

2 Flute Micrograin Solid Carbide Single End Mills

Straight Shank • Square Nose • Right Hand • Spiral Flute • Center Cutting •

30° Helix Or 40° High Performance Helix

NEW LOWER PRICE
ON SELECT ORDER NUMBERS***SOLID**
CARBIDE

30° HELIX



40° HELIX

SIZE	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH	TTC USA MADE E1		G2		C2		E2		E1	
				30° HELIX [1504]	PRICE EACH	30° HELIX [GEM]	PRICE EACH	30° HELIX [121]	PRICE EACH	30° HELIX [121]	PRICE EACH	40° HELIX	PRICE EACH
1/64"	1/8"	.040"	1-1/2"	—	—	—	—	20-412-106	\$21.88	—	—	—	—
1/32	1/8	5/64	1-1/4	20-504-002	\$6.89	—	—	—	—	—	—	—	—
1/32	1/8	5/64	1-1/2	—	—	21-100-300	\$11.45	20-412-114	16.92	08-600-000	\$12.01	—	—
3/64	1/8	7/64	1-1/4	20-504-003	6.45	—	—	—	—	—	—	—	—
3/64	1/8	7/64	1-1/2	—	—	21-100-302	11.45	20-412-123	16.92	08-600-001	11.71	—	—
1/16	1/8	3/16	1-1/2	20-504-004	7.80	—	21-100-304	10.45	20-412-132	13.22	08-600-002	10.79	—
5/64	1/8	3/16	1-1/2	—	—	—	21-100-306	10.45	—	—	—	—	—
5/64	1/8	15/64	1-1/2	—	—	—	—	20-412-140	13.51	—	—	—	—
5/64	1/8	1/4	1-1/2	20-504-005	7.80	—	—	—	—	—	—	—	—
3/32	1/8	9/32	1-1/2	—	—	—	—	20-412-146	13.51	08-600-004	10.41	—	—
3/32	1/8	3/8	1-1/2	20-504-006	5.76	21-100-308	10.45	—	—	—	—	—	—
7/64	1/8	7/64	1-1/2	—	—	21-100-310	10.45	—	—	—	—	—	—
7/64	1/8	21/64	1-1/2	—	—	—	—	20-412-151	13.51	—	—	—	—
7/64	1/8	3/8	1-1/2	20-504-007	7.80	—	—	—	—	—	—	—	—
1/8	1/8	3/8	1-1/2	—	—	—	—	20-412-153	12.64	—	—	—	—
1/8	1/8	1/2	1-1/2	20-504-008	7.80	21-100-312	9.30	—	—	08-600-006	9.43	—	—
9/64	3/16	1/2	2	—	—	21-100-314	14.80	—	—	08-600-007	14.00	—	—
5/32	3/16	1/2	2	—	—	—	—	20-412-157	18.00	08-600-008	14.00	—	—
5/32	3/16	9/16	2	20-504-010	7.90	21-100-316	14.80	—	—	—	—	—	—
11/64	3/16	5/8	2	—	—	21-100-318	14.80	—	—	08-600-009	14.00	—	—
3/16	3/16	9/16	2	—	—	—	—	20-412-160	17.61	—	—	—	—
3/16	3/16	5/8	2	20-504-012	8.37	21-100-320	14.80	—	—	08-600-010	13.14	—	—
13/64	1/4	5/8	2-1/2	—	—	21-100-322	18.50	—	—	08-600-011	17.45	—	—
7/32	1/4	5/8	2-1/2	20-504-014	10.16	21-100-324	18.50	20-412-163	23.33	08-600-012	17.45	—	—
15/64	1/4	3/4	2-1/2	—	—	21-100-326	18.50	—	—	08-600-013	17.45	—	—
1/4	1/4	3/4	2-1/2	20-504-016	10.73	21-100-328	18.50	20-412-165	21.49	08-600-014	16.18	—	—
17/64	5/16	3/4	2-1/2	—	—	—	—	—	—	08-600-015	27.42	—	—
9/32	5/16	3/4	2-1/2	20-504-018	12.59	21-100-330	21.60	20-412-167	28.58	—	—	—	—
5/16	5/16	3/4	2-1/2	—	—	—	—	—	—	08-600-018	22.68	—	—
5/16	5/16	13/16	2-1/2	20-504-020	12.12	21-100-332	21.60	20-412-168	29.45	—	—	—	—
3/8	3/8	7/8	2-1/2	20-504-024	16.17	21-100-334	24.50	20-412-171	32.08	08-600-022	27.95	—	—
25/64	7/16	1	2-3/4	—	—	—	—	—	—	08-600-023	39.16	—	—
27/64	7/16	1	2-3/4	—	—	—	—	—	—	08-600-025*	24.92	—	—
7/16	7/16	1	2-1/2	—	—	21-100-336	38.70	—	—	—	—	—	—
7/16	7/16	1	2-3/4	20-504-028	22.52	—	—	20-412-174	45.69	—	—	—	—
1/2	1/2	1	3	20-504-032	26.04	21-100-338	42.60	20-412-176	53.47	08-600-030	44.25	—	—
9/16	9/16	1-1/8	3-1/2	—	—	—	—	20-412-178	102.08	—	—	—	—
9/16	9/16	1-1/4	3-1/2	20-504-036	44.26	21-100-340	68.10	—	—	—	—	—	—
5/8	5/8	1-1/4	3-1/2	20-504-040	48.11	21-100-342	78.25	20-412-179	102.08	08-600-032*	54.33	—	—
11/16	11/16	1-1/2	4	20-504-044	67.03	—	—	—	—	—	—	—	—
11/16	3/4	1-3/8	4	—	—	21-100-344	96.40	—	—	—	—	—	—
11/16	3/4	1-1/2	4	—	—	—	—	—	—	08-600-033*	89.62	—	—
3/4	3/4	1-1/2	4	20-504-048	67.03	21-100-346	119.30	20-412-182	147.77	08-600-034	114.00	—	—
7/8	7/8	1-1/2	4	—	—	21-100-348	165.40	20-412-185	244.02	—	—	—	—
7/8	7/8	1-3/4	4	—	—	—	—	—	—	08-600-035*	121.84	—	—
1	1	1-1/2	4	—	—	21-100-350	180.85	20-412-149	254.71	—	—	—	—

*Limited Supply & New Lower Price.

APPLICATIONS:

TTC Production - 30° Helix

- For use on soft materials only.

Micro 100

- High performance.

M.A. Ford

- For milling lower strength steels.

TTC Production - 40° Helix

- Center cutting to allow for 3 axis profile milling, plunging & ramping.
- For use on aluminum and non-ferrous materials

FEATURES:

Micro 100

- Can attain optimum cutting speeds and feeds, maximum rigidity and virtually no tool deflection, allowing for much higher metal removal rates with far fewer regrinds.

- 10% cobalt.

M.A. Ford

- Maximum fluted volume for chip removal.

TTC Production - 40° Helix

- Provides a higher shearing action with superb workpiece finish.
- Chip ejection is greatly improved and allows use of higher feeds and speeds on stainless steel and heat-treated materials.
- Higher rake and helix.

TOLERANCES:

TIR Maximum:	.005"
TTC PRODUCTION	
Shank Diameter:	-.0000" / -.0005"
Cutter Diameter	
1/32" thru 1/4":	+.000" / -.002"
9/32" thru 1":	+.000" / -.003"
MICRO 100	
Shank Diameter:	-.0001" / -.0003"
Cutter Diameter	
1/32" thru 1/4":	+.000" / -.002"
9/32" thru 1":	+.000" / -.003"
M.A. FORD	
Shank Diameter:	+.0000" / -.0005"
Cutter Diameter	
1/64":	+.000" / -.001"
1/32" thru 1/4":	+.000" / -.002"
9/32" thru 1":	+.000" / -.003"

Micro 100® proudly introduces M100 DEX Carbide Indexable tooling for turning, milling & boring. See pages 424-425.

MICRO 100
super carbide
M100 DEX