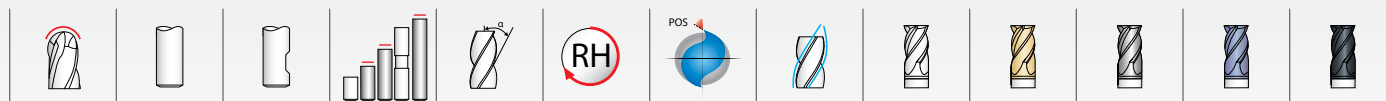
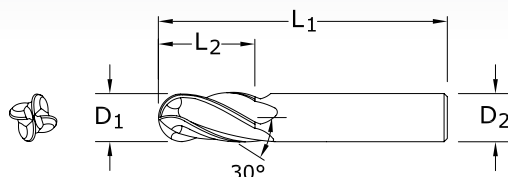


4 Flute Ball End



1B • 1LB • 1ELB

FRACTIONAL SERIES



TOLERANCES (inch)

 $D_1 = +0.0000/-0.0020$ $D_2 = h_6$

TECH INFO 139

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

inch				EDP NO.							SERIES
CUTTING DIAMETER D ₁	LENGTH OF CUT L ₂	OVERALL LENGTH L ₁	SHANK DIAMETER D ₂	UNCOATED	UNCOATED W/FLAT	TI-NAMITE (TiN)	TI-NAMITE-C (TiCN)	TI-NAMITE-A (AlTiN)	TI-NAMITE-A (AlTiN) W/FLAT	DI-NAMITE (Diamond)	
1/64	1/32	1-1/2	1/8	30102	—	39102	39002	30031	—	—	1B
1/32	5/64	1-1/2	1/8	30104	—	39104	39004	30032	—	—	1B
3/64	7/64	1-1/2	1/8	30106	—	39106	39006	30033	—	—	1B
1/16	3/16	1-1/2	1/8	30108	—	39108	39008	30034	—	91269	1B
5/64	3/16	1-1/2	1/8	30110	—	39110	39010	30035	—	—	1B
3/32	9/32	1-1/2	1/8	30112	—	39112	39012	30036	—	—	1B
7/64	3/8	1-1/2	1/8	30114	—	39114	39014	30037	—	—	1B
*1/8	3/8	1-1/2	1/8	30069	—	39178	39078	—	—	—	1B
1/8	1/2	1-1/2	1/8	30116	—	39116	39016	30038	—	91273	1B
1/8	3/4	2-1/4	1/8	33142	—	31770	31780	31790	—	—	1LB
1/8	1	3	1/8	33144	—	31900	31918	31928	—	—	1ELB
9/64	1/2	2	3/16	30118	—	39118	39018	30039	—	—	1B
5/32	1/2	2	3/16	30120	—	39120	39020	30040	—	—	1B
11/64	5/8	2	3/16	30122	—	39122	39022	30041	—	—	1B
*3/16	5/8	2	3/16	30124	—	39124	39024	30042	—	—	1B
3/16	3/4	2-1/2	3/16	33102	—	31771	31781	31791	—	91277	1LB
3/16	1-1/8	3	3/16	33122	—	31902	31919	31929	—	—	1ELB
13/64	5/8	2-1/2	1/4	30126	—	39126	39026	30043	—	—	1B
7/32	5/8	2-1/2	1/4	30128	—	39128	39028	30044	—	—	1B
15/64	3/4	2-1/2	1/4	30130	—	39130	39030	30045	—	—	1B
*1/4	3/4	2-1/2	1/4	30132	—	39132	39032	30046	—	91281	1B
1/4	1-1/8	3	1/4	33104	—	31772	31782	31792	—	—	1LB
1/4	1-1/2	4	1/4	33124	—	31904	31920	31930	—	—	1ELB
17/64	3/4	2-1/2	5/16	30134	—	39134	39034	30047	—	—	1B
9/32	3/4	2-1/2	5/16	30136	—	39136	39036	30048	—	—	1B
19/64	13/16	2-1/2	5/16	30138	—	39138	39038	30049	—	—	1B
*5/16	13/16	2-1/2	5/16	30140	—	39140	39040	30050	—	91285	1B
5/16	1-1/8	3	5/16	33106	—	31773	31783	31793	—	—	1LB

continued on next page