multiple neck length dimensions in a wide range of cutting diameters to provide the best available geometry for finishing cuts in mold making applications.
- A positive rake angle supports maximum cutting performance in medium and hard materials for conventional side milling and slotting.



**MMBM Metric Mold Making Ball Nose End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
1mm - 3mm: +.000mm -.014mm  
4mm - 5mm: +.000mm -.018mm  
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

MMBM-2 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Reduced Neck Diameter (D3) metric	Reduced Neck Length (L3) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>6mm Shanks</b>						
MMBM-010-6	1.0	1.0	0.95	6	57	6
MMBM-010-8				8		
MMBM-010-11				11		
MMBM-010-12				12		
MMBM-010-15				15		
MMBM-010-20				20		
MMBM-012-7	1.2	1.2	1.15	7		
MMBM-012-15				15		
MMBM-012-20				20		
MMBM-015-7	1.5	1.5	1.45	7		
MMBM-015-15				15		
MMBM-015-20				20		
MMBM-020-7	2.0	2.0	1.90	7		
MMBM-020-15				15		
MMBM-020-20				20		
MMBM-030-12	3.0	3.0	2.90	12		
MMBM-030-15				15		
MMBM-040-15	4.0	4.0	3.80			
MMBM-050-15	5.0	5.0	4.80			

Refer to pages 323-363 for Technical Data.

K

# SFBM-2

Metric, 2 Flute, Center Cutting,  
30° Helix, HSC Shrink Fit, Ball Nose End Mills



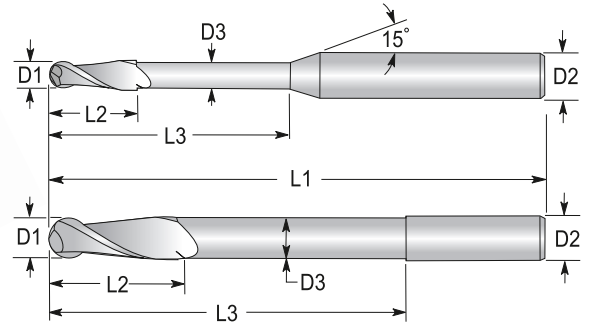
**Featuring:**

- These highest precision finishing ball nose end mills are suitable for HSC applications and are engineered for shrink-fit tool holding.
- A positive rake angle supports maximum cutting performance in soft, medium and hard materials for conventional side milling and slotting.



**SFBM Metric HSC Shrink Fit Ball Nose End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
0.2mm - 1.4mm: +.000mm -.014mm  
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

SFBM-2 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Reduced Neck Diameter (D3) metric	Reduced Neck Length (L3) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>6mm Shanks</b>						
SFBM-002-0	0.2	0.3	0.00	0.0	57	6
SFBM-003-0	0.3	0.4	0.25	1.0		
SFBM-003-1						
SFBM-004-0	0.4	0.5	0.00	0.0		
SFBM-004-1			0.35	1.2		
SFBM-005-1	0.5	0.6	0.45	1.6		
SFBM-005-3		0.5		3.3		
SFBM-005-5				5.1		
SFBM-006-2	0.6	0.7	0.55	1.7		
SFBM-006-4		0.6		4.5		
SFBM-006-6				6.2		
SFBM-008-2	0.8	1.0	0.75	2.5		
SFBM-008-5		0.8		5.2		
SFBM-008-8				8.0		
SFBM-010-3	1.0	1.3	0.95	3.3		
SFBM-010-8				8.0		
SFBM-012-3	1.2	1.5	1.15	3.5		
SFBM-012-8		1.2		8.0		
SFBM-014-3	1.4	1.8	1.35	3.8		
SFBM-014-15		2.3		15.0		

Refer to pages 323-363 for Technical Data.

**K**

# SFBM-2

Metric, 2 Flute, Center Cutting,  
30° Helix, HSC Shrink Fit, Ball Nose End Mills



**Featuring:**

- These highest precision finishing ball nose end mills are suitable for HSC applications and are engineered for shrink-fit tool holding.
- A positive rake angle supports maximum cutting performance in soft, medium and hard materials for conventional side milling and slotting.

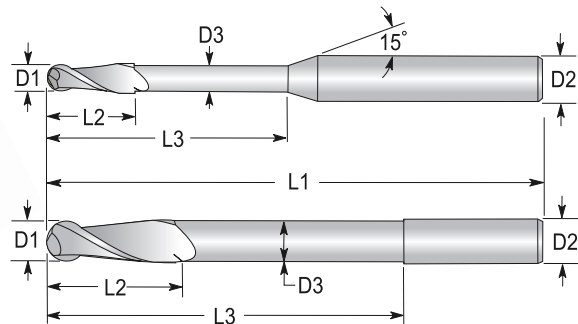


**SFBM Metric HSC Shrink Fit Ball Nose End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
0.2mm - 1.4mm: +.000mm -.014mm  
T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

SFBM-2 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Reduced Neck Diameter (D3) metric	Reduced Neck Length (L3) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>6mm Shanks</b>						
SFBM-015-4	1.5	1.9	1.45	4.9	57	6
SFBM-015-9		1.5		9.5		
SFBM-016-5	1.6	2.0	1.55	5.0		
SFBM-016-22		2.3		22.0		
SFBM-018-5	1.8	2.3	1.75	5.3		
SFBM-020-5	2.0	2.5	1.95	5.5		
SFBM-020-9				9.5		
SFBM-025-6	2.5	3.0	2.40	6.0		
SFBM-025-9		2.5		9.5		
SFBM-030-8	3.0	4.0	2.90	8.0		
SFBM-030-15		4.0		15.0		
SFBM-035-9	3.5	4.5	3.40	9.5		
SFBM-040-10	4.0	5.0	3.90	10.0		
SFBM-040-20				20.0		
SFBM-050-11	5.0	6.0	4.90	11.0		
SFBM-050-25				25.0		
SFBM-060-12	6.0	7.5	5.90	12.5		
SFBM-060-25				25.0		

Refer to pages 323-363 for Technical Data.

**K**

# BEMM-2/-3/-4

Metric, 2, 3, & 4 Flute, Center Cutting,  
30° Helix, Ball Nose End Mills

**Featuring:**

- High performance ball nose end mills with a 2, 3, & 4-flute geometry and a helix of 30°.
- These end mills are ideal for semi-finishing, finishing, and slotting in steels, stainless steels, high temperature alloys, and other difficult to machine materials.



**BEMM Metric Ball Nose End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm

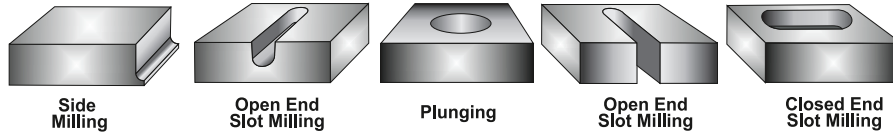
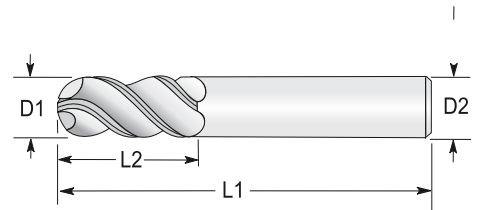
Cutter Diameter:  
3mm : +.000mm -.014mm  
4mm - 6mm : +.000mm -.018mm  
8mm - 10mm : +.000mm -.022mm  
12mm - 18mm : +.000mm -.027mm  
20mm - 25mm : +.000mm -.033mm

T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

BEMM-2 Catalog No.	BEMM-3 Catalog No.	BEMM-4 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	3-Flute	4-Flute	metric	metric	metric	metric
<b>3mm Shanks</b>						
BEMM-030-2	BEMM-030-3	BEMM-030-4	3	15	38	3
<b>4mm Shanks</b>						
BEMM-040-2	BEMM-040-3	BEMM-040-4	4	18	50	4
<b>5mm Shanks</b>						
BEMM-050-2	BEMM-050-3	BEMM-050-4	5	18	50	5
<b>6mm Shanks</b>						
BEMM-060-2	BEMM-060-3	BEMM-060-4	6	18	57	6
<b>8mm Shanks</b>						
BEMM-080-2	BEMM-080-3	BEMM-080-4	8	22	63	8
<b>10mm Shanks</b>						
BEMM-100-2	BEMM-100-3	BEMM-100-4	10	25	72	10
<b>12mm Shanks</b>						
BEMM-120-2	BEMM-120-3	BEMM-120-4	12	30	83	12
<b>14mm Shanks</b>						
BEMM-140-2	BEMM-140-3	BEMM-140-4	14	35	83	14
<b>16mm Shanks</b>						
BEMM-160-2	BEMM-160-3	BEMM-160-4	16	35	92	16
<b>18mm Shanks</b>						
BEMM-180-2	BEMM-180-3	BEMM-180-4	18	45	92	18
<b>20mm Shanks</b>						
BEMM-200-2	BEMM-200-3	BEMM-200-4	20	45	104	20

Refer to pages 323-363 for Technical Data.

# HMBM-2/-3/-4

Metric, 2 & 4 Flute, Center Cutting,  
Universal Hard Milling, Ball Nose End Mills



**Featuring:**

- Engineered with a negative rake angle, these high-tech end mills are **specifically engineered for numerous milling applications in hard materials.**
- The unique tool geometry provides **maximum milling performance in semi-finishing and finishing as well as in roughing cuts.**



**HMBM Metric Universal Hard Milling End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm

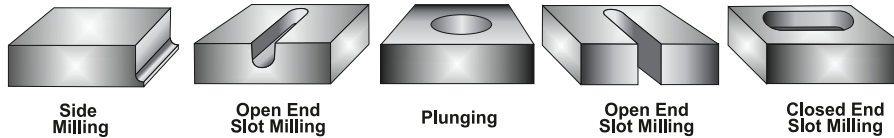
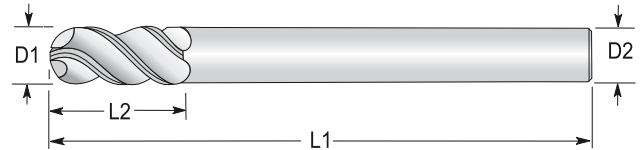
Cutter Diameter:  
1mm 3mm: +.000mm -.014mm  
4mm - 6mm: +.000mm -.018mm  
8mm - 10mm: +.000mm -.022mm  
12mm - 16mm: +.000mm -.027mm  
20mm: +.000mm -.033mm

T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



<b>HMBM-2</b> Catalog No.	<b>HMBM-4</b> Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
2-Flute	4-Flute				
<b>4mm Shanks</b>					
HMBM-010-2	_____	1.0	1.5	50	4
HMBM-015-2	_____	1.5	2.0		
<b>6mm Shanks</b>					
HMBM-020-2	_____	2.0	3.0	57	6
HMBM-025-2	_____	2.5	4.0		
HMBM-030-2	_____	3.0	4.5	70	
HMBM-040-2	_____	4.0	6.0		
HMBM-050-2	_____	5.0	7.5	80	
HMBM-060-2	HMBM-060-4	6.0	9.0	90	
<b>8mm Shanks</b>					
HMBM-080-2	HMBM-080-4	8.0	12.0	100	8
<b>10mm Shanks</b>					
HMBM-100-2	HMBM-100-4	10.0	15.0	100	10
<b>12mm Shanks</b>					
HMBM-120-2	HMBM-120-4	12.0	18.0	110	12
<b>16mm Shanks</b>					
HMBM-160-2	_____	16.0	24.0	140	16
<b>20mm Shanks</b>					
HMBM-200-2	_____	20.0	30.0	160	20

Refer to pages 323-363 for Technical Data.

**K**

# VSBM-4

Metric, 4 Flute, Variable Helix, High Velocity,  
Stub Length, Ball Nose End Mills



**Featuring:**

- Variable Pitch
- High-Production / High Speed Milling
- Excellent Surface Finish
- Eliminates Chatter
- Reduces Machine Vibration



**VSBM Metric Variable Pitch Ball Nose End Mill Tolerances:**

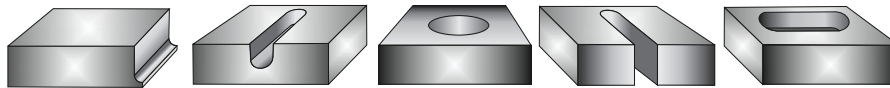
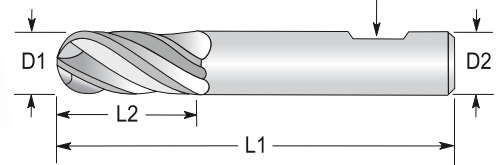
Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
3mm: +.000mm -.014mm  
4mm - 6mm: +.000mm-.018mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 18mm: +.000mm -.043mm  
20mm: +.000mm -.052mm  
25mm: +.000mm -.062mm  
T.I.R. Maximum:  
.013mm

**End Mills Coated with:**

**AlTiN**

OTHER COATINGS UPON REQUEST  
SEE PAGE 326

Shank sizes with 10mm and larger diameters feature a Weldon Flat



Side Milling

Open End Slot Milling

Plunging

Open End Slot Milling

Closed End Slot Milling

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

VSBM-4 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>4-Flute</b>				
<b>4mm Shanks</b>				
VSBM-030-4X	3	6	50	4
VSBM-040-4X	4	8		
<b>6mm Shanks</b>				
VSBM-050-4X	5	10	57	6
VSBM-060-4X	6			
<b>8mm Shanks</b>				
VSBM-080-4X	8	16	63	8
<b>10mm Shanks</b>				
VSBM-100-4X	10	19	72	10
<b>12mm Shanks</b>				
VSBM-120-4X	12	22	83	12
<b>16mm Shanks</b>				
VSBM-160-4X	16	25	92	16

Refer to pages 323-363 for Technical Data.

**K**

# VHBM-4

Metric, 4 Flute, Variable Helix,  
High Velocity, Ball Nose End Mills

**Featuring:**

- Variable Pitch
- High-Production / High Speed Milling
- Excellent Surface Finish
- Eliminates Chatter
- Reduces Machine Vibration



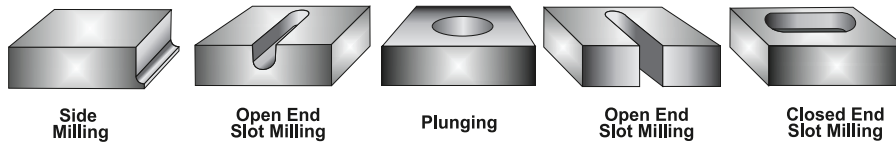
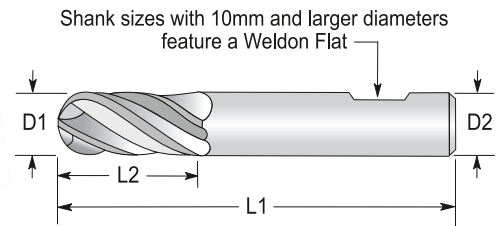
**VHBM Metric Variable Pitch Ball Nose End Mill Tolerances:**

Shank Diameter:  
-0.025mm to -0.076mm  
Cutter Diameter:  
3mm: +.000mm -.014mm  
4mm - 6mm: +.000mm-.018mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 18mm: +.000mm -.043mm  
20mm: +.000mm -.052mm  
25mm: +.000mm -.062mm  
T.I.R. Maximum:  
.013mm

End Mills Coated with:

**AlTiN**

OTHER COATINGS UPON REQUEST  
SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

VHBM-4 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
<b>4-Flute</b>				
<b>4mm Shanks</b>				
VHBM-030-4X	3	8	50	4
VHBM-040-4X	4	11		
<b>6mm Shanks</b>				
VHBM-050-4X	5	16	57	6
VHBM-060-4X	6			
<b>8mm Shanks</b>				
VHBM-080-4X	8	19	63	8
<b>10mm Shanks</b>				
VHBM-100-4X	10	22	72	10
<b>12mm Shanks</b>				
VHBM-120-4X	12	26	83	12
<b>14mm Shanks</b>				
VHBM-140-4X	14	26	83	14
<b>16mm Shanks</b>				
VHBM-160-4X	16	32	92	16
<b>18mm Shanks</b>				
VHBM-180-4X	18	32	92	18
<b>20mm Shanks</b>				
VHBM-200-4X	20	38	104	20
<b>25mm Shanks</b>				
VHBM-250-4X	25	38	127	25

Refer to pages 323-363 for Technical Data.

K



# VLBM-4

Metric, 4 Flute, Variable Helix, High Velocity,  
Long Length, Reduced Neck, Ball Nose End Mills

**Featuring:**

- Variable Pitch
- High-Production / High Speed Milling
- Reduced Neck for Greater Clearance
- Excellent Surface Finish
- Eliminates Chatter
- Reduces Machine Vibration

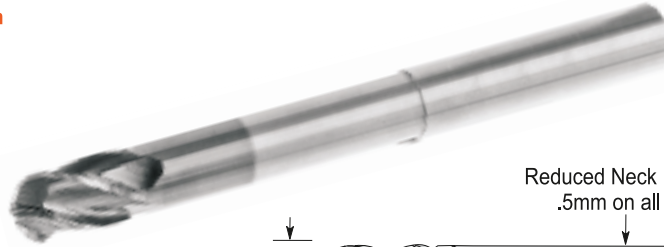


VLBM Metric Variable Pitch, Long Length,  
Reduced Neck, Ball Nose, End Mill Tolerances:

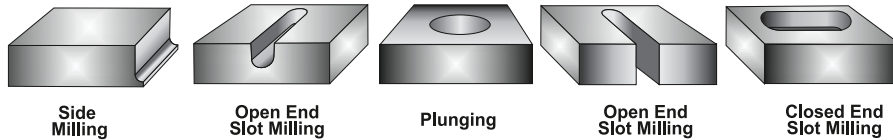
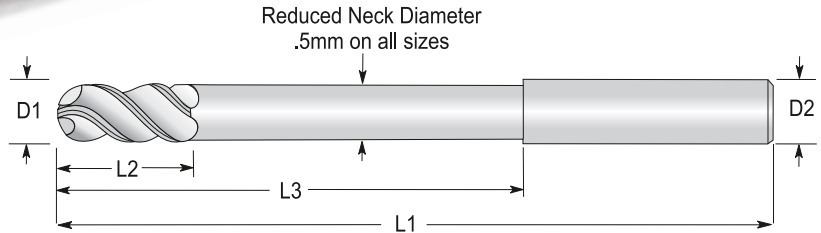
Shank Diameter:  
-.0025mm to -.0076mm

Cutter Diameter:  
6mm: +.000mm -.050mm  
8mm - 25mm: +.000mm -.080mm

T.I.R. Maximum:  
.013mm



**End Mills Coated with:**  
**AlTiN**  
OTHER COATINGS UPON REQUEST  
SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

<b>VLBM-4 Catalog No.</b>	<b>Cutter Diameter (D1)</b>	<b>Flute Length (L2)</b>	<b>Reduced Neck Length (L3)</b>	<b>Overall Length (L1)</b>	<b>Shank Diameter (D2)</b>
4-Flute	metric	metric	metric	metric	metric
<b>6mm Shanks</b>					
VLBM-040-4X	4	5	15	57	6
VLBM-050-4X	5	8	30	75	
VLBM-060-4X	6				
<b>8mm Shanks</b>					
VLBM-080-4X	8	10	50	100	8
<b>10mm Shanks</b>					
VLBM-100-4X	10	12	50	100	10
<b>12mm Shanks</b>					
VLBM-120-4X	12	14	50	100	12
<b>14mm Shanks</b>					
VLBM-140-4X	14	18	65	100	14
<b>16mm Shanks</b>					
VLBM-160-4X	16	22	80	120	16
<b>20mm Shanks</b>					
VLBM-200-4X	20	30	100	150	20
<b>25mm Shanks</b>					
VLBM-250-4X	25	38	110	150	25

Refer to pages 323-363 for Technical Data.

# BELM-2/-3/-4

Metric, 2, 3, & 4 Flute, Center Cutting - 30° Helix,  
Extra Long Length, Ball Nose End Mills



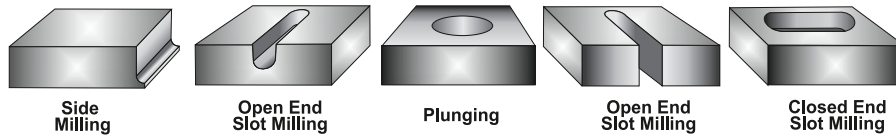
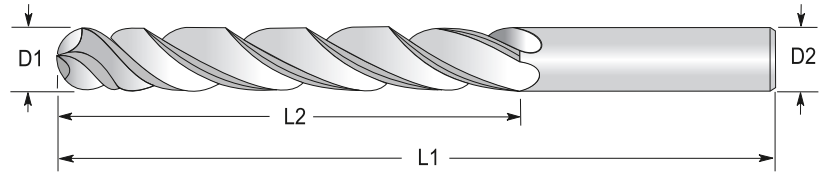
**BELM Metric Extra Long Length, Ball Nose, End Mill Tolerances:**

- Shank Diameter:  
-.0025mm to -.0076mm
- Cutter Diameter:  
3mm: +.000mm -.025mm  
4mm - 6mm: +.000mm -.030mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 18mm: +.000mm -.043mm  
20mm: +.000mm -.052mm  
25mm: +.000mm -.062mm
- T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

BELM-2 Catalog No.	BELM-3 Catalog No.	BELM-4 Catalog No.	Cutter Diameter (D1) metric	Flute Length (L2) metric	Overall Length (L1) metric	Shank Diameter (D2) metric
2-Flute	3-Flute	4-Flute				
<b>3mm Shanks</b>						
BELM-030-2	BELM-030-3	BELM-030-4	3	25	75	3
<b>4mm Shanks</b>						
BELM-040-2	BELM-040-3	BELM-040-4	4	25	75	4
<b>5mm Shanks</b>						
BELM-050-2	BELM-050-3	BELM-050-4	5	25	75	5
<b>6mm Shanks</b>						
BELM-060-2	BELM-060-3	BELM-060-4	6	25	75	6
<b>8mm Shanks</b>						
BELM-080-2	BELM-080-3	BELM-080-4	8	25	75	8
<b>10mm Shanks</b>						
BELM-100-2	BELM-100-3	BELM-100-4	10	38	100	10
<b>12mm Shanks</b>						
BELM-120-2	BELM-120-3	BELM-120-4	12	50	100	12
<b>14mm Shanks</b>						
BELM-140-2	BELM-140-3	BELM-140-4	14	75	150	14
<b>16mm Shanks</b>						
BELM-160-2	BELM-160-3	BELM-160-4	16	75	150	16
<b>18mm Shanks</b>						
BELM-180-2	BELM-180-3	BELM-180-4	18	75	150	18
<b>20mm Shanks</b>						
BELM-200-2	BELM-200-3	BELM-200-4	20	75	150	20
<b>25mm Shanks</b>						
BELM-250-2	BELM-250-3	BELM-250-4	25	75	150	25

Refer to pages 323-363 for Technical Data.

K

# BLRM-2/-3/-4

Metric, 2, 3, & 4 Flute, Center Cutting - 30° Helix,  
Reduced Neck, Ball Nose End Mills



BLRM Metric Reduced Neck

End Mill Tolerances:

Shank Diameter:

-.0025mm to -.0076mm

Cutter Diameter:

2mm - 3mm: +.000mm -.025mm

4mm - 6mm: +.000mm -.030mm

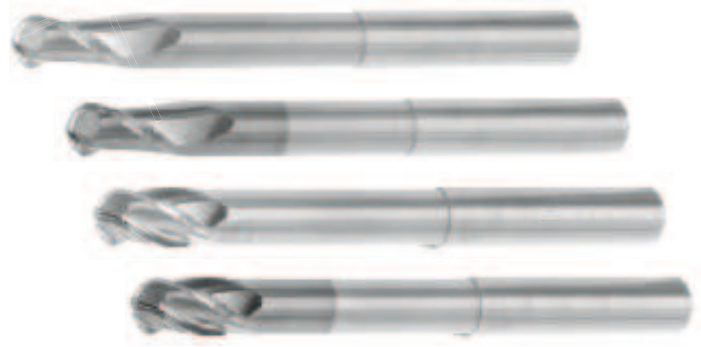
8mm - 10mm: +.000mm -.036mm

12mm - 16mm: +.000mm -.043mm

20mm: +.000mm -.052mm

T.I.R. Maximum:

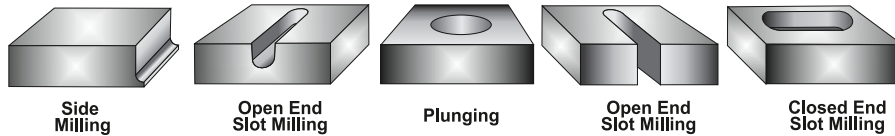
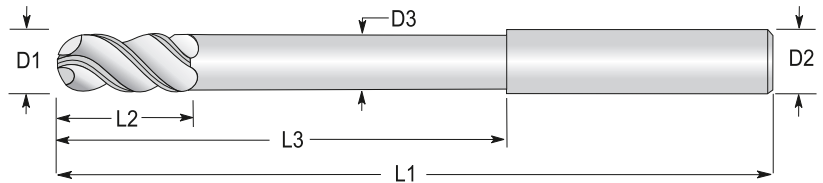
.013mm



**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

BLRM-2 Catalog No.	BLRM-3 Catalog No.	BLRM-4 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Reduced Neck Diameter (D3)	Reduced Neck Length (L3)	Overall Length (L1)	Shank Diameter (D2)
2-Flute	3-Flute	4-Flute	metric	metric	metric	metric	metric	metric
<b>6mm Shanks</b>								
BLRM-020-2	BLRM-020-3	BLRM-020-4	2	5	1.5	15	57	6
BLRM-030-2	BLRM-030-3	BLRM-030-4	3	8	2.5	30	75	
BLRM-040-2	BLRM-040-3	BLRM-040-4	4		3.5			
BLRM-050-2	BLRM-050-3	BLRM-050-4	5	10	4.5	50	100	
BLRM-060-2	BLRM-060-3	BLRM-060-4	6	12	5.5			
<b>8mm Shanks</b>								
BLRM-080-2	BLRM-080-3	BLRM-080-4	8	14	7.5	50	100	8
<b>10mm Shanks</b>								
BLRM-100-2	BLRM-100-3	BLRM-100-4	10	18	9.5	65	120	10
<b>12mm Shanks</b>								
BLRM-120-2	BLRM-120-3	BLRM-120-4	12	22	11.5	80	130	12
<b>16mm Shanks</b>								
BLRM-160-2	BLRM-160-3	BLRM-160-4	16	30	15.5	100	150	16
<b>20mm Shanks</b>								
BLRM-200-2	BLRM-200-3	BLRM-200-4	20	38	19.5	100	150	20

Refer to pages 323-363 for Technical Data.

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# SBMM-2

Metric, 2 Flute, Center Cutting - 30° Helix, Spherical Ball Nose, End Mills



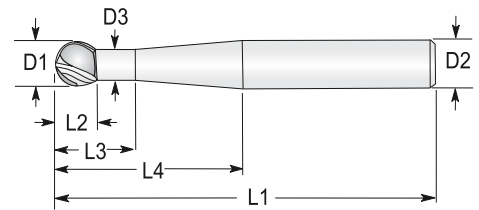
**Featuring:**

- These short flute 220° spherical ball nose end mills feature a reduced neck diameter and are **ideal for copy milling and deep pocket milling applications.**
- The special geometry allows inclination of up to 15° with optimal chip evacuation for increased feed rates.



**SBMM Metric Spherical Ball Nose End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
2mm - 3mm: +.000mm -.014mm  
4mm - 6mm : +.000mm -.018mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 16mm: +.000mm -.043mm  
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

SBMM-2 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Neck Diameter (D3)	Neck Length (L3)	Reduced Neck Length (L4)	Radius	Overall Length (L1)	Shank Diameter (D2)
2-Flute	metric	metric	metric	metric	metric	metric	metric	metric
<b>6mm Shanks</b>								
SBMM-020-206	2	1.3	1.3	6	32	1.0	75	6
SBMM-020-210				10	36			
SBMM-020-216				16	42			
SBMM-030-209	3	2.0	2.0	9	31	1.5		
SBMM-030-215				15	37			
SBMM-030-221				21	43			
SBMM-040-212	4	2.7	2.7	12	30	2.0	100	
SBMM-040-220				20	36			
SBMM-040-232				32	44			
SBMM-060-218	6	4.0	4.0	18	29	3.0	75	
SBMM-060-230				25	41			
SBMM-060-248				32	44			
<b>8mm Shanks</b>								
SBMM-080-224	8	5.4	5.4	24	39	4.0	100	8
SBMM-080-240				40	55			
SBMM-080-264				55	68			
<b>10mm Shanks</b>								
SBMM-100-230	10	6.7	6.7	30	48	5.0	100	10
SBMM-100-250				40	59			
SBMM-100-272				55	68			
<b>12mm Shanks</b>								
SBMM-120-236	12	8.0	8.0	36	58	6.0	100	12
SBMM-120-272				55	68			
<b>16mm Shanks</b>								
SBMM-160-248	16	10.7	10.7	48	55	8.0	100	16
SBMM-160-272				55	68			

Refer to pages 323-363 for Technical Data.

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# SBMM-3

Metric, 3 Flute, Center Cutting - 30° Helix, Spherical Ball Nose, End Mills

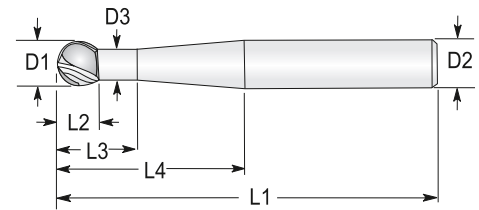
**Featuring:**

- These short flute 220° spherical ball nose end mills feature a reduced neck diameter and are **ideal for copy milling and deep pocket milling applications.**
- The special geometry allows inclination of up to 15° with optimal chip evacuation for increased feed rates.



**SBMM Metric Spherical Ball Nose End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
2mm - 3mm: +.000mm -.014mm  
4mm - 6mm : +.000mm -.018mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 16mm: +.000mm -.043mm  
T.I.R. Maximum:  
.013mm



**Coated End Mills AVAILABLE!**

**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326

For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

SBMM-3 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Neck Diameter (D3)	Neck Length (L3)	Reduced Neck Length (L4)	Radius	Overall Length (L1)	Shank Diameter (D2)
3-Flute	metric	metric	metric	metric	metric	metric	metric	metric
<b>6mm Shanks</b>								
SBMM-020-306	2	1.3	1.3	6	32	1.0	75	6
SBMM-020-310				10	36			
SBMM-020-316				16	42			
SBMM-030-309	3	2.0	2.0	9	31	1.5	75	6
SBMM-030-315				15	37			
SBMM-030-321				21	43			
SBMM-040-312	4	2.7	2.7	12	30	2.0	100	6
SBMM-040-320				20	36			
SBMM-040-332				32	44		3.0	
SBMM-060-318	6	4.0	4.0	18	29	100		
SBMM-060-330				25	41	75		
SBMM-060-348				32	44	100		
<b>8mm Shanks</b>								
SBMM-080-324	8	5.4	5.4	24	39	4.0	100	8
SBMM-080-340				40	55			
SBMM-080-364				55	68			
<b>10mm Shanks</b>								
SBMM-100-330	10	6.7	6.7	30	48	5.0	100	10
SBMM-100-350				40	59			
SBMM-100-372				55	68			
<b>12mm Shanks</b>								
SBMM-120-336	12	8.0	8.0	36	58	6.0	100	12
SBMM-120-372				55	68			
<b>16mm Shanks</b>								
SBMM-160-348	16	10.7	10.7	48	55	8.0	100	16
SBMM-160-372				55	68			

Refer to pages 323-363 for Technical Data.

# SBMM-4

Metric, 4 Flute, Center Cutting - 30° Helix, Spherical Ball Nose, End Mills



**Featuring:**

- These short flute 220° spherical ball nose end mills feature a reduced neck diameter and are **ideal for copy milling and deep pocket milling applications.**
- The special geometry allows inclination of up to 15° with optimal chip evacuation for increased feed rates.

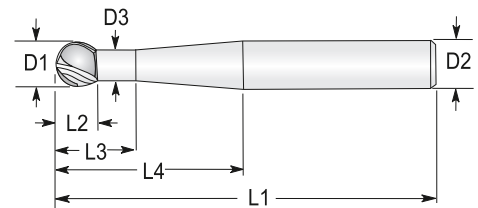


**SBMM Metric Spherical Ball Nose End Mill Tolerances:**

Shank Diameter:  
-.0025mm to -.0076mm  
Cutter Diameter:  
2mm - 3mm: +.000mm -.014mm  
4mm - 6mm : +.000mm -.018mm  
8mm - 10mm: +.000mm -.036mm  
12mm - 16mm: +.000mm -.043mm  
T.I.R. Maximum:  
.013mm

**Coated End Mills AVAILABLE!**  
**AlTiN** Add an "X" to end of Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

SBMM-4 Catalog No.	Cutter Diameter (D1)	Flute Length (L2)	Neck Diameter (D3)	Neck Length (L3)	Reduced Neck Length (L4)	Radius	Overall Length (L1)	Shank Diameter (D2)
4-Flute	metric	metric	metric	metric	metric	metric	metric	metric
<b>6mm Shanks</b>								
SBMM-020-406	2	1.3	1.3	6	32	1.0	75	6
SBMM-020-410				10	36			
SBMM-020-416				16	42			
SBMM-030-409	3	2.0	2.0	9	31	1.5		
SBMM-030-415				15	37			
SBMM-030-421				21	43			
SBMM-040-412	4	2.7	2.7	12	30	2.0		
SBMM-040-420				20	36			
SBMM-040-432				32	44		100	
SBMM-060-418	6	4.0	4.0	18	29	3.0	75	
SBMM-060-430				25	41			
SBMM-060-448				32	44		100	
<b>8mm Shanks</b>								
SBMM-080-424	8	5.4	5.4	24	39	4.0	100	8
SBMM-080-440				40	55			
SBMM-080-464				55	68			
<b>10mm Shanks</b>								
SBMM-100-430	10	6.7	6.7	30	48	5.0	100	10
SBMM-100-450				40	59			
SBMM-100-472				55	68			
<b>12mm Shanks</b>								
SBMM-120-436	12	8.0	8.0	36	58	6.0	100	12
SBMM-120-472				55	68			
<b>16mm Shanks</b>								
SBMM-160-448	16	10.7	10.7	48	55	8.0	100	16
SBMM-160-472				55	68			

Refer to pages 323-363 for Technical Data.

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# TEBM-3

Metric, 3 Flute, Center Cutting - 30° Helix,  
Ball Nose, Tapered End Mills



TEBM Metric, Ball Nose, Tapered End Mill Tool

Shank Diameter:  
-.0025mm to -.0076mm

Small Diameter:  
+.08mm -.000mm

T.I.R. Maximum:  
.013mm

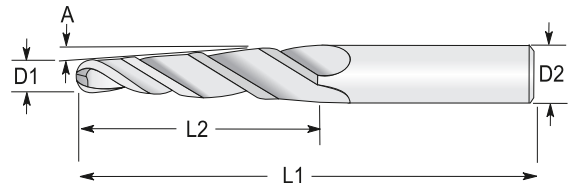


Style "TEBM"  
by SPECIAL ORDER  
once current inventories  
are depleted.

Coated End Mills AVAILABLE!

**AlTiN** Add an "X" to end of  
Catalog No.

OTHER COATINGS UPON REQUEST, SEE PAGE 326



For current pricing and availability please visit our website at: [www.micro100.com](http://www.micro100.com)

TEBM-3 Catalog No.	Small Diameter (D1)	Flute Length (L2)	Angle Per Side (A)	Overall Length (L1)	Shank Diameter (D2)	
3-Flute						
metric						
<b>6mm Shanks</b>						
TEBM-060-0.5	3	15	0° 30'	57	6	
TEBM-060-1			1°			
TEBM-060-1.5			1° 30'			
TEBM-060-5		17	5°			
<b>8mm Shanks</b>						
TEBM-080-0.5	5	25	0° 30'	63	8	
TEBM-080-1			1°			
TEBM-080-1.5			1° 30'			
TEBM-080-2			2°			
<b>10mm Shanks</b>						
TEBM-100-0.5	5	35	0° 30'	72	10	
TEBM-100-1			1°			
TEBM-100-1.5			1° 30'			
TEBM-100-5	6	23	5°			
<b>12mm Shanks</b>						
TEBM-120-2.5	8	40	2° 30'	83	12	
TEBM-120-3		35	3°			
TEBM-120-4		29	4°			
TEBM-120-5		23	5°			
<b>16mm Shanks</b>						
TEBM-160-2	12	50	2°	92	16	
TEBM-160-2.5		46	2° 30'			
TEBM-160-3		38	3°			
TEBM-160-4		23				4°
TEBM-160-5						5°

Refer to pages 323-363 for Technical Data.

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