

# Onyx Tap CNC Style — Spiral Point Plug Taps

Taraud à entrée hélicoïdale

Machuelo con punta en espiral



- Manufactured To Table 302A Standards
- High Speed Steel
- Oxide/Nitride Surface Treatment

For general purpose tapping in a wide variety of materials up to 28Rc hardness.

Primarily designed for tapping through holes. The spiral point forces the chips ahead of the tap.

CNC Reduced Neck Design

## List No. 2101 – Fractional & Machine Screw

## List No. 2101M – Metric

**Steam Oxide over Nitride** increases wear resistance, reduces friction, acts as a lubricant, reduces galling and chip welding, improves chip flow and increases tap lubricant retention.

**Reduce Neck Design and Shorter Thread Length** for increased coolant flow to the cutting edge, enhanced chip evacuation and reduced contact between tap and workpiece.

## List No. 2101 – Fractional & Machine Screw

SIZE	THREAD TYPE	PITCH DIA. LIMIT	NO. OF FLUTES	THREAD LENGTH	NECK LENGTH	OAL	EDP NO.
4-40	NC	H2	2	.313	.250	1-7/8	34700
6-32	NC	H3	2	.375	.313	2	34701
8-32	NC	H3	2	.375	.375	2-1/8	34702
8-32	NC	H3	3	.375	.375	2-1/8	34703
10-24	NC	H3	2	.500	.375	2-3/8	34704
10-24	NC	H3	3	.500	.375	2-3/8	34705
10-32	NF	H3	2	.500	.375	2-3/8	34706
10-32	NF	H3	3	.500	.375	2-3/8	34707
12-24	NC	H3	3	.500	.375	2-3/8	34708
12-28	NF	H3	3	.500	.375	2-3/8	34709
1/4-20	NC	H3	2	.625	.375	2-1/2	34710
1/4-20	NC	H3	3	.625	.375	2-1/2	34711
1/4-28	NF	H3	2	.625	.375	2-1/2	34712
1/4-28	NF	H3	3	.625	.375	2-1/2	34713
5/16-18	NC	H3	3	.688	.438	2-23/32	34714
5/16-24	NF	H3	3	.688	.438	2-23/32	34715
3/8-16	NC	H3	3	.750	.500	2-15/16	34716
3/8-24	NF	H3	3	.750	.500	2-15/16	34717
7/16-14	NC	H3	3	.875	.563	3-5/32	34718
7/16-20	NF	H3	3	.875	.563	3-5/32	34719
1/2-13	NC	H3	3	.938	.719	3-3/8	34720
1/2-20	NF	H3	3	.938	.719	3-3/8	34721
9/16-12	NC	H3	4	1.000	.673	3-19/32	34722
9/16-18	NF	H3	4	1.000	.673	3-19/32	34723
5/8-11	NC	H3	4	1.125	.673	3-13/16	34724
5/8-18	NF	H3	4	1.125	.673	3-13/16	34725
3/4-10	NC	H3	4	1.219	.766	4-1/4	34726
3/4-16	NF	H3	4	1.219	.766	4-1/4	34727
7/8-9	NC	H4	4	1.344	.875	4-11/16	34728
7/8-14	NF	H4	4	1.344	.875	4-11/16	34729
1-8	NC	H4	4	1.500	1.000	5-1/8	34730
1-12	NF	H4	4	1.500	1.000	5-1/8	34731
1-1/8-7	NC	H4	4	1.719	.843	5-7/16	34732
1-1/8-12	NF	H4	4	1.719	.843	5-7/16	34733
1-1/4-7	NC	H4	4	1.719	.843	5-3/4	34734
1-1/4-12	NF	H4	4	1.719	.843	5-3/4	34735
1-3/8-6	NC	H4	4	2.000	1.000	6-1/16	34736
1-3/8-12	NF	H4	4	2.000	1.000	6-1/16	34737
1-1/2-6	NC	H4	6	2.000	1.000	6-3/8	34738
1-1/2-12	NF	H4	6	2.000	1.000	6-3/8	34739

## List No. 2101M – Metric

SIZE	PITCH	PITCH DIA. LIMIT	NO. OF FLUTES	THREAD LENGTH	NECK LENGTH	OAL	EDP NO.
M2	0.4	D3	2	.313	.313	1-15/16	34800
M2.5	0.45	D3	2	.313	.313	1-15/16	34801
M3	0.5	D3	2	.313	.313	1-15/16	34802
M3.5	0.6	D4	2	.375	.313	2	34803
M4	0.7	D4	3	.375	.375	2-1/8	34804
M5	0.8	D4	3	.500	.375	2-3/8	34805
M6	1	D5	3	.625	.375	2-1/2	34806
M7	1	D5	3	.688	.438	2-23/32	34807
M8	1	D5	3	.688	.438	2-23/32	34808
M8	1.25	D5	3	.688	.438	2-23/32	34809
M10	1.25	D5	3	.750	.500	2-15/16	34810
M10	1.5	D6	3	.750	.500	2-15/16	34811
M12	1.25	D5	3	.938	.719	3-3/8	34812
M12	1.75	D6	3	.938	.719	3-3/8	34813
M14	1.5	D6	4	1.000	.673	3-19/32	34814
M14	2	D7	4	1.000	.673	3-19/32	34815
M16	1.5	D6	4	1.125	.673	3-13/16	34816
M16	2	D7	4	1.125	.673	3-13/16	34817
M18	1.5	D6	4	1.125	.719	4-1/32	34818
M18	2.5	D7	4	1.125	.719	4-1/32	34819
M20	1.5	D6	4	1.188	.812	4-15/32	34820
M20	2.5	D7	4	1.188	.812	4-15/32	34821
M22	1.5	D6	4	1.188	1.031	4-11/16	34822
M22	2.5	D7	4	1.188	1.031	4-11/16	34823
M24	1.5	D7	4	1.422	.797	4-29/32	34824
M24	3	D8	4	1.422	.797	4-29/32	34825

# Onyx Tap

## CNC Style — Spiral Flute Semi-Bottoming Taps

- Manufactured To Table 302A Standards
- High Speed Steel
- Oxide/Nitride Surface Treatment

For general purpose tapping in a wide variety of materials up to 28Rc hardness.

Primarily designed for tapping blind holes. The spiral flutes draw the chips out of the hole.

CNC Reduced Neck Design

Taraud à gorges hélicoïdales  
Machuelo de roscar con gavilanes en espiral



### List No. 2102 – Fractional & Machine Screw

### List No. 2102M – Metric

**Steam Oxide over Nitride** increases wear resistance, reduces friction, acts as a lubricant, reduces galling and chip welding, improves chip flow and increases tap lubricant retention.

**Reduce Neck Design and Shorter Thread Length** for increased coolant flow to the cutting edge, enhanced chip evacuation and reduced contact between tap and workpiece.

### List No. 2102 – Fractional & Machine Screw

SIZE	THREAD TYPE	PITCH DIA. LIMIT	NO. OF FLUTES	THREAD LENGTH	NECK LENGTH	OAL	EDP NO.
4-40	NC	H2	3	.236	.327	1-7/8	34750
6-32	NC	H3	3	.236	.452	2	34751
8-32	NC	H3	3	.236	.514	2-1/8	34752
10-24	NC	H3	3	.354	.521	2-3/8	34753
10-32	NF	H3	3	.354	.521	2-3/8	34754
12-24	NC	H3	3	.354	.521	2-3/8	34755
12-28	NF	H3	3	.354	.521	2-3/8	34756
1/4-20	NC	H3	3	.433	.567	2-1/2	34757
1/4-28	NF	H3	3	.433	.567	2-1/2	34758
5/16-18	NC	H3	3	.472	.653	2-23/32	34759
5/16-24	NF	H3	3	.472	.653	2-23/32	34760
3/8-16	NC	H3	3	.551	.699	2-15/16	34761
3/8-24	NF	H3	3	.551	.699	2-15/16	34762
7/16-14	NC	H3	3	.591	.847	3-5/32	34763
7/16-20	NF	H3	3	.591	.847	3-5/32	34764
1/2-13	NC	H3	3	.630	1.026	3-3/8	34765
1/2-20	NF	H3	3	.630	1.026	3-3/8	34766
9/16-12	NC	H3	3	.690	.983	3-19/32	34767
9/16-18	NF	H3	3	.690	.983	3-19/32	34768
5/8-11	NC	H3	3	.745	1.052	3-13/16	34769
5/8-18	NF	H3	3	.745	1.052	3-13/16	34770
3/4-10	NC	H3	4	.820	1.165	4-1/4	34771
3/4-16	NF	H3	4	.820	1.165	4-1/4	34772
7/8-9	NC	H4	4	.911	1.308	4-11/16	34773
7/8-14	NF	H4	4	.911	1.308	4-11/16	34774
1-8	NC	H4	4	1.025	1.475	5-1/8	34775
1-12	NF	H4	4	1.025	1.475	5-1/8	34776
1-1/8-7	NC	H4	4	1.143	1.419	5-7/16	34777
1-1/8-12	NF	H4	4	1.143	1.419	5-7/16	34778
1-1/4-7	NC	H4	4	1.143	1.419	5-3/4	34779
1-1/4-12	NF	H4	4	1.143	1.419	5-3/4	34780
1-3/8-6	NC	H4	4	1.333	1.667	6-1/16	34781
1-3/8-12	NF	H4	4	1.333	1.667	6-1/16	34782
1-1/2-6	NC	H4	4	1.333	1.667	6-3/8	34783
1-1/2-12	NF	H4	4	1.333	1.667	6-3/8	34784

### List No. 2102M – Metric

SIZE	PITCH	PITCH DIA. LIMIT	NO. OF FLUTES	THREAD LENGTH	NECK LENGTH	OAL	EDP NO.
M3	0.5	D3	3	.236	.389	1-15/16	34840
M3.5	0.6	D4	3	.236	.452	2	34841
M4	0.7	D4	3	.236	.514	2-1/8	34842
M5	0.8	D4	3	.354	.521	2-3/8	34843
M6	1	D5	3	.433	.567	2-1/2	34844
M7	1	D5	3	.472	.653	2-23/32	34845
M8	1	D5	3	.472	.653	2-23/32	34846
M8	1.25	D5	3	.472	.653	2-23/32	34847
M10	1.25	D5	3	.551	.699	2-15/16	34848
M10	1.5	D6	3	.551	.699	2-15/16	34849
M12	1.25	D5	3	.630	1.026	3-3/8	34850
M12	1.75	D6	3	.630	1.026	3-3/8	34851
M14	1.5	D6	3	.690	.983	3-19/32	34852
M14	2	D7	3	.690	.983	3-19/32	34853
M16	1.5	D6	3	.745	1.052	3-13/16	34854
M16	2	D7	3	.745	1.052	3-13/16	34855
M18	1.5	D6	4	.813	.983	4-1/32	34856
M18	2.5	D7	4	.813	.983	4-1/32	34857
M20	1.5	D6	4	.790	1.210	4-15/32	34858
M20	2.5	D7	4	.790	1.210	4-15/32	34859
M22	1.5	D6	4	.790	1.428	4-11/16	34860
M22	2.5	D7	4	.790	1.428	4-11/16	34861
M24	1.5	D7	4	.940	1.279	4-29/32	34862
M24	3	D8	4	.940	1.279	4-29/32	34863