



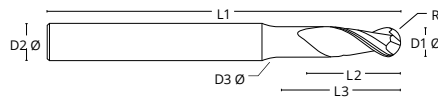
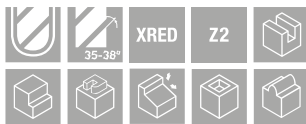
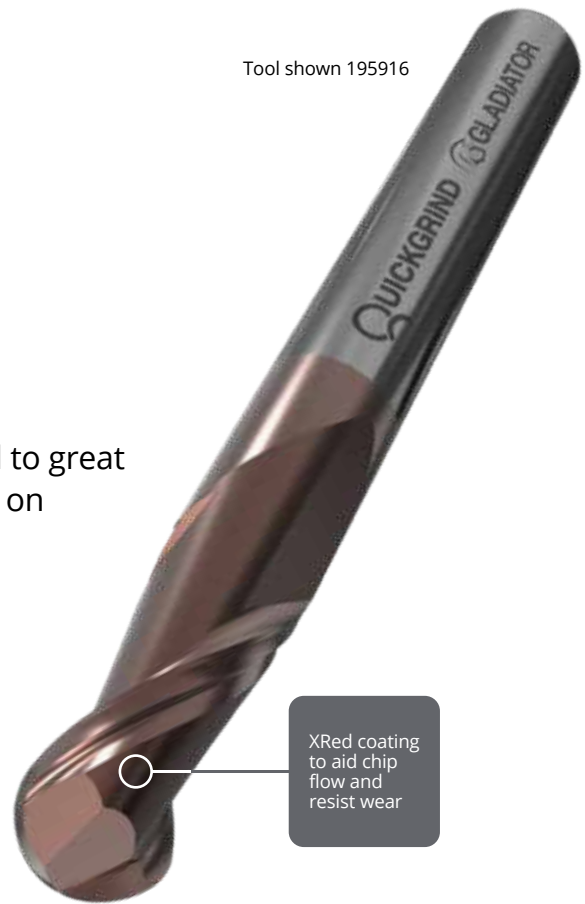
High Performance Ball Nose End Mills

Tool shown 195916

A real winner

This world beating 2 flute ball nose cutter is used to great effect in mould and die, general engineering and on components such as turbine blades.

Whether used with a 90° or 10-15° tilt approach Gladiator is a stable and accurate tool allowing for high speed cutting and machining. It is suitable for roughing, semi-finishing, finishing and super-finishing with profile, copy or contour milling.



Gladiator 2 flute ball nose for steels

D1 mm	D2 mm	D3 mm	L1 mm	L2 mm	L3 mm	R mm	Teeth Z	Stock code
3.00	6.00	2.80	58.00	5.00	14.00	1.50	2	195912
4.00	6.00	3.80	58.00	8.00	14.00	2.00	2	195913
5.00	6.00	4.80	58.00	10.00	17.00	2.50	2	195914
6.00	6.00	-	58.00	12.00	-	3.00	2	195915
8.00	8.00	-	64.00	16.00	-	4.00	2	195916
10.00	10.00	-	73.00	20.00	-	5.00	2	195917
12.00	12.00	-	84.00	25.00	-	6.00	2	195918



Tool shown 195913



High Performance Ball Nose End Mills

Tool shown 495918

A stellar performer

The Zodiac 4 flute ball nose is based on our exceptional Mirage end mill and brings a new dimension to ball nose end milling.

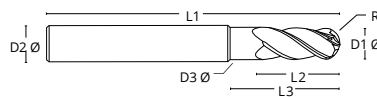
Four flutes provide for highly efficient swarf evacuation and enable high speed and feed machining with great stability. Whether contour milling or profiling this tool excels at roughing, semi-finishing, finishing and super-finishing in a wide range of materials.



XRed coating aids chip flow and resists wear



Tool shown 495915



Zodiac 4 flute ball nose for super alloys, titanium and stainless steel

D1 mm	D2 mm	D3 mm	L1 mm	L2 mm	L3 mm	R mm	Teeth Z	Stock code
3.00	6.00	2.80	58.00	10.00	15.00	1.50	4	495906
4.00	6.00	3.80	58.00	11.00	16.00	2.00	4	495908
5.00	6.00	4.70	58.00	13.00	18.00	2.50	4	495914
6.00	6.00	5.60	58.00	13.00	20.00	3.00	4	495915
8.00	8.00	7.50	64.00	18.00	27.00	4.00	4	495916
10.00	10.00	9.50	73.00	22.00	32.00	5.00	4	495917
12.00	12.00	11.50	84.00	26.00	38.00	6.00	4	495918
16.00	16.00	15.50	93.00	32.00	44.00	8.00	4	495944



 **ALLIGATOR DUO** Ball nose
High Performance Ball nose End Mills

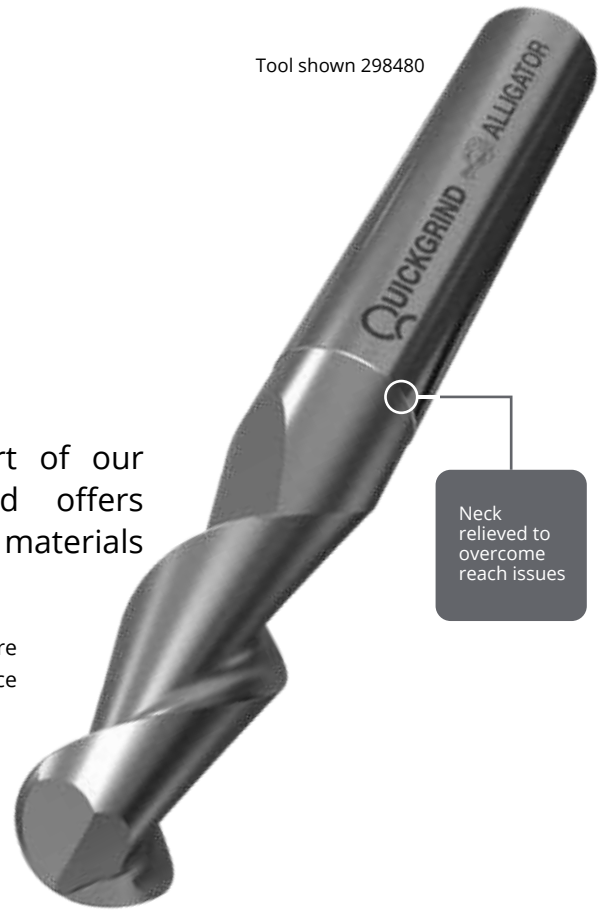
Tool shown 298480

The ball nose with bite

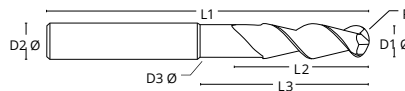
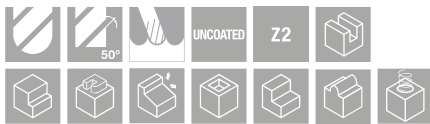
The Alligator Duo 2 flute ball nose is part of our successful Alligator end mill range and offers exceptional performance in non-ferrous materials including aluminium and aluminium alloys.

Copy milling, contour milling and profile milling are all strategies where this tool excels, providing a high degree of swarf removal and resistance to tool wear.

Our standard uncoated Duo ball nose comes in 6.00 to 16.00mm diameter and up to 93.00mm overall length and is ideal for most applications.



Neck relieved to overcome reach issues



Alligator Duo 2 flute ball nose for aluminium

D1 Ø mm	D2 Ø mm	D3 Ø mm	L1 mm	L2 mm	L3 mm	R mm	Teeth Z	Stock code
6.00	6.00	5.80	58.00	18.00	30.00	3.00	2	298415
8.00	8.00	7.80	64.00	18.00	30.00	4.00	2	298475
10.00	10.00	9.80	73.00	22.00	35.00	5.00	2	298481
12.00	12.00	11.80	84.00	26.00	45.00	6.00	2	298479
16.00	16.00	15.80	93.00	32.00	50.00	8.00	2	298480



Tool shown 298415

Uncoated for most applications