

2 Flute Ball Nose Single End Mills

High Speed Steel

- Designed for milling radius bottom slots, fillets and special contours.
- Center cutting design is used to plunge into solid material at the beginning of a slotting cut.
- 2 Flute design provides excellent chip evacuation.

Regular Length



Size	Shank Dia.	Flute Length	Overall Length	M2 Order No.	M2AI Order No.	TiN-Coated Order No.
1/8"	3/8"	3/8"	2-5/16"	720-1401	721-1401	722-1401
5/32	3/8"	7/16	2-5/16	720-1402	721-1402	722-1402
3/16	3/8"	1/2	2-3/8	720-1403	721-1403	722-1403
7/32	3/8"	1/2	2-3/8	720-1404	721-1404	722-1404
1/4	3/8"	5/8	2-7/16	720-1405	721-1405	722-1405
9/32	3/8"	9/16	2-3/8	720-1406	721-1406	722-1406
5/16	3/8"	3/4	2-1/2	720-1407	721-1407	722-1407
11/32	3/8"	3/4	2-1/2	720-1408	721-1408	722-1408
3/8	3/8"	3/4	2-1/2	720-1409	721-1409	722-1409
7/16	1/2	1	3	720-1411	721-1411	722-1411
1/2	1/2	1	3	720-1413	721-1413	722-1413
9/16	1/2	1	3	720-1415	721-1415	722-1415
5/8	1/2	1-1/8	3-1/8	720-1417	721-1417	722-1417
5/8	5/8	1-3/8	3-3/8	720-1419	721-1419	722-1419
3/4	1/2	1-5/8	3-5/8	720-1421	721-1421	722-1421
3/4	3/4	1-5/8	3-7/8	720-1423	721-1423	722-1423
13/16	3/4	2	4-1/4	720-1425	721-1425	722-1425
7/8	3/4	2	4-1/4	720-1427	721-1427	722-1427
7/8	7/8	2	4-1/4	720-1429	721-1429	722-1429
15/16	3/4	2-1/4	4-1/2	720-1431	721-1431	722-1431
1	3/4	2-1/4	4-9/16	720-1433	721-1433	722-1433
1	1	2-1/4	4-3/4	720-1435	721-1435	722-1435
1-1/8	1	2-1/4	4-3/4	720-1437	721-1437	722-1437
1-1/4	1-1/4	2-1/2	5	720-1439	721-1439	722-1439
1-3/8	1-1/4	2-1/2	5	720-1441	721-1441	722-1441
1-1/2	1-1/4	2-1/2	5	720-1443	721-1443	722-1443
2	1-1/4	2-1/2	5	720-1445	721-1445	722-1445

2 Flute Ball Nose Single End Mills

Extended Shank



Length					M2 Order No.	M2AI Order No.	TiN-Coated Order No.
Size	Shank Dia.	Shank Length	Flute Length	OAL			
1/8"	3/8"	13/16"	3/8"	2-3/8"	720-1451	721-1451	722-1451
3/16	3/8"	1-1/8	1/2	2-11/16	720-1453	721-1453	722-1453
1/4	3/8"	1-1/2	5/8	3-1/16	720-1455	721-1455	722-1455
5/16	3/8"	1-3/4	3/4	3-5/16	720-1457	721-1457	722-1457
3/8	3/8"	1-3/4	3/4	3-5/16	720-1459	721-1459	722-1459
7/16	1/2	1-7/8	1	3-11/16	720-1461	721-1461	722-1461
1/2	1/2	2-1/4	1	4	720-1463	721-1463	722-1463
5/8	5/8	2-3/4	1-3/8	4-5/8	720-1465	721-1465	722-1465
3/4	3/4	3-3/8	1-5/8	5-3/8	720-1467	721-1467	722-1467
1	1	5	2-1/2	7-1/4	720-1469	721-1469	722-1469

2 Flute Ball Nose Single End Mills for Aluminum

Regular long & Extra Long Flute Length

- Recommended for mill radius bottom slots and special contours in aluminum and other non-ferrous materials.
- The high helix angle shears the material cleanly and helps eliminate chatter.
- TiN coating add lubricity to minimize chip packing in th flutes.



Size	Shank Dia.	Flute Length	Overall Length	M2 Order No.	M2AI Order No.	TiN-Coated Order No.
1/4"	3/8"	5/8"	2-1/2"	720-1601	721-1601	722-1601
1/4	3/8"	1-1/4	3-1/8	720-1603	721-1603	722-1603
1/4	3/8"	1-3/4	3-1/2	720-1605	721-1605	722-1605
5/16	3/8"	3/4	2-1/2	720-1607	721-1607	722-1607
5/16	3/8"	1-3/8	3-1/8	720-1609	721-1609	722-1609
5/16	3/8"	2	3-3/4	720-1611	721-1611	722-1611
3/8	3/8"	3/4	2-1/2	720-1613	721-1613	722-1613
3/8	3/8"	1-1/2	3-1/4	720-1615	721-1615	722-1615
3/8	3/8"	2-1/2	4-1/4	720-1617	721-1617	722-1617
7/16	3/8"	1	2-11/16	720-1619	721-1619	722-1619
7/16	1/2	1-3/4	3-3/4	720-1621	721-1621	722-1621
7/16	1/2	2-3/4	4-3/4	720-1623	721-1623	722-1623
1/2	1/2	1	3-1/4	720-1625	721-1625	722-1625
1/2	1/2	2	4	720-1627	721-1627	722-1627
1/2	1/2	3	5	720-1629	721-1629	722-1629
5/8	5/8	1-5/8	3-3/4	720-1631	721-1631	722-1631
5/8	5/8	2-1/2	4-5/8	720-1633	721-1633	722-1633
5/8	5/8	4	6-1/8	720-1635	721-1635	722-1635
3/4	3/4	1-5/8	3-7/8	720-1637	721-1637	722-1637
3/4	3/4	3	5-1/4	720-1639	721-1639	722-1639
3/4	3/4	4	6-1/4	720-1641	721-1641	722-1641
7/8	1-7/8	1-7/8	4-1/8	720-1643	721-1643	722-1643
7/8	7/8	3-1/2	5-3/4	720-1645	721-1645	722-1645
7/8	7/8	5	7-1/4	720-1647	721-1647	722-1647
1	3/4	1-7/8	4-1/8	720-1651	721-1651	722-1651
1	1	2	4-1/2	720-1653	721-1653	722-1653
1	1	4	6-1/2	720-1655	721-1655	722-1655
1	1	6	8-1/2	720-1657	721-1657	722-1657

4 Flute Ball Nose Single End Mills

High Speed Steel



Shank Flute				Order No.	Shank Flute				Order No.
Size	Dia.	Lth	OAL		Size	Dia.	Lth	OAL	
1/8"	3/8"	3/8"	2-5/16"	320-3700	5/8"	5/8"	1-5/8"	3-3/4"	320-3750
1/4	3/8"	5/8"	2-1/2"	320-3705	5/8	5/8	2-1/2	4-5/8	320-3758
1/4	3/8"	1-1/4	3-1/16	320-3708	3/4	3/4	1-5/8	3-7/8	320-3760
5/16	3/8"	3/4	2-1/2	320-3715	3/4	3/4	3	5-1/4	320-3768
5/16	3/8"	1	2-3/4	320-3710	7/8	7/8	1-7/8	4-1/8	320-3765
5/16	3/8"	1-1/2	3-1/4	320-3718	1	1	2	4-1/2	320-3775
3/8	3/8"	3/4	2-1/2	320-3725	1	1	2-1/4	4-3/4	320-3770
3/8	3/8"	1	2-3/4	320-3720	1	1	4	6-1/2	320-3778
3/8	3/8"	1-1/2	3-1/4	320-3728	1-1/4	1-1/4	2	4-1/2	320-3785
1/2	1/2	1	2-3/4	320-3730	1-1/4	1-1/4	2-1/2	5	320-3780
1/2	1/2	1-1/4	3-1/4	320-3735	1-1/2	1-1/2	2	4-1/2	320-3795
1/2	1/2	1-1/2	3-1/4	320-3740	1-1/2	1-1/2	2-1/2	5	320-3790
1/2	1/2	2	4	320-3748					

2 Flute Ball Nose Double End Mills

High Speed Steel

- Designed for milling radius bottom slots, fillets and special contours.
- Center cutting design is used to plunge into solid material at the beginning of a slotting cut.
- 2 Flute design provides excellent chip evacuation.



Size	Shank Dia.	Flute Length	Overall Length	M2 Order No.	M2Al Order No.	TiN-Coated Order No.
1/8"	3/8"	3/8"	3-3/16"	720-2100	721-2100	722-2100
9/64	3/8	7/16	3-1/8	720-2105	721-2105	722-2105
5/32	3/8	1/2	3-1/8	720-2110	721-2110	722-2110
11/64	3/8	7/16	3-1/8	720-2115	721-2115	722-2115
3/16	3/8	7/16	3-1/8	720-2120	721-2120	722-2120
13/64	3/8	1/2	3-1/8	720-2125	721-2125	722-2125
7/32	3/8	1/2	3-1/8	720-2130	721-2130	722-2130
15/64	3/8	1/2	3-1/8	720-2135	721-2135	722-2135
1/4	3/8	1/2	3-1/8	720-2140	721-2140	722-2140
17/64	3/8	9/16	3-1/8	720-2145	721-2145	722-2145
9/32	3/8	9/16	3-1/8	720-2150	721-2150	722-2150
19/64	3/8	9/16	3-1/8	720-2155	721-2155	722-2155
5/16	3/8	9/16	3-1/8	720-2160	721-2160	722-2160
21/64	3/8	9/16	3-1/8	720-2161	721-2161	722-2161
11/32	3/8	9/16	3-1/8	720-2162	721-2162	722-2162
23/64	1/2	9/16	3-1/8	720-2163	721-2163	722-2163
3/8	3/8	9/16	3-1/8	720-2165	721-2165	722-2165
13/32	1/2	13/16	3-3/4	720-2168	721-2168	722-2168
7/16	1/2	13/16	3-3/4	720-2170	721-2170	722-2170
1/2	1/2	13/16	3-3/4	720-2174	721-2174	722-2174
5/8	5/8	1-1/8	4-1/2	720-2185	721-2185	722-2185
3/4	3/4	1-5/16	5	720-2188	721-2188	722-2188
7/8	7/8	1-9/16	5-1/2	720-2190	721-2190	722-2190
1	1	1-5/8	5-7/8	720-2192	721-2192	722-2192

2 Flute High Helix Ball Nose Double End Mills

for Aluminum,
High Speed Steel



Size	Shank Dia.	Flute Length	Overall Length	M2 Order No.	M2Al Order No.	TiN-Coated Order No.
1/8"	3/8"	3/8"	3-1/16"	720-2202	721-2202	722-2202
3/16	3/8	7/16	3-1/4	720-2204	721-2204	722-2204
1/4	3/8	1/2	3-3/8	720-2206	721-2206	722-2206
5/16	3/8	9/16	3-1/2	720-2208	721-2208	722-2208
3/8	3/8	9/16	3-1/2	720-2210	721-2210	722-2210
7/16	1/2	13/16	4-1/8	720-2212	721-2212	722-2212
1/2	1/2	13/16	4-1/8	720-2214	721-2214	722-2214
9/16	5/8	1-1/8	5	720-2216	721-2216	722-2216
5/8	5/8	1-1/8	5	720-2218	721-2218	722-2218
11/16	3/4	1-5/16	5-5/8	720-2220	721-2220	722-2220
3/4	3/4	1-5/16	5-5/8	720-2222	721-2222	722-2222
13/16	7/8	1-9/16	6-1/8	720-2224	721-2224	722-2224
7/8	7/8	1-9/16	6-1/8	720-2226	721-2226	722-2226
15/16	1	1-5/8	6-3/8	720-2228	721-2228	722-2228
1	1	1-5/8	6-3/8	720-2230	721-2230	722-2230

2 Flute Ball Nose Single End Mills

M42 8% Cobalt

- Designed for milling radius bottom slots, fillets and special contours.
- Center cutting design is used to plunge into solid material at the beginning of a slotting cut.
- 2 Flute design provides excellent chip evacuation.



Regular Length

Size	Shank Dia.	Flute Length	Overall Length	Order No.
1/8"	3/8"	3/8"	2-5/16"	723-1401
5/32	3/8	7/16	2-5/16	723-1402
3/16	3/8	1/2	2-3/8	723-1403
7/32	3/8	1/2	2-3/8	723-1404
1/4	3/8	5/8	2-7/16	723-1405
9/32	3/8	9/16	2-3/8	723-1406
5/16	3/8	3/4	2-1/2	723-1407
11/32	3/8	3/4	2-1/2	723-1408
3/8	3/8	3/4	2-1/2	723-1409
7/16	1/2	1	3	723-1411
1/2	1/2	1	3	723-1413
9/16	1/2	1	3	723-1415
5/8	1/2	1-1/8	3-1/8	723-1417
5/8	5/8	1-3/8	3-3/8	723-1419
3/4	1/2	1-5/8	3-5/8	723-1421
3/4	3/4	1-5/8	3-7/8	723-1423
13/16	3/4	2	4-1/4	723-1425
7/8	3/4	2	4-1/4	723-1427
7/8	7/8	2	4-1/4	723-1429
15/16	3/4	2-1/4	4-1/2	723-1431
1	3/4	2-1/4	4-9/16	723-1433
1	1	2-1/4	4-3/4	723-1435
1-1/8	1	2-1/4	4-3/4	723-1437
1-1/4	1-1/4	2-1/2	5	723-1439
1-3/8	1-1/4	2-1/2	5	723-1441
1-1/2	1-1/4	2-1/2	5	723-1443
2	1-1/4	2-1/2	5	723-1445

2 Flute Ball Nose Single End Mills

M42 8% Cobalt



Extended Shank

Size	Shank Dia.	Length Below Shank	Flute Length	Overall Length	Order No.
1/8"	3/8"	13/16"	3/8"	2-3/8"	723-1451
3/16	3/8	1-1/8	1/2	2-11/16	723-1453
1/4	3/8	1-1/2	5/8	3-1/16	723-1455
5/16	3/8	1-3/4	3/4	3-5/16	723-1457
3/8	3/8	1-3/4	3/4	3-5/16	723-1459
7/16	1/2	1-7/8	1	3-11/16	723-1461
1/2	1/2	2-1/4	1	4	723-1463
5/8	5/8	2-3/4	1-3/8	4-5/8	723-1465
3/4	3/4	3-3/8	1-5/8	5-3/8	723-1467
1	1	5	2-1/2	7-1/4	723-1469

4 Flute Ball Nose Single End Mills

M42 8% Cobalt



Size	Shank Dia.	Flute Length	Overall Length	Order No.
1/8"	3/8"	3/8"	2-5/16"	723-3700
3/16	3/8	1/2	2-3/8	723-3702
1/4	3/8	5/8	2-1/2	723-3705
1/4	3/8	1-1/4	3-1/16	723-3708
5/16	3/8	3/4	2-1/2	723-3715
5/16	3/8	1	2-3/4	723-3710
5/16	3/8	1-1/2	3-1/4	723-3718
3/8	3/8	3/4	2-1/2	723-3725
3/8	3/8	1	2-3/4	723-3720
3/8	3/8	1-1/2	3-1/4	723-3728
1/2	1/2	1	2-3/4	723-3730
1/2	1/2	1-1/4	3-1/4	723-3735
1/2	1/2	1-1/2	3-1/4	723-3740
1/2	1/2	2	4	723-3748
5/8	5/8	1-5/8	3-3/4	723-3750
5/8	5/8	2-1/2	4-5/8	723-3758
3/4	3/4	1-5/8	3-7/8	723-3760
3/4	3/4	3	5-1/4	723-3768
7/8	7/8	1-7/8	4-1/8	723-3765
1	1	2	4-1/2	723-3775
1	1	2-1/4	4-3/4	723-3770
1	1	4	6-1/2	723-3778
1-1/4	1-1/4	2	4-1/2	723-3785
1-1/4	1-1/4	2-1/2	5	723-3780
1-1/2	1-1/4	2	4-1/2	723-3795
1-1/2	1-1/4	2-1/2	5	723-3790

2 Flute Ball Nose Double End Mills

M42 8% Cobalt



Size	Shank Dia.	Flute Length	Overall Length	Order No.
1/8"	3/8"	3/8"	3-3/16"	723-2100
9/64	3/8	7/16	3-1/8	723-2105
5/32	3/8	1/2	3-1/8	723-2110
11/64	3/8	7/16	3-1/8	723-2115
3/16	3/8	7/16	3-1/8	723-2120
13/64	3/8	1/2	3-1/8	723-2125
7/32	3/8	1/2	3-1/8	723-2130
15/64	3/8	1/2	3-1/8	723-2135
1/4	3/8	1/2	3-1/8	723-2140
17/64	3/8	9/16	3-1/8	723-2145
9/32	3/8	9/16	3-1/8	723-2150
19/64	3/8	9/16	3-1/8	723-2155
5/16	3/8	9/16	3-1/8	723-2160
21/64	3/8	9/16	3-1/8	723-2161
11/32	3/8	9/16	3-1/8	723-2162
23/64	1/2	9/16	3-1/8	723-2163
3/8	3/8	9/16	3-1/8	723-2165
13/32	1/2	13/16	3-3/4	723-2168
7/16	1/2	13/16	3-3/4	723-2170
1/2	1/2	13/16	3-3/4	723-2174
5/8	5/8	1-1/8	4-1/2	723-2185
3/4	3/4	1-5/16	5	723-2188
7/8	7/8	1-9/16	5-1/2	723-2190
1	1	1-5/8	5-7/8	723-2192

2 Flute Inch Shank Single End Mills



Size	Shank Dia.	Flute Length	Overall Length	M2 Order No.	M2Al Order No.	TiN-Coated Order No.
5mm	3/8"	1/2"	2-5/16"	720-9050	721-9050	722-9050
6mm	3/8	1/2	2-5/16	720-9060	721-9060	722-9060
7mm	3/8	9/16	2-5/16	720-9070	721-9070	722-9070
8mm	3/8	9/16	2-5/16	720-9080	721-9080	722-9080
9mm	3/8	9/16	2-5/16	720-9090	721-9090	722-9090
10mm	3/8	13/16	2-1/2	720-9100	721-9100	722-9100
11mm	3/8	13/16	2-1/2	720-9110	721-9110	722-9110
12mm	1/2	1	3	720-9120	721-9120	722-9120
13mm	1/2	1-1/8	3-1/8	720-9130	721-9130	722-9130
14mm	1/2	1-1/8	3-1/8	720-9140	721-9140	722-9140
15mm	1/2	1-1/8	3-1/8	720-9150	721-9150	722-9150
16mm	1/2	1-5/16	3-5/16	720-9160	721-9160	722-9160
18mm	1/2	1-5/16	3-5/16	720-9180	721-9180	722-9180
20mm	3/4	1-1/2	3-3/4	720-9200	721-9200	722-9200
22mm	3/4	1-1/2	3-3/4	720-9222	721-9222	722-9222
24mm	3/4	1-1/2	3-3/4	720-9240	721-9240	722-9240
25mm	1	1-5/8	4-1/8	720-9250	721-9250	722-9250

4 Flute Inch Shank Single End Mills

Center Cutting



Size	Shank Dia.	Flute Length	Overall Length	M2 Order No.	M2Al Order No.	TiN-Coated Order No.
5mm	3/8"	9/16"	2-7/16"	720-8050	721-8050	722-8050
6mm	3/8	5/8	2-1/2	720-8060	721-8060	722-8060
7mm	3/8	5/8	2-1/2	720-8070	721-8070	722-8070
8mm	3/8	3/4	2-1/2	720-8080	721-8080	722-8080
9mm	3/8	3/4	2-1/2	720-8090	721-8090	722-8090
10mm	3/8	3/4	2-1/2	720-8100	721-8100	722-8100
11mm	3/8	1	2-11/16	720-8110	721-8110	722-8110
12mm	3/8	1	2-11/16	720-8120	721-8120	722-8120
13mm	1/2	1-1/4	3-1/4	720-8130	721-8130	722-8130
14mm	1/2	1-3/8	3-3/8	720-8140	721-8140	722-8140
15mm	1/2	1-3/8	3-3/8	720-8150	721-8150	722-8150
16mm	5/8	1-5/8	3-3/4	720-8160	721-8160	722-8160
18mm	3/4	1-5/8	3-3/4	720-8180	721-8180	722-8180
20mm	3/4	1-7/8	4-1/8	720-8200	721-8200	722-8200
22mm	7/8	1-7/8	4-1/8	720-8220	721-8220	722-8220
24mm	7/8	1-7/8	4-1/8	720-8240	721-8240	722-8240
25mm	1	2	4-1/2	720-8250	721-8250	722-8250

Metric 4 Flute Single End Mills

DIN844B, High Speed Steel, Long Length



Size	Shank Dia.	Flute Length	Overall Length	M2 Order No.	M2Al Order No.	TiN-Coated Order No.
3mm	6	12	56	720-4503	721-4503	722-4503
4mm	6	19	63	720-4504	721-4504	722-4504
5mm	6	24	68	720-4505	721-4505	722-4505
6mm	6	24	68	720-4506	721-4506	722-4506
7mm	10	30	80	720-4507	721-4507	722-4507
8mm	10	38	88	720-4508	721-4508	722-4508
10mm	10	45	95	720-4510	721-4510	722-4510
12mm	12	53	110	720-4512	721-4512	722-4512
14mm	12	53	110	720-4514	721-4514	722-4514
16mm	16	63	123	720-4516	721-4516	722-4516
18mm	16	63	123	720-4518	721-4518	722-4518
20mm	20	75	141	720-4520	721-4520	722-4520
22mm	20	75	141	720-4522	721-4522	722-4522
25mm	25	90	166	720-4525	721-4525	722-4525