

2-Flute Ball Nose Long Length — Typhoon



Typhoon ball nose end mills are designed for contour milling in hardened materials. The long length allows for milling tougher materials in longer reach applications.



Speeds & Feeds > P. A38

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
Inch					
1/8	1/8	3/4	2-1/4	104652	22.45
3/16	3/16	3/4	2-1/4	104656	23.44
1/4	1/4	1-1/8	3	104660	49.74
5/16	5/16	1-1/8	3	104663	63.43
3/8	3/8	1-1/8	3	104667	69.92
1/2	1/2	2	4	104671	107.10
3/4	3/4	2-1/4	5	104679	340.91
1	1	2-1/4	5	104683	413.93

2-Flute Mold Mill — Typhoon



The Typhoon Mold Mill offers excellent performance and tool life in mold milling applications on tougher materials.



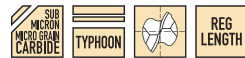
Speeds & Feeds > P. A39

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
Inch					
1/8	1/8	5/16	2-3/8	104034	40.11
3/16	3/16	3/8	3-1/8	104036	40.11
1/4	1/4	1/2	3-1/2	104038	61.94
5/16	5/16	15/32	4	104040	83.54
3/8	3/8	3/4	4	104042	89.42
1/2	1/2	7/8	4-1/4	104044	116.43
5/8	5/8	15/16	6	104046	220.07
3/4	3/4	1-1/8	6	104048	339.24
1	1	1-1/2	6	104050	487.32

2-Flute Spherical Ball End — Typhoon



- High performance ball nose plus end mills are used in the mold industry and have a full 220 degree arc cutting capability
- Modified AlTiN coated for improved tool life and increased production output
- Made from premium sub-micron grain carbide



Speeds & Feeds > P. A38

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
Regular Length					
1/8	1/8	3/32	1-1/2	153110	39.41
3/16	3/16	9/64	2	153112	39.81
1/4	1/4	3/16	2-1/2	153114	57.94
3/8	3/8	9/32	2-1/2	153116	81.55
1/2	1/2	3/8	3	153118	120.69
Long Length					
1/8	1/8	3/32	3	153120	44.63
3/16	3/16	9/64	3	153122	45.30
1/4	1/4	3/16	4	153124	78.66
3/8	3/8	9/32	4	153126	91.85
1/2	1/2	3/8	6	153128	172.04

Tolerances - Inch

Size	Diameter	Shank Diameter
3/32 thru 1"	+0.000"-0.002"	+0.0000"-0.0005"

Tolerances - Metric

Size	Diameter	Shank Diameter
1mm-25mm	+0.000mm-0.051mm	+0.000mm-0.013mm

Steel

Stainless Steel

Cast Iron/Hardened

Aluminum

4-Flute Regular Length — Typhoon



These end mills are manufactured with premium sub-micron carbide and are designed to cut hardened materials. The unique geometry of the Typhoon end mill combined with its modified AlTiN coating make it an excellent choice for demanding applications.



Speeds & Feeds > P. A37

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
Inch					
1/16	1/8	3/16	1-1/2	104702	18.50
3/32	1/8	5/16	1-1/2	104701	17.66
1/8	1/8	1/2	1-1/2	104700	16.59
5/32	3/16	9/16	2	104703	21.87
3/16	3/16	5/8	2	104704	20.92
7/32	1/4	5/8	2-1/2	104705	30.63
1/4	1/4	3/4	2-1/2	104708	28.23
9/32	5/16	3/4	2-1/2	104707	48.10
5/16	5/16	13/16	2-1/2	104712	40.24
3/8	3/8	1	2-1/2	104716	47.49
7/16	7/16	1	2-3/4	104718	57.10
1/2	1/2	1	3	104720	71.03
9/16	9/16	1-1/8	3-1/2	104722	118.12
5/8	5/8	1-1/4	3-1/2	104724	131.07
11/16	3/4	1-3/8	4	104730	210.24
3/4	3/4	1-1/2	4	104728	187.09
7/8	7/8	1-1/2	4	104731	279.49
1	1	1-1/2	4	104732	279.49
Metric					
1	3	3	39	101840	19.62
1.5	3	5	39	101841	19.62
2	3	7	39	101842	18.50
2.5	3	8	39	101843	17.79
3	3	10	39	101844	16.59
3.5	4	12	51	101845	31.15
4	4	14	51	101846	31.15
4.5	5	14	51	101847	33.32
5	5	16	51	101848	33.32
6	6	19	64	101849	29.23
7	8	19	64	101850	51.44
8	8	21	64	101851	41.72
9	10	22	70	101852	64.42
10	10	25	70	101853	56.95
11	12	25	70	101854	69.33
12	12	25	76	101855	73.96
14	14	30	89	101856	130.88
16	16	32	89	101857	136.72
18	18	35	102	101858	205.86
20	20	38	102	101859	252.76
22	22	38	102	101860	306.36
25	25	38	102	101861	288.65

4-Flute Long Length — Typhoon



These end mills are manufactured with premium sub-micron carbide and are designed to cut hardened materials. The unique geometry of the Typhoon end mill combined with its modified AlTiN coating make it an excellent choice for demanding and longer reach applications.



Speeds & Feeds > P. A37

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
Inch					
1/8	1/8	3/4	2-1/4	104832	21.87
3/16	3/16	3/4	2-1/4	104834	23.44
1/4	1/4	1-1/8	3	104836	47.37
5/16	5/16	1-1/8	3	104838	60.41
3/8	3/8	1-1/8	3	104840	66.59
1/2	1/2	2	4	104842	96.12
5/8	5/8	2-1/4	5	104844	205.62
3/4	3/4	2-1/4	5	104846	251.10
1	1	2-1/4	5	104848	374.13