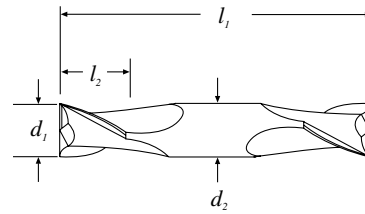


15M



GB

15M End Mills - Double End - Square End
15MB End Mills - Double End - Ball End
Micrograin Solid Carbide
 2 Flute - Short Length - 30° Right Hand Spiral
 - Right Hand Cutting - Center Cutting

ES

Fresas 15M - Doble punta - Punta plana
Fresas 15MB - Doble punta - Punta radial o esférica *Metal duro con micrograno*
 2 labios - Serie corta - Hélice a derecha 30°
 - Corte a derecha - Corte al centro

FR

Fraises 15M - Taillée aux 2 bouts - Bout plat
Fraises 15MB - Taillée aux 2 bouts - Bout hémisphérique
Carbure monobloc, micrograin
 2 dents - Courtes - Hélice à droite, 30°
 - Coupe à droite - Coupe au centre

PT

Fresas 14M - Dois topos - Topo direito/reto
Fresas 14MB - Dois topos - Topo boleado/esférico
Metal duro microgrão
 2 navalhas/cortes - Extremidade dupla
 - Série curta - Espiral de 30° à direita
 - Corte à direita - Corte central

IT

Frese 15M - Testa piana
Frese 15MB - Testa semisferica
Micrograna
 Serie extra corta - Frese doppie con testa piana e semisferica a 2 tagli - Elica destra a 30°
 - Taglio destrorso - Taglio al centro

DE

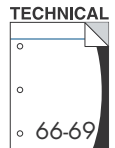
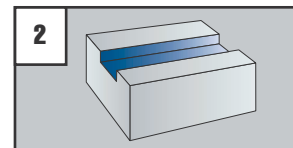
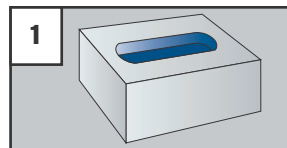
Schaftfräser 15M - Mit 2 Schneidköpfen
 - Flachstirn
Schaftfräser 15MB - Mit 2 Schneidköpfen
 - Rundstirn
Vollhartmetall, Feinstkorn
 2 Schneiden - 30° Rechtsdrill
 - Rechtsschneidend - Zentrumschnitt

$\varnothing d_1$ mm	$\varnothing d_2$ mm	l_1 mm	l_2 mm	EDP No.	Ti-NAMITE EDP No.	Ti-NAMITE-C EDP No.	Ti-NAMITE-A EDP No.
1	3	38	2	41505	49010	49031	49052
1,5	3	38	3	41509	49011	49032	49053
2	3	38	4	41513	49012	49033	49054
2,5	3	38	5	41517	49013	49034	49055
3	3	38	6	41521	49014	49035	49056
3,5	4	50	7	41525	49015	49036	49057
4	4	50	8	41529	49016	49037	49058
4,5	4,5	63	9,5	41533	49017	49038	49059
5	5	63	10	41537	49018	49039	49060
6	6	63	12	41541	49019	49040	49061
7	8	63	12	41545	49020	49041	49062
8	8	63	12	41549	49021	49042	49063
9	9	75	14	41553	49022	49043	49064
10	10	75	14	41557	49023	49044	49065
11	12	75	14	41561	49024	49045	49066
12	12	75	16	41565	49025	49046	49067

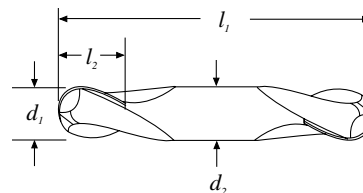


TOLERANCES

$\varnothing d_1 = +0,000 - 0,05$
 $\varnothing d_2 = +0,000 - 0,01$



15MB

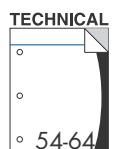
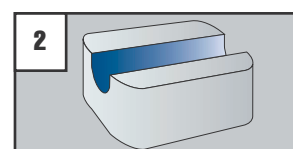
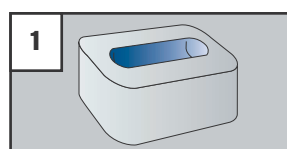


$\varnothing d_1$ mm	$\varnothing d_2$ mm	l_1 mm	l_2 mm	EDP No.	Ti-NAMITE EDP No.	Ti-NAMITE-C EDP No.	Ti-NAMITE-A EDP No.
1	3	38	2	41506	49073	49094	49115
1,5	3	38	3	41510	49074	49095	49116
2	3	38	4	41514	49075	49096	49117
2,5	3	38	5	41518	49076	49097	49118
3	3	38	6	41522	49077	49098	49119
3,5	4	50	7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

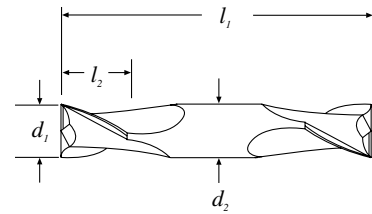
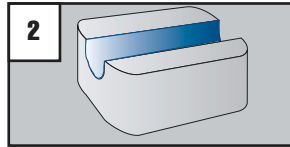
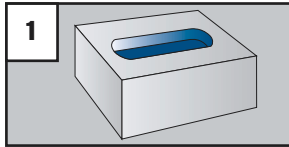


TOLERANCES

$\varnothing d_1 = +0,000 - 0,05$
 $\varnothing d_2 = +0,000 - 0,01$



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.
1/32	1/16	1-1/2	1/8	31501	31541	39651	31316
3/64	3/32	1-1/2	1/8	31503	31543	39653	31317
1/16	1/8	1-1/2	1/8	31505	31545	39655	31318
5/64	1/8	1-1/2	1/8	31507	31547	39657	31319
3/32	3/16	1-1/2	1/8	31509	31549	39659	31320
7/64	3/16	1-1/2	1/8	31511	31551	39661	31321
1/8	1/4	1-1/2	1/8	31513	31553	39663	31322
9/64	5/16	2	3/16	31515	31555	39665	31323
5/32	5/16	2	3/16	31517	31557	39667	31324
11/64	5/16	2	3/16	31519	31559	39669	31325
3/16	3/8	2	3/16	31521	31561	39671	31326
13/64	1/2	2-1/2	1/4	31523	31563	39673	31327
7/32	1/2	2-1/2	1/4	31525	31565	39675	31328
15/64	1/2	2-1/2	1/4	31527	31567	39677	31329
1/4	1/2	2-1/2	1/4	31529	31569	39679	31330
9/32	1/2	2-1/2	5/16	31531	31571	39681	31331
5/16	1/2	2-1/2	5/16	31533	31573	39683	31332
3/8	9/16	2-1/2	3/8	31535	31575	39685	31333
7/16	9/16	2-3/4	7/16	31537	31577	39687	31334
1/2	5/8	3	1/2	31539	31579	39689	31335

**E**

**Series 15 End Mills - Double End
- Square End**

**Series 15B End Mills - Double End
- Ball End**

Micrograin Solid Carbide

2 Flute - Short Length - 30° Right Hand Spiral
- Right Hand Cutting - Center Cutting

ES

**Fresas Serie 15 - Doble punta
- Punta plana**

**Fresas Serie 15B - Doble punta
- Punta radial o esférica**

Carburo sólido con micrograno

2 filos - Serie corta - Hélice a derecha 30°
- Corte a derecha - Corte al centro

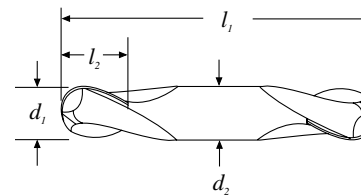
FR

**Fraises Série 15 - Tailée aux 2 bouts
- Bout plat**

**Fraises Série 15B - Tailée aux 2 bouts
- Bout hémisphérique**

Carbure monobloc, micrograin

2 dents - Courtes - Hélice à droite, 30°
- Coupe à droite - Coupe au centre



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.
1/32	1/16	1-1/2	1/8	31502	31542	39652	31337
3/64	3/32	1-1/2	1/8	31504	31544	39654	31338
1/16	1/8	1-1/2	1/8	31506	31546	39656	31339
5/64	1/8	1-1/2	1/8	31508	31548	39658	31340
3/32	3/16	1-1/2	1/8	31510	31550	39660	31341
7/64	3/16	1-1/2	1/8	31512	31552	39662	31342
1/8	1/4	1-1/2	1/8	31514	31554	39664	31343
9/64	5/16	2	3/16	31516	31556	39666	31344
5/32	5/16	2	3/16	31518	31558	39668	31345
11/64	5/16	2	3/16	31520	31560	39670	31346
3/16	3/8	2	3/16	31522	31562	39672	31347
13/64	1/2	2-1/2	1/4	31524	31564	39674	31348
7/32	1/2	2-1/2	1/4	31526	31566	39676	31349
15/64	1/2	2-1/2	1/4	31528	31568	39678	31350
1/4	1/2	2-1/2	1/4	31530	31570	39680	31351
9/32	1/2	2-1/2	5/16	31532	31572	39682	31352
5/16	1/2	2-1/2	5/16	31534	31574	39684	31353
3/8	9/16	2-1/2	3/8	31536	31576	39686	31354
7/16	9/16	2-3/4	7/16	31538	31578	39688	31355
1/2	5/8	3	1/2	31540	31580	39690	31356