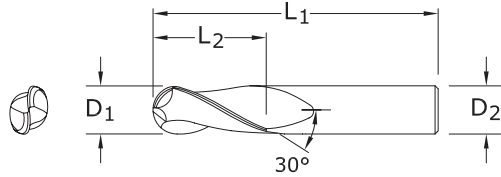
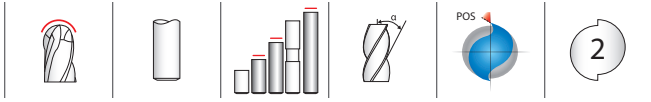


2 Flute Ball End



3B•3LB•3ELB

FRACTIONAL SERIES

TOLERANCES (inch)

D₁ = +0.0000/-0.0020
D₂ = h₆

- STEELS
- STAINLESS STEELS
- CAST IRON
- HIGH TEMP ALLOYS
- TITANIUM
- HARDENED STEELS
- NON-FERROUS
- PLASTICS/COMPOSITES

- U.S. Stock Standard
- NOT STOCKED—
Call for Delivery

CUTTING DIAMETER D ₁	LENGTH OF CUT L ₂	OVERALL LENGTH L ₁	SHANK DIAMETER D ₂	EDP NO.				STOCK	SERIES
				UNCOATED	Ti-NAMITE (TiN)	Ti-NAMITE-C (TiCN)	Ti-NAMITE-A (AlTiN)		
1/64	1/32	1-1/2	1/8	30302	39302	39502	30471	●	3B
1/32	5/64	1-1/2	1/8	30304	39304	39504	30472	●	3B
3/64	7/64	1-1/2	1/8	30306	39306	39506	30473	●	3B
1/16	3/16	1-1/2	1/8	30308	39308	39508	30474	●	3B
5/64	3/16	1-1/2	1/8	30310	39310	39510	30475	●	3B
3/32	9/32	1-1/2	1/8	30312	39312	39512	30476	●	3B
7/64	3/8	1-1/2	1/8	30314	39314	39514	30477	●	3B
1/8	3/8	1-1/2	1/8	30378	39378	39578	30599	●	3B
*1/8	1/2	1-1/2	1/8	30316	39316	39516	30478	●	3B
1/8	3/4	2-1/4	1/8	33342	31830	31840	31890	●	3LB
1/8	1	3	1/8	33344	31968	31978	31988	●	3ELB
9/64	1/2	2	3/16	30318	39318	39518	30479	●	3B
5/32	1/2	2	3/16	30320	39320	39520	30480	●	3B
11/64	5/8	2	3/16	30322	39322	39522	30481	●	3B
*3/16	5/8	2	3/16	30324	39324	39524	30482	●	3B
3/16	3/4	2-1/2	3/16	33302	31831	31841	31891	●	3LB
3/16	1-1/8	3	3/16	33322	31969	31979	31989	●	3ELB
13/64	5/8	2-1/2	1/4	30326	39326	39526	30483	●	3B
7/32	5/8	2-1/2	1/4	30328	39328	39528	30484	●	3B
15/64	3/4	2-1/2	1/4	30330	39330	39530	30485	●	3B
*1/4	3/4	2-1/2	1/4	30332	39332	39532	30486	●	3B
1/4	1-1/8	3	1/4	33304	31832	31842	31892	●	3LB
1/4	1-1/2	4	1/4	33324	31970	31980	31990	●	3ELB
17/64	3/4	2-1/2	5/16	30334	39334	39534	30487	●	3B
9/32	3/4	2-1/2	5/16	30336	39336	39536	30488	●	3B
19/64	13/16	2-1/2	5/16	30338	39338	39538	30489	●	3B
*5/16	13/16	2-1/2	5/16	30340	39340	39540	30490	●	3B
5/16	1-1/8	3	5/16	33306	31833	31843	31893	●	3LB
5/16	1-5/8	4	5/16	33326	31971	31981	31991	●	3ELB
21/64	1	2-1/2	3/8	30342	39342	39542	30491	●	3B

continued on next page

3B•3LB•3ELB
FRACTIONAL SERIES

inch				EDP NO.				STOCK	SERIES	CONTINUED
CUTTING DIAMETER D ₁	LENGTH OF CUT L ₂	OVERALL LENGTH L ₁	SHANK DIAMETER D ₂	UNCOATED	Ti-NAMITE (TiN)	Ti-NAMITE-C (TiCN)	Ti-NAMITE-A (AlTiN)			
11/32	1	2-1/2	3/8	30344	39344	39544	30492	●	3B	
23/64	1	2-1/2	3/8	30346	39346	39546	30493	●	3B	
*3/8	1	2-1/2	3/8	30348	39348	39548	30494	●	3B	
3/8	1-1/8	3	3/8	33308	31834	31844	31894	●	3LB	
3/8	1-3/4	4	3/8	33328	31972	31982	31992	●	3ELB	
25/64	1	2-3/4	7/16	30350	39350	39550	30495	●	3B	
13/32	1	2-3/4	7/16	30352	39352	39552	30496	●	3B	
27/64	1	2-3/4	7/16	30354	39354	39554	30497	●	3B	
7/16	1	2-3/4	7/16	30356	39356	39556	30498	●	3B	
7/16	2	4-1/2	7/16	33310	31835	31845	31895	●	3LB	
7/16	3	6	7/16	33330	31973	31983	31993	●	3ELB	
29/64	1	3	1/2	30358	39358	39558	30499	●	3B	
15/32	1	3	1/2	30360	39360	39560	30500	●	3B	
31/64	1	3	1/2	30362	39362	39562	30591	●	3B	
*1/2	1	3	1/2	30364	39364	39564	30592	●	3B	
1/2	2	4-1/2	1/2	33312	31836	31846	31896	●	3LB	
1/2	3	6	1/2	33332	31974	31984	31994	●	3ELB	
9/16	1-1/8	3-1/2	9/16	30366	39366	39566	30593	●	3B	
5/8	1-1/4	3-1/2	5/8	30368	39368	39568	30594	●	3B	
5/8	2-1/4	5	5/8	33314	31837	31847	31897	●	3LB	
5/8	3	6	5/8	33334	31975	31985	31995	●	3ELB	
11/16	1-3/8	4	3/4	30370	39370	39570	30595	●	3B	
3/4	1-1/2	4	3/4	30372	39372	39572	30596	●	3B	
3/4	2-1/4	5	3/4	33316	31838	31848	31898	●	3LB	
3/4	3	6	3/4	33336	31976	31986	31996	●	3ELB	
7/8	1-1/2	4	7/8	30374	39374	39574	30597	●	3B	
1	1-1/2	4	1	30376	39376	39576	30598	●	3B	
1	2-1/4	5	1	33318	31839	31849	31899	●	3LB	
1	3	6	1	33338	31977	31987	31997	●	3ELB	
*Series 3B Set				30390	39390	39590	30600	●	3B	