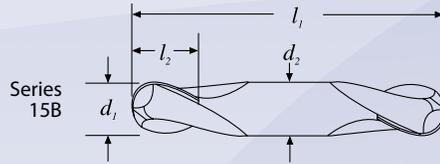


## 2 Flute – Double End – Ball End

Series 15B



### TOLERANCES

$d_1 = +.000 - .002$   
 $d_2 = -.0001 - .0004$

### Series 15B • 15MB



End Mills – Double End – Ball End  
Micrograin Solid Carbide – 2 Flute –  
30° Right Hand Spiral – Right Hand  
Cutting – Center Cutting  
\* With Flat

### Serie 15B • 15MB



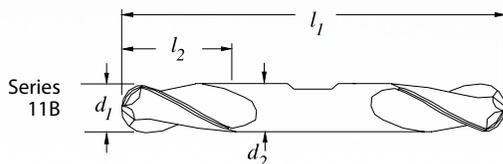
Fresas – Doble punta – Punta  
radial o esférica – Carburo sólido  
con micrograno – 2 filos – Hélice  
a derecha 30° – Corte a derecha –  
Corte al centro  
\* Con en el Mango

### Série 15B • 15MB



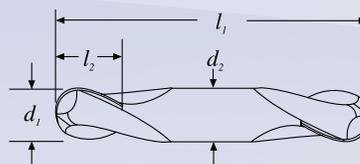
Fraises – Tailée aux 2 bouts –  
Bout hémisphérique – Carbone  
monobloc, micrograin – 2 dents –  
Hélice à droite, 30° – Coupe à droite  
– Coupe au centre  
\* Avec Méplat

Cutting Diameter $d_1$	Length of Cut $l_2$	Overall Length $l_1$	Shank Diameter $d_2$	Uncoated EDP No.	Ti-NAMITE (TiN) EDP No.	Ti-NAMITE-C (TiCN) EDP No.	Ti-NAMITE-A (AlTiN) EDP No.	Series Number
1/32	1/16	1-1/2	1/8	31502	31542	39652	31337	15B
3/64	3/32	1-1/2	1/8	31504	31544	39654	31338	15B
1/16	1/8	1-1/2	1/8	31506	31546	39656	31339	15B
5/64	1/8	1-1/2	1/8	31508	31548	39658	31340	15B
3/32	3/16	1-1/2	1/8	31510	31550	39660	31341	15B
7/64	3/16	1-1/2	1/8	31512	31552	39662	31342	15B
1/8	1/4	1-1/2	1/8	31514	31554	39664	31343	15B
*1/8	3/8	3-1/16	3/8	31102	31067	31078	31089	11B
9/64	5/16	2	3/16	31516	31556	39666	31344	15B
5/32	5/16	2	3/16	31518	31558	39668	31345	15B
*5/32	7/16	3-1/8	3/8	31104	31068	31079	31090	11B
11/64	5/16	2	3/16	31520	31560	39670	31346	15B
3/16	3/8	2	3/16	31522	31562	39672	31347	15B
*3/16	1/2	3-1/4	3/8	31106	31069	31080	31091	11B
13/64	1/2	2-1/2	1/4	31524	31564	39674	31348	15B
7/32	1/2	2-1/2	1/4	31526	31566	39676	31349	15B
*7/32	9/16	3-3/8	3/8	31108	31070	31081	31092	11B
15/64	1/2	2-1/2	1/4	31528	31568	39678	31350	15B
1/4	1/2	2-1/2	1/4	31530	31570	39680	31351	15B
*1/4	5/8	3-3/8	3/8	31110	31071	31082	31093	11B
9/32	1/2	2-1/2	5/16	31532	31572	39682	31352	15B
*9/32	11/16	3-3/8	3/8	31112	31072	31083	31094	11B
5/16	1/2	2-1/2	5/16	31534	31574	39684	31353	15B
*5/16	3/4	3-1/2	3/8	31114	31073	31084	31095	11B
*11/32	3/4	3-1/2	3/8	31116	31074	31085	31096	11B
3/8	9/16	2-1/2	3/8	31536	31576	39686	31354	15B
*3/8	3/4	3-1/2	3/8	31118	31075	31086	31097	11B
7/16	9/16	2-3/4	7/16	31538	31578	39688	31355	15B
*7/16	7/8	4	1/2	31120	31076	31087	31098	11B
1/2	5/8	3	1/2	31540	31580	39690	31356	15B
*1/2	1	4	1/2	31122	31077	31088	31099	11B



Series 11B



**TOLERANCES** $d_1 = +0,000 - 0,05$  $d_2 = +0,000 - 0,01$ 

Cutting Diameter $d_1$ mm	Length of Cut $l_2$ mm	Overall Length $l_1$ mm	Shank Diameter $d_2$ mm	Uncoated EDP No.	Ti-NAMITE (TiN) EDP No.	Ti-NAMITE-C (TiCN) EDP No.	Ti-NAMITE-A (AlTiN) EDP No.	Series Number
1	2	38	3	41506	49073	49094	49115	15MB
1,5	3	38	3	41510	49074	49095	49116	15MB
2	4	38	3	41514	49075	49096	49117	15MB
2,5	5	38	3	41518	49076	49097	49118	15MB
3	6	38	3	41522	49077	49098	49119	15MB
3,5	7	50	4	41526	49078	49099	49120	15MB
4	8	50	4	41530	49079	49100	49121	15MB
4,5	9,5	63	4,5	41534	49080	49101	49122	15MB
5	10	63	5	41538	49081	49102	49123	15MB
6	12	63	6	41542	49082	49103	49124	15MB
7	12	63	8	41546	49083	49104	49125	15MB
8	12	63	8	41550	49084	49105	49126	15MB
9	14	75	9	41554	49085	49106	49127	15MB
10	14	75	10	41558	49086	49107	49128	15MB
11	14	75	12	41562	49087	49108	49129	15MB
12	16	75	12	41566	49088	49109	49130	15MB

