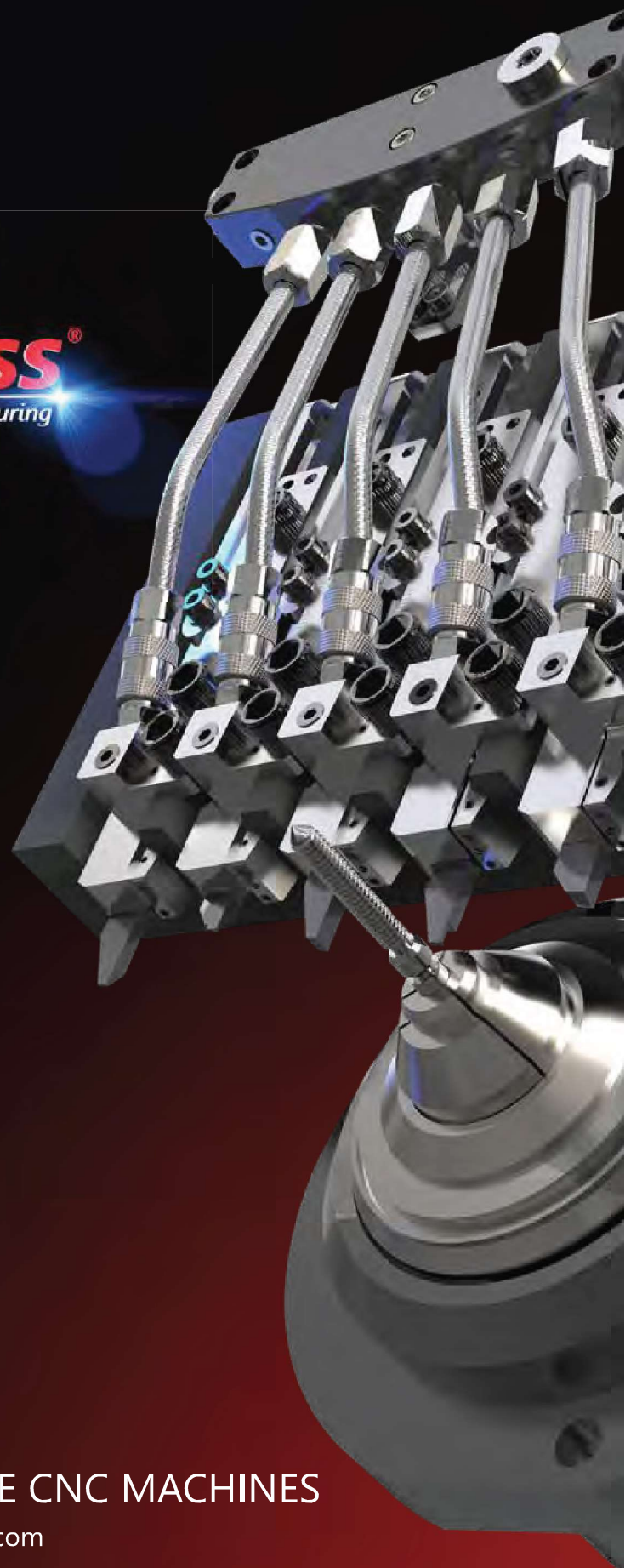




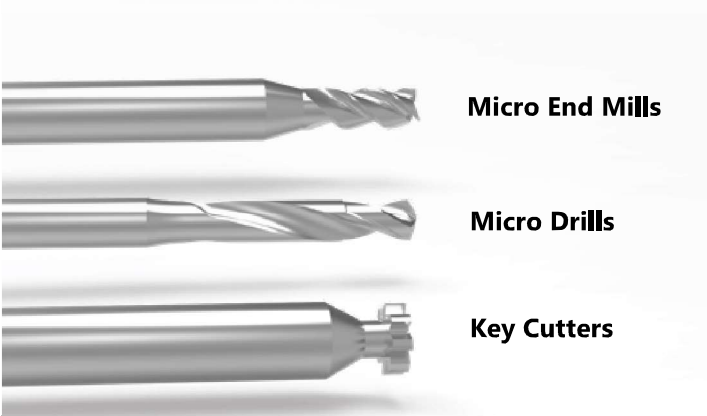
2019 Catalog

Version 10.19



TOOLING FOR SWISS-TYPE CNC MACHINES

www.genswiss.com



Micro End Mills

Micro Drills

Key Cutters



Gear Hobs



Custom Tool Engineering

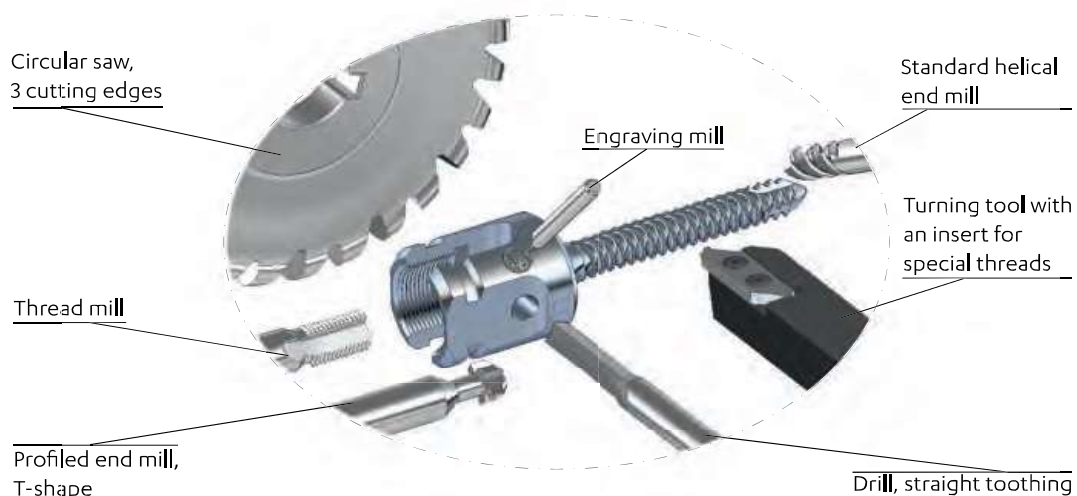


Saw Blades

Genevieve Swiss is committed to bringing the industry's finest cutting tools to the North American metalworking market. Louis Belet of Switzerland is a leading manufacturer of super precision micro tooling, drills and end mills as well as a large variety of specialty cutters. With over 6500 standard tool offerings as well as advanced production capability, Louis Belet has the precision micro tooling you need to achieve optimal production efficiency.

Tooling Optimized for Medical Technology Applications:

Cutting tools for titanium and medical stainless that have been tested and optimized through research and assistance from Louis Belet's customers.

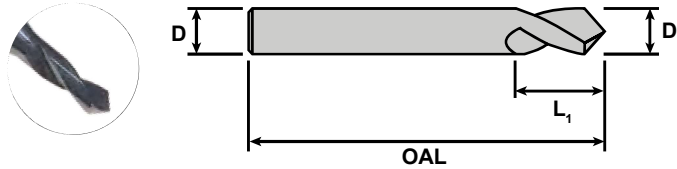


337 Series: Center Drills

GEOMETRY:	
Flutes:	2
Helix:	24°
Drill Point:	60°, 90°, 120°

TOLERANCE:	
D1 Under 1mm:	+/- .01mm
D1 Over 1mm	+/- .02mm
D Shank:	h5

OPTIONAL COATINGS:	
TRIO:	Steel & Stainless
SOLO:	Brass & Bronze
RICO:	Titanium & Aluminum



60° - 2 Flute

Item No.	Description	D ₁	D	L ₁	OAL
3968-000100	TD-337-3-0.5	0.5	2	2	38
3968-000101	TD-337-3-0.6	0.6	2	2	38
3968-000102	TD-337-3-0.7	0.7	2	2	38
3968-000103	TD-337-3-0.8	0.8	2	3	38
3968-000104	TD-337-3-0.9	0.9	2	3	38
3968-000105	TD-337-3-1	1	2	3	38
3968-000106	TD-337-3-1.1	1.1	2	3	38
3968-000107	TD-337-3-1.2	1.2	2	3	38
3968-000108	TD-337-3-1.3	1.3	2	3	38
3968-000109	TD-337-3-1.4	1.4	2	3	38
3968-000110	TD-337-3-1.5	1.5	2	5	38
3968-000111	TD-337-3-1.6	1.6	2	5	38
3968-000112	TD-337-3-1.7	1.7	2	5	38
3968-000113	TD-337-3-1.8	1.8	2	5	38
3968-000114	TD-337-3-1.9	1.9	2	5	38
3968-000115	TD-337-3-2	2	2	8	38
3968-000116	TD-337-3-2.5	2.5	2.5	8	38
3968-000117	TD-337-3-3	3	3	8	44
3968-000118	TD-337-3-4	4	4	12	50
3968-000119	TD-337-3-5	5	5	12	50
3968-000120	TD-337-3-6	6	6	15	61
3968-000121	TD-337-3-8	8	8	20	72
3968-000122	TD-337-3-10	10	10	20	72
3968-000123	TD-337-3-12	12	12	25	83
3968-000124	TD-337-3-16	16	16	25	83
3968-000125	TD-337-3-20	20	20	35	104

90° - 2 Flute

Item No.	Description	D ₁	D	L ₁	OAL
Call For Details	TD-337-0.40	0.4	2	2	38
3962-000100	TD-337-0.5	0.5	2	2	38
3962-000101	TD-337-0.55	0.55	2	2	38
3962-000102	TD-337-0.6	0.6	2	2	38
3962-000103	TD-337-0.65	0.65	2	2	38
3962-000104	TD-337-0.7	0.7	2	2	38
3962-000105	TD-337-0.75	0.75	2	2	38
3962-000106	TD-337-0.8	0.8	2	3	38
3962-000107	TD-337-0.85	0.85	2	3	38
3962-000108	TD-337-0.9	0.9	2	3	38
3962-000109	TD-337-0.95	0.95	2	3	38
3962-000110	TD-337-1	1	2	3	38
3962-000111	TD-337-1.05	1.05	2	3	38
3962-000112	TD-337-1.1	1.1	2	3	38
3962-000113	TD-337-1.15	1.15	2	3	38
3962-000114	TD-337-1.2	1.2	2	3	38
3962-000115	TD-337-1.25	1.25	2	3	38
3962-000116	TD-337-1.3	1.3	2	3	38
3962-000117	TD-337-1.35	1.35	2	3	38
3962-000118	TD-337-1.4	1.4	2	3	38
3962-000119	TD-337-1.45	1.45	2	3	38
3962-000120	TD-337-1.5	1.5	2	5	38
3962-000121	TD-337-1.6	1.6	2	5	38
3962-000122	TD-337-1.7	1.7	2	5	38
3962-000123	TD-337-1.8	1.8	2	5	38
3962-000124	TD-337-1.9	1.9	2	5	38
3962-000125	TD-337-2	2	2	8	38
3962-000126	TD-337-2.5	2.5	2.5	8	38
3962-000127	TD-337-3	3	3	8	44
3962-000128	TD-337-4	4	4	12	50
3962-000129	TD-337-5	5	5	12	50
3962-000130	TD-337-6	6	6	15	61
3962-000131	TD-337-8	8	8	20	72
3962-000132	TD-337-10	10	10	20	72
3962-000133	TD-337-12	12	12	25	83
3962-000134	TD-337-16	16	16	25	83
3962-000135	TD-337-20	20	20	35	104

120° - 2 Flute

Item No.	Description	D ₁	D	L ₁	OAL
3966-000100	TD-337-2-0.5	0.5	2	2	38
3966-000101	TD-337-2-0.55	0.55	2	2	38
3966-000102	TD-337-2-0.6	0.6	2	2	38
3966-000103	TD-337-2-0.65	0.65	2	2	38
3966-000104	TD-337-2-0.7	0.7	2	2	38
3966-000105	TD-337-2-0.75	0.75	2	2	38
3966-000106	TD-337-2-0.8	0.8	2	3	38
3966-000107	TD-337-2-0.85	0.85	2	3	38
3966-000108	TD-337-2-0.9	0.9	2	3	38
3966-000109	TD-337-2-0.95	0.95	2	3	38
3966-000110	TD-337-2-1	1	2	3	38
3966-000111	TD-337-2-1.05	1.05	2	3	38
3966-000112	TD-337-2-1.1	1.1	2	3	38
3966-000113	TD-337-2-1.15	1.15	2	3	38
3966-000114	TD-337-2-1.2	1.2	2	3	38
3966-000115	TD-337-2-1.25	1.25	2	3	38
3966-000116	TD-337-2-1.3	1.3	2	3	38
3966-000117	TD-337-2-1.35	1.35	2	3	38
3966-000118	TD-337-2-1.4	1.4	2	3	38
3966-000119	TD-337-2-1.45	1.45	2	3	38
3966-000120	TD-337-2-1.5	1.5	2	5	38
3966-000121	TD-337-2-1.6	1.6	2	5	38
3966-000122	TD-337-2-1.7	1.7	2	5	38
3966-000123	TD-337-2-1.8	1.8	2	5	38
3966-000124	TD-337-2-1.9	1.9	2	5	38
3966-000125	TD-337-2-2	2	2	8	38
3966-000126	TD-337-2-2.5	2.5	2.5	8	38
3966-000127	TD-337-2-3	3	3	8	44
3966-000128	TD-337-2-4	4	4	12	50
3966-000129	TD-337-2-5	5	5	12	50
3966-000130	TD-337-2-6	6	6	15	61
3966-000131	TD-337-2-8	8	8	20	72
3966-000132	TD-337-2-10	10	10	20	72
3966-000133	TD-337-2-12	12	12	25	83
3966-000134	TD-337-2-16	16	16	25	83
3966-000135	TD-337-2-20	20	20	35	104

Through rigorous testing, feedback from customers as well as years of advancement in grinding and geometry development, Louis Belet has introduced the EXPERT series of application specific drills and cutting tools. The INOX370 Series has been developed for advanced tool life, cutting reliability and chip control in stainless steels.

Comparative Trial Test:

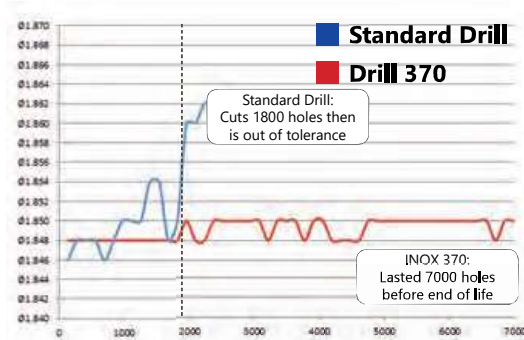
- Test: INOX370 vs Conventional Twist Drill
- Diameter: 1.85mm x 12mm Flute Length
- Material: 316L Stainless
- Hole: 8mm deep thru-hole

End of Life Criteria:

- Tool breakage
- Conical holes
- Excessive burrs
- Deviation of hole location
- Diameter tolerance $\pm .01\text{mm}$

Cutting Parameters:

Vc = 30m / min or 98.4 SFM
 f = .04mm per rev or .0015" IPR
 RPM = 5164
 Peck Cycle = .37mm



Test Results

INOX 370 Drill

- Cut 7000 Holes
- Fragmented Chips
- Cleaner, Tight Tolerance Holes



Standard Drill

- Cut 1800 Holes
- Long Stringy Chips
- Poor finish, burrs



**PROPRIETARY
COATING OPTIMIZED
for STAINLESS**

**"Not Your Father's
Carbide Drills"**



342 Series: Precision Micro Drills - 2 Flute

GEOMETRY:

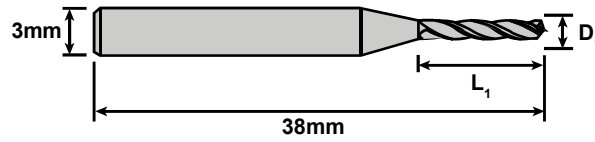
Flutes: 2
Helix: 34°
Drill Point: 118°

TOLERANCE:

D1: -0.02mm / -0.004mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



Item No.	Description	D ₁	L ₁
3982-000100	TD-342-0.05	0.05	0.3
3982-000101	TD-342-0.06	0.06	0.4
3982-000102	TD-342-0.07	0.07	0.4
3982-000103	TD-342-0.08	0.08	0.5
3982-000104	TD-342-0.09	0.09	0.5
3982-000105	TD-342-0.1	0.10	0.5
3982-000106	TD-342-0.11	0.11	0.5
3982-000107	TD-342-0.12	0.12	0.5
3982-000108	TD-342-0.13	0.13	0.5
3982-000109	TD-342-0.14	0.14	0.5
3982-000110	TD-342-0.15	0.15	0.8
3982-000111	TD-342-0.16	0.16	0.8
3982-000112	TD-342-0.17	0.17	0.8
3982-000113	TD-342-0.18	0.18	0.8
3982-000114	TD-342-0.19	0.19	0.8
3982-000115	TD-342-0.2	0.20	0.8
3982-000116	TD-342-0.21	0.21	1.0
3982-000117	TD-342-0.22	0.22	1.0
3982-000118	TD-342-0.23	0.23	1.0
3982-000119	TD-342-0.24	0.24	1.0
3982-000120	TD-342-0.25	0.25	1.0
3982-000121	TD-342-0.26	0.26	1.5
3982-000122	TD-342-0.27	0.27	1.5
3982-000123	TD-342-0.28	0.28	1.5
3982-000124	TD-342-0.29	0.29	1.5
3982-000125	TD-342-0.3	0.30	1.5
3982-000126	TD-342-0.31	0.31	2.0
3982-000127	TD-342-0.32	0.32	2.0
3982-000128	TD-342-0.33	0.33	2.0
3982-000129	TD-342-0.34	0.34	2.0
3982-000130	TD-342-0.35	0.35	2.0
3982-000131	TD-342-0.36	0.36	3.0
3982-000132	TD-342-0.37	0.37	3.0
3982-000133	TD-342-0.38	0.38	3.0
3982-000134	TD-342-0.39	0.39	3.0
3982-000135	TD-342-0.4	0.40	3.0
3982-000136	TD-342-0.41	0.41	3.0
3982-000137	TD-342-0.42	0.42	3.0
3982-000138	TD-342-0.43	0.43	3.0
3982-000139	TD-342-0.44	0.44	3.0
3982-000140	TD-342-0.45	0.45	3.0
3982-000141	TD-342-0.46	0.46	3.0
3982-000142	TD-342-0.47	0.47	4.0
3982-000143	TD-342-0.48	0.48	4.0
3982-000144	TD-342-0.49	0.49	4.0
3982-000145	TD-342-0.5	0.50	4.0
3982-000146	TD-342-0.51	0.51	4.0
3982-000147	TD-342-0.52	0.52	4.0
3982-000148	TD-342-0.53	0.53	4.0
3982-000149	TD-342-0.54	0.54	4.0
3982-000150	TD-342-0.55	0.55	4.0

Item No.	Description	D ₁	L ₁
3982-000151	TD-342-0.56	0.56	4.0
3982-000152	TD-342-0.57	0.57	4.0
3982-000153	TD-342-0.58	0.58	4.0
3982-000154	TD-342-0.59	0.59	4.0
3982-000155	TD-342-0.6	0.60	4.0
3982-000156	TD-342-0.61	0.61	5.0
3982-000157	TD-342-0.62	0.62	5.0
3982-000158	TD-342-0.63	0.63	5.0
3982-000159	TD-342-0.64	0.64	5.0
3982-000160	TD-342-0.65	0.65	5.0
3982-000161	TD-342-0.66	0.66	5.0
3982-000162	TD-342-0.67	0.67	5.0
3982-000163	TD-342-0.68	0.68	5.0
3982-000164	TD-342-0.69	0.69	5.0
3982-000165	TD-342-0.7	0.70	5.0
3982-000166	TD-342-0.71	0.71	5.0
3982-000167	TD-342-0.72	0.72	5.0
3982-000168	TD-342-0.73	0.73	5.0
3982-000169	TD-342-0.74	0.74	5.0
3982-000170	TD-342-0.75	0.75	5.0
3982-000171	TD-342-0.76	0.76	5.0
3982-000172	TD-342-0.77	0.77	5.0
3982-000173	TD-342-0.78	0.78	5.0
3982-000174	TD-342-0.79	0.79	5.0
3982-000175	TD-342-0.8	0.80	5.0
3982-000176	TD-342-0.81	0.81	6.0
3982-000177	TD-342-0.82	0.82	6.0
3982-000178	TD-342-0.83	0.83	6.0
3982-000179	TD-342-0.84	0.84	6.0
3982-000180	TD-342-0.85	0.85	6.0
3982-000181	TD-342-0.86	0.86	6.0
3982-000182	TD-342-0.87	0.87	6.0
3982-000183	TD-342-0.88	0.88	6.0
3982-000184	TD-342-0.89	0.89	6.0
3982-000185	TD-342-0.9	0.90	6.0
3982-000186	TD-342-0.91	0.91	6.0
3982-000187	TD-342-0.92	0.92	6.0
3982-000188	TD-342-0.93	0.93	6.0
3982-000189	TD-342-0.94	0.94	6.0
3982-000190	TD-342-0.95	0.95	6.0
3982-000191	TD-342-0.96	0.96	6.0
3982-000192	TD-342-0.97	0.97	6.0
3982-000193	TD-342-0.98	0.98	6.0
3982-000194	TD-342-0.99	0.99	6.0
3982-000195	TD-342-1	1.00	6.0
3982-000196	TD-342-1.01	1.01	6.0
3982-000197	TD-342-1.02	1.02	6.0
3982-000198	TD-342-1.03	1.03	6.0
3982-000199	TD-342-1.04	1.04	6.0
3982-000200	TD-342-1.05	1.05	6.0
3982-000201	TD-342-1.06	1.06	6.0

342 Series: Precision Micro Drills - 2 Flute (continued)

GEOMETRY:

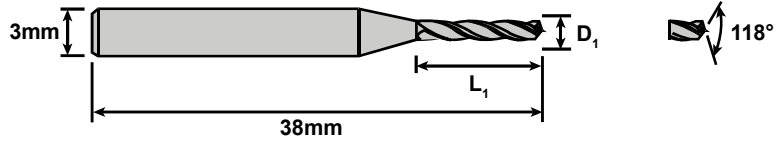
Flutes: 2
Helix: 34°
Drill Point: 118°

TOLERANCE:

D1: -0.02mm / -0.004mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁
3982-000202	TD-342-1.07	1.07	6.0	3982-000253	TD-342-1.59	1.59	8.0
3982-000203	TD-342-1.08	1.08	6.0	3982-000254	TD-342-1.6	1.60	8.0
3982-000204	TD-342-1.09	1.09	6.0	3982-000255	TD-342-1.61	1.61	8.0
3982-000205	TD-342-1.1	1.10	6.0	3982-000256	TD-342-1.62	1.62	8.0
3982-000206	TD-342-1.12	1.12	6.0	3982-000257	TD-342-1.63	1.63	8.0
3982-000207	TD-342-1.13	1.13	6.0	3982-000258	TD-342-1.64	1.64	8.0
3982-000208	TD-342-1.14	1.14	6.0	3982-000259	TD-342-1.65	1.65	8.0
3982-000209	TD-342-1.15	1.15	6.0	3982-000260	TD-342-1.66	1.66	8.0
3982-000210	TD-342-1.16	1.16	6.0	3982-000261	TD-342-1.67	1.67	8.0
3982-000211	TD-342-1.17	1.17	6.0	3982-000262	TD-342-1.68	1.68	8.0
3982-000212	TD-342-1.18	1.18	6.0	3982-000263	TD-342-1.69	1.69	8.0
3982-000213	TD-342-1.19	1.19	6.0	3982-000264	TD-342-1.7	1.70	8.0
3982-000214	TD-342-1.2	1.20	6.0	3982-000265	TD-342-1.71	1.71	12.0
3982-000215	TD-342-1.21	1.21	8.0	3982-000266	TD-342-1.72	1.72	12.0
3982-000216	TD-342-1.22	1.22	8.0	3982-000267	TD-342-1.73	1.73	12.0
3982-000217	TD-342-1.23	1.23	8.0	3982-000268	TD-342-1.74	1.74	12.0
3982-000218	TD-342-1.24	1.24	8.0	3982-000269	TD-342-1.75	1.75	12.0
3982-000219	TD-342-1.25	1.25	8.0	3982-000270	TD-342-1.76	1.76	12.0
3982-000220	TD-342-1.26	1.26	8.0	3982-000271	TD-342-1.77	1.77	12.0
3982-000221	TD-342-1.27	1.27	8.0	3982-000272	TD-342-1.78	1.78	12.0
3982-000222	TD-342-1.28	1.28	8.0	3982-000273	TD-342-1.79	1.79	12.0
3982-000223	TD-342-1.29	1.29	8.0	3982-000274	TD-342-1.8	1.80	12.0
3982-000224	TD-342-1.3	1.30	8.0	3982-000275	TD-342-1.81	1.81	12.0
3982-000225	TD-342-1.31	1.31	8.0	3982-000276	TD-342-1.82	1.82	12.0
3982-000226	TD-342-1.32	1.32	8.0	3982-000277	TD-342-1.83	1.83	12.0
3982-000227	TD-342-1.33	1.33	8.0	3982-000278	TD-342-1.84	1.84	12.0
3982-000228	TD-342-1.34	1.34	8.0	3982-000279	TD-342-1.85	1.85	12.0
3982-000229	TD-342-1.35	1.35	8.0	3982-000280	TD-342-1.86	1.86	12.0
3982-000230	TD-342-1.36	1.36	8.0	3982-000281	TD-342-1.87	1.87	12.0
3982-000231	TD-342-1.37	1.37	8.0	3982-000282	TD-342-1.88	1.88	12.0
3982-000232	TD-342-1.38	1.38	8.0	3982-000283	TD-342-1.89	1.89	12.0
3982-000233	TD-342-1.39	1.39	8.0	3982-000284	TD-342-1.9	1.90	12.0
3982-000234	TD-342-1.4	1.40	8.0	3982-000285	TD-342-1.91	1.91	12.0
3982-000235	TD-342-1.41	1.41	8.0	3982-000286	TD-342-1.92	1.92	12.0
3982-000236	TD-342-1.42	1.42	8.0	3982-000287	TD-342-1.93	1.93	12.0
3982-000237	TD-342-1.43	1.43	8.0	3982-000288	TD-342-1.94	1.94	12.0
3982-000238	TD-342-1.44	1.44	8.0	3982-000289	TD-342-1.95	1.95	12.0
3982-000239	TD-342-1.45	1.45	8.0	3982-000290	TD-342-1.96	1.96	12.0
3982-000240	TD-342-1.46	1.46	8.0	3982-000291	TD-342-1.97	1.97	12.0
3982-000241	TD-342-1.47	1.47	8.0	3982-000292	TD-342-1.98	1.98	12.0
3982-000242	TD-342-1.48	1.48	8.0	3982-000293	TD-342-1.99	1.99	12.0
3982-000243	TD-342-1.49	1.49	8.0	3982-000294	TD-342-2	2.00	12.0
3982-000244	TD-342-1.5	1.50	8.0	3982-000295	TD-342-2.05	2.05	12.0
3982-000245	TD-342-1.51	1.51	8.0	3982-000296	TD-342-2.1	2.10	12.0
3982-000246	TD-342-1.52	1.52	8.0	3982-000297	TD-342-2.15	2.15	12.0
3982-000247	TD-342-1.53	1.53	8.0	3982-000298	TD-342-2.2	2.20	12.0
3982-000248	TD-342-1.54	1.54	8.0	3982-000299	TD-342-2.25	2.25	12.0
3982-000249	TD-342-1.55	1.55	8.0	3982-000300	TD-342-2.3	2.30	12.0
3982-000250	TD-342-1.56	1.56	8.0	3982-000301	TD-342-2.35	2.35	12.0
3982-000251	TD-342-1.57	1.57	8.0	3982-000302	TD-342-2.4	2.40	12.0
3982-000252	TD-342-1.58	1.58	8.0	3982-000303	TD-342-2.45	2.45	12.0
				3982-000304	TD-342-2.5	2.50	12.0

343-6 Series: Precision Micro Drills - 2 Flute

GEOMETRY:

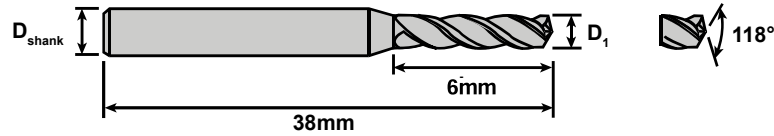
Flutes: 2
Helix: 34°
Drill Point: 118°

TOLERANCE:

D1: -0.002mm / -0.004mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



Item No.	Description	D ₁	D _{shank}	Item No.	Description	D ₁	D _{shank}	Item No.	Description	D ₁	D _{shank}
3986-000109	TD-343-6-0.80	0.80mm	2.0mm	3986-000148	TD-343-6-1.2	1.20mm	2.0mm	3986-000188	TD-343-6-1.6	1.60mm	2.0mm
3986-000100	TD-343-6-0.81	0.81mm	2.0mm	3986-000139	TD-343-6-1.21	1.21mm	2.0mm	3986-000179	TD-343-6-1.61	1.61mm	2.0mm
3986-000101	TD-343-6-0.82	0.82mm	2.0mm	3986-000140	TD-343-6-1.22	1.22mm	2.0mm	3986-000180	TD-343-6-1.62	1.62mm	2.0mm
3986-000102	TD-343-6-0.83	0.83mm	2.0mm	3986-000141	TD-343-6-1.23	1.23mm	2.0mm	3986-000181	TD-343-6-1.63	1.63mm	2.0mm
3986-000103	TD-343-6-0.84	0.84mm	2.0mm	3986-000142	TD-343-6-1.24	1.24mm	2.0mm	3986-000182	TD-343-6-1.64	1.64mm	2.0mm
3986-000104	TD-343-6-0.85	0.85mm	2.0mm	3986-000143	TD-343-6-1.25	1.25mm	2.0mm	3986-000183	TD-343-6-1.65	1.65mm	2.0mm
3986-000105	TD-343-6-0.86	0.86mm	2.0mm	3986-000144	TD-343-6-1.26	1.26mm	2.0mm	3986-000184	TD-343-6-1.66	1.66mm	2.0mm
3986-000106	TD-343-6-0.87	0.87mm	2.0mm	3986-000145	TD-343-6-1.27	1.27mm	2.0mm	3986-000185	TD-343-6-1.67	1.67mm	2.0mm
3986-000107	TD-343-6-0.88	0.88mm	2.0mm	3986-000146	TD-343-6-1.28	1.28mm	2.0mm	3986-000186	TD-343-6-1.68	1.68mm	2.0mm
3986-000108	TD-343-6-0.89	0.89mm	2.0mm	3986-000147	TD-343-6-1.29	1.29mm	2.0mm	3986-000187	TD-343-6-1.69	1.69mm	2.0mm
3986-000119	TD-343-6-0.90	0.90mm	2.0mm	3986-000158	TD-343-6-1.3	1.30mm	2.0mm	3986-000198	TD-343-6-1.7	1.70mm	2.0mm
3986-000110	TD-343-6-0.91	0.91mm	2.0mm	3986-000149	TD-343-6-1.31	1.31mm	2.0mm	3986-000189	TD-343-6-1.71	1.71mm	2.0mm
3986-000111	TD-343-6-0.92	0.92mm	2.0mm	3986-000150	TD-343-6-1.32	1.32mm	2.0mm	3986-000190	TD-343-6-1.72	1.72mm	2.0mm
3986-000112	TD-343-6-0.93	0.93mm	2.0mm	3986-000151	TD-343-6-1.33	1.33mm	2.0mm	3986-000191	TD-343-6-1.73	1.73mm	2.0mm
3986-000113	TD-343-6-0.94	0.94mm	2.0mm	3986-000152	TD-343-6-1.34	1.34mm	2.0mm	3986-000192	TD-343-6-1.74	1.74mm	2.0mm
3986-000114	TD-343-6-0.95	0.95mm	2.0mm	3986-000153	TD-343-6-1.35	1.35mm	2.0mm	3986-000193	TD-343-6-1.75	1.75mm	2.0mm
3986-000115	TD-343-6-0.96	0.96mm	2.0mm	3986-000154	TD-343-6-1.36	1.36mm	2.0mm	3986-000194	TD-343-6-1.76	1.76mm	2.0mm
3986-000116	TD-343-6-0.97	0.97mm	2.0mm	3986-000155	TD-343-6-1.37	1.37mm	2.0mm	3986-000195	TD-343-6-1.77	1.77mm	2.0mm
3986-000117	TD-343-6-0.98	0.98mm	2.0mm	3986-000156	TD-343-6-1.38	1.38mm	2.0mm	3986-000196	TD-343-6-1.78	1.78mm	2.0mm
3986-000118	TD-343-6-0.99	0.99mm	2.0mm	3986-000157	TD-343-6-1.39	1.39mm	2.0mm	3986-000197	TD-343-6-1.79	1.79mm	2.0mm
3986-000219	TD-343-6-1.00	1.00mm	2.0mm	3986-000168	TD-343-6-1.4	1.40mm	2.0mm	3986-000208	TD-343-6-1.8	1.80mm	2.0mm
3986-000120	TD-343-6-1.01	1.01mm	2.0mm	3986-000159	TD-343-6-1.41	1.41mm	2.0mm	3986-000199	TD-343-6-1.81	1.81mm	2.0mm
3986-000121	TD-343-6-1.02	1.02mm	2.0mm	3986-000160	TD-343-6-1.42	1.42mm	2.0mm	3986-000200	TD-343-6-1.82	1.82mm	2.0mm
3986-000122	TD-343-6-1.03	1.03mm	2.0mm	3986-000161	TD-343-6-1.43	1.43mm	2.0mm	3986-000201	TD-343-6-1.83	1.83mm	2.0mm
3986-000123	TD-343-6-1.04	1.04mm	2.0mm	3986-000162	TD-343-6-1.44	1.44mm	2.0mm	3986-000202	TD-343-6-1.84	1.84mm	2.0mm
3986-000124	TD-343-6-1.05	1.05mm	2.0mm	3986-000163	TD-343-6-1.45	1.45mm	2.0mm	3986-000203	TD-343-6-1.85	1.85mm	2.0mm
3986-000125	TD-343-6-1.06	1.06mm	2.0mm	3986-000164	TD-343-6-1.46	1.46mm	2.0mm	3986-000204	TD-343-6-1.86	1.86mm	2.0mm
3986-000126	TD-343-6-1.07	1.07mm	2.0mm	3986-000165	TD-343-6-1.47	1.47mm	2.0mm	3986-000205	TD-343-6-1.87	1.87mm	2.0mm
3986-000127	TD-343-6-1.08	1.08mm	2.0mm	3986-000166	TD-343-6-1.48	1.48mm	2.0mm	3986-000206	TD-343-6-1.88	1.88mm	2.0mm
3986-000128	TD-343-6-1.09	1.09mm	2.0mm	3986-000167	TD-343-6-1.49	1.49mm	2.0mm	3986-000207	TD-343-6-1.89	1.89mm	2.0mm
3986-000138	TD-343-6-1.10	1.10mm	2.0mm	3986-000178	TD-343-6-1.5	1.50mm	2.0mm	3986-000218	TD-343-6-1.9	1.90mm	2.0mm
3986-000129	TD-343-6-1.11	1.11mm	2.0mm	3986-000169	TD-343-6-1.51	1.51mm	2.0mm	3986-000209	TD-343-6-1.91	1.91mm	2.0mm
3986-000130	TD-343-6-1.12	1.12mm	2.0mm	3986-000170	TD-343-6-1.52	1.52mm	2.0mm	3986-000210	TD-343-6-1.92	1.92mm	2.0mm
3986-000131	TD-343-6-1.13	1.13mm	2.0mm	3986-000171	TD-343-6-1.53	1.53mm	2.0mm	3986-000211	TD-343-6-1.93	1.93mm	2.0mm
3986-000132	TD-343-6-1.14	1.14mm	2.0mm	3986-000172	TD-343-6-1.54	1.54mm	2.0mm	3986-000212	TD-343-6-1.94	1.94mm	2.0mm
3986-000133	TD-343-6-1.15	1.15mm	2.0mm	3986-000173	TD-343-6-1.55	1.55mm	2.0mm	3986-000213	TD-343-6-1.95	1.95mm	2.0mm
3986-000134	TD-343-6-1.16	1.16mm	2.0mm	3986-000174	TD-343-6-1.56	1.56mm	2.0mm	3986-000214	TD-343-6-1.96	1.96mm	2.0mm
3986-000135	TD-343-6-1.17	1.17mm	2.0mm	3986-000175	TD-343-6-1.57	1.57mm	2.0mm	3986-000215	TD-343-6-1.97	1.97mm	2.0mm
3986-000136	TD-343-6-1.18	1.18mm	2.0mm	3986-000176	TD-343-6-1.58	1.58mm	2.0mm	3986-000216	TD-343-6-1.98	1.98mm	2.0mm
3986-000137	TD-343-6-1.19	1.19mm	2.0mm	3986-000177	TD-343-6-1.59	1.59mm	2.0mm	3986-000217	TD-343-6-1.99	1.99mm	2.0mm
								3986-000220	TD-343-6-2.0	2.00mm	2.0mm

343-8 Series: Precision Micro Drills - 2 Flute

GEOMETRY:

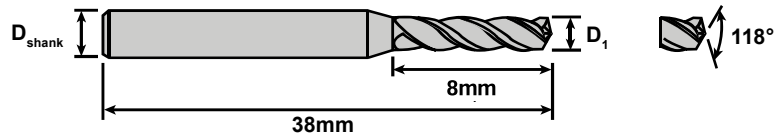
Flutes: 2
Helix: 34°
Drill Point: 118°

TOLERANCE:

D₁: -0.002mm / -0.004mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



Item No.	Description	D ₁	D _{shank}	Item No.	Description	D ₁	D _{shank}	Item No.	Description	D ₁	D _{shank}
3988-000100	TD-343-8-0.8	0.80mm	2.0mm	3988-000154	TD-343-8-1.34	1.34mm	2.0mm	3988-000208	TD-343-8-1.88	1.88mm	2.0mm
3988-000101	TD-343-8-0.81	0.81mm	2.0mm	3988-000155	TD-343-8-1.35	1.35mm	2.0mm	3988-000209	TD-343-8-1.89	1.89mm	2.0mm
3988-000102	TD-343-8-0.82	0.82mm	2.0mm	3988-000156	TD-343-8-1.36	1.36mm	2.0mm	3988-000210	TD-343-8-1.9	1.90mm	2.0mm
3988-000103	TD-343-8-0.83	0.83mm	2.0mm	3988-000157	TD-343-8-1.37	1.37mm	2.0mm	3988-000211	TD-343-8-1.91	1.91mm	2.0mm
3988-000104	TD-343-8-0.84	0.84mm	2.0mm	3988-000158	TD-343-8-1.38	1.38mm	2.0mm	3988-000212	TD-343-8-1.92	1.92mm	2.0mm
3988-000105	TD-343-8-0.85	0.85mm	2.0mm	3988-000159	TD-343-8-1.39	1.39mm	2.0mm	3988-000213	TD-343-8-1.93	1.93mm	2.0mm
3988-000106	TD-343-8-0.86	0.86mm	2.0mm	3988-000160	TD-343-8-1.4	1.40mm	2.0mm	3988-000214	TD-343-8-1.94	1.94mm	2.0mm
3988-000107	TD-343-8-0.87	0.87mm	2.0mm	3988-000161	TD-343-8-1.41	1.41mm	2.0mm	3988-000215	TD-343-8-1.95	1.95mm	2.0mm
3988-000108	TD-343-8-0.88	0.88mm	2.0mm	3988-000162	TD-343-8-1.42	1.42mm	2.0mm	3988-000216	TD-343-8-1.96	1.96mm	2.0mm
3988-000109	TD-343-8-0.89	0.89mm	2.0mm	3988-000163	TD-343-8-1.43	1.43mm	2.0mm	3988-000217	TD-343-8-1.97	1.97mm	2.0mm
3988-000110	TD-343-8-0.9	0.90mm	2.0mm	3988-000164	TD-343-8-1.44	1.44mm	2.0mm	3988-000218	TD-343-8-1.98	1.98mm	2.0mm
3988-000111	TD-343-8-0.91	0.91mm	2.0mm	3988-000165	TD-343-8-1.45	1.45mm	2.0mm	3988-000219	TD-343-8-1.99	1.99mm	2.0mm
3988-000112	TD-343-8-0.92	0.92mm	2.0mm	3988-000166	TD-343-8-1.46	1.46mm	2.0mm	3988-000221	TD-343-8-2.05	2.05mm	2.0mm
3988-000113	TD-343-8-0.93	0.93mm	2.0mm	3988-000167	TD-343-8-1.47	1.47mm	2.0mm	3988-000222	TD-343-8-2.1	2.10mm	2.0mm
3988-000114	TD-343-8-0.94	0.94mm	2.0mm	3988-000168	TD-343-8-1.48	1.48mm	2.0mm	3988-000223	TD-343-8-2.15	2.15mm	2.0mm
3988-000115	TD-343-8-0.95	0.95mm	2.0mm	3988-000169	TD-343-8-1.49	1.49mm	2.0mm	3988-000224	TD-343-8-2.17	2.17mm	2.0mm
3988-000116	TD-343-8-0.96	0.96mm	2.0mm	3988-000170	TD-343-8-1.5	1.50mm	2.0mm	3988-000225	TD-343-8-2.18	2.18mm	2.0mm
3988-000117	TD-343-8-0.97	0.97mm	2.0mm	3988-000171	TD-343-8-1.51	1.51mm	2.0mm	3988-000226	TD-343-8-2.2	2.20mm	2.0mm
3988-000118	TD-343-8-0.98	0.98mm	2.0mm	3988-000172	TD-343-8-1.52	1.52mm	2.0mm	3988-000227	TD-343-8-2.25	2.25mm	2.0mm
3988-000119	TD-343-8-0.99	0.99mm	2.0mm	3988-000173	TD-343-8-1.53	1.53mm	2.0mm	3988-000228	TD-343-8-2.27	2.27mm	2.0mm
3988-000120	TD-343-8-1.0	1.00mm	2.0mm	3988-000174	TD-343-8-1.54	1.54mm	2.0mm	3988-000229	TD-343-8-2.28	2.28mm	2.0mm
3988-000121	TD-343-8-1.01	1.01mm	2.0mm	3988-000175	TD-343-8-1.55	1.55mm	2.0mm	3988-000230	TD-343-8-2.3	2.30mm	2.0mm
3988-000122	TD-343-8-1.02	1.02mm	2.0mm	3988-000176	TD-343-8-1.56	1.56mm	2.0mm	3988-000231	TD-343-8-2.35	2.35mm	2.0mm
3988-000123	TD-343-8-1.03	1.03mm	2.0mm	3988-000177	TD-343-8-1.57	1.57mm	2.0mm	3988-000232	TD-343-8-2.37	2.37mm	2.0mm
3988-000124	TD-343-8-1.04	1.04mm	2.0mm	3988-000178	TD-343-8-1.58	1.58mm	2.0mm	3988-000233	TD-343-8-2.38	2.38mm	2.0mm
3988-000125	TD-343-8-1.05	1.05mm	2.0mm	3988-000179	TD-343-8-1.59	1.59mm	2.0mm	3988-000234	TD-343-8-2.4	2.40mm	2.0mm
3988-000126	TD-343-8-1.06	1.06mm	2.0mm	3988-000180	TD-343-8-1.6	1.60mm	2.0mm	3988-000235	TD-343-8-2.45	2.45mm	2.0mm
3988-000127	TD-343-8-1.07	1.07mm	2.0mm	3988-000181	TD-343-8-1.61	1.61mm	2.0mm	3988-000236	TD-343-8-2.5	2.50mm	2.0mm
3988-000128	TD-343-8-1.08	1.08mm	2.0mm	3988-000182	TD-343-8-1.62	1.62mm	2.0mm	3988-000237	TD-343-8-2.55	2.55mm	2.0mm
3988-000129	TD-343-8-1.09	1.09mm	2.0mm	3988-000183	TD-343-8-1.63	1.63mm	2.0mm	3988-000238	TD-343-8-2.6	2.60mm	2.0mm
3988-000130	TD-343-8-1.1	1.10mm	2.0mm	3988-000184	TD-343-8-1.64	1.64mm	2.0mm	3988-000239	TD-343-8-2.65	2.65mm	2.0mm
3988-000131	TD-343-8-1.11	1.11mm	2.0mm	3988-000185	TD-343-8-1.65	1.65mm	2.0mm	3988-000240	TD-343-8-2.7	2.70mm	2.0mm
3988-000132	TD-343-8-1.12	1.12mm	2.0mm	3988-000186	TD-343-8-1.66	1.66mm	2.0mm	3988-000241	TD-343-8-2.8	2.80mm	2.0mm
3988-000133	TD-343-8-1.13	1.13mm	2.0mm	3988-000187	TD-343-8-1.67	1.67mm	2.0mm	3988-000242	TD-343-8-2.9	2.90mm	2.0mm
3988-000134	TD-343-8-1.14	1.14mm	2.0mm	3988-000188	TD-343-8-1.68	1.68mm	2.0mm	3988-000243	TD-343-8-2.95	2.95mm	2.0mm
3988-000135	TD-343-8-1.15	1.15mm	2.0mm	3988-000189	TD-343-8-1.69	1.69mm	2.0mm	3988-000220	TD-343-8-2.0	2.00mm	2.0mm
3988-000136	TD-343-8-1.16	1.16mm	2.0mm	3988-000190	TD-343-8-1.7	1.70mm	2.0mm	3988-000244	TD-343-8-3.0	3.00mm	3.0mm
3988-000137	TD-343-8-1.17	1.17mm	2.0mm	3988-000191	TD-343-8-1.71	1.71mm	2.0mm	3988-000245	TD-343-8-3.1	3.10mm	4.0mm
3988-000138	TD-343-8-1.18	1.18mm	2.0mm	3988-000192	TD-343-8-1.72	1.72mm	2.0mm	3988-000246	TD-343-8-3.2	3.20mm	4.0mm
3988-000139	TD-343-8-1.19	1.19mm	2.0mm	3988-000193	TD-343-8-1.73	1.73mm	2.0mm	3988-000247	TD-343-8-3.3	3.30mm	4.0mm
3988-000140	TD-343-8-1.2	1.20mm	2.0mm	3988-000194	TD-343-8-1.74	1.74mm	2.0mm	3988-000248	TD-343-8-3.4	3.40mm	4.0mm
3988-000141	TD-343-8-1.21	1.21mm	2.0mm	3988-000195	TD-343-8-1.75	1.75mm	2.0mm	3988-000249	TD-343-8-3.5	3.50mm	4.0mm
3988-000142	TD-343-8-1.22	1.22mm	2.0mm	3988-000196	TD-343-8-1.76	1.76mm	2.0mm	3988-000250	TD-343-8-3.6	3.60mm	4.0mm
3988-000143	TD-343-8-1.23	1.23mm	2.0mm	3988-000197	TD-343-8-1.77	1.77mm	2.0mm	3988-000251	TD-343-8-3.7	3.70mm	4.0mm
3988-000144	TD-343-8-1.24	1.24mm	2.0mm	3988-000198	TD-343-8-1.78	1.78mm	2.0mm	3988-000252	TD-343-8-3.8	3.80mm	4.0mm
3988-000145	TD-343-8-1.25	1.25mm	2.0mm	3988-000199	TD-343-8-1.79	1.79mm	2.0mm	3988-000253	TD-343-8-3.9	3.90mm	4.0mm
3988-000146	TD-343-8-1.26	1.26mm	2.0mm	3988-000200	TD-343-8-1.8	1.80mm	2.0mm	3988-000254	TD-343-8-4.0	4.00mm	4.0mm
3988-000147	TD-343-8-1.27	1.27mm	2.0mm	3988-000201	TD-343-8-1.81	1.81mm	2.0mm	3988-000255	TD-343-8-4.1	4.10mm	4.5mm
3988-000148	TD-343-8-1.28	1.28mm	2.0mm	3988-000202	TD-343-8-1.82	1.82mm	2.0mm	3988-000256	TD-343-8-4.2	4.20mm	4.5mm
3988-000149	TD-343-8-1.29	1.29mm	2.0mm	3988-000203	TD-343-8-1.83	1.83mm	2.0mm	3988-000257	TD-343-8-4.3	4.30mm	4.5mm
3988-000150	TD-343-8-1.3	1.30mm	2.0mm	3988-000204	TD-343-8-1.84	1.84mm	2.0mm	3988-000258	TD-343-8-4.4	4.40mm	4.5mm
3988-000151	TD-343-8-1.31	1.31mm	2.0mm	3988-000205	TD-343-8-1.85	1.85mm	2.0mm	3988-000259	TD-343-8-4.5	4.50mm	4.5mm
3988-000152	TD-343-8-1.32	1.32mm	2.0mm	3988-000206	TD-343-8-1.86	1.86mm	2.0mm	3988-000260	TD-343-8-5.0	5.00mm	5.0mm
3988-000153	TD-343-8-1.33	1.33mm	2.0mm	3988-000207	TD-343-8-1.87	1.87mm	2.0mm	3988-000261	TD-343-8-5.5	5.50mm	5.5mm
3988-000154	TD-343-8-1.34	1.34mm	2.0mm					3988-000262	TD-343-8-6.0	6.00mm	6.0mm

343-12 Series: Precision Micro Drills - 2 Flute

GEOMETRY:

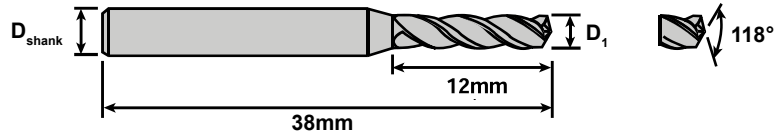
Flutes: 2
Helix: 34°
Drill Point: 118°

TOLERANCE:

D1: -0.002mm / -0.004mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



Item No.	Description	D ₁	D _{shank}	Item No.	Description	D ₁	D _{shank}	Item No.	Description	D ₁	D _{shank}
3984-000100	TD-343-12-0.8	0.80mm	2.0mm	3984-000154	TD-343-12-1.34	1.34mm	2.0mm	3984-000208	TD-343-12-1.88	1.88mm	2.0mm
3984-000101	TD-343-12-0.81	0.81mm	2.0mm	3984-000155	TD-343-12-1.35	1.35mm	2.0mm	3984-000209	TD-343-12-1.89	1.89mm	2.0mm
3984-000102	TD-343-12-0.82	0.82mm	2.0mm	3984-000156	TD-343-12-1.36	1.36mm	2.0mm	3984-000210	TD-343-12-1.9	1.90mm	2.0mm
3984-000103	TD-343-12-0.83	0.83mm	2.0mm	3984-000157	TD-343-12-1.37	1.37mm	2.0mm	3984-000211	TD-343-12-1.91	1.91mm	2.0mm
3984-000104	TD-343-12-0.84	0.84mm	2.0mm	3984-000158	TD-343-12-1.38	1.38mm	2.0mm	3984-000212	TD-343-12-1.92	1.92mm	2.0mm
3984-000105	TD-343-12-0.85	0.85mm	2.0mm	3984-000159	TD-343-12-1.39	1.39mm	2.0mm	3984-000213	TD-343-12-1.93	1.93mm	2.0mm
3984-000106	TD-343-12-0.86	0.86mm	2.0mm	3984-000160	TD-343-12-1.4	1.40mm	2.0mm	3984-000214	TD-343-12-1.94	1.94mm	2.0mm
3984-000107	TD-343-12-0.87	0.87mm	2.0mm	3984-000161	TD-343-12-1.41	1.41mm	2.0mm	3984-000215	TD-343-12-1.95	1.95mm	2.0mm
3984-000108	TD-343-12-0.88	0.88mm	2.0mm	3984-000162	TD-343-12-1.42	1.42mm	2.0mm	3984-000216	TD-343-12-1.96	1.96mm	2.0mm
3984-000109	TD-343-12-0.89	0.89mm	2.0mm	3984-000163	TD-343-12-1.43	1.43mm	2.0mm	3984-000217	TD-343-12-1.97	1.97mm	2.0mm
3984-000110	TD-343-12-0.9	0.90mm	2.0mm	3984-000164	TD-343-12-1.44	1.44mm	2.0mm	3984-000218	TD-343-12-1.98	1.98mm	2.0mm
3984-000111	TD-343-12-0.91	0.91mm	2.0mm	3984-000165	TD-343-12-1.45	1.45mm	2.0mm	3984-000219	TD-343-12-1.99	1.99mm	2.0mm
3984-000112	TD-343-12-0.92	0.92mm	2.0mm	3984-000166	TD-343-12-1.46	1.46mm	2.0mm	3984-000220	TD-343-12-2.0	2.00mm	2.0mm
3984-000113	TD-343-12-0.93	0.93mm	2.0mm	3984-000167	TD-343-12-1.47	1.47mm	2.0mm	3984-000221	TD-343-12-2.05	2.05mm	2.0mm
3984-000114	TD-343-12-0.94	0.94mm	2.0mm	3984-000168	TD-343-12-1.48	1.48mm	2.0mm	3984-000222	TD-343-12-2.1	2.10mm	2.0mm
3984-000115	TD-343-12-0.95	0.95mm	2.0mm	3984-000169	TD-343-12-1.49	1.49mm	2.0mm	3984-000223	TD-343-12-2.15	2.15mm	2.0mm
3984-000116	TD-343-12-0.96	0.96mm	2.0mm	3984-000170	TD-343-12-1.5	1.50mm	2.0mm	3984-000224	TD-343-12-2.17	2.17mm	2.0mm
3984-000117	TD-343-12-0.97	0.97mm	2.0mm	3984-000171	TD-343-12-1.51	1.51mm	2.0mm	3984-000225	TD-343-12-2.18	2.18mm	2.0mm
3984-000118	TD-343-12-0.98	0.98mm	2.0mm	3984-000172	TD-343-12-1.52	1.52mm	2.0mm	3984-000226	TD-343-12-2.2	2.20mm	2.0mm
3984-000119	TD-343-12-0.99	0.99mm	2.0mm	3984-000173	TD-343-12-1.53	1.53mm	2.0mm	3984-000227	TD-343-12-2.25	2.25mm	2.0mm
3984-000120	TD-343-12-1.0	1.00mm	2.0mm	3984-000174	TD-343-12-1.54	1.54mm	2.0mm	3984-000228	TD-343-12-2.27	2.27mm	2.0mm
3984-000121	TD-343-12-1.01	1.01mm	2.0mm	3984-000175	TD-343-12-1.55	1.55mm	2.0mm	3984-000229	TD-343-12-2.28	2.28mm	2.0mm
3984-000122	TD-343-12-1.02	1.02mm	2.0mm	3984-000176	TD-343-12-1.56	1.56mm	2.0mm	3984-000230	TD-343-12-2.3	2.30mm	2.0mm
3984-000123	TD-343-12-1.03	1.03mm	2.0mm	3984-000177	TD-343-12-1.57	1.57mm	2.0mm	3984-000231	TD-343-12-2.35	2.35mm	2.0mm
3984-000124	TD-343-12-1.04	1.04mm	2.0mm	3984-000178	TD-343-12-1.58	1.58mm	2.0mm	3984-000232	TD-343-12-2.37	2.37mm	2.0mm
3984-000125	TD-343-12-1.05	1.05mm	2.0mm	3984-000179	TD-343-12-1.59	1.59mm	2.0mm	3984-000233	TD-343-12-2.38	2.38mm	2.0mm
3984-000126	TD-343-12-1.06	1.06mm	2.0mm	3984-000180	TD-343-12-1.6	1.60mm	2.0mm	3984-000234	TD-343-12-2.4	2.40mm	2.0mm
3984-000127	TD-343-12-1.07	1.07mm	2.0mm	3984-000181	TD-343-12-1.61	1.61mm	2.0mm	3984-000235	TD-343-12-2.45	2.45mm	2.0mm
3984-000128	TD-343-12-1.08	1.08mm	2.0mm	3984-000182	TD-343-12-1.62	1.62mm	2.0mm	3984-000236	TD-343-12-2.5	2.50mm	2.0mm
3984-000129	TD-343-12-1.09	1.09mm	2.0mm	3984-000183	TD-343-12-1.63	1.63mm	2.0mm	3984-000237	TD-343-12-2.55	2.55mm	2.0mm
3984-000130	TD-343-12-1.1	1.10mm	2.0mm	3984-000184	TD-343-12-1.64	1.64mm	2.0mm	3984-000238	TD-343-12-2.6	2.60mm	2.0mm
3984-000131	TD-343-12-1.11	1.11mm	2.0mm	3984-000185	TD-343-12-1.65	1.65mm	2.0mm	3984-000239	TD-343-12-2.65	2.65mm	2.0mm
3984-000132	TD-343-12-1.12	1.12mm	2.0mm	3984-000186	TD-343-12-1.66	1.66mm	2.0mm	3984-000240	TD-343-12-2.7	2.70mm	2.0mm
3984-000133	TD-343-12-1.13	1.13mm	2.0mm	3984-000187	TD-343-12-1.67	1.67mm	2.0mm	3984-000241	TD-343-12-2.8	2.80mm	2.0mm
3984-000134	TD-343-12-1.14	1.14mm	2.0mm	3984-000188	TD-343-12-1.68	1.68mm	2.0mm	3984-000242	TD-343-12-2.9	2.90mm	2.0mm
3984-000135	TD-343-12-1.15	1.15mm	2.0mm	3984-000189	TD-343-12-1.69	1.69mm	2.0mm	3984-000243	TD-343-12-2.95	2.95mm	2.0mm
3984-000136	TD-343-12-1.16	1.16mm	2.0mm	3984-000190	TD-343-12-1.7	1.70mm	2.0mm	3984-000244	TD-343-12-3.0	3.00mm	3.0mm
3984-000137	TD-343-12-1.17	1.17mm	2.0mm	3984-000191	TD-343-12-1.71	1.71mm	2.0mm	3984-000245	TD-343-12-3.1	3.10mm	4.0mm
3984-000138	TD-343-12-1.18	1.18mm	2.0mm	3984-000192	TD-343-12-1.72	1.72mm	2.0mm	3984-000246	TD-343-12-3.2	3.20mm	4.0mm
3984-000139	TD-343-12-1.19	1.19mm	2.0mm	3984-000193	TD-343-12-1.73	1.73mm	2.0mm	3984-000247	TD-343-12-3.3	3.30mm	4.0mm
3984-000140	TD-343-12-1.2	1.20mm	2.0mm	3984-000194	TD-343-12-1.74	1.74mm	2.0mm	3984-000248	TD-343-12-3.4	3.40mm	4.0mm
3984-000141	TD-343-12-1.21	1.21mm	2.0mm	3984-000195	TD-343-12-1.75	1.75mm	2.0mm	3984-000249	TD-343-12-3.5	3.50mm	4.0mm
3984-000142	TD-343-12-1.22	1.22mm	2.0mm	3984-000196	TD-343-12-1.76	1.76mm	2.0mm	3984-000250	TD-343-12-3.6	3.60mm	4.0mm
3984-000143	TD-343-12-1.23	1.23mm	2.0mm	3984-000197	TD-343-12-1.77	1.77mm	2.0mm	3984-000251	TD-343-12-3.7	3.70mm	4.0mm
3984-000144	TD-343-12-1.24	1.24mm	2.0mm	3984-000198	TD-343-12-1.78	1.78mm	2.0mm	3984-000252	TD-343-12-3.8	3.80mm	4.0mm
3984-000145	TD-343-12-1.25	1.25mm	2.0mm	3984-000199	TD-343-12-1.79	1.79mm	2.0mm	3984-000253	TD-343-12-3.9	3.90mm	4.0mm
3984-000146	TD-343-12-1.26	1.26mm	2.0mm	3984-000200	TD-343-12-1.8	1.80mm	2.0mm	3984-000254	TD-343-12-4.0	4.00mm	4.0mm
3984-000147	TD-343-12-1.27	1.27mm	2.0mm	3984-000201	TD-343-12-1.81	1.81mm	2.0mm	3984-000255	TD-343-12-4.1	4.10mm	4.5mm
3984-000148	TD-343-12-1.28	1.28mm	2.0mm	3984-000202	TD-343-12-1.82	1.82mm	2.0mm	3984-000256	TD-343-12-4.2	4.20mm	4.5mm
3984-000149	TD-343-12-1.29	1.29mm	2.0mm	3984-000203	TD-343-12-1.83	1.83mm	2.0mm	3984-000257	TD-343-12-4.3	4.30mm	4.5mm
3984-000150	TD-343-12-1.3	1.30mm	2.0mm	3984-000204	TD-343-12-1.84	1.84mm	2.0mm	3984-000258	TD-343-12-4.4	4.40mm	4.5mm
3984-000151	TD-343-12-1.31	1.31mm	2.0mm	3984-000205	TD-343-12-1.85	1.85mm	2.0mm	3984-000259	TD-343-12-4.5	4.50mm	4.5mm
3984-000152	TD-343-12-1.32	1.32mm	2.0mm	3984-000206	TD-343-12-1.86	1.86mm	2.0mm	3984-000260	TD-343-12-5.0	5.00mm	5.0mm
3984-000153	TD-343-12-1.33	1.33mm	2.0mm	3984-000207	TD-343-12-1.87	1.87mm	2.0mm	3984-000261	TD-343-12-5.5	5.50mm	5.5mm
								3984-000262	TD-343-12-6.0	6.00mm	6.0mm

344 Series: Coolant-Thru Micro Drills - 2 Flute

GEOMETRY:

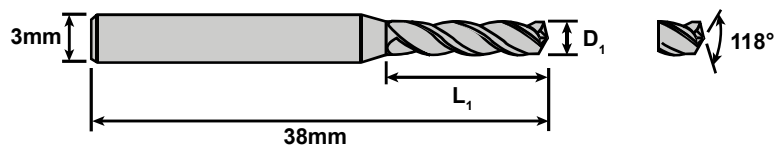
Flutes: 2
Helix: 34°
Drill Point: 118°

TOLERANCE:

D1: -0.02mm / -0.004mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁
Call For Details	TD-344-0.70	0.70	5mm	Call For Details	TD-344-1.30	1.30	8mm	Call For Details	TD-344-2.20	2.20	12mm
Call For Details	TD-344-0.75	0.75	5mm	Call For Details	TD-344-1.40	1.40	8mm	Call For Details	TD-344-2.30	2.30	12mm
Call For Details	TD-344-0.80	0.80	6mm	Call For Details	TD-344-1.50	1.50	12mm	Call For Details	TD-344-2.40	2.40	12mm
Call For Details	TD-344-0.85	0.85	6mm	Call For Details	TD-344-1.60	1.60	12mm	Call For Details	TD-344-2.50	2.50	12mm
Call For Details	TD-344-0.90	0.90	6mm	Call For Details	TD-344-1.70	1.70	12mm	Call For Details	TD-344-2.60	2.60	12mm
Call For Details	TD-344-1.00	1.00	8mm	Call For Details	TD-344-1.75	1.75	12mm	Call For Details	TD-344-2.70	2.70	12mm
Call For Details	TD-344-1.05	1.05	8mm	Call For Details	TD-344-1.80	1.80	12mm	Call For Details	TD-344-2.80	2.80	12mm
Call For Details	TD-344-1.10	1.10	8mm	Call For Details	TD-344-1.90	1.90	12mm	Call For Details	TD-344-2.90	2.90	12mm
Call For Details	TD-344-1.20	1.20	8mm	Call For Details	TD-344-2.00	2.00	12mm	Call For Details	TD-344-3.00	3.00	12mm
Call For Details	TD-344-1.25	1.25	8mm	Call For Details	TD-344-2.10	2.10	12mm	WE CAN DO SPECIALS! CALL TODAY			

353 Series: Triple Fluted Precision Micro Drill

GEOMETRY:

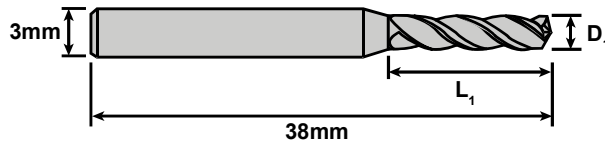
Flutes: 3
Helix: 34°
Drill Point: 140°

TOLERANCE:

D1: -0.02mm / -0.004mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



353 - Standard

Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁
3998-000100	TD-353-0.15	0.15	2.0	3998-000122	TD-353-1.25	1.25	10.5
3998-000101	TD-353-0.2	0.20	3.0	3998-000123	TD-353-1.3	1.30	10.5
3998-000102	TD-353-0.25	0.25	3.5	3998-000124	TD-353-1.35	1.35	10.5
3998-000103	TD-353-0.3	0.30	5.0	3998-000125	TD-353-1.4	1.40	10.5
3998-000104	TD-353-0.35	0.35	5.0	3998-000126	TD-353-1.45	1.45	10.5
3998-000105	TD-353-0.4	0.40	6.0	3998-000127	TD-353-1.5	1.50	10.5
3998-000106	TD-353-0.45	0.45	6.0	3998-000128	TD-353-1.6	1.60	10.5
3998-000107	TD-353-0.5	0.50	6.0	3998-000129	TD-353-1.7	1.70	10.5
3998-000108	TD-353-0.55	0.55	7.0	3998-000130	TD-353-1.8	1.80	10.5
3998-000109	TD-353-0.6	0.60	7.0	3998-000131	TD-353-1.9	1.90	10.5
3998-000110	TD-353-0.65	0.65	7.0	3998-000132	TD-353-2	2.00	10.5
3998-000111	TD-353-0.7	0.70	9.5	3998-000133	TD-353-2.1	2.10	10.5
3998-000112	TD-353-0.75	0.75	9.5	3998-000134	TD-353-2.2	2.20	10.5
3998-000113	TD-353-0.8	0.80	9.5	3998-000135	TD-353-2.3	2.30	10.5
3998-000114	TD-353-0.85	0.85	9.5	3998-000136	TD-353-2.4	2.40	10.5
3998-000115	TD-353-0.9	0.90	9.5	3998-000137	TD-353-2.5	2.50	10.5
3998-000116	TD-353-0.95	0.95	9.5	3998-000138	TD-353-2.6	2.60	10.5
3998-000117	TD-353-1	1.00	9.5	3998-000139	TD-353-2.7	2.70	10.5
3998-000118	TD-353-1.05	1.05	10.5	3998-000140	TD-353-2.8	2.80	10.5
3998-000119	TD-353-1.1	1.10	10.5	3998-000141	TD-353-2.9	2.90	10.5
3998-000120	TD-353-1.15	1.15	10.5	3998-000142	TD-353-3	3.00	10.5
3998-000121	TD-353-1.2	1.20	10.5				

353 Series: Triple Fluted Precision Micro Drill

GEOMETRY:

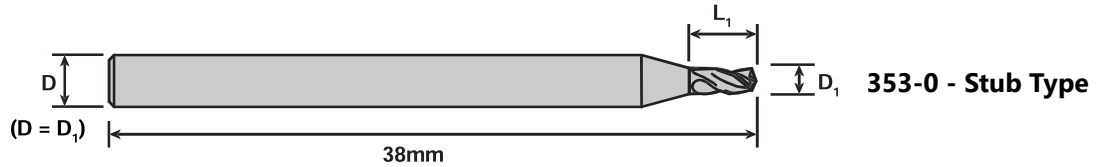
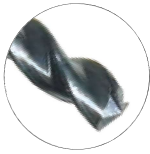
Flutes: 3
Helix: 34°
Drill Point: 140°

TOLERANCE:

D1: -0.02mm / -0.004mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



353-0 - Stub Type

Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁
3858-000100	TD-353-0-0.15	0.15	1.5	3858-000143	TD-353-0-0.7	0.70	3.0	3858-000186	TD-353-0-1.13	1.13	3.5
3858-000101	TD-353-0-0.2	0.20	2.0	3858-000144	TD-353-0-0.71	0.71	3.0	3858-000187	TD-353-0-1.14	1.14	3.5
3858-000102	TD-353-0-0.25	0.25	2.0	3858-000145	TD-353-0-0.72	0.72	3.0	3858-000188	TD-353-0-1.15	1.15	3.5
3858-000103	TD-353-0-0.3	0.30	2.0	3858-000146	TD-353-0-0.73	0.73	3.0	3858-000189	TD-353-0-1.16	1.16	3.5
3858-000104	TD-353-0-0.31	0.31	2.0	3858-000147	TD-353-0-0.74	0.74	3.0	3858-000190	TD-353-0-1.17	1.17	3.5
3858-000105	TD-353-0-0.32	0.32	2.0	3858-000148	TD-353-0-0.75	0.75	3.0	3858-000191	TD-353-0-1.18	1.18	3.5
3858-000106	TD-353-0-0.33	0.33	2.0	3858-000149	TD-353-0-0.76	0.76	3.0	3858-000192	TD-353-0-1.19	1.19	3.5
3858-000107	TD-353-0-0.34	0.34	2.0	3858-000150	TD-353-0-0.77	0.77	3.0	3858-000193	TD-353-0-1.2	1.20	3.5
3858-000108	TD-353-0-0.35	0.35	2.0	3858-000151	TD-353-0-0.78	0.78	3.0	3858-000194	TD-353-0-1.21	1.21	3.5
3858-000109	TD-353-0-0.36	0.36	2.0	3858-000152	TD-353-0-0.79	0.79	3.0	3858-000195	TD-353-0-1.22	1.22	3.5
3858-000110	TD-353-0-0.37	0.37	2.0	3858-000153	TD-353-0-0.8	0.80	3.0	3858-000196	TD-353-0-1.23	1.23	3.5
3858-000111	TD-353-0-0.38	0.38	2.0	3858-000154	TD-353-0-0.81	0.81	3.0	3858-000197	TD-353-0-1.24	1.24	3.5
3858-000112	TD-353-0-0.39	0.39	2.0	3858-000155	TD-353-0-0.82	0.82	3.0	3858-000198	TD-353-0-1.25	1.25	3.5
3858-000113	TD-353-0-0.4	0.40	2.0	3858-000156	TD-353-0-0.83	0.83	3.0	3858-000199	TD-353-0-1.26	1.26	3.5
3858-000114	TD-353-0-0.41	0.41	2.0	3858-000157	TD-353-0-0.84	0.84	3.0	3858-000200	TD-353-0-1.27	1.27	3.5
3858-000115	TD-353-0-0.42	0.42	2.0	3858-000158	TD-353-0-0.85	0.85	3.0	3858-000201	TD-353-0-1.28	1.28	3.5
3858-000116	TD-353-0-0.43	0.43	2.0	3858-000159	TD-353-0-0.86	0.86	3.0	3858-000202	TD-353-0-1.29	1.29	3.5
3858-000117	TD-353-0-0.44	0.44	2.0	3858-000160	TD-353-0-0.87	0.87	3.0	3858-000203	TD-353-0-1.3	1.30	3.5
3858-000118	TD-353-0-0.45	0.45	2.0	3858-000161	TD-353-0-0.88	0.88	3.0	3858-000204	TD-353-0-1.31	1.31	3.5
3858-000119	TD-353-0-0.46	0.46	2.0	3858-000162	TD-353-0-0.89	0.89	3.0	3858-000205	TD-353-0-1.32	1.32	3.5
3858-000120	TD-353-0-0.47	0.47	2.0	3858-000163	TD-353-0-0.9	0.90	3.0	3858-000206	TD-353-0-1.33	1.33	3.5
3858-000121	TD-353-0-0.48	0.48	2.0	3858-000164	TD-353-0-0.91	0.91	3.0	3858-000207	TD-353-0-1.34	1.34	3.5
3858-000122	TD-353-0-0.49	0.49	2.0	3858-000165	TD-353-0-0.92	0.92	3.0	3858-000208	TD-353-0-1.35	1.35	3.5
3858-000123	TD-353-0-0.5	0.50	3.0	3858-000166	TD-353-0-0.93	0.93	3.0	3858-000209	TD-353-0-1.36	1.36	3.5
3858-000124	TD-353-0-0.51	0.51	3.0	3858-000167	TD-353-0-0.94	0.94	3.0	3858-000210	TD-353-0-1.37	1.37	3.5
3858-000125	TD-353-0-0.52	0.52	3.0	3858-000168	TD-353-0-0.95	0.95	3.0	3858-000211	TD-353-0-1.38	1.38	3.5
3858-000126	TD-353-0-0.53	0.53	3.0	3858-000169	TD-353-0-0.96	0.96	3.0	3858-000212	TD-353-0-1.39	1.39	3.5
3858-000127	TD-353-0-0.54	0.54	3.0	3858-000170	TD-353-0-0.97	0.97	3.0	3858-000213	TD-353-0-1.4	1.40	3.5
3858-000128	TD-353-0-0.55	0.55	3.0	3858-000171	TD-353-0-0.98	0.98	3.0	3858-000214	TD-353-0-1.41	1.41	3.5
3858-000129	TD-353-0-0.56	0.56	3.0	3858-000172	TD-353-0-0.99	0.99	3.0	3858-000215	TD-353-0-1.42	1.42	3.5
3858-000130	TD-353-0-0.57	0.57	3.0	3858-000173	TD-353-0-1	1.00	3.5	3858-000216	TD-353-0-1.43	1.43	3.5
3858-000131	TD-353-0-0.58	0.58	3.0	3858-000174	TD-353-0-1.01	1.01	3.5	3858-000217	TD-353-0-1.44	1.44	3.5
3858-000132	TD-353-0-0.59	0.59	3.0	3858-000175	TD-353-0-1.02	1.02	3.5	3858-000218	TD-353-0-1.45	1.45	3.5
3858-000133	TD-353-0-0.6	0.60	3.0	3858-000176	TD-353-0-1.03	1.03	3.5	3858-000219	TD-353-0-1.46	1.46	3.5
3858-000134	TD-353-0-0.61	0.61	3.0	3858-000177	TD-353-0-1.04	1.04	3.5	3858-000220	TD-353-0-1.47	1.47	3.5
3858-000135	TD-353-0-0.62	0.62	3.0	3858-000178	TD-353-0-1.05	1.05	3.5	3858-000221	TD-353-0-1.48	1.48	3.5
3858-000136	TD-353-0-0.63	0.63	3.0	3858-000179	TD-353-0-1.06	1.06	3.5	3858-000222	TD-353-0-1.49	1.49	3.5
3858-000137	TD-353-0-0.64	0.64	3.0	3858-000180	TD-353-0-1.07	1.07	3.5	3858-000223	TD-353-0-1.5	1.50	3.5
3858-000138	TD-353-0-0.65	0.65	3.0	3858-000181	TD-353-0-1.08	1.08	3.5				
3858-000139	TD-353-0-0.66	0.66	3.0	3858-000182	TD-353-0-1.09	1.09	3.5				
3858-000140	TD-353-0-0.67	0.67	3.0	3858-000183	TD-353-0-1.1	1.10	3.5				
3858-000141	TD-353-0-0.68	0.68	3.0	3858-000184	TD-353-0-1.11	1.11	3.5				
3858-000142	TD-353-0-0.69	0.69	3.0	3858-000185	TD-353-0-1.12	1.12	3.5				

353 Series: Triple Fluted Precision Micro Drill

GEOMETRY:

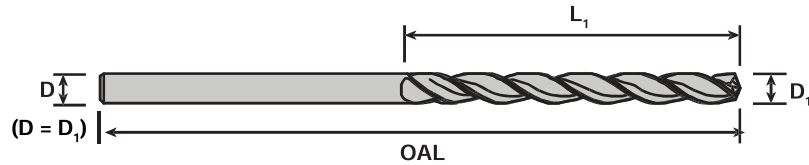
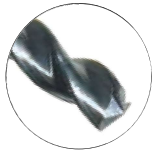
Flutes: 3
Helix: 34°
Drill Point: 140°

TOLERANCE:

D1: -0.02mm / -0.004mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



353-2 - Extra Length

353-2 Series - Extra Length

Item No.	Description	D ₁	L ₁	OAL	Item No.	Description	D ₁	L ₁	OAL	Item No.	Description	D ₁	L ₁	OAL
3862-000100	TD-353-2-1	1.00	11.5	34	3862-000143	TD-353-2-5.3	5.30	50.0	86	3862-000186	TD-353-2-9.6	9.60	84.0	133
3862-000101	TD-353-2-1.1	1.10	13.0	36	3862-000144	TD-353-2-5.4	5.40	55.0	93	3862-000187	TD-353-2-9.7	9.70	84.0	133
3862-000102	TD-353-2-1.2	1.20	15.0	38	3862-000145	TD-353-2-5.5	5.50	55.0	93	3862-000188	TD-353-2-9.8	9.80	84.0	133
3862-000103	TD-353-2-1.3	1.30	15.0	38	3862-000146	TD-353-2-5.6	5.60	55.0	93	3862-000189	TD-353-2-9.9	9.90	84.0	133
3862-000104	TD-353-2-1.4	1.40	17.0	40	3862-000147	TD-353-2-5.7	5.70	55.0	93	3862-000190	TD-353-2-10.0	10.00	84.0	133
3862-000105	TD-353-2-1.5	1.50	17.0	40	3862-000148	TD-353-2-5.8	5.80	55.0	93	3862-000191	TD-353-2-10.2	10.20	84.0	133
3862-000106	TD-353-2-1.6	1.60	19.0	43	3862-000149	TD-353-2-5.9	5.90	55.0	93	3862-000192	TD-353-2-10.5	10.50	84.0	133
3862-000107	TD-353-2-1.7	1.70	19.0	43	3862-000150	TD-353-2-6.0	6.00	55.0	93	3862-000193	TD-353-2-11.0	11.00	91.0	142
3862-000108	TD-353-2-1.8	1.80	21.0	46	3862-000151	TD-353-2-6.1	6.10	60.0	101	3862-000194	TD-353-2-11.5	11.50	91.0	142
3862-000109	TD-353-2-1.9	1.90	21.0	46	3862-000152	TD-353-2-6.2	6.20	60.0	101	3862-000195	TD-353-2-12.0	12.00	98.0	151
3862-000110	TD-353-2-2.0	2.00	22.0	49	3862-000153	TD-353-2-6.3	6.30	60.0	101	3862-000196	TD-353-2-12.5	12.50	98.0	151
3862-000111	TD-353-2-2.1	2.10	22.0	49	3862-000154	TD-353-2-6.4	6.40	60.0	101	3862-000197	TD-353-2-13.0	13.00	98.0	151
3862-000112	TD-353-2-2.2	2.20	25.0	53	3862-000155	TD-353-2-6.5	6.50	60.0	101	3862-000198	TD-353-2-13.5	13.50	105.0	160
3862-000113	TD-353-2-2.3	2.30	25.0	53	3862-000156	TD-353-2-6.6	6.60	60.0	101	3862-000199	TD-353-2-14.0	14.00	105.0	160
3862-000114	TD-353-2-2.4	2.40	28.0	57	3862-000157	TD-353-2-6.7	6.70	60.0	101					
3862-000115	TD-353-2-2.5	2.50	28.0	57	3862-000158	TD-353-2-6.8	6.80	66.0	109					
3862-000116	TD-353-2-2.6	2.60	28.0	57	3862-000159	TD-353-2-6.9	6.90	66.0	109					
3862-000117	TD-353-2-2.7	2.70	31.0	61	3862-000160	TD-353-2-7.0	7.00	66.0	109					
3862-000118	TD-353-2-2.8	2.80	31.0	61	3862-000161	TD-353-2-7.1	7.10	66.0	109					
3862-000119	TD-353-2-2.9	2.90	31.0	61	3862-000162	TD-353-2-7.2	7.20	66.0	109					
3862-000120	TD-353-2-3.0	3.00	31.0	61	3862-000163	TD-353-2-7.3	7.30	66.0	109					
3862-000121	TD-353-2-3.1	3.10	34.0	65	3862-000164	TD-353-2-7.4	7.40	66.0	109					
3862-000122	TD-353-2-3.2	3.20	34.0	65	3862-000165	TD-353-2-7.5	7.50	66.0	109					
3862-000123	TD-353-2-3.3	3.30	34.0	65	3862-000166	TD-353-2-7.6	7.60	72.0	117					
3862-000124	TD-353-2-3.4	3.40	37.0	70	3862-000167	TD-353-2-7.7	7.70	72.0	117					
3862-000125	TD-353-2-3.5	3.50	37.0	70	3862-000168	TD-353-2-7.8	7.80	72.0	117					
3862-000126	TD-353-2-3.6	3.60	37.0	70	3862-000169	TD-353-2-7.9	7.90	72.0	117					
3862-000127	TD-353-2-3.7	3.70	37.0	70	3862-000170	TD-353-2-8.0	8.00	72.0	117					
3862-000128	TD-353-2-3.8	3.80	41.0	75	3862-000171	TD-353-2-8.1	8.10	72.0	117					
3862-000129	TD-353-2-3.9	3.90	41.0	75	3862-000172	TD-353-2-8.2	8.20	72.0	117					
3862-000130	TD-353-2-4.0	4.00	41.0	75	3862-000173	TD-353-2-8.3	8.30	72.0	117					
3862-000131	TD-353-2-4.1	4.10	41.0	75	3862-000174	TD-353-2-8.4	8.40	72.0	117					
3862-000132	TD-353-2-4.2	4.20	41.0	75	3862-000175	TD-353-2-8.5	8.50	72.0	117					
3862-000133	TD-353-2-4.3	4.30	45.0	80	3862-000176	TD-353-2-8.6	8.60	78.0	125					
3862-000134	TD-353-2-4.4	4.40	45.0	80	3862-000177	TD-353-2-8.7	8.70	78.0	125					
3862-000135	TD-353-2-4.5	4.50	45.0	80	3862-000178	TD-353-2-8.8	8.80	78.0	125					
3862-000136	TD-353-2-4.6	4.60	45.0	80	3862-000179	TD-353-2-8.9	8.90	78.0	125					
3862-000137	TD-353-2-4.7	4.70	45.0	80	3862-000180	TD-353-2-9.0	9.00	78.0	125					
3862-000138	TD-353-2-4.8	4.80	50.0	86	3862-000181	TD-353-2-9.1	9.10	78.0	125					
3862-000139	TD-353-2-4.9	4.90	50.0	86	3862-000182	TD-353-2-9.2	9.20	78.0	125					
3862-000140	TD-353-2-5.0	5.00	50.0	86	3862-000183	TD-353-2-9.3	9.30	78.0	125					
3862-000141	TD-353-2-5.1	5.10	50.0	86	3862-000184	TD-353-2-9.4	9.40	78.0	125					
3862-000142	TD-353-2-5.2	5.20	50.0	86	3862-000185	TD-353-2-9.5	9.50	78.0	125					

370 Series: Drills For Stainless Steels - 2 Flute

GEOMETRY:

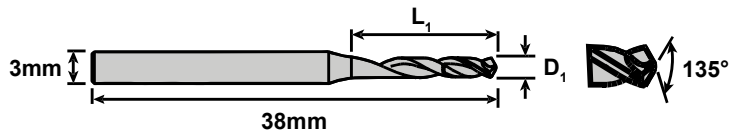
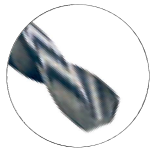
Flutes: 2
Helix: Variable
Drill Point: 135°

TOLERANCE:

D1: -0.002mm / -0.004mm
D Shank: h5

OPTIONAL COATINGS:

PROPRIETARY COATING
OPTIMIZED FOR STAINLESS



370 Series: Drills For Stainless Steels - 2 Flute

Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁
3816-050370	TD-370-0.5	0.50mm	4mm	3816-092370	TD-370-0.92	0.92mm	8mm	3816-134370	TD-370-1.34	1.34mm	8mm
3816-051370	TD-370-0.51	0.51mm	4mm	3916-093370	TD-370-0.93	0.93mm	8mm	3816-135370	TD-370-1.35	1.35mm	8mm
3816-052370	TD-370-0.52	0.52mm	4mm	3816-094370	TD-370-0.94	0.94mm	8mm	3816-136370	TD-370-1.36	1.36mm	8mm
3816-053370	TD-370-0.53	0.53mm	4mm	3816-095370	TD-370-0.95	0.95mm	8mm	3816-137370	TD-370-1.37	1.37mm	8mm
3816-054370	TD-370-0.54	0.54mm	4mm	3816-096370	TD-370-0.96	0.96mm	8mm	3816-138370	TD-370-1.38	1.38mm	8mm
3816-055370	TD-370-0.55	0.55mm	4mm	3816-097370	TD-370-0.97	0.97mm	8mm	3816-139370	TD-370-1.39	1.39mm	8mm
3816-056370	TD-370-0.56	0.56mm	4mm	3816-098370	TD-370-0.98	0.98mm	8mm	3816-140370	TD-370-1.40	1.40mm	8mm
3816-057370	TD-370-0.57	0.57mm	4mm	3816-099370	TD-370-0.99	0.99mm	8mm	3816-141370	TD-370-1.41	1.41mm	8mm
3816-058370	TD-370-0.58	0.58mm	4mm	3816-100370	TD-370-1.00	1.00mm	8mm	3816-142370	TD-370-1.42	1.42mm	8mm
3816-059370	TD-370-0.59	0.59mm	4mm	3816-101370	TD-370-1.01	1.01mm	8mm	3816-143370	TD-370-1.43	1.43mm	8mm
3816-060370	TD-370-0.60	0.60mm	5mm	3816-102370	TD-370-1.02	1.02mm	8mm	3816-144370	TD-370-1.44	1.44mm	8mm
3816-061370	TD-370-0.61	0.61mm	5mm	3816-103370	TD-370-1.03	1.03mm	8mm	3816-145370	TD-370-1.45	1.45mm	8mm
3816-062370	TD-370-0.62	0.62mm	5mm	3816-104370	TD-370-1.04	1.04mm	8mm	3816-146370	TD-370-1.46	1.46mm	8mm
3816-063370	TD-370-0.63	0.63mm	5mm	3816-105370	TD-370-1.05	1.05mm	8mm	3816-147370	TD-370-1.47	1.47mm	8mm
3816-064370	TD-370-0.64	0.64mm	5mm	3816-106370	TD-370-1.06	1.06mm	8mm	3816-148370	TD-370-1.48	1.48mm	8mm
3816-065370	TD-370-0.65	0.65mm	5mm	3816-107370	TD-370-1.07	1.07mm	8mm	3816-149370	TD-370-1.49	1.49mm	8mm
3816-066370	TD-370-0.66	0.66mm	5mm	3816-108370	TD-370-1.08	1.08mm	8mm	3816-150370	TD-370-1.50	1.50mm	12mm
3816-067370	TD-370-0.67	0.67mm	5mm	3816-109370	TD-370-1.09	1.09mm	8mm	3816-155370	TD-370-1.55	1.55mm	12mm
3816-068370	TD-370-0.68	0.68mm	5mm	3816-110370	TD-370-1.10	1.10mm	8mm	3816-160370	TD-370-1.60	1.60mm	12mm
3816-069370	TD-370-0.69	0.69mm	5mm	3816-111370	TD-370-1.11	1.11mm	8mm	3816-165370	TD-370-1.65	1.65mm	12mm
3816-070370	TD-370-0.70	0.70mm	5mm	3816-112370	TD-370-1.12	1.12mm	8mm	3816-170370	TD-370-1.70	1.70mm	12mm
3816-071370	TD-370-0.71	0.71mm	5mm	3816-113370	TD-370-1.13	1.13mm	8mm	3816-175370	TD-370-1.75	1.75mm	12mm
3816-072370	TD-370-0.72	0.72mm	5mm	3816-114370	TD-370-1.14	1.14mm	8mm	3816-180370	TD-370-1.80	1.80mm	12mm
3816-073370	TD-370-0.73	0.73mm	5mm	3816-115370	TD-370-1.15	1.15mm	8mm	3816-185370	TD-370-1.85	1.85mm	12mm
3816-074370	TD-370-0.74	0.74mm	5mm	3816-116370	TD-370-1.16	1.16mm	8mm	3816-190370	TD-370-1.90	1.90mm	12mm
3816-075370	TD-370-0.75	0.75mm	5mm	3816-117370	TD-370-1.17	1.17mm	8mm	3816-195370	TD-370-1.95	1.95mm	12mm
3816-076370	TD-370-0.76	0.76mm	5mm	3816-118370	TD-370-1.18	1.18mm	8mm	3816-200370	TD-370-2.00	2.00mm	12mm
3816-077370	TD-370-0.77	0.77mm	5mm	3816-119370	TD-370-1.19	1.19mm	8mm	3816-205370	TD-370-2.05	2.05mm	12mm
3816-078370	TD-370-0.78	0.78mm	5mm	3816-120370	TD-370-1.20	1.20mm	8mm	3816-210370	TD-370-2.10	2.10mm	12mm
3816-079370	TD-370-0.79	0.79mm	5mm	3816-121370	TD-370-1.21	1.21mm	8mm	3816-215370	TD-370-2.15	2.15mm	12mm
3816-080370	TD-370-0.80	0.80mm	6mm	3816-122370	TD-370-1.22	1.22mm	8mm	3816-220370	TD-370-2.20	2.20mm	12mm
3816-081370	TD-370-0.81	0.80mm	6mm	3816-123370	TD-370-1.23	1.23mm	8mm	3816-225370	TD-370-2.25	2.25mm	12mm
3816-082370	TD-370-0.82	0.80mm	6mm	3816-124370	TD-370-1.24	1.24mm	8mm	3816-230370	TD-370-2.30	2.30mm	12mm
3816-083370	TD-370-0.83	0.80mm	6mm	3816-125370	TD-370-1.25	1.25mm	8mm	3816-235370	TD-370-2.35	2.35mm	12mm
3816-084370	TD-370-0.84	0.80mm	6mm	3816-126370	TD-370-1.26	1.26mm	8mm	3816-240370	TD-370-2.40	2.40mm	12mm
3816-085370	TD-370-0.85	0.80mm	6mm	3816-127370	TD-370-1.27	1.27mm	8mm	3816-245370	TD-370-2.45	2.45mm	12mm
3816-086370	TD-370-0.86	0.80mm	6mm	3816-128370	TD-370-1.28	1.28mm	8mm	3816-250370	TD-370-2.50	2.50mm	12mm
3816-087370	TD-370-0.87	0.80mm	6mm	3816-129370	TD-370-1.29	1.29mm	8mm	3816-260370	TD-370-2.60	2.60mm	12mm
3816-088370	TD-370-0.88	0.80mm	6mm	3816-130370	TD-370-1.30	1.30mm	8mm	3816-270370	TD-370-2.70	2.70mm	12mm
3816-089370	TD-370-0.89	0.80mm	6mm	3816-131370	TD-370-1.31	1.31mm	8mm	3816-280370	TD-370-2.80	2.80mm	12mm
3816-090370	TD-370-0.90	0.80mm	6mm	3816-132370	TD-370-1.32	1.32mm	8mm	3816-290370	TD-370-2.90	2.90mm	12mm
3816-091370	TD-370-0.91	0.80mm	8mm	3816-133370	TD-370-1.33	1.33mm	8mm	3816-300370	TD-370-3.00	3.00mm	12mm

374 Series: Drills For Stainless Steels - 2 Flute - Coolant-Thru

GEOMETRY:

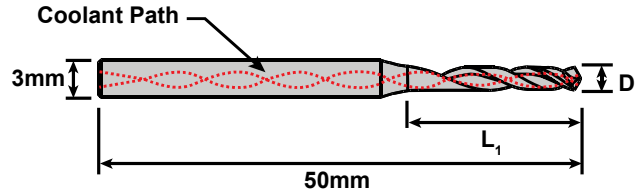
Flutes: 2
Helix: Variable
Drill Point: 135°

TOLERANCE:

D1: -0.002mm / -0.004mm
D Shank: h5

OPTIONAL COATINGS:

PROPRIETARY COATING
OPTIMIZED FOR STAINLESS



Coolant-Thru



374 Series: Drills For Stainless Steels - 2 Flute - Coolant-Thru

Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁
Call For Details	TD-374-0.70	0.70mm	8mm	Call For Details	TD-374-0.95	0.95mm	10mm	Call For Details	TD-374-1.20	1.20mm	14mm
Call For Details	TD-374-0.71	0.71mm	8mm	Call For Details	TD-374-0.96	0.96mm	10mm	Call For Details	TD-374-1.21	1.21mm	14mm
Call For Details	TD-374-0.72	0.72mm	8mm	Call For Details	TD-374-0.97	0.97mm	10mm	Call For Details	TD-374-1.22	1.22mm	14mm
Call For Details	TD-374-0.73	0.73mm	8mm	Call For Details	TD-374-0.98	0.98mm	10mm	Call For Details	TD-374-1.23	1.23mm	14mm
Call For Details	TD-374-0.74	0.74mm	8mm	Call For Details	TD-374-0.99	0.99mm	10mm	Call For Details	TD-374-1.24	1.24mm	14mm
Call For Details	TD-374-0.75	0.75mm	8mm	Call For Details	TD-374-1.00	1.00mm	12mm	Call For Details	TD-374-1.25	1.25mm	14mm
Call For Details	TD-374-0.76	0.76mm	8mm	Call For Details	TD-374-1.01	1.01mm	12mm	Call For Details	TD-374-1.26	1.26mm	14mm
Call For Details	TD-374-0.77	0.77mm	8mm	Call For Details	TD-374-1.02	1.02mm	12mm	Call For Details	TD-374-1.27	1.27mm	14mm
Call For Details	TD-374-0.78	0.78mm	8mm	Call For Details	TD-374-1.03	1.03mm	12mm	Call For Details	TD-374-1.28	1.28mm	14mm
Call For Details	TD-374-0.79	0.79mm	8mm	Call For Details	TD-374-1.04	1.04mm	12mm	Call For Details	TD-374-1.29	1.29mm	14mm
Call For Details	TD-374-0.80	0.80mm	8mm	Call For Details	TD-374-1.05	1.05mm	12mm	Call For Details	TD-374-1.30	1.30mm	14mm
Call For Details	TD-374-0.81	0.80mm	8mm	Call For Details	TD-374-1.06	1.06mm	12mm	Call For Details	TD-374-1.31	1.31mm	14mm
Call For Details	TD-374-0.82	0.80mm	8mm	Call For Details	TD-374-1.07	1.07mm	12mm	Call For Details	TD-374-1.32	1.32mm	14mm
Call For Details	TD-374-0.83	0.80mm	8mm	Call For Details	TD-374-1.08	1.08mm	12mm	Call For Details	TD-374-1.33	1.33mm	14mm
Call For Details	TD-374-0.84	0.80mm	8mm	Call For Details	TD-374-1.09	1.09mm	12mm	Call For Details	TD-374-1.34	1.34mm	14mm
Call For Details	TD-374-0.85	0.80mm	8mm	Call For Details	TD-374-1.10	1.10mm	12mm	Call For Details	TD-374-1.35	1.35mm	14mm
Call For Details	TD-374-0.86	0.80mm	8mm	Call For Details	TD-374-1.11	1.11mm	12mm	Call For Details	TD-374-1.36	1.36mm	14mm
Call For Details	TD-374-0.87	0.80mm	8mm	Call For Details	TD-374-1.12	1.12mm	12mm	Call For Details	TD-374-1.37	1.37mm	14mm
Call For Details	TD-374-0.88	0.80mm	8mm	Call For Details	TD-374-1.13	1.13mm	12mm	Call For Details	TD-374-1.38	1.38mm	14mm
Call For Details	TD-374-0.89	0.80mm	8mm	Call For Details	TD-374-1.14	1.14mm	12mm	Call For Details	TD-374-1.39	1.39mm	14mm
Call For Details	TD-374-0.90	0.80mm	10mm	Call For Details	TD-374-1.15	1.15mm	12mm	Call For Details	TD-374-1.40	1.40mm	14mm
Call For Details	TD-374-0.91	0.80mm	10mm	Call For Details	TD-374-1.16	1.16mm	12mm	Call For Details	TD-374-1.41	1.41mm	14mm
Call For Details	TD-374-0.92	0.92mm	10mm	Call For Details	TD-374-1.17	1.17mm	12mm	Call For Details	TD-374-1.42	1.42mm	14mm
Call For Details	TD-374-0.93	0.93mm	10mm	Call For Details	TD-374-1.18	1.18mm	12mm	Call For Details	TD-374-1.43	1.43mm	14mm
Call For Details	TD-374-0.94	0.94mm	10mm	Call For Details	TD-374-1.19	1.19mm	12mm	Call For Details	TD-374-1.44	1.44mm	14mm

374 Series: Drills For Stainless Steels - 2 Flute - Coolant-Thru (continued)

GEOMETRY:

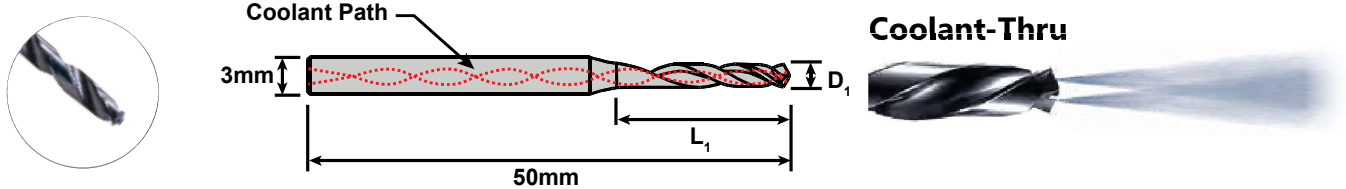
Flutes: 2
Helix: Variable
Drill Point: 135°

TOLERANCE:

D1: -0.002mm / -0.004mm
D Shank: h5

OPTIONAL COATINGS:

PROPRIETARY COATING
OPTIMIZED FOR STAINLESS



374 Series: Drills For Stainless Steels - 2 Flute - Coolant-Thru (continued)

Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁	Item No.	Description	D ₁	L ₁
Call For Details	TD-374-1.45	1.45mm	14mm	Call For Details	TD-374-1.70	1.70mm	18mm	Call For Details	TD-374-1.95	1.95mm	18mm
Call For Details	TD-374-1.46	1.46mm	14mm	Call For Details	TD-374-1.71	1.71mm	18mm	Call For Details	TD-374-1.96	1.96mm	18mm
Call For Details	TD-374-1.47	1.47mm	14mm	Call For Details	TD-374-1.72	1.72mm	18mm	Call For Details	TD-374-1.97	1.97mm	18mm
Call For Details	TD-374-1.48	1.48mm	14mm	Call For Details	TD-374-1.73	1.73mm	18mm	Call For Details	TD-374-1.98	1.98mm	18mm
Call For Details	TD-374-1.49	1.49mm	14mm	Call For Details	TD-374-1.74	1.74mm	18mm	Call For Details	TD-374-1.99	1.99mm	18mm
Call For Details	TD-374-1.50	1.50mm	14mm	Call For Details	TD-374-1.75	1.75mm	18mm	Call For Details	TD-374-2.00	2.00mm	18mm
Call For Details	TD-374-1.51	1.51mm	14mm	Call For Details	TD-374-1.76	1.76mm	18mm	Call For Details	TD-374-2.05	2.05mm	18mm
Call For Details	TD-374-1.52	1.52mm	14mm	Call For Details	TD-374-1.77	1.77mm	18mm	Call For Details	TD-374-2.10	2.10mm	20mm
Call For Details	TD-374-1.53	1.53mm	14mm	Call For Details	TD-374-1.78	1.78mm	18mm	Call For Details	TD-374-2.15	2.15mm	20mm
Call For Details	TD-374-1.54	1.54mm	14mm	Call For Details	TD-374-1.79	1.79mm	18mm	Call For Details	TD-374-2.20	2.20mm	20mm
Call For Details	TD-374-1.55	1.55mm	14mm	Call For Details	TD-374-1.80	1.80mm	18mm	Call For Details	TD-374-2.25	2.25mm	20mm
Call For Details	TD-374-1.56	1.56mm	14mm	Call For Details	TD-374-1.81	1.81mm	18mm	Call For Details	TD-374-2.30	2.30mm	20mm
Call For Details	TD-374-1.57	1.57mm	14mm	Call For Details	TD-374-1.82	1.82mm	18mm	Call For Details	TD-374-2.35	2.35mm	20mm
Call For Details	TD-374-1.58	1.58mm	14mm	Call For Details	TD-374-1.83	1.83mm	18mm	Call For Details	TD-374-2.40	2.40mm	20mm
Call For Details	TD-374-1.59	1.59mm	14mm	Call For Details	TD-374-1.84	1.84mm	18mm	Call For Details	TD-374-2.45	2.45mm	20mm
Call For Details	TD-374-1.60	1.60mm	14mm	Call For Details	TD-374-1.85	1.85mm	18mm	Call For Details	TD-374-2.50	2.50mm	20mm
Call For Details	TD-374-1.61	1.61mm	14mm	Call For Details	TD-374-1.86	1.86mm	18mm	Call For Details	TD-374-2.60	2.60mm	20mm
Call For Details	TD-374-1.62	1.62mm	14mm	Call For Details	TD-374-1.87	1.87mm	18mm	Call For Details	TD-374-2.70	2.70mm	20mm
Call For Details	TD-374-1.63	1.63mm	14mm	Call For Details	TD-374-1.88	1.88mm	18mm	Call For Details	TD-374-2.80	2.80mm	20mm
Call For Details	TD-374-1.64	1.64mm	14mm	Call For Details	TD-374-1.89	1.89mm	18mm	Call For Details	TD-374-2.90	2.90mm	20mm
Call For Details	TD-374-1.65	1.65mm	14mm	Call For Details	TD-374-1.90	1.90mm	18mm	Call For Details	TD-374-3.00	3.00mm	20mm
Call For Details	TD-374-1.66	1.66mm	14mm	Call For Details	TD-374-1.91	1.91mm	18mm	Call For Details	TD-374-3.50	3.50mm	20mm
Call For Details	TD-374-1.67	1.67mm	14mm	Call For Details	TD-374-1.92	1.92mm	18mm	Call For Details	TD-374-4.00	4.00mm	20mm
Call For Details	TD-374-1.68	1.68mm	14mm	Call For Details	TD-374-1.93	1.93mm	18mm				
Call For Details	TD-374-1.69	1.69mm	14mm	Call For Details	TD-374-1.94	1.94mm	18mm				

1510 Series: Precision Micro End Mills

GEOMETRY:

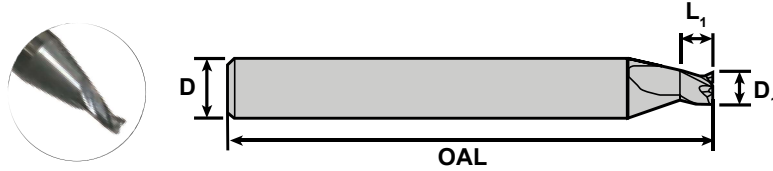
Flutes: 3
Helix: 30°
Rake: 8-10°

TOLERANCE:

D1 under 1mm: +/-0.01mm
D1 over 1mm: +/-0.02mm
OAL: -0.02mm / -0.00mm
D Shank: h5

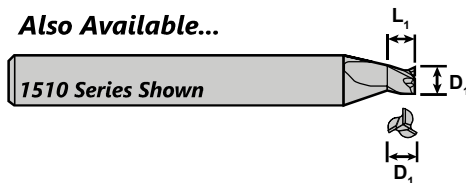
OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum

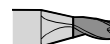


Item No.	Description	D ₁	D	L ₁	OAL	Item No.	Description	D ₁	D	L ₁	OAL	Item No.	Description	D ₁	D	L ₁	OAL
3894-000100	TE-1510-0.3	0.30	3.0	0.30	38	3894-000134	TE-1510-2	2.00	3.0	2.00	38	3894-000168	TE-1510-4.4	4.40	6.0	4.40	51
3894-000101	TE-1510-0.35	0.35	3.0	0.35	38	3894-000135	TE-1510-2.05	2.05	3.0	2.05	38	3894-000169	TE-1510-4.5	4.50	6.0	4.50	51
3894-000102	TE-1510-0.4	0.40	3.0	0.40	38	3894-000136	TE-1510-2.1	2.10	3.0	2.10	38	3894-000170	TE-1510-4.6	4.60	6.0	4.60	51
3894-000103	TE-1510-0.45	0.45	3.0	0.45	38	3894-000137	TE-1510-2.15	2.15	3.0	2.15	38	3894-000171	TE-1510-4.7	4.70	6.0	4.70	51
3894-000104	TE-1510-0.5	0.50	3.0	0.50	38	3894-000138	TE-1510-2.2	2.20	3.0	2.20	38	3894-000172	TE-1510-4.8	4.80	6.0	4.80	51
3894-000105	TE-1510-0.55	0.55	3.0	0.55	38	3894-000139	TE-1510-2.25	2.25	3.0	2.25	38	3894-000173	TE-1510-4.9	4.90	6.0	4.90	51
3894-000106	TE-1510-0.6	0.60	3.0	0.60	38	3894-000140	TE-1510-2.3	2.30	3.0	2.30	38	3894-000174	TE-1510-5	5.00	6.0	5.00	51
3894-000107	TE-1510-0.65	0.65	3.0	0.65	38	3894-000141	TE-1510-2.35	2.35	3.0	2.35	38	3894-000175	TE-1510-5.1	5.10	6.0	5.10	51
3894-000108	TE-1510-0.7	0.70	3.0	0.70	38	3894-000142	TE-1510-2.4	2.40	3.0	2.40	38	3894-000176	TE-1510-5.2	5.20	6.0	5.20	51
3894-000109	TE-1510-0.75	0.75	3.0	0.75	38	3894-000143	TE-1510-2.45	2.45	3.0	2.45	38	3894-000177	TE-1510-5.3	5.30	6.0	5.30	51
3894-000110	TE-1510-0.8	0.80	3.0	0.80	38	3894-000144	TE-1510-2.5	2.50	3.0	2.50	38	3894-000178	TE-1510-5.4	5.40	6.0	5.40	51
3894-000111	TE-1510-0.85	0.85	3.0	0.85	38	3894-000145	TE-1510-2.55	2.55	3.0	2.55	38	3894-000179	TE-1510-5.5	5.50	6.0	5.50	51
3894-000112	TE-1510-0.9	0.90	3.0	0.90	38	3894-000146	TE-1510-2.6	2.60	3.0	2.60	38	3894-000180	TE-1510-5.6	5.60	6.0	5.60	51
3894-000113	TE-1510-0.95	0.95	3.0	0.95	38	3894-000147	TE-1510-2.65	2.65	3.0	2.65	38	3894-000181	TE-1510-5.7	5.70	6.0	5.70	51
3894-000114	TE-1510-1	1.00	3.0	1.00	38	3894-000148	TE-1510-2.7	2.70	3.0	2.70	38	3894-000182	TE-1510-5.8	5.80	6.0	5.80	51
3894-000115	TE-1510-1.05	1.05	3.0	1.05	38	3894-000149	TE-1510-2.75	2.75	3.0	2.75	38	3894-000183	TE-1510-5.9	5.90	6.0	5.90	51
3894-000116	TE-1510-1.1	1.10	3.0	1.10	38	3894-000150	TE-1510-2.8	2.80	3.0	2.80	38	3894-000184	TE-1510-6	6.00	6.0	6.00	51
3894-000117	TE-1510-1.15	1.15	3.0	1.15	38	3894-000151	TE-1510-2.85	2.85	3.0	2.85	38	3894-000185	TE-1510-6.5	6.50	8.0	6.50	51
3894-000118	TE-1510-1.2	1.20	3.0	1.20	38	3894-000152	TE-1510-2.9	2.90	3.0	2.90	38	3894-000186	TE-1510-7	7.00	8.0	7.00	61
3894-000119	TE-1510-1.25	1.25	3.0	1.25	38	3894-000153	TE-1510-2.95	2.95	3.0	2.95	38	3894-000187	TE-1510-7.5	7.50	8.0	7.50	61
3894-000120	TE-1510-1.3	1.30	3.0	1.30	38	3894-000154	TE-1510-3	3.00	6.0	3.00	51	3894-000188	TE-1510-8	8.00	10.0	8.00	61
3894-000121	TE-1510-1.35	1.35	3.0	1.35	38	3894-000155	TE-1510-3.1	3.10	6.0	3.10	51	3894-000189	TE-1510-8.5	8.50	10.0	8.50	72
3894-000122	TE-1510-1.4	1.40	3.0	1.40	38	3894-000156	TE-1510-3.2	3.20	6.0	3.20	51	3894-000190	TE-1510-9	9.00	10.0	9.00	72
3894-000123	TE-1510-1.45	1.45	3.0	1.45	38	3894-000157	TE-1510-3.3	3.30	6.0	3.30	51	3894-000191	TE-1510-9.5	9.50	10.00	9.50	72
3894-000124	TE-1510-1.5	1.50	3.0	1.50	38	3894-000158	TE-1510-3.4	3.40	6.0	3.40	51	3894-000192	TE-1510-10	10.00	10.00	10.00	72
3894-000125	TE-1510-1.55	1.55	3.0	1.55	38	3894-000159	TE-1510-3.5	3.50	6.0	3.50	51	3894-000193	TE-1510-11	11.00	11.00	11.00	83
3894-000126	TE-1510-1.6	1.60	3.0	1.60	38	3894-000160	TE-1510-3.6	3.60	6.0	3.60	51	3894-000194	TE-1510-12	12.00	12.00	12.00	83
3894-000127	TE-1510-1.65	1.65	3.0	1.65	38	3894-000161	TE-1510-3.7	3.70	6.0	3.70	51	3894-000195	TE-1510-13	13.00	13.00	13.00	83
3894-000128	TE-1510-1.7	1.70	3.0	1.70	38	3894-000162	TE-1510-3.8	3.80	6.0	3.80	51	3894-000196	TE-1510-14	14.00	14.00	14.00	83
3894-000129	TE-1510-1.75	1.75	3.0	1.75	38	3894-000163	TE-1510-3.9	3.90	6.0	3.90	51	3894-000197	TE-1510-15	15.00	15.00	15.00	83
3894-000130	TE-1510-1.8	1.80	3.0	1.80	38	3894-000164	TE-1510-4	4.00	6.0	4.00	51	3894-000198	TE-1510-16	16.00	16.00	16.00	92
3894-000131	TE-1510-1.85	1.85	3.0	1.85	38	3894-000165	TE-1510-4.1	4.10	6.0	4.10	51						
3894-000132	TE-1510-1.9	1.90	3.0	1.90	38	3894-000166	TE-1510-4.2	4.20	6.0	4.20	51						
3894-000133	TE-1510-1.95	1.95	3.0	1.95	38	3894-000167	TE-1510-4.3	4.30	6.0	4.30	51						

Also Available...



1520 Series: $L_1 = 2xD_1$
Two Times the Length



1530 Series: $L_1 = 3xD_1$
Three Times the Length



1540 Series: $L_1 = 4xD_1$
Four Times the Length



1210 Series: Precision Micro End Mills

GEOMETRY:

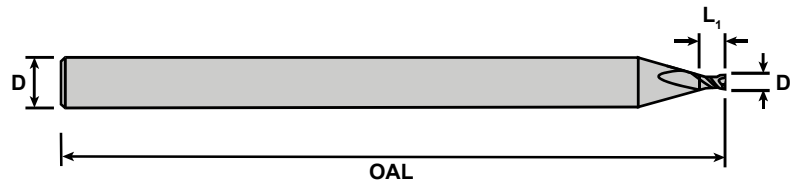
Flutes: 2
Helix: 30°
Rake: 8-10°

TOLERANCE:

D1 under 1mm: +/- .01mm
D1 over 1mm: +/- .02mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



Item No.	Description	D ₁	D	L ₁	OAL	Item No.	Description	D ₁	D	L ₁	OAL	Item No.	Description	D ₁	D	L ₁	OAL
3822-000100	TE-1210-0.04	0.04	3.0	0.04	38	3822-000118	TE-1210-0.65	0.65	3.0	0.65	38	3822-000137	TE-1210-1.6	1.60	3.0	1.60	38
3822-000101	TE-1210-0.05	0.05	3.0	0.05	38	3822-000119	TE-1210-0.7	0.70	3.0	0.70	38	3822-000138	TE-1210-1.65	1.65	3.0	1.65	38
3822-000102	TE-1210-0.06	0.06	3.0	0.06	38	3822-000120	TE-1210-0.75	0.75	3.0	0.75	38	3822-000139	TE-1210-1.7	1.70	3.0	1.70	38
3822-000103	TE-1210-0.07	0.07	3.0	0.07	38	3822-000121	TE-1210-0.8	0.80	3.0	0.80	38	3822-000140	TE-1210-1.75	1.75	3.0	1.75	38
3822-000104	TE-1210-0.08	0.08	3.0	0.08	38	3822-000123	TE-1210-0.9	0.90	3.0	0.90	38	3822-000141	TE-1210-1.8	1.80	3.0	1.80	38
3822-000105	TE-1210-0.09	0.09	3.0	0.09	38	3822-000124	TE-1210-0.95	0.95	3.0	0.95	38	3822-000142	TE-1210-1.85	1.85	3.0	1.85	38
3822-000106	TE-1210-0.1	0.10	3.0	0.10	38	3822-000125	TE-1210-1	1.00	3.0	1.00	38	3822-000143	TE-1210-1.9	1.90	3.0	1.90	38
3822-000107	TE-1210-0.12	0.12	3.0	0.12	38	3822-000126	TE-1210-1.05	1.05	3.0	1.05	38	3822-000144	TE-1210-1.95	1.95	3.0	1.95	38
3822-000108	TE-1210-0.15	0.15	3.0	0.15	38	3822-000127	TE-1210-1.1	1.10	3.0	1.10	38	3822-000145	TE-1210-2	2.00	3.0	2.00	38
3822-000109	TE-1210-0.2	0.20	3.0	0.20	38	3822-000128	TE-1210-1.15	1.15	3.0	1.15	38	3822-000146	TE-1210-2.1	2.10	3.0	2.10	38
3822-000110	TE-1210-0.25	0.25	3.0	0.25	38	3822-000129	TE-1210-1.2	1.20	3.0	1.20	38	3822-000147	TE-1210-2.2	2.20	3.0	2.20	38
3822-000111	TE-1210-0.3	0.30	3.0	0.30	38	3822-000130	TE-1210-1.25	1.25	3.0	1.25	38	3822-000148	TE-1210-2.3	2.30	3.0	2.30	38
3822-000112	TE-1210-0.35	0.35	3.0	0.35	38	3822-000131	TE-1210-1.3	1.30	3.0	1.30	38	3822-000149	TE-1210-2.4	2.40	3.0	2.40	38
3822-000113	TE-1210-0.4	0.40	3.0	0.40	38	3822-000132	TE-1210-1.35	1.35	3.0	1.35	38	3822-000150	TE-1210-2.5	2.50	3.0	2.50	38
3822-000114	TE-1210-0.45	0.45	3.0	0.45	38	3822-000133	TE-1210-1.4	1.40	3.0	1.40	38	3822-000151	TE-1210-2.6	2.60	3.0	2.60	38
3822-000115	TE-1210-0.5	0.50	3.0	0.50	38	3822-000134	TE-1210-1.45	1.45	3.0	1.45	38	3822-000152	TE-1210-2.7	2.70	3.0	2.70	38
3822-000116	TE-1210-0.55	0.55	3.0	0.55	38	3822-000135	TE-1210-1.5	1.50	3.0	1.50	38	3822-000153	TE-1210-2.8	2.80	3.0	2.80	38
3822-000117	TE-1210-0.6	0.60	3.0	0.60	38	3822-000136	TE-1210-1.55	1.55	3.0	1.55	38	3822-000154	TE-1210-2.9	2.90	3.0	2.90	38

1620 Series End Mills: Variable Pitch & Helix

GEOMETRY:

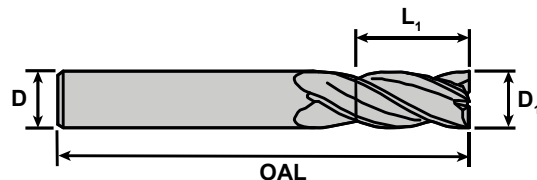
Flutes: 4
Helix: 35-45° (Variable)
Rake: 8°

TOLERANCE:

D1 under 1mm: +/- .01mm
D1 over 1mm: +/- .02mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



Item No.	Description	D ₁	L ₁	D	OAL	Item No.	Description	D ₁	L ₁	D	OAL
3904-000100	TE-1620-1	1.00	2.0	6.0	51	3904-000107	TE-1620-5	5.00	10.0	6.0	51
3904-000101	TE-1620-1.5	1.50	3.0	6.0	51	3904-000108	TE-1620-6	6.00	12.0	6.0	51
3904-000102	TE-1620-2	2.00	4.0	6.0	51	3904-000109	TE-1620-8	8.00	16.0	8.0	61
3904-000103	TE-1620-2.5	2.50	5.0	6.0	51	3904-000110	TE-1620-10	10.00	20.0	10.0	72
3904-000104	TE-1620-3	3.00	6.0	6.0	51	3904-000111	TE-1620-12	12.00	24.0	12.0	83
3904-000105	TE-1620-3.5	3.50	7.0	6.0	51	3904-000112	TE-1620-14	14.00	28.0	14.0	83
3904-000106	TE-1620-4	4.00	8.0	6.0	51	3904-000113	TE-1620-16	16.00	32.0	16.0	92

1621 Series End Mills: Variable Pitch & Helix

GEOMETRY:

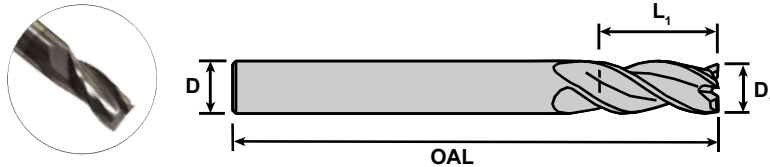
Flutes: 3
Helix: 35-45° (Variable)
Rake: 8°

TOLERANCE:

D1 under 1mm: +/- .01mm
D1 over 1mm: +/- .02mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
SOLO: Brass & Bronze
RICO: Titanium & Aluminum



Item No.	Description	D ₁	L ₁	D	OAL	Item No.	Description	D ₁	L ₁	D	OAL
3848-000100	TE-1621-1	1.00	2.0	6.0	51	3848-000107	TE-1621-5	5.00	10.0	6.0	51
3848-000101	TE-1621-1.5	1.50	3.0	6.0	51	3848-000108	TE-1621-6	6.00	12.0	6.0	51
3848-000102	TE-1621-2	2.00	4.0	6.0	51	3848-000109	TE-1621-8	8.00	16.0	8.0	61
3848-000103	TE-1621-2.5	2.50	5.0	6.0	51	3848-000110	TE-1621-10	10.00	20.0	10.0	72
3848-000104	TE-1621-3	3.00	6.0	6.0	51	3848-000111	TE-1621-12	12.00	24.0	12.0	83
3848-000105	TE-1621-3.5	3.50	7.0	6.0	51	3848-000112	TE-1621-14	14.00	28.0	14.0	83
3848-000106	TE-1621-4	4.00	8.0	6.0	51	3848-000113	TE-1621-16	16.00	32.0	16.0	92

1820 Series End Mills: Advanced Performance & Finish For Brass

GEOMETRY:

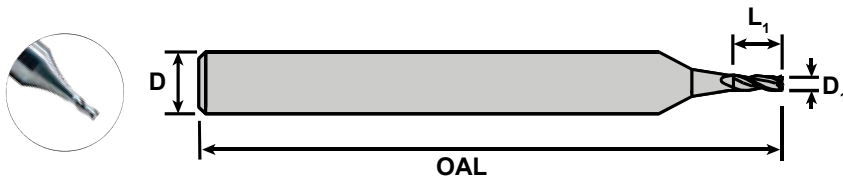
Flutes: 3
Helix: 30°
Rake: 8-10°

TOLERANCE:

D1 under 1mm: +/- .01mm
D1 over 1mm: +/- .02mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

DLC: Brass & Bronze



Item No.	Description	D ₁	D	L ₁	OAL
3823-000100	TE-1820-0.5	0.50	4.0	1.00	38
3823-000101	TE-1820-0.8	0.80	4.0	1.60	38
3823-000102	TE-1820-1	1.00	4.0	2.00	38
3823-000103	TE-1820-1.5	1.50	4.0	3.00	38
3823-000104	TE-1820-2	2.00	4.0	4.00	38
3823-000105	TE-1820-3	3.00	4.0	5.00	38

3000 Series HSC End Mills: For Stainless Steels

GEOMETRY:

Flutes(Z): 2-3
Helix: 42°
Rake: 14°

TOLERANCE:

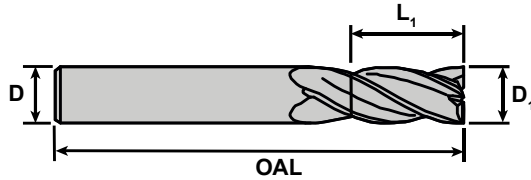
D1 under 1mm: +/-0.01mm
D1 over 1mm: +/-0.02mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless



Sharp Corners



Item No.	Description	D ₁	L ₁	D	OAL	Z	Item No.	Description	D ₁	L ₁	D	OAL	Z
3940-000100	TE-3000-0.3	0.30	0.6	6.0	57	2	3940-000115	TE-3000-1.8	1.80	3.6	6.0	57	3
3940-000101	TE-3000-0.4	0.40	0.8	6.0	57	2	3940-000116	TE-3000-1.9	1.90	3.8	6.0	57	3
3940-000102	TE-3000-0.5	0.50	1.0	6.0	57	2	3940-000117	TE-3000-2	2.00	4.0	6.0	57	3
3940-000103	TE-3000-0.6	0.60	1.2	6.0	57	2	3940-000118	TE-3000-2.1	2.10	2.2	6.0	57	3
3940-000104	TE-3000-0.7	0.70	1.4	6.0	57	2	3940-000119	TE-3000-2.2	2.20	2.4	6.0	57	3
3940-000105	TE-3000-0.8	0.80	1.6	6.0	57	2	3940-000120	TE-3000-2.3	2.30	4.6	6.0	57	3
3940-000106	TE-3000-0.9	0.90	1.8	6.0	57	2	3940-000121	TE-3000-2.4	2.40	4.8	6.0	57	3
3940-000107	TE-3000-1	1.00	2.0	6.0	57	2	3940-000122	TE-3000-2.5	2.50	5.0	6.0	57	3
3940-000108	TE-3000-1.1	1.10	2.2	6.0	57	2	3940-000127	TE-3000-3	3.00	6.0	6.0	57	3
3940-000109	TE-3000-1.2	1.20	2.4	6.0	57	2	3940-000128	TE-3000-3.5	3.50	7.0	6.0	57	3
3940-000110	TE-3000-1.3	1.30	2.6	6.0	57	3	3940-000129	TE-3000-4	4.00	8.0	6.0	57	3
3940-000111	TE-3000-1.4	1.40	2.8	6.0	57	3	3940-000131	TE-3000-5	5.00	10.0	6.0	57	3
3940-000112	TE-3000-1.5	1.50	3.0	6.0	57	3	3940-000132	TE-3000-6	6.00	12.0	8.0	63	3
3940-000113	TE-3000-1.6	1.60	3.2	6.0	57	3	3940-000133	TE-3000-8	8.00	16.0	10.0	72	3
3940-000114	TE-3000-1.7	1.70	3.4	6.0	57	3	3940-000134	TE-3000-10	10.00	20.0	10.0	72	3

3100 Series HSC End Mills: For Titanium

GEOMETRY:

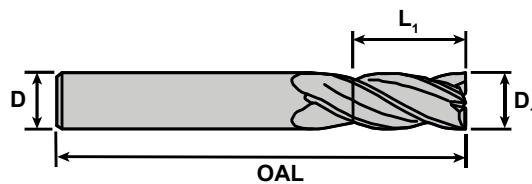
Flutes(Z): 3-4
Helix: 42°
Rake: 14°

TOLERANCE:

D1 under 1mm: +/-0.01mm
D1 over 1mm: +/-0.02mm
OAL: -0.02mm / -0.00mm
D Shank: h5

OPTIONAL COATINGS:

TRIO: Steel & Stainless
RICO: for Titanium



Item No.	Description	D ₁	L ₁	D	OAL	Z	Item No.	Description	D ₁	L ₁	D	OAL	Z
3946-000100	TE-3100-0.5	0.50	1.0	6.0	57	3	3946-000115	TE-3100-2	2.00	4.0	6.0	57	3
3946-000101	TE-3100-0.6	0.60	1.2	6.0	57	3	3946-000116	TE-3100-2.1	2.10	2.2	6.0	57	3
3946-000102	TE-3100-0.7	0.70	1.4	6.0	57	3	3946-000117	TE-3100-2.2	2.20	2.4	6.0	57	3
3946-000103	TE-3100-0.8	0.80	1.6	6.0	57	3	3946-000118	TE-3100-2.3	2.30	4.6	6.0	57	3
3946-000104	TE-3100-0.9	0.90	1.8	6.0	57	3	3946-000119	TE-3100-2.4	2.40	4.8	6.0	57	3
3946-000105	TE-3100-1	1.00	2.0	6.0	57	3	3946-000120	TE-3100-2.5	2.50	5.0	6.0	57	3
3946-000106	TE-3100-1.1	1.10	2.2	6.0	57	3	3946-000125	TE-3100-3	3.00	6.0	6.0	57	3
3946-000107	TE-3100-1.2	1.20	2.4	6.0	57	3	3946-000126	TE-3100-3.5	3.50	7.0	6.0	57	3
3946-000108	TE-3100-1.3	1.30	2.6	6.0	57	3	3946-000127	TE-3100-4	4.00	8.0	6.0	57	3
3946-000109	TE-3100-1.4	1.40	2.8	6.0	57	3	3946-000128	TE-3100-4.5	4.50	9.0	6.0	57	3
3946-000110	TE-3100-1.5	1.50	3.0	6.0	57	3	3946-000129	TE-3100-5	5.00	10.0	6.0	57	3
3946-000111	TE-3100-1.6	1.60	3.2	6.0	57	3	3946-000130	TE-3100-6	6.00	12.0	8.0	63	3
3946-000112	TE-3100-1.7	1.70	3.4	6.0	57	3	3946-000131	TE-3100-8	8.00	16.0	10.0	72	3
3946-000113	TE-3100-1.8	1.80	3.6	6.0	57	3	3946-000132	TE-3100-10	10.00	20.0	10.0	72	4
3946-000114	TE-3100-1.9	1.90	3.8	6.0	57	3	3946-000133	TE-3100-12	12.00	24.0	12.0	83	4