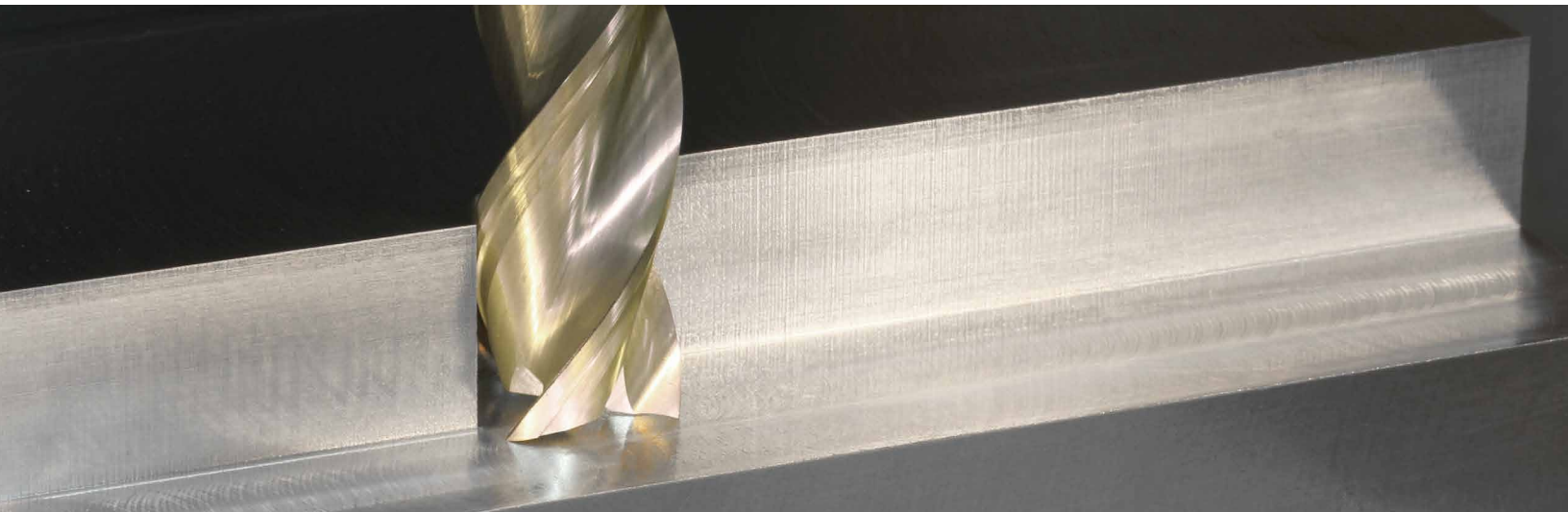




# ATLAS

High Performance End Mills



High Speed Machining of Aluminum, Copper Alloys, Brass, and Plastics

Large Lineup for a Wide Range of Applications

Square End, Corner Radius, Ball Nose, and Roughing Types Available

Excellent Surface Finish



# ATLAS High Performance End Mills

High Speed Machining of Aluminum, Copper Alloys, Brass, and Plastics

## 1 Large Lineup of 3 Flute Square, Corner Radius, Ball Nose, and Roughers Available

All styles are 3 flutes and center cutting

### Square End

Superior anti-vibration performance  
Special lengths available upon request



Cutting Dia.  $\varnothing 0.125\text{--}\varnothing 1.000$   
Uncoated or in High Performance ZrN Coating

Stub Length

Standard Length

Long Length

### Ball Nose

Chatter-resistant designs  
Special lengths available upon request



Cutting Dia.  $\varnothing 0.125\text{--}\varnothing 1.000$   
Uncoated or in High Performance ZrN Coating

Stub Length

Standard Flute

Long Length

### Corner Radius

High efficiency small, medium, and large, corner radius end mills  
Special lengths or corner radius available upon request



Cutting Dia.  $\varnothing 0.125\text{--}\varnothing 1.000$   
Uncoated or in High Performance ZrN Coating

Small Corner Radius

Medium Corner Radius

Large Corner Radius

Stub Length

Standard Length

Long Length

### Rougher Finisher

Staggered chip breakers for curling chips providing excellent surface finish  
Special lengths available upon request



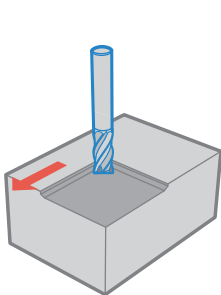
Cutting Dia.  $\varnothing 0.125\text{--}\varnothing 1.000$   
Uncoated or in High Performance ZrN Coating

Stub Length

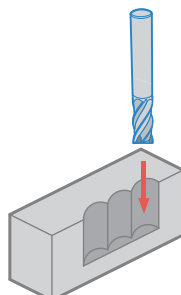
Standard Length

Long Length

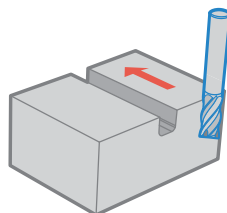
## 2 Wide Range of Machining Applications



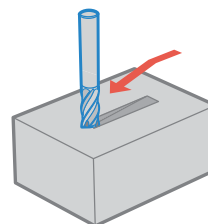
Facing & Shouldering



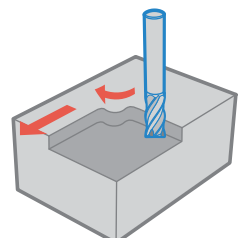
Plunging



Slotting



Ramping



Profiling

### 3 High Performance ZrN Coating Improves Wear and Reduces Edge Build-up

Zirconium Nitride (ZrN) coatings effectively reduce built-up edges when machining Aluminum and Copper

#### Coating Properties

Coating	ZrN
Structure	Monolayer
Hardness [GPa]	20
Friction Coefficient	0.4
Thickness [ $\mu\text{m}$ ]	1-4
Oxidation Temperature [ $^{\circ}\text{C}$ ]	550 $^{\circ}$

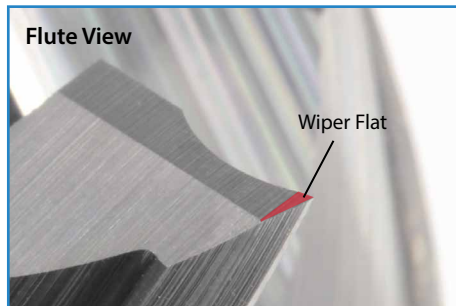
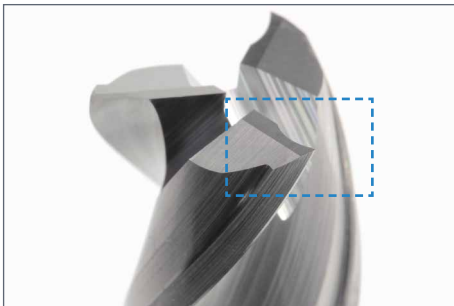


*Other coatings available upon request*

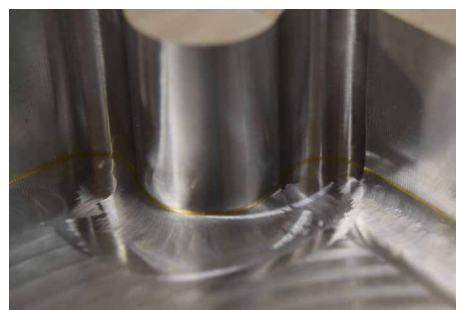
### 4 Excellent Surface Finish

Micro circular lands on OD and wiper flats on the square and corner radius styles create smooth floors and excellent surface finishes

#### Cutting Edge Design



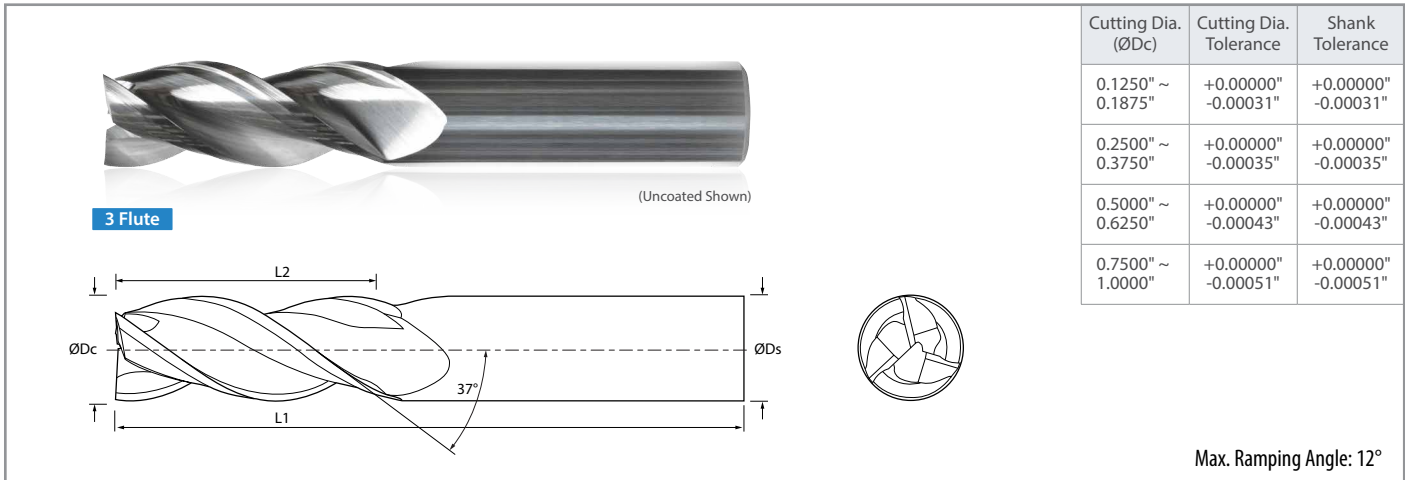
#### Surface Finish Comparison (Internal Evaluation)



Cleaner and more consistent floor finish than Competitor A

ATLAS

Competitor A



Stub Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)				
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut
				ØDc				
1770-1250.250	●	1770-1250AD250	●	0.1250	1/8	0.1250	1.500	0.250
1770-1875.313	●	1770-1875AD313	●	0.1875	3/16	0.1875	2.000	0.313
1770-2500.375	●	1770-2500AD375	●	0.2500	1/4	0.2500	2.500	0.375
1770-3125.438	●	1770-3125AD438	●	0.3125	5/16	0.3125	2.500	0.438
1770-3750.500	●	1770-3750AD500	●	0.3750	3/8	0.3750	2.500	0.500
1770-5000.625	●	1770-5000AD625	●	0.5000	1/2	0.5000	3.000	0.625
1770-6250.750	●	1770-6250AD750	●	0.6250	5/8	0.6250	3.500	0.750
1770-7500.1000	●	1770-7500AD1000	●	0.7500	3/4	0.7500	4.000	1.000
1770-10000.1250	●	1770-10000AD1250	●	1.0000	1	1.0000	4.000	1.250

Standard Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)				
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut
				ØDc				
1770-1250.500	●	1770-1250AD500	●	0.1250	1/8	0.1250	1.500	0.500
1770-1875.625	●	1770-1875AD625	●	0.1875	3/16	0.1875	2.000	0.625
1770-2500.750	●	1770-2500AD750	●	0.2500	1/4	0.2500	2.500	0.750
1770-3125.750	●	1770-3125AD750	●	0.3125	5/16	0.3125	2.500	0.750
1770-3750.1000	●	1770-3750AD1000	●	0.3750	3/8	0.3750	2.500	1.000
1770-5000.1250	●	1770-5000AD1250	●	0.5000	1/2	0.5000	3.000	1.250
1770-6250.1625	●	1770-6250AD1625	●	0.6250	5/8	0.6250	3.500	1.625
1770-7500.1625	●	1770-7500AD1625	●	0.7500	3/4	0.7500	4.000	1.625
1770-10000.2000	●	1770-10000AD2000	●	1.0000	1	1.0000	4.000	2.000

Long Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)				
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut
				ØDc				
1770-2500.1125	●	1770-2500AD1125	●	0.2500	1/4	0.2500	3.000	1.125
1770-3125.1125	●	1770-3125AD1125	●	0.3125	5/16	0.3125	3.000	1.125
1770-3750.1500	●	1770-3750AD1500	●	0.3750	3/8	0.3750	4.000	1.500
1770-5000.2250	●	1770-5000AD2250	●	0.5000	1/2	0.5000	4.000	2.250
1770-6250.2500	●	1770-6250AD2500	●	0.6250	5/8	0.6250	5.000	2.500
1770-7500.2500	●	1770-7500AD2500	●	0.7500	3/4	0.7500	5.000	2.500
1770-10000.2500	●	1770-10000AD2500	●	1.0000	1	1.0000	6.000	2.500

● : U.S. Stock

**3 Flute**  
(Uncoated Shown)

Cutting Dia. (ØDc)	Cutting Dia. Tolerance	Shank Tolerance
0.1250" ~ 0.1875"	+0.00000" -0.00031"	+0.00000" -0.00031"
0.2500" ~ 0.3750"	+0.00000" -0.00035"	+0.00000" -0.00035"
0.5000" ~ 0.6250"	+0.00000" -0.00043"	+0.00000" -0.00043"
0.7500" ~ 1.0000"	+0.00000" -0.00051"	+0.00000" -0.00051"

Max. Ramping Angle: 12°

Stub Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)					
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut	Corner Radius
				ØDc					
1771-1250.250CR1	●	1771-1250AD250CR1	●	0.1250	1/8	0.1250	1.500	0.250	0.010
1771-1875.313CR1	●	1771-1875AD313CR1	●	0.1875	3/16	0.1875	2.000	0.313	0.010
1771-2500.375CR1	●	1771-2500AD375CR1	●	0.2500	1/4	0.2500	2.500	0.375	0.010
1771-3125.438CR1	●	1771-3125AD438CR1	●	0.3125	5/16	0.3125	2.500	0.438	0.010
1771-3750.500CR1	●	1771-3750AD500CR1	●	0.3750	3/8	0.3750	2.500	0.500	0.015
1771-5000.625CR1	●	1771-5000AD625CR1	●	0.5000	1/2	0.5000	3.000	0.625	0.015
1771-6250.750CR1	●	1771-6250AD750CR1	●	0.6250	5/8	0.6250	3.500	0.750	0.020
1771-7500.1000CR1	●	1771-7500AD1000CR1	●	0.7500	3/4	0.7500	4.000	1.000	0.030
1771-10000.1250CR1	●	1771-10000AD1250C1	●	1.0000	1	1.0000	4.000	1.250	0.030

Standard Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)					
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut	Corner Radius
				ØDc					
1771-1250.500CR1	●	1771-1250AD500CR1	●	0.1250	1/8	0.1250	1.500	0.500	0.010
1771-1875.625CR1	●	1771-1875AD625CR1	●	0.1875	3/16	0.1875	2.000	0.625	0.010
1771-2500.750CR1	●	1771-2500AD750CR1	●	0.2500	1/4	0.2500	2.500	0.750	0.010
1771-3125.750CR1	●	1771-3125AD750CR1	●	0.3125	5/16	0.3125	2.500	0.750	0.010
1771-3750.1000CR1	●	1771-3750AD1000CR1	●	0.3750	3/8	0.3750	2.500	1.000	0.015
1771-5000.1250CR1	●	1771-5000AD1250CR1	●	0.5000	1/2	0.5000	3.000	1.250	0.015
1771-6250.1625CR1	●	1771-6250AD1625CR1	●	0.6250	5/8	0.6250	3.500	1.625	0.020
1771-7500.1625CR1	●	1771-7500AD1625CR1	●	0.7500	3/4	0.7500	4.000	1.625	0.030
1771-10000.2000CR1	●	1771-10000AD2000C1	●	1.0000	1	1.0000	4.000	2.000	0.030

Long Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)					
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut	Corner Radius
				ØDc					
1771-2500.1125CR1	●	1771-2500AD1125CR1	●	0.2500	1/4	0.2500	3.000	1.125	0.010
1771-3125.1125CR1	●	1771-3125AD1125CR1	●	0.3125	5/16	0.3125	3.000	1.125	0.010
1771-3750.1500CR1	●	1771-3750AD1500CR1	●	0.3750	3/8	0.3750	4.000	1.500	0.015
1771-5000.2250CR1	●	1771-5000AD2250CR1	●	0.5000	1/2	0.5000	4.000	2.250	0.015
1771-6250.2500CR1	●	1771-6250AD2500CR1	●	0.6250	5/8	0.6250	5.000	2.500	0.020
1771-7500.2500CR1	●	1771-7500AD2500CR1	●	0.7500	3/4	0.7500	5.000	2.500	0.030
1771-10000.2500CR1	●	1771-10000AD2500C1	●	1.0000	1	1.0000	6.000	2.500	0.030

● : U.S. Stock

(Uncoated Shown)

**3 Flute**

Cutting Dia. (ØDc)	Cutting Dia. Tolerance	Shank Tolerance
0.1250" ~ 0.1875"	+0.00000" -0.00031"	+0.00000" -0.00031"
0.2500" ~ 0.3750"	+0.00000" -0.00035"	+0.00000" -0.00035"
0.5000" ~ 0.6250"	+0.00000" -0.00043"	+0.00000" -0.00043"
0.7500" ~ 1.0000"	+0.00000" -0.00051"	+0.00000" -0.00051"

Max. Ramping Angle: 12°

Stub Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)					
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut	Corner Radius
				ØDc					
1771-1250.250CR2	●	1771-1250AD250CR2	●	0.1250	1/8	0.1250	1.500	0.250	0.020
1771-1875.313CR2	●	1771-1875AD313CR2	●	0.1875	3/16	0.1875	2.000	0.313	0.020
1771-2500.375CR2	●	1771-2500AD375CR2	●	0.2500	1/4	0.2500	2.500	0.375	0.025
1771-3125.438CR2	●	1771-3125AD438CR2	●	0.3125	5/16	0.3125	2.500	0.438	0.030
1771-3750.500CR2	●	1771-3750AD500CR2	●	0.3750	3/8	0.3750	2.500	0.500	0.040
1771-5000.625CR2	●	1771-5000AD625CR2	●	0.5000	1/2	0.5000	3.000	0.625	0.050
1771-6250.750CR2	●	1771-6250AD750CR2	●	0.6250	5/8	0.6250	3.500	0.750	0.060
1771-7500.1000CR2	●	1771-7500AD1000CR2	●	0.7500	3/4	0.7500	4.000	1.000	0.060
1771-10000.1250CR2	●	1771-10000AD1250C2	●	1.0000	1	1.0000	4.000	1.250	0.060

Standard Length Dimensions (Inch Size)

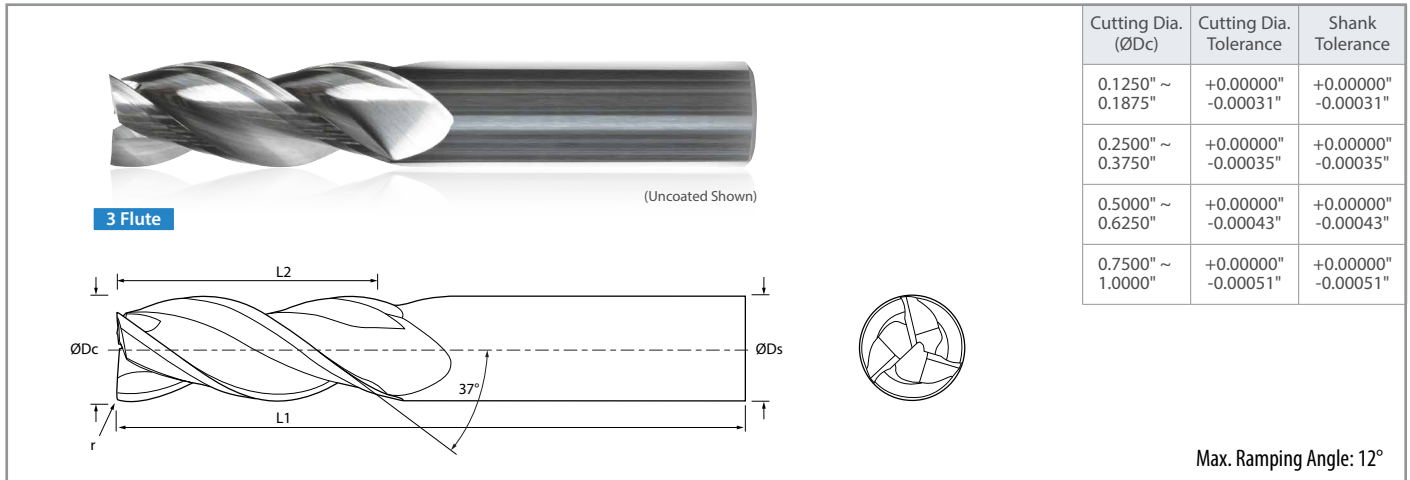
Uncoated		ZrN Coated		Dimensions (in)					
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut	Corner Radius
				ØDc					
1771-1250.500CR2	●	1771-1250AD500CR2	●	0.1250	1/8	0.1250	1.500	0.500	0.020
1771-1875.625CR2	●	1771-1875AD625CR2	●	0.1875	3/16	0.1875	2.000	0.625	0.020
1771-2500.750CR2	●	1771-2500AD750CR2	●	0.2500	1/4	0.2500	2.500	0.750	0.025
1771-3125.750CR2	●	1771-3125AD750CR2	●	0.3125	5/16	0.3125	2.500	0.750	0.030
1771-3750.1000CR2	●	1771-3750AD1000CR2	●	0.3750	3/8	0.3750	2.500	1.000	0.040
1771-5000.1250CR2	●	1771-5000AD1250CR2	●	0.5000	1/2	0.5000	3.000	1.250	0.050
1771-6250.1625CR2	●	1771-6250AD1625CR2	●	0.6250	5/8	0.6250	3.500	1.625	0.060
1771-7500.1625CR2	●	1771-7500AD1625CR2	●	0.7500	3/4	0.7500	4.000	1.625	0.060
1771-10000.2000CR2	●	1771-10000AD2000C2	●	1.0000	1	1.0000	4.000	2.000	0.060

Long Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)					
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut	Corner Radius
				ØDc					
1771-2500.1125CR2	●	1771-2500AD1125CR2	●	0.2500	1/4	0.2500	3.000	1.125	0.025
1771-3125.1125CR2	●	1771-3125AD1125CR2	●	0.3125	5/16	0.3125	3.000	1.125	0.030
1771-3750.1500CR2	●	1771-3750AD1500CR2	●	0.3750	3/8	0.3750	4.000	1.500	0.040
1771-5000.2250CR2	●	1771-5000AD2250CR2	●	0.5000	1/2	0.5000	4.000	2.250	0.050
1771-6250.2500CR2	●	1771-6250AD2500CR2	●	0.6250	5/8	0.6250	5.000	2.500	0.060
1771-7500.2500CR2	●	1771-7500AD2500CR2	●	0.7500	3/4	0.7500	5.000	2.500	0.060
1771-10000.2500CR2	●	1771-10000AD2500C2	●	1.0000	1	1.0000	6.000	2.500	0.060

● : U.S. Stock





Stub Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)					
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut	Corner Radius
				ØDc					
1771-1250.250CR3	●	1771-1250AD250CR3	●	0.1250	1/8	0.1250	1.500	0.250	0.030
1771-1875.313CR3	●	1771-1875AD313CR3	●	0.1875	3/16	0.1875	2.000	0.313	0.030
1771-2500.375CR3	●	1771-2500AD375CR3	●	0.2500	1/4	0.2500	2.500	0.375	0.040
1771-3125.438CR3	●	1771-3125AD438CR3	●	0.3125	5/16	0.3125	2.500	0.438	0.050
1771-3750.500CR3	●	1771-3750AD500CR3	●	0.3750	3/8	0.3750	2.500	0.500	0.060
1771-5000.625CR3	●	1771-5000AD625CR3	●	0.5000	1/2	0.5000	3.000	0.625	0.080
1771-6250.750CR3	●	1771-6250AD750CR3	●	0.6250	5/8	0.6250	3.500	0.750	0.100
1771-7500.1000CR3	●	1771-7500AD1000CR3	●	0.7500	3/4	0.7500	4.000	1.000	0.120
1771-10000.1250CR3	●	1771-10000AD1250C3	●	1.0000	1	1.0000	4.000	1.250	0.120

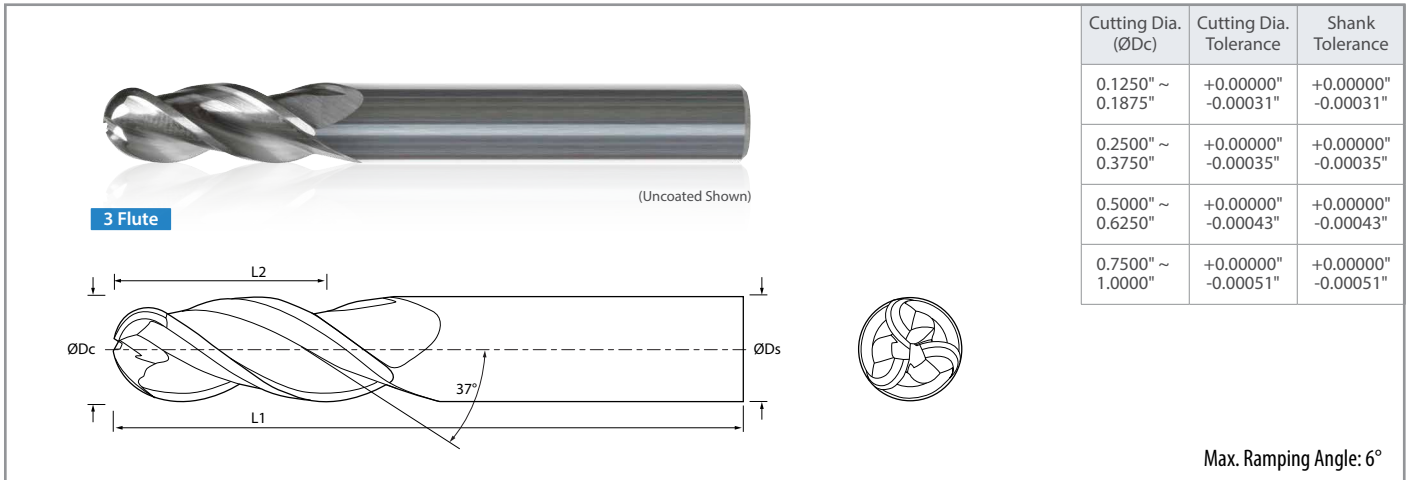
Standard Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)					
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut	Corner Radius
				ØDc					
1771-1250.500CR3	●	1771-1250AD500CR3	●	0.1250	1/8	0.1250	1.500	0.500	0.030
1771-1875.625CR3	●	1771-1875AD625CR3	●	0.1875	3/16	0.1875	2.000	0.625	0.030
1771-2500.750CR3	●	1771-2500AD750CR3	●	0.2500	1/4	0.2500	2.500	0.750	0.040
1771-3125.750CR3	●	1771-3125AD750CR3	●	0.3125	5/16	0.3125	2.500	0.750	0.050
1771-3750.1000CR3	●	1771-3750AD1000CR3	●	0.3750	3/8	0.3750	2.500	1.000	0.060
1771-5000.1250CR3	●	1771-5000AD1250CR3	●	0.5000	1/2	0.5000	3.000	1.250	0.080
1771-6250.1625CR3	●	1771-6250AD1625CR3	●	0.6250	5/8	0.6250	3.500	1.625	0.100
1771-7500.1625CR3	●	1771-7500AD1625CR3	●	0.7500	3/4	0.7500	4.000	1.625	0.120
1771-10000.2000CR3	●	1771-10000AD2000C3	●	1.0000	1	1.0000	4.000	2.000	0.120

Long Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)					
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut	Corner Radius
				ØDc					
1771-2500.1125CR3	●	1771-2500AD1125CR3	●	0.2500	1/4	0.2500	3.000	1.125	0.040
1771-3125.1125CR3	●	1771-3125AD1125CR3	●	0.3125	5/16	0.3125	3.000	1.125	0.050
1771-3750.1500CR3	●	1771-3750AD1500CR3	●	0.3750	3/8	0.3750	4.000	1.500	0.060
1771-5000.2250CR3	●	1771-5000AD2250CR3	●	0.5000	1/2	0.5000	4.000	2.250	0.080
1771-6250.2500CR3	●	1771-6250AD2500CR3	●	0.6250	5/8	0.6250	5.000	2.500	0.100
1771-7500.2500CR3	●	1771-7500AD2500CR3	●	0.7500	3/4	0.7500	5.000	2.500	0.120
1771-10000.2500CR3	●	1771-10000AD2500C3	●	1.0000	1	1.0000	6.000	2.500	0.120

● : U.S. Stock



Stub Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)				
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut
				ØDc				
1775-1250.250	●	1775-1250AD250	●	0.1250	1/8	0.1250	1.500	0.250
1775-1875.313	●	1775-1875AD313	●	0.1875	3/16	0.1875	2.000	0.313
1775-2500.375	●	1775-2500AD375	●	0.2500	1/4	0.2500	2.500	0.375
1775-3125.437	●	1775-3125AD437	●	0.3125	5/16	0.3125	2.500	0.437
1775-3750.500	●	1775-3750AD500	●	0.3750	3/8	0.3750	2.500	0.500
1775-5000.625	●	1775-5000AD625	●	0.5000	1/2	0.5000	3.000	0.625
1775-6250.750	●	1775-6250AD750	●	0.6250	5/8	0.6250	3.500	0.750
1775-7500.1000	●	1775-7500AD1000	●	0.7500	3/4	0.7500	4.000	1.000
1775-10000.1250	●	1775-10000AD1250	●	1.0000	1	1.0000	4.000	1.250

Standard Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)				
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut
				ØDc				
1775-1250.500	●	1775-1250AD500	●	0.1250	1/8	0.1250	1.500	0.500
1775-1875.625	●	1775-1875AD625	●	0.1875	3/16	0.1875	2.000	0.625
1775-2500.750	●	1775-2500AD750	●	0.2500	1/4	0.2500	2.500	0.750
1775-3125.750	●	1775-3125AD750	●	0.3125	5/16	0.3125	2.500	0.750
1775-3750.1000	●	1775-3750AD1000	●	0.3750	3/8	0.3750	2.500	1.000
1775-5000.1250	●	1775-5000AD1250	●	0.5000	1/2	0.5000	3.000	1.250
1775-6250.1625	●	1775-6250AD1625	●	0.6250	5/8	0.6250	3.500	1.625
1775-7500.1625	●	1775-7500AD1625	●	0.7500	3/4	0.7500	4.000	1.625
1775-10000.2000	●	1775-10000AD2000	●	1.0000	1	1.0000	4.000	2.000

Long Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)				
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut
				ØDc				
1775-2500.1125	●	1775-2500AD1125	●	0.2500	1/4	0.2500	3.000	1.125
1775-3125.1125	●	1775-3125AD1125	●	0.3125	5/16	0.3125	3.000	1.125
1775-3750.1500	●	1775-3750AD1500	●	0.3750	3/8	0.3750	4.000	1.500
1775-5000.2250	●	1775-5000AD2250	●	0.5000	1/2	0.5000	4.000	2.250
1775-6250.2500	●	1775-6250AD2500	●	0.6250	5/8	0.6250	5.000	2.500
1775-7500.2500	●	1775-7500AD2500	●	0.7500	3/4	0.7500	5.000	2.500
1775-10000.2500	●	1775-10000AD2500	●	1.0000	1	1.0000	6.000	2.500

● : U.S. Stock



3 Flute (Uncoated Shown)

Cutting Dia. (ØDc)	Cutting Dia. Tolerance	Shank Tolerance
0.1250" ~ 0.1875"	+0.00000" -0.00031"	+0.00000" -0.00031"
0.2500" ~ 0.3750"	+0.00000" -0.00035"	+0.00000" -0.00035"
0.5000" ~ 0.6250"	+0.00000" -0.00043"	+0.00000" -0.00043"
0.7500" ~ 1.0000"	+0.00000" -0.00051"	+0.00000" -0.00051"

Max. Ramping Angle: 12°

Stub Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)				
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut
				ØDc				
1780-1250.250	●	1780-1250AD250	●	0.1250	1/8	0.1250	1.500	0.250
1780-1875.313	●	1780-1875AD313	●	0.1875	3/16	0.1875	2.000	0.313
1780-2500.375	●	1780-2500AD375	●	0.2500	1/4	0.2500	2.500	0.375
1780-3125.437	●	1780-3125AD437	●	0.3125	5/16	0.3125	2.500	0.437
1780-3750.500	●	1780-3750AD500	●	0.3750	3/8	0.3750	2.500	0.500
1780-5000.625	●	1780-5000AD625	●	0.5000	1/2	0.5000	3.000	0.625
1780-6250.750	●	1780-6250AD750	●	0.6250	5/8	0.6250	3.500	0.750
1780-7500.1000	●	1780-7500AD1000	●	0.7500	3/4	0.7500	4.000	1.000
1780-10000.1250	●	1780-10000AD1250	●	1.0000	1	1.0000	4.000	1.250

Standard Length Dimensions (Inch Size)

Uncoated		ZrN Coated		Dimensions (in)				
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut
				ØDc				
1780-1250.500	●	1780-1250AD500	●	0.1250	1/8	0.1250	1.500	0.500
1780-1875.625	●	1780-1875AD625	●	0.1875	3/16	0.1875	2.000	0.625
1780-2500.750	●	1780-2500AD750	●	0.2500	1/4	0.2500	2.500	0.750
1780-3125.750	●	1780-3125AD750	●	0.3125	5/16	0.3125	2.500	0.750
1780-3750.1000	●	1780-3750AD1000	●	0.3750	3/8	0.3750	2.500	1.000
1780-5000.1250	●	1780-5000AD1250	●	0.5000	1/2	0.5000	3.000	1.250
1780-6250.1625	●	1780-6250AD1625	●	0.6250	5/8	0.6250	3.500	1.625
1780-7500.1625	●	1780-7500AD1625	●	0.7500	3/4	0.7500	4.000	1.625
1780-10000.2000	●	1780-10000AD2000	●	1.0000	1	1.0000	4.000	2.000

Long Length Dimensions (Inch Size)

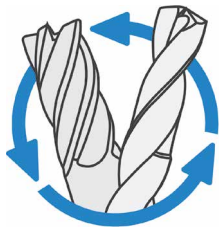
Uncoated		ZrN Coated		Dimensions (in)				
Part Number	Stock	Part Number	Stock	Cutting Diameter		Shank Diameter	Overall Length	Length of Cut
				ØDc				
1780-2500.1125	●	1780-2500AD1125	●	0.2500	1/4	0.2500	3.000	1.125
1780-3125.1125	●	1780-3125AD1125	●	0.3125	5/16	0.3125	3.000	1.125
1780-3750.1500	●	1780-3750AD1500	●	0.3750	3/8	0.3750	4.000	1.500
1780-5000.2250	●	1780-5000AD2250	●	0.5000	1/2	0.5000	4.000	2.250
1780-6250.2500	●	1780-6250AD2500	●	0.6250	5/8	0.6250	5.000	2.500
1780-7500.2500	●	1780-7500AD2500	●	0.7500	3/4	0.7500	5.000	2.500
1780-10000.2500	●	1780-10000AD2500	●	1.0000	1	1.0000	6.000	2.500

● : U.S. Stock

# Recommended Cutting Conditions ★ 1st Recommendation ☆ 2nd Recommendation

Workpiece Material	Cutting Speed (sfm)	Diameter (in) / Feed Rate (ipt)					
		Application	Ø 0.1250 - 0.1875 (Ø 1/8 - 3/16)	Ø 0.2500 - 0.3750 (Ø 1/4 - 3/8)	Ø 0.5000 - 0.6250 (Ø 1/2 - 5/8)	Ø 0.7500 (Ø 3/4)	Ø 1.0000
Aluminum	★ 850 - 1,300	Roughing / Finishing	0.001	0.002	0.004	0.006	0.008
Copper Alloy	★ 450 - 850	Roughing / Finishing	0.001	0.002	0.003	0.004	0.006
Brass	☆ 400 - 700	Roughing / Finishing	0.001	0.002	0.003	0.004	0.006
Plastics	☆ 800 - 1,600	Roughing / Finishing	0.002	0.003	0.006	0.010	0.014

- Max ramping angle is 12° for Square End, Corner Radius, and Rougher Finisher types and 6° for Ball Nose types.
- Stainless steel machining is NOT recommended for ATLAS roughing end mills.
- Above recommendations are suggested starting parameters. Cutting speeds and feed rates may vary according to machining application.



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