GOLDTWIST™

Bodies:
- 1.5xD, 3xD, 5xD and 8xD
  - Weldon & Cylindrical Shanks
- 12xD
  - Cylindrical Shank Only

Tips:
- 6.0-25.9 mm
- 0.2362–1.0197"

Geometries:
- TPA - Steel
- TMA - Stainless Steel
- TKA - Cast Iron
- TNA - Non-Ferrous
- TPC (Self-Centering) - Steel/Cast Iron

Grades:
- IN2505
- IN05S

Applications:
- Die & Mold, General Purpose, Aerospace, Automotive, Shipbuilding, Heat Exchangers, Agriculture

Ingersoll's new Gold Twist series of quick change drill tips & bodies have been gaining popularity throughout North America with proven performance and productivity gains. In light of this, we are pleased to announce several areas of expansion:

Body Expansion:
We now offer 1.5xD bodies to complement our existing 3xD, 5xD, 8xD and 12xD bodies. These new, stubbier drills allow the end user to make short, accurate holes with minimum overhang. This promotes maximum stability, performance and tool life. In addition, the 1.5xD bodies are recommended for drilling a perfectly matched pilot hole for deeper 8xD and 12xD applications (if not using TPC self-centering geometry tip).

A full line-up of cylindrical shank bodies in 1.5xD, 3xD, 5xD, 8xD and 12xD provides improved performance and accuracy when mated with a hydraulic or shrink fit tool holder, particularly in applications over 5xD.

Expanded range of body diameters from 6.0–25.9 mm. Please note, 6.0 and 6.5 mm bodies are available in 1.5, 3, 5 and 8xD L/D ratios).

New Tip Sizes:
Ingersoll can better meet the end-users requirements with expanded tip diameters. Available now: 6.0–25.9 mm in P, M & K geometries. See page 13 for the N geometry sizes.

Geometries:
P Geometry (TPA) - for steel and general purpose use.
M Geometry (TMA) – for stainless steel and high-temp alloys.
K Geometry (TKA) – for cast iron.
N Geometry (TNA) - for non-ferrous.
NEW Self-Centering Geometry (TPC) - for steel and cast iron.

P Geometry | M Geometry | K Geometry | N Geometry | Self-Centering Geometry

INDUSTRY 4.0 PRODUCT ANNOUNCEMENT •UPDATE• 2023

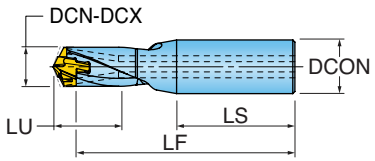
Member IMC Group Ingersoll Cutting Tools

GOLDTWIST™ CYLINDRICAL SHANKS

1.5XD CYLINDRICAL SHANKS

Drilling

Coolant



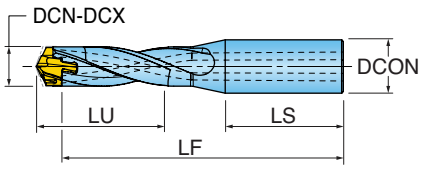
1.5xD	DCN-DCX Tip Diameter Range		LU Usable Length	DCON Shank Diameter	LS Shank Length	LF Functional Length	SSC Pocket Size	Key
TD0600009S4R01	0.2362	0.2520	0.35	0.500	1.77	2.520	6	KTD6.0-D9.9
TD0650010S4R01	0.2560	0.2716	0.39	0.500	1.77	2.550	6.5	KTD6.0-D9.9
TD0700010S4R01	0.2756	0.2913	0.43	0.500	1.77	2.580	7	KTD6.0-D9.9
TD0750011S4R01	0.2953	0.3110	0.44	0.500	1.77	2.610	7.5	KTD6.0-D9.9
TD0800012S4R01	0.3150	0.3504	0.47	0.500	1.77	2.660	8	KTD6.0-D9.9
TD0900013S4R01	0.3543	0.3898	0.55	0.500	1.77	2.690	9	KTD6.0-D9.9
TD1000015S6R01	0.3937	0.4291	0.59	0.625	1.89	2.880	10	KTD10.0-19.9
TD1100016S6R01	0.4331	0.4685	0.67	0.625	1.89	2.930	11	KTD10.0-19.9
TD1200018S6R01	0.4724	0.5079	0.71	0.625	1.89	2.990	12	KTD10.0-19.9
TD1300019S6R01	0.5118	0.5472	0.79	0.625	1.89	3.050	13	KTD10.0-19.9
TD1400021S6R01	0.5512	0.5866	0.83	0.625	1.89	3.190	14	KTD10.0-19.9
TD1500022S7R01	0.5906	0.6260	0.91	0.750	1.97	3.450	15	KTD10.0-19.9
TD1600024S7R01	0.6299	0.6654	0.94	0.750	1.97	3.540	16	KTD10.0-19.9
TD1700025S7R01	0.6693	0.7047	1.02	0.750	1.97	3.640	17	KTD10.0-19.9
TD1800027S1R01	0.7087	0.7441	1.06	1.000	2.20	3.980	18	KTD10.0-19.9
TD1900028S1R01	0.7480	0.7835	1.14	1.000	2.20	4.070	19	KTD10.0-19.9
TD2000030S1R01	0.7874	0.8228	1.18	1.000	2.20	4.170	20	KTD20.0-D26.9
TD2100031S1R01	0.8268	0.8622	1.26	1.000	2.20	4.270	21	KTD20.0-D26.9
TD2200033S1R01	0.8661	0.9016	1.30	1.000	2.20	4.370	22	KTD20.0-D26.9
TD2300034S9R01	0.9055	0.9409	1.38	1.250	2.36	4.630	23	KTD20.0-D26.9
TD2400036S9R01	0.9449	0.9803	1.42	1.250	2.36	4.720	24	KTD20.0-D26.9
TD2500037S9R01	0.9843	1.0197	1.50	1.250	2.36	4.820	25	KTD20.0-D26.9

GOLDTWIST™ CYLINDRICAL SHANKS

3XD CYLINDRICAL SHANKS

Drilling

Coolant



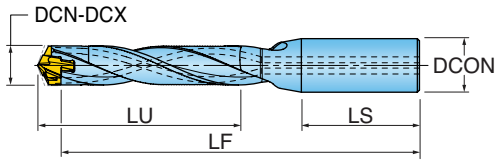
3xD	DCN-DCX Tip Diameter Range		LU Usable Length	DCON Shank Diameter	LS Shank Length	LF Functional Length	SSC Pocket Size	Key
TD0600018S4R01	0.2362	0.2520	0.71	0.500	1.77	2.870	6	KTD6.0-D9.9
TD0650020S4R01	0.2560	0.2716	0.79	0.500	1.77	2.930	6.5	KTD6.0-D9.9
TD0700021S4R01	0.2756	0.2913	0.83	0.500	1.77	2.990	7	KTD6.0-D9.9
TD0750022S4R01	0.2953	0.3110	0.89	0.500	1.77	3.050	7.5	KTD6.0-D9.9
TD0800024S4R01	0.3150	0.3307	0.94	0.500	1.77	3.110	8	KTD6.0-D9.9
TD0850025S4R01	0.3346	0.3504	1.00	0.500	1.77	3.170	8.5	KTD6.0-D9.9
TD0900027S4R01	0.3543	0.3701	1.06	0.500	1.77	3.230	9	KTD6.0-D9.9
TD0950028S4R01	0.3740	0.3898	1.12	0.500	1.77	3.280	9.5	KTD6.0-D9.9
TD1000030S6R01	0.3937	0.4094	1.18	0.625	1.89	3.470	10	KTD10.0-19.9
TD1050031S6R01	0.4134	0.4291	1.26	0.625	1.89	3.530	10.5	KTD10.0-19.9
TD1100033S6R01	0.4331	0.4488	1.30	0.625	1.89	3.580	11	KTD10.0-19.9
TD1150034S6R01	0.4528	0.4685	1.38	0.625	1.89	3.640	11.5	KTD10.0-19.9
TD1200036S6R01	0.4724	0.4882	1.42	0.625	1.89	3.700	12	KTD10.0-19.9
TD1250037S6R01	0.4921	0.5079	1.46	0.625	1.89	3.760	12.5	KTD10.0-19.9
TD1300039S6R01	0.5118	0.5276	1.54	0.625	1.89	3.820	13	KTD10.0-19.9
TD1350040S6R01	0.5315	0.5472	1.61	0.625	1.89	3.880	13.5	KTD10.0-19.9
TD1400042S6R01	0.5512	0.5669	1.65	0.625	1.89	4.010	14	KTD10.0-19.9
TD1450043S6R01	0.5709	0.5866	1.73	0.625	1.89	4.070	14.5	KTD10.0-19.9
TD1500045S7R01	0.5906	0.6260	1.77	0.750	1.97	4.330	15	KTD10.0-19.9
TD1600048S7R01	0.6299	0.6654	1.89	0.750	1.97	4.490	16	KTD10.0-19.9
TD1700051S7R01	0.6693	0.7047	2.01	0.750	1.97	4.650	17	KTD10.0-19.9
TD1800054S1R01	0.7087	0.7441	2.13	1.000	2.20	5.040	18	KTD10.0-19.9
TD1900057S1R01	0.7480	0.7835	2.24	1.000	2.20	5.200	19	KTD10.0-19.9
TD2000060S1R01	0.7874	0.8228	2.36	1.000	2.20	5.350	20	KTD20.0-D26.9
TD2100063S1R01	0.8268	0.8622	2.48	1.000	2.20	5.510	21	KTD20.0-D26.9
TD2200066S1R01	0.8661	0.9016	2.60	1.000	2.20	5.670	22	KTD20.0-D26.9
TD2300069S9R01	0.9055	0.9409	2.72	1.250	2.36	5.990	23	KTD20.0-D26.9
TD2400072S9R01	0.9449	0.9803	2.83	1.250	2.36	6.140	24	KTD20.0-D26.9
TD2500075S9R01	0.9843	1.0197	2.95	1.250	2.36	6.300	25	KTD20.0-D26.9

GOLDTWIST™ CYLINDRICAL SHANKS

5XD CYLINDRICAL SHANKS

Drilling

Coolant



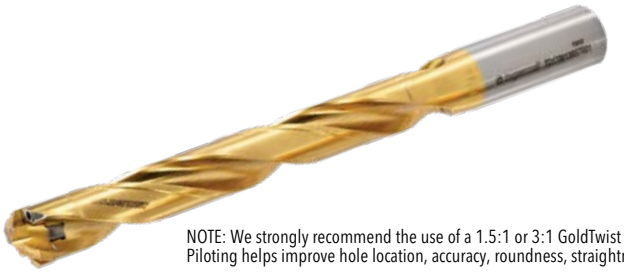
5xD	DCN-DCX Tip Diameter Range		LU Usable Length	DCON Shank Diameter	LS Shank Length	LF Functional Length	SSC Pocket Size	Key
TD0600030S4R01	0.2362	0.2520	1.18	0.500	1.77	3.340	6	KTD6.0-D9.9
TD0650033S4R01	0.2560	0.2716	1.30	0.500	1.77	3.440	6.5	KTD6.0-D9.9
TD0700035S4R01	0.2756	0.2913	1.38	0.500	1.77	3.540	7	KTD6.0-D9.9
TD0750060S4R01	0.2953	0.3110	1.48	0.500	1.77	3.640	7.5	KTD6.0-D9.9
TD0800040S4R01	0.3150	0.3307	1.57	0.500	1.77	3.740	8	KTD6.0-D9.9
TD0850042S4R01	0.3346	0.3504	1.67	0.500	1.77	3.840	8.5	KTD6.0-D9.9
TD0900045S4R01	0.3543	0.3701	1.77	0.500	1.77	3.930	9	KTD6.0-D9.9
TD0950047S4R01	0.3740	0.3898	1.87	0.500	1.77	4.030	9.5	KTD6.0-D9.9
TD1000050S6R01	0.3937	0.4094	1.97	0.625	1.89	4.260	10	KTD10.0-19.9
TD1050052S6R01	0.4134	0.4291	2.09	0.625	1.89	4.350	10.5	KTD10.0-19.9
TD1100055S6R01	0.4331	0.4488	2.17	0.625	1.89	4.450	11	KTD10.0-19.9
TD1150057S6R01	0.4528	0.4685	2.28	0.625	1.89	4.550	11.5	KTD10.0-19.9
TD1200060S6R01	0.4724	0.4882	2.36	0.625	1.89	4.640	12	KTD10.0-19.9
TD1250062S6R01	0.4921	0.5079	2.44	0.625	1.89	4.740	12.5	KTD10.0-19.9
TD1300065S6R01	0.5118	0.5276	2.56	0.625	1.89	4.840	13	KTD10.0-19.9
TD1350067S6R01	0.5315	0.5472	2.68	0.625	1.89	4.940	13.5	KTD10.0-19.9
TD1400070S6R01	0.5512	0.5669	2.76	0.625	1.89	5.120	14	KTD10.0-19.9
TD1450072S6R01	0.5709	0.5866	2.87	0.625	1.89	5.220	14.5	KTD10.0-19.9
TD1500075S7R01	0.5906	0.6260	2.95	0.750	1.97	5.520	15	KTD10.0-19.9
TD1600080S7R01	0.6299	0.6654	3.15	0.750	1.97	5.750	16	KTD10.0-19.9
TD1700085S7R01	0.6693	0.7047	3.35	0.750	1.97	5.990	17	KTD10.0-19.9
TD1800090S1R01	0.7087	0.7441	3.54	1.000	2.20	6.460	18	KTD10.0-19.9
TD1900095S1R01	0.7480	0.7835	3.74	1.000	2.20	6.690	19	KTD10.0-19.9
TD2000100S1R01	0.7874	0.8228	3.94	1.000	2.20	6.920	20	KTD20.0-D26.9
TD2100105S1R01	0.8268	0.8622	4.13	1.000	2.20	7.160	21	KTD20.0-D26.9
TD2200110S1R01	0.8661	0.9016	4.33	1.000	2.20	7.400	22	KTD20.0-D26.9
TD2300115S9R01	0.9055	0.9409	4.53	1.250	2.36	7.800	23	KTD20.0-D26.9
TD2400120S9R01	0.9449	0.9803	4.72	1.250	2.36	8.030	24	KTD20.0-D26.9
TD2500125S9R01	0.9843	1.0197	4.92	1.250	2.36	8.270	25	KTD20.0-D26.9

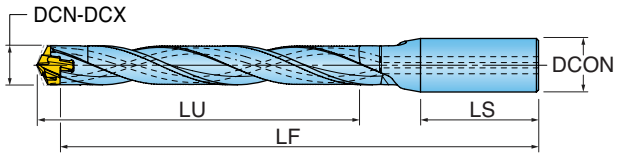
GOLDTWIST™ CYLINDRICAL SHANKS

8XD CYLINDRICAL SHANKS

Drilling

Coolant





NOTE: We strongly recommend the use of a 1.5:1 or 3:1 GoldTwist drill of the same diameter to pilot if not using TPC (self-centering geometry). Piloting helps improve hole location, accuracy, roundness, straightness and surface finish.

8xD	DCN-DCX Tip Diameter Range		LU Usable Length	DCON Shank Diameter	LS Shank Length	LF Functional Length	SSC Pocket Size	Key
TD0600048S4R01	0.2362	0.2520	1.93	0.500	1.77	4.056	6	KTD6.0-D9.9
TD0650052S4R01	0.2560	0.2716	2.09	0.500	1.77	4.213	6.5	KTD6.0-D9.9
TD0700056S4R01	0.2756	0.2913	2.20	0.500	1.77	4.370	7	KTD6.0-D9.9
TD0750060S4R01	0.2953	0.3110	2.28	0.500	1.77	4.530	7.5	KTD6.0-D9.9
TD0800064S4R01	0.3150	0.3307	2.52	0.500	1.77	4.690	8	KTD6.0-D9.9
TD0850068S4R01	0.3346	0.3504	2.68	0.500	1.77	4.880	8.5	KTD6.0-D9.9
TD0900072S4R01	0.3543	0.3701	2.83	0.500	1.77	5.000	9	KTD6.0-D9.9
TD0950076S4R01	0.3740	0.3898	2.99	0.500	1.77	5.190	9.5	KTD6.0-D9.9
TD1000080S6R01	0.3937	0.4094	3.15	0.625	1.89	5.440	10	KTD10.0-19.9
TD1050084S6R01	0.4134	0.4291	3.31	0.625	1.89	5.590	10.5	KTD10.0-19.9
TD1100088S6R01	0.4331	0.4488	3.46	0.625	1.89	5.750	11	KTD10.0-19.9
TD1150092S6R01	0.4528	0.4685	3.62	0.625	1.89	5.910	11.5	KTD10.0-19.9
TD1200096S6R01	0.4724	0.4882	3.78	0.625	1.89	6.060	12	KTD10.0-19.9
TD1250100S6R01	0.4921	0.5079	3.94	0.625	1.89	6.220	12.5	KTD10.0-19.9
TD1300104S6R01	0.5118	0.5276	4.09	0.625	1.89	6.380	13	KTD10.0-19.9
TD1350108S6R01	0.5315	0.5472	4.25	0.625	1.89	6.530	13.5	KTD10.0-19.9
TD1400112S6R01	0.5512	0.5669	4.41	0.625	1.89	6.770	14	KTD10.0-19.9
TD1450116S6R01	0.5709	0.5866	4.57	0.625	1.89	6.930	14.5	KTD10.0-19.9
TD1500120S7R01	0.5906	0.6260	4.72	0.750	1.97	7.290	15	KTD10.0-19.9
TD1600128S7R01	0.6299	0.6654	5.04	0.750	1.97	7.640	16	KTD10.0-19.9
TD1700136S7R01	0.6693	0.7047	5.35	0.750	1.97	7.990	17	KTD10.0-19.9
TD1800144S1R01	0.7087	0.7441	5.67	1.000	2.20	8.580	18	KTD10.0-19.9
TD1900152S1R01	0.7480	0.7835	5.98	1.000	2.20	8.940	19	KTD10.0-19.9
TD2000160S1R01	0.7874	0.8228	6.30	1.000	2.20	9.280	20	KTD20.0-D26.9
TD2100168S1R01	0.8268	0.8622	6.61	1.000	2.20	9.640	21	KTD20.0-D26.9
TD2200176S1R01	0.8661	0.9016	6.93	1.000	2.20	10.000	22	KTD20.0-D26.9
TD2300184S9R01	0.9055	0.9409	7.24	1.250	2.36	10.520	23	KTD20.0-D26.9
TD2400192S9R01	0.9449	0.9803	7.56	1.250	2.36	10.870	24	KTD20.0-D26.9
TD2500200S9R01	0.9843	1.0197	7.87	1.250	2.36	11.220	25	KTD20.0-D26.9

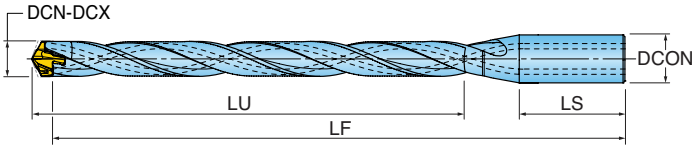
NOTE: PLEASE SEE PAGE 19 FOR RECOMMENDED PILOTING PROCEDURE FOR 8XD AND 12XD APPLICATIONS IF NOT USING TPC (SELF-CENTERING) GEOMETRY.

GOLDTWIST™ CYLINDRICAL SHANKS

12XD CYLINDRICAL SHANKS

Drilling

Coolant



NOTE: We strongly recommend the use of a 1.5:1 or 3:1 GoldTwist drill of the same diameter to pilot if not using TPC (self-centering geometry). Piloting helps improve hole location, accuracy, roundness, straightness and surface finish.

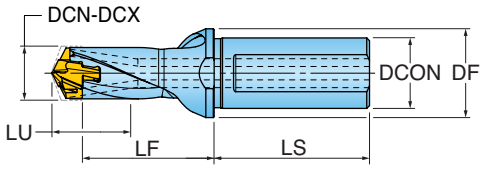
12x1	DCN-DCX Tip Diameter Range (mm)	DCN-DCX Tip Diameter Range (inch)	LU Usable Length	DCON Shank Diameter	LS Shank Length	LF Functional Length	SSC Pocket Size	Key
TD0800096S4R01	8.0-8.4	0.3150 - 0.3307	3.63	0.500	1.77	5.940	8	KTD6.0-9.9
TD0850102S4R01	8.5-8.9	0.3346 - 0.3503	4.08	0.500	1.77	6.180	8.5	KTD6.0-9.9
TD0900108S4R01	9.0-9.4	0.3543 - 0.3700	4.32	0.500	1.77	6.420	9	KTD6.0-9.9
TD0950114S4R01	9.5-9.9	0.3740 - 0.3897	4.56	0.500	1.77	6.650	9.5	KTD6.0-9.9
TD1000120S6R01	10.0-10.4	0.3937 - 0.4094	4.80	0.625	1.89	7.010	10	KTD10.0-19.9
TD1050126S6R01	10.5-10.9	0.4133 - 0.4291	5.04	0.625	1.89	7.200	10.5	KTD10.0-19.9
TD1100132S6R01	11.0-11.4	0.4330 - 0.4488	5.28	0.625	1.89	7.480	11	KTD10.0-19.9
TD1150138S6R01	11.5-11.9	0.4527 - 0.4685	5.52	0.625	1.89	7.720	11.5	KTD10.0-19.9
TD1200144S6R01	12.0-12.4	0.4724 - 0.4882	5.67	0.625	1.89	7.950	12	KTD10.0-19.9
TD1250150S6R01	12.5-12.9	0.4921 - 0.5079	5.91	0.625	1.89	8.190	12.5	KTD10.0-19.9
TD1300156S6R01	13.0-13.4	0.5118 - 0.5276	6.14	0.625	1.89	8.400	13	KTD10.0-19.9
TD1350162S6R01	13.5-13.9	0.5315 - 0.5472	6.38	0.625	1.89	8.640	13.5	KTD10.0-19.9
TD1400168S6R01	14.0-14.4	0.5512 - 0.5669	6.61	0.625	1.89	8.970	14	KTD10.0-19.9
TD1450174S6R01	14.5-14.9	0.5709 - 0.5866	6.85	0.625	1.89	9.210	14.5	KTD10.0-19.9
TD1500180S7R01	15.0-15.9	0.5906 - 0.6260	7.09	0.750	1.97	9.900	15	KTD10.0-19.9
TD1600192S7R01	16.0-16.9	0.6299 - 0.6654	7.56	0.750	1.97	10.420	16	KTD10.0-19.9
TD1700204S7R01	17.0-17.9	0.6693 - 0.7047	8.03	0.750	1.97	10.950	17	KTD10.0-19.9
TD1800216S1R01	18.0-18.9	0.7087 - 0.7441	8.50	1.000	2.20	11.720	18	KTD10.0-19.9
TD1900228S1R01	19.0-19.9	0.7480 - 0.7835	8.98	1.000	2.20	12.250	19	KTD10.0-19.9
TD2000240S1R01	20.0-20.9	0.7874 - 0.8228	9.45	1.000	2.20	12.770	20	KTD20.0-26.9
TD2100252S1R01	21.0-21.9	0.8268 - 0.8622	9.92	1.000	2.20	13.300	21	KTD20.0-26.9
TD2200264S1R01	22.0-22.9	0.8661 - 0.9016	10.39	1.000	2.20	13.830	22	KTD20.0-26.9
TD2300276S9R01	23.0-23.9	0.9055 - 0.9409	10.87	1.250	2.36	14.520	23	KTD20.0-26.9
TD2400288S9R01	24.0-24.9	0.9449 - 0.9803	11.34	1.250	2.36	15.040	24	KTD20.0-26.9
TD2500300S9R01	25.0-25.9	0.9843 - 1.0197	11.81	1.250	2.36	15.570	25	KTD20.0-26.9

NOTE: PLEASE SEE PAGE 19 FOR RECOMMENDED PILOTING PROCEDURE FOR 8XD AND 12XD APPLICATIONS IF NOT USING TPC (SELF-CENTERING) GEOMETRY.

1.5XD UNIVERSAL SHANKS

Drilling

Coolant



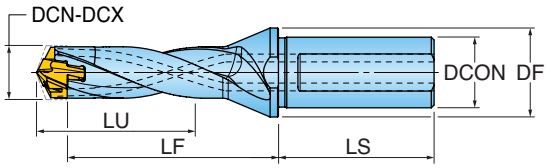
1.5xD	DCN-DCX Tip Diameter Range		LU Usable Length	DCON Shank Diameter	DF Flange Diameter	LS Shank Length	LF Functional Length	SSC Pocket Size	Key
TD0600009B9R01	0.2362	0.2520	0.35	0.500	0.63	1.77	0.748	6	KTD6.0-D9.9
TD0650010B9R01	0.2560	0.2716	0.39	0.500	0.63	1.77	0.781	6.5	KTD6.0-D9.9
TD0700010B9R01	0.2756	0.2913	0.43	0.500	0.63	1.77	0.809	7	KTD6.0-D9.9
TD0750011B9R01	0.2953	0.3110	0.44	0.500	0.63	1.77	0.839	7.5	KTD6.0-D9.9
TD0800012B9R01	0.3150	0.3504	0.47	0.500	0.63	1.77	0.887	8	KTD6.0-D9.9
TD0900013B9R01	0.3543	0.3898	0.55	0.500	0.63	1.77	0.922	9	KTD6.0-D9.9
TD1000015C0R01	0.3937	0.4291	0.59	0.625	0.79	1.89	0.986	10	KTD10.0-19.9
TD1100016C0R01	0.4331	0.4685	0.67	0.625	0.79	1.89	1.040	11	KTD10.0-19.9
TD1200018C0R01	0.4724	0.5079	0.71	0.625	0.79	1.89	1.104	12	KTD10.0-19.9
TD1300019C0R01	0.5118	0.5472	0.79	0.625	0.79	1.89	1.161	13	KTD10.0-19.9
TD1400021C0R01	0.5512	0.5866	0.83	0.625	0.79	1.89	1.299	14	KTD10.0-19.9
TD150002218R01	0.5906	0.6260	0.91	0.750	0.98	1.97	1.476	15	KTD10.0-19.9
TD160002418R01	0.6299	0.6654	0.94	0.750	0.98	1.97	1.574	16	KTD10.0-19.9
TD170002518R01	0.6693	0.7047	1.02	0.750	0.98	1.97	1.670	17	KTD10.0-19.9
TD1800027C8R01	0.7087	0.7441	1.06	1.000	1.26	2.20	1.777	18	KTD10.0-19.9
TD1900028C8R01	0.7480	0.7835	1.14	1.000	1.26	2.20	1.867	19	KTD10.0-19.9
TD2000030C8R01	0.7874	0.8228	1.18	1.000	1.26	2.20	1.973	20	KTD20.0-D26.9
TD2100031C8R01	0.8268	0.8622	1.26	1.000	1.26	2.20	2.070	21	KTD20.0-D26.9
TD2200033C8R01	0.8661	0.9016	1.30	1.000	1.26	2.20	2.168	22	KTD20.0-D26.9
TD2300034B7R01	0.9055	0.9409	1.38	1.250	1.65	2.36	2.265	23	KTD20.0-D26.9
TD2400036B7R01	0.9449	0.9803	1.42	1.250	1.65	2.36	2.363	24	KTD20.0-D26.9
TD2500037B7R01	0.9843	1.0197	1.50	1.250	1.65	2.36	2.459	25	KTD20.0-D26.9

GOLDTWIST™ UNIVERSAL & ISO9766 SHANKS

3XD UNIVERSAL SHANKS

Drilling

Coolant



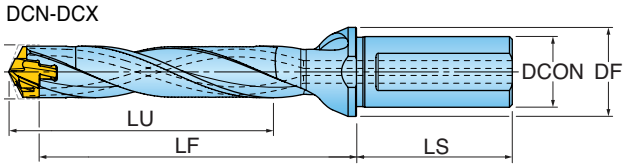
3xD	DCN-DCX Tip Diameter Range		LU Usable Length	DCON Shank Diameter	DF Flange Diameter	LS Shank Length	LF Functional Length	SSC Pocket Size	Key
TD0600018B9R01	0.2362	0.2520	0.71	0.500	0.63	1.77	1.102	6	KTD6.0-D9.9
TD0650020B9R01	0.2560	0.2716	0.79	0.500	0.63	1.77	1.162	6.5	KTD6.0-D9.9
TD0700021B9R01	0.2756	0.2913	0.83	0.500	0.63	1.77	1.221	7	KTD6.0-D9.9
TD0750022B9R01	0.2953	0.3110	0.89	0.500	0.63	1.77	1.281	7.5	KTD6.0-D9.9
TD0800024B9R01	0.3150	0.3307	0.94	0.500	0.63	1.77	1.338	8	KTD6.0-D9.9
TD0850025B9R01	0.3346	0.3504	1.00	0.500	0.63	1.77	1.379	8.5	KTD6.0-D9.9
TD0900027B9R01	0.3543	0.3701	1.06	0.500	0.63	1.77	1.460	9	KTD6.0-D9.9
TD0950028B9R01	0.3740	0.3898	1.12	0.500	0.63	1.77	1.512	9.5	KTD6.0-D9.9
TD1000030C0R01	0.3937	0.4094	1.18	0.625	0.79	1.89	1.576	10	KTD10.0-19.9
TD1050031C0R01	0.4134	0.4291	1.26	0.625	0.79	1.89	1.656	10.5	KTD10.0-19.9
TD1100033C0R01	0.4331	0.4488	1.30	0.625	0.79	1.89	1.690	11	KTD10.0-19.9
TD1150034C0R01	0.4528	0.4685	1.38	0.625	0.79	1.89	1.750	11.5	KTD10.0-19.9
TD1200036C0R01	0.4724	0.4882	1.42	0.625	0.79	1.89	1.814	12	KTD10.0-19.9
TD1250037C0R01	0.4921	0.5079	1.46	0.625	0.79	1.89	1.874	12.5	KTD10.0-19.9
TD1300039C0R01	0.5118	0.5276	1.54	0.625	0.79	1.89	1.931	13	KTD10.0-19.9
TD1350040C0R01	0.5315	0.5472	1.61	0.625	0.79	1.89	2.001	13.5	KTD10.0-19.9
TD1400042C0R01	0.5512	0.5669	1.65	0.625	0.79	1.89	2.119	14	KTD10.0-19.9
TD1450043C0R01	0.5709	0.5866	1.73	0.625	0.79	1.89	2.179	14.5	KTD10.0-19.9
TD150004518R01	0.5906	0.6260	1.77	0.750	0.98	1.97	2.356	15	KTD10.0-19.9
TD160004818R01	0.6299	0.6654	1.89	0.750	0.98	1.97	2.524	16	KTD10.0-19.9
TD170005118R01	0.6693	0.7047	2.01	0.750	0.98	1.97	2.680	17	KTD10.0-19.9
TD1800054C8R01	0.7087	0.7441	2.13	1.000	1.26	2.20	2.837	18	KTD10.0-19.9
TD1900057C8R01	0.7480	0.7835	2.24	1.000	1.26	2.20	2.997	19	KTD10.0-19.9
TD2000060C8R01	0.7874	0.8228	2.36	1.000	1.26	2.20	3.153	20	KTD20.0-D26.9
TD2100063C8R01	0.8268	0.8622	2.48	1.000	1.26	2.20	3.310	21	KTD20.0-D26.9
TD2200066C8R01	0.8661	0.9016	2.60	1.000	1.26	2.20	3.468	22	KTD20.0-D26.9
TD2300069B7R01	0.9055	0.9409	2.72	1.250	1.65	2.36	3.625	23	KTD20.0-D26.9
TD2400072B7R01	0.9449	0.9803	2.83	1.250	1.65	2.36	3.783	24	KTD20.0-D26.9
TD2500075B7R01	0.9843	1.0197	2.95	1.250	1.65	2.36	3.939	25	KTD20.0-D26.9

GOLDTWIST™ UNIVERSAL & ISO9766 SHANKS

5XD UNIVERSAL SHANKS

Drilling

Coolant



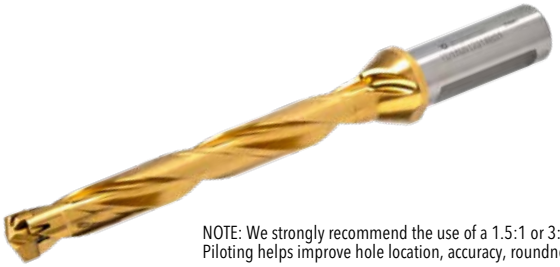
5xD	DCN-DCX Tip Diameter Range		LU Usable Length	DCON Shank Diameter	DF Flange Diameter	LS Shank Length	LF Functional Length	SSC Pocket Size	Key
TD0600030B9R01	0.2362	0.2520	1.18	0.500	0.63	1.77	1.573	6	KTD6.0-D9.9
TD0650033B9R01	0.2560	0.2716	1.30	0.500	0.63	1.77	1.686	6.5	KTD6.0-D9.9
TD0700035B9R01	0.2756	0.2913	1.38	0.500	0.63	1.77	1.781	7	KTD6.0-D9.9
TD0750037B9R01	0.2953	0.3110	1.48	0.500	0.63	1.77	1.869	7.5	KTD6.0-D9.9
TD0800040B9R01	0.3150	0.3307	1.57	0.500	0.63	1.77	1.967	8	KTD6.0-D9.9
TD0850042B9R01	0.3346	0.3504	1.67	0.500	0.63	1.77	2.067	8.5	KTD6.0-D9.9
TD0900045B9R01	0.3543	0.3701	1.77	0.500	0.63	1.77	2.162	9	KTD6.0-D9.9
TD0950047B9R01	0.3740	0.3898	1.87	0.500	0.63	1.77	2.262	9.5	KTD6.0-D9.9
TD1000050C0R01	0.3937	0.4094	1.97	0.625	0.79	1.89	2.366	10	KTD10.0-19.9
TD1050052C0R01	0.4134	0.4291	2.09	0.625	0.79	1.89	2.456	10.5	KTD10.0-19.9
TD1100055C0R01	0.4331	0.4488	2.17	0.625	0.79	1.89	2.560	11	KTD10.0-19.9
TD1150057C0R01	0.4528	0.4685	2.28	0.625	0.79	1.89	2.660	11.5	KTD10.0-19.9
TD1200060C0R01	0.4724	0.4882	2.36	0.625	0.79	1.89	2.754	12	KTD10.0-19.9
TD1250062C0R01	0.4921	0.5079	2.44	0.625	0.79	1.89	2.854	12.5	KTD10.0-19.9
TD1300065C0R01	0.5118	0.5276	2.56	0.625	0.79	1.89	2.951	13	KTD10.0-19.9
TD1350067C0R01	0.5315	0.5472	2.68	0.625	0.79	1.89	3.051	13.5	KTD10.0-19.9
TD1400070C0R01	0.5512	0.5669	2.76	0.625	0.79	1.89	3.229	14	KTD10.0-19.9
TD1450072C0R01	0.5709	0.5866	2.87	0.625	0.79	1.89	3.329	14.5	KTD10.0-19.9
TD150007518R01	0.5906	0.6260	2.95	0.750	0.98	1.97	3.546	15	KTD10.0-19.9
TD160008018R01	0.6299	0.6654	3.15	0.750	0.98	1.97	3.784	16	KTD10.0-19.9
TD170008518R01	0.6693	0.7047	3.35	0.750	0.98	1.97	4.020	17	KTD10.0-19.9
TD1800090C8R01	0.7087	0.7441	3.54	1.000	1.26	2.20	4.257	18	KTD10.0-19.9
TD1900095C8R01	0.7480	0.7835	3.74	1.000	1.26	2.20	4.487	19	KTD10.0-19.9
TD2000100C8R01	0.7874	0.8228	3.94	1.000	1.26	2.20	4.723	20	KTD20.0-D26.9
TD2100105C8R01	0.8268	0.8622	4.13	1.000	1.26	2.20	4.960	21	KTD20.0-D26.9
TD2200110C8R01	0.8661	0.9016	4.33	1.000	1.26	2.20	5.198	22	KTD20.0-D26.9
TD2300115B7R01	0.9055	0.9409	4.53	1.250	1.65	2.36	5.435	23	KTD20.0-D26.9
TD2400120B7R01	0.9449	0.9803	4.72	1.250	1.65	2.36	5.673	24	KTD20.0-D26.9
TD2500125B7R01	0.9843	1.0197	4.92	1.250	1.65	2.36	5.909	25	KTD20.0-D26.9

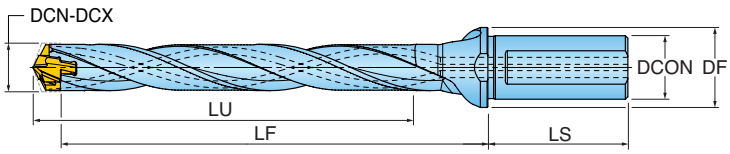
GOLDTWIST™ UNIVERSAL & ISO9766 SHANKS

8XD UNIVERSAL SHANKS

Drilling

Coolant





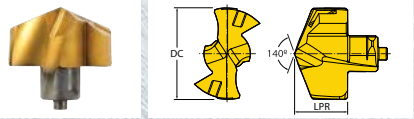
NOTE: We strongly recommend the use of a 1.5:1 or 3:1 GoldTwist drill of the same diameter to pilot if not using TPC (self-centering geometry). Piloting helps improve hole location, accuracy, roundness, straightness and surface finish.

8xD	DCN-DCX Tip Diameter Range		LU Usable Length	DCON Shank Diameter	DF Flange Diameter	LS Shank Length	LF Functional Length	SSC Pocket Size	Key
TD0700056B9R01	0.2756	0.2913	2.20	0.500	0.63	1.77	2.599	7	KTD6.0-D9.9
TD0750060B9R01	0.2953	0.3110	2.28	0.500	0.63	1.77	2.759	7.5	KTD6.0-D9.9
TD0800064B9R01	0.3150	0.3307	2.52	0.500	0.63	1.77	2.917	8	KTD6.0-D9.9
TD0850068B9R01	0.3346	0.3504	2.68	0.500	0.63	1.77	3.107	8.5	KTD6.0-D9.9
TD0900072B9R01	0.3543	0.3701	2.83	0.500	0.63	1.77	3.232	9	KTD6.0-D9.9
TD0950076B9R01	0.3740	0.3898	2.99	0.500	0.63	1.77	3.422	9.5	KTD6.0-D9.9
TD1000080C0R01	0.3937	0.4094	3.15	0.625	0.79	1.89	3.546	10	KTD10.0-19.9
TD1050084C0R01	0.4134	0.4291	3.31	0.625	0.79	1.89	3.696	10.5	KTD10.0-19.9
TD1100088C0R01	0.4331	0.4488	3.46	0.625	0.79	1.89	3.860	11	KTD10.0-19.9
TD1150092C0R01	0.4528	0.4685	3.62	0.625	0.79	1.89	4.020	11.5	KTD10.0-19.9
TD1200096C0R01	0.4724	0.4882	3.78	0.625	0.79	1.89	4.174	12	KTD10.0-19.9
TD1250100C0R01	0.4921	0.5079	3.94	0.625	0.79	1.89	4.334	12.5	KTD10.0-19.9
TD1300104C0R01	0.5118	0.5276	4.09	0.625	0.79	1.89	4.491	13	KTD10.0-19.9
TD1350108C0R01	0.5315	0.5472	4.25	0.625	0.79	1.89	4.641	13.5	KTD10.0-19.9
TD1400112C0R01	0.5512	0.5669	4.41	0.625	0.79	1.89	4.879	14	KTD10.0-19.9
TD1450116C0R01	0.5709	0.5866	4.57	0.625	0.79	1.89	5.039	14.5	KTD10.0-19.9
TD150012018R01	0.5906	0.6260	4.72	0.750	0.98	1.97	5.316	15	KTD10.0-19.9
TD160012818R01	0.6299	0.6654	5.04	0.750	0.98	1.97	5.674	16	KTD10.0-19.9
TD170013618R01	0.6693	0.7047	5.35	0.750	0.98	1.97	6.020	17	KTD10.0-19.9
TD1800144C8R01	0.7087	0.7441	5.67	1.000	1.26	2.20	6.377	18	KTD10.0-19.9
TD1900152C8R01	0.7480	0.7835	5.98	1.000	1.26	2.20	6.737	19	KTD10.0-19.9
TD2000160C8R01	0.7874	0.8228	6.30	1.000	1.26	2.20	7.083	20	KTD20.0-D26.9
TD2100168C8R01	0.8268	0.8622	6.61	1.000	1.26	2.20	7.440	21	KTD20.0-D26.9
TD2200176C8R01	0.8661	0.9016	6.93	1.000	1.26	2.20	7.798	22	KTD20.0-D26.9
TD2300184B7R01	0.9055	0.9409	7.24	1.250	1.65	2.36	8.155	23	KTD20.0-D26.9
TD2400192B7R01	0.9449	0.9803	7.56	1.250	1.65	2.36	8.513	24	KTD20.0-D26.9
TD2500200B7R01	0.9843	1.0197	7.87	1.250	1.65	2.36	8.859	25	KTD20.0-D26.9

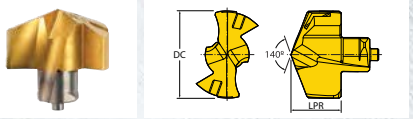
NOTE: PLEASE SEE PAGE 19 FOR RECOMMENDED PILOTING PROCEDURE FOR 8XD AND 12XD APPLICATIONS IF NOT USING TPC (SELF-CENTERING) GEOMETRY.

GOLDTWIST™ REPLACEABLE TIPS: 6.00MM - 9.40MM DIA

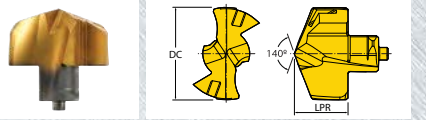
TPA for Steels & General Purpose



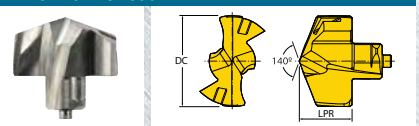
TMA for Stainless Steels & Exotics



TKA for Cast Iron



TNA for Non-Ferrous



TPA Steels & GP	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	DC Cutting Diameter mm	DC Cutting Diameter inch	LPR Projection Length	SSC Insert Seat Size
TPA0600R01	TMA0600R01	TKA0600R01		6.00	0.2362	0.157	6.0
TPA0610R01	TMA0610R01	TKA0610R01		6.10	0.2402	0.157	6.0
TPA0620R01	TMA0620R01	TKA0620R01		6.20	0.2441	0.157	6.0
TPA0630R01	TMA0630R01	TKA0630R01		6.30	0.2480	0.157	6.0
			TNA0635R01	6.35	0.2500	0.157	6.0
TPA0640R01	TMA0640R01	TKA0640R01		6.40	0.2520	0.157	6.0
TPA0650R01	TMA0650R01	TKA0650R01		6.50	0.2559	0.169	6.5
TPA0660R01	TMA0660R01	TKA0660R01		6.60	0.2598	0.169	6.5
TPA0670R01	TMA0670R01	TKA0670R01		6.70	0.2638	0.169	6.5
TPA0680R01	TMA0680R01	TKA0680R01		6.80	0.2677	0.169	6.5
TPA0690R01	TMA0690R01	TKA0690R01		6.90	0.2717	0.169	6.5
TPA0700R01	TMA0700R01	TKA0700R01		7.00	0.2756	0.181	7.0
TPA0710R01	TMA0710R01	TKA0710R01		7.10	0.2795	0.181	7.0
			TNA0714R01	7.14	0.2812	0.181	7.0
TPA0720R01	TMA0720R01	TKA0720R01		7.20	0.2835	0.181	7.0
TPA0730R01	TMA0730R01	TKA0730R01		7.30	0.2874	0.181	7.0
TPA0740R01	TMA0740R01	TKA0740R01		7.40	0.2913	0.181	7.0
TPA0750R01	TMA0750R01	TKA0750R01		7.50	0.2953	0.181	7.5
TPA0760R01	TMA0760R01	TKA0760R01		7.60	0.2992	0.181	7.5
TPA0770R01	TMA0770R01	TKA0770R01		7.70	0.3031	0.181	7.5
TPA0780R01	TMA0780R01	TKA0780R01		7.80	0.3071	0.181	7.5
TPA0790R01	TMA0790R01	TKA0790R01		7.90	0.3110	0.181	7.5
			TNA0794R01	7.94	0.3125	0.181	7.5
TPA0800R01	TMA0800R01	TKA0800R01	TNA0800R01	8.00	0.3150	0.213	8.0
TPA0810R01	TMA0810R01	TKA0810R01		8.10	0.3189	0.213	8.0
TPA0820R01	TMA0820R01	TKA0820R01		8.20	0.3228	0.213	8.0
TPA0830R01	TMA0830R01	TKA0830R01		8.30	0.3268	0.213	8.0
TPA0840R01	TMA0840R01	TKA0840R01		8.40	0.3307	0.213	8.0
TPA0850R01	TMA0850R01	TKA0850R01	TNA0850R01	8.50	0.3346	0.213	8.5
TPA0860R01	TMA0860R01	TKA0860R01		8.60	0.3386	0.213	8.5
TPA0870R01	TMA0870R01	TKA0870R01	TNA0870R01	8.70	0.3425	0.213	8.5
			TNA0873R01	8.73	0.3437	0.213	8.5
TPA0880R01	TMA0880R01	TKA0880R01		8.80	0.3465	0.213	8.5
TPA0890R01	TMA0890R01	TKA0890R01		8.90	0.3504	0.213	8.5
TPA0900R01	TMA0900R01	TKA0900R01	TNA0900R01	9.00	0.3543	0.228	9.0
TPA0910R01	TMA0910R01	TKA0910R01		9.10	0.3583	0.228	9.0
TPA0920R01	TMA0920R01	TKA0920R01		9.20	0.3622	0.228	9.0
TPA0930R01	TMA0930R01	TKA0930R01		9.30	0.3661	0.228	9.0
TPA0940R01	TMA0940R01	TKA0940R01	TNA0940R01	9.40	0.3701	0.228	9.0

*** Grade IN2505 for ISO P, M and K Geometries/Materials
*** Grade IN05S for ISO N Geometry/Materials

● = P ○ = M ● = K ● = N ● = S ○ = H

GOLDTWIST™ REPLACEABLE TIPS: 9.50MM - 13.80MM DIA

TPA Steels & GP	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	DC Cutting Diameter mm	DC Cutting Diameter inch	LPR Projection Length	SSC Insert Seat Size
TPA0950R01	TMA0950R01	TKA0950R01	TNA0950R01	9.50	0.3740	0.228	9.5
			TNA0953R01	9.53	0.3750	0.228	9.5
TPA0960R01	TMA0960R01	TKA0960R01		9.60	0.3780	0.228	9.5
TPA0970R01	TMA0970R01	TKA0970R01		9.70	0.3819	0.228	9.5
TPA0980R01	TMA0980R01	TKA0980R01		9.80	0.3858	0.228	9.5
TPA0990R01	TMA0990R01	TKA0990R01	TNA0990R01	9.90	0.3898	0.228	9.5
TPA1000R01	TMA1000R01	TKA1000R01	TNA1000R01	10.00	0.3937	0.244	10.0
TPA1010R01	TMA1010R01	TKA1010R01		10.10	0.3976	0.244	10.0
TPA1020R01	TMA1020R01	TKA1020R01	TNA1020R01	10.20	0.4016	0.244	10.0
TPA1030R01	TMA1030R01	TKA1030R01		10.30	0.4055	0.244	10.0
			TNA1032R01	10.32	0.4062	0.244	10.0
TPA1040R01	TMA1040R01	TKA1040R01		10.40	0.4094	0.244	10.0
TPA1050R01	TMA1050R01	TKA1050R01	TNA1050R01	10.50	0.4134	0.244	10.5
TPA1060R01	TMA1060R01	TKA1060R01		10.60	0.4173	0.244	10.5
TPA1070R01	TMA1070R01	TKA1070R01		10.70	0.4213	0.244	10.5
TPA1080R01	TMA1080R01	TKA1080R01	TNA1080R01	10.80	0.4252	0.244	10.5
TPA1090R01	TMA1090R01	TKA1090R01		10.90	0.4291	0.244	10.5
TPA1100R01	TMA1100R01	TKA1100R01	TNA1100R01	11.00	0.4331	0.260	11.0
TPA1110R01	TMA1110R01	TKA1110R01		11.10	0.4370	0.260	11.0
			TNA1111R01	11.11	0.4375	0.260	11.0
TPA1120R01	TMA1120R01	TKA1120R01		11.20	0.4409	0.260	11.0
TPA1130R01	TMA1130R01	TKA1130R01		11.30	0.4449	0.260	11.0
TPA1140R01	TMA1140R01	TKA1140R01		11.40	0.4488	0.260	11.0
TPA1150R01	TMA1150R01	TKA1150R01	TNA1150R01	11.50	0.4528	0.260	11.5
TPA1160R01	TMA1160R01	TKA1160R01		11.60	0.4567	0.260	11.5
TPA1170R01	TMA1170R01	TKA1170R01		11.70	0.4606	0.260	11.5
TPA1180R01	TMA1180R01	TKA1180R01		11.80	0.4646	0.260	11.5
TPA1190R01	TMA1190R01	TKA1190R01	TNA1190R01	11.90	0.4685	0.260	11.5
				11.91	0.4689	0.260	11.5
TPA1200R01	TMA1200R01	TKA1200R01	TNA1200R01	12.00	0.4724	0.275	12.0
TPA1210R01	TMA1210R01	TKA1210R01		12.10	0.4764	0.275	12.0
TPA1220R01	TMA1220R01	TKA1220R01		12.20	0.4803	0.275	12.0
TPA1230R01	TMA1230R01	TKA1230R01	TNA1230R01	12.30	0.4843	0.275	12.0
TPA1240R01	TMA1240R01	TKA1240R01		12.40	0.4882	0.275	12.0
TPA1250R01	TMA1250R01	TKA1250R01	TNA1250R01	12.50	0.4921	0.275	12.5
TPA1260R01	TMA1260R01	TKA1260R01		12.60	0.4961	0.275	12.5
TPA1270R01	TMA1270R01	TKA1270R01	TNA1270R01	12.70	0.5000	0.275	12.5
TPA1280R01	TMA1280R01	TKA1280R01		12.80	0.5039	0.275	12.5
TPA1290R01	TMA1290R01	TKA1290R01		12.90	0.5079	0.275	12.5
TPA1300R01	TMA1300R01	TKA1300R01	TNA1300R01	13.00	0.5118	0.299	13.0
TPA1310R01	TMA1310R01	TKA1310R01		13.10	0.5157	0.299	13.0
TPA1320R01	TMA1320R01	TKA1320R01		13.20	0.5197	0.299	13.0
TPA1330R01	TMA1330R01	TKA1330R01		13.30	0.5236	0.299	13.0
TPA1340R01	TMA1340R01	TKA1340R01		13.40	0.5276	0.299	13.0
TPA1350R01	TMA1350R01	TKA1350R01	TNA1350R01	13.50	0.5315	0.299	13.5
TPA1360R01	TMA1360R01	TKA1360R01		13.60	0.5354	0.299	13.5
TPA1370R01	TMA1370R01	TKA1370R01	TNA1370R01	13.70	0.5394	0.299	13.5
TPA1380R01	TMA1380R01	TKA1380R01		13.80	0.5433	0.299	13.5

*** Grade IN2505 for ISO P, M and K Geometries/Materials
*** Grade IN05S for ISO N Geometry/Materials

● = P ● = M ● = K ● = N ● = S ○ = H

GOLDTWIST™ REPLACEABLE TIPS: 13.90MM - 18.10MM DIA

TPA Steels & GP	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	DC Cutting Diameter mm	DC Cutting Diameter inch	LPR Projection Length	SSC Insert Seat Size
TPA1390R01	TMA1390R01	TKA1390R01		13.90	0.5472	0.299	13.5
TPA1400R01	TMA1400R01	TKA1400R01	TNA1400R01	14.00	0.5512	0.321	14.0
TPA1410R01	TMA1410R01	TKA1410R01		14.10	0.5551	0.321	14.0
TPA1420R01	TMA1420R01	TKA1420R01		14.20	0.5591	0.321	14.0
			TNA1429R01	14.29	0.5625	0.321	14.0
TPA1430R01	TMA1430R01	TKA1430R01		14.30	0.5630	0.321	14.0
TPA1440R01	TMA1440R01	TKA1440R01		14.40	0.5669	0.321	14.0
TPA1450R01	TMA1450R01	TKA1450R01	TNA1450R01	14.50	0.5709	0.321	14.5
TPA1460R01	TMA1460R01	TKA1460R01		14.60	0.5748	0.321	14.5
TPA1470R01	TMA1470R01	TKA1470R01		14.70	0.5787	0.321	14.5
TPA1480R01	TMA1480R01	TKA1480R01		14.80	0.5827	0.321	14.5
TPA1490R01	TMA1490R01	TKA1490R01		14.90	0.5866	0.321	14.5
TPA1500R01	TMA1500R01	TKA1500R01	TNA1500R01	15.00	0.5906	0.344	15.0
			TNA1508R01	15.08	0.5937	0.344	15.0
TPA1510R01	TMA1510R01	TKA1510R01		15.10	0.5945	0.344	15.0
TPA1520R01	TMA1520R01	TKA1520R01		15.20	0.5984	0.344	15.0
TPA1530R01	TMA1530R01	TKA1530R01		15.30	0.6024	0.344	15.0
TPA1540R01	TMA1540R01	TKA1540R01		15.40	0.6063	0.344	15.0
TPA1550R01	TMA1550R01	TKA1550R01		15.50	0.6102	0.344	15.0
TPA1560R01	TMA1560R01	TKA1560R01		15.60	0.6142	0.344	15.0
TPA1570R01	TMA1570R01	TKA1570R01		15.70	0.6181	0.344	15.0
TPA1580R01	TMA1580R01	TKA1580R01		15.80	0.6220	0.344	15.0
			TNA1588R01	15.88	0.6250	0.344	15.0
TPA1590R01	TMA1590R01	TKA1590R01		15.90	0.6260	0.344	15.0
TPA1600R01	TMA1600R01	TKA1600R01	TNA1600R01	16.00	0.6299	0.366	16.0
TPA1610R01	TMA1610R01	TKA1610R01		16.10	0.6339	0.366	16.0
TPA1620R01	TMA1620R01	TKA1620R01		16.20	0.6378	0.366	16.0
TPA1630R01	TMA1630R01	TKA1630R01		16.30	0.6417	0.366	16.0
TPA1640R01	TMA1640R01	TKA1640R01		16.40	0.6457	0.366	16.0
TPA1650R01	TMA1650R01	TKA1650R01	TNA1650R01	16.50	0.6496	0.366	16.0
TPA1660R01	TMA1660R01	TKA1660R01		16.60	0.6535	0.366	16.0
			TNA1667R01	16.67	0.6562	0.366	16.0
TPA1670R01	TMA1670R01	TKA1670R01	TNA1670R01	16.70	0.6575	0.366	16.0
TPA1680R01	TMA1680R01	TKA1680R01		16.80	0.6614	0.366	16.0
TPA1690R01	TMA1690R01	TKA1690R01		16.90	0.6654	0.366	16.0
TPA1700R01	TMA1700R01	TKA1700R01	TNA1700R01	17.00	0.6693	0.390	17.0
TPA1710R01	TMA1710R01	TKA1710R01		17.10	0.6732	0.390	17.0
TPA1720R01	TMA1720R01	TKA1720R01		17.20	0.6772	0.390	17.0
TPA1730R01	TMA1730R01	TKA1730R01		17.30	0.6811	0.390	17.0
TPA1740R01	TMA1740R01	TKA1740R01		17.40	0.6850	0.390	17.0
			TNA1746R01	17.46	0.6875	0.390	17.0
TPA1750R01	TMA1750R01	TKA1750R01	TNA1750R01	17.50	0.6890	0.390	17.0
TPA1760R01	TMA1760R01	TKA1760R01		17.60	0.6929	0.390	17.0
TPA1770R01	TMA1770R01	TKA1770R01		17.70	0.6968	0.390	17.0
TPA1780R01	TMA1780R01	TKA1780R01		17.80	0.7008	0.390	17.0
TPA1790R01	TMA1790R01	TKA1790R01		17.90	0.7047	0.390	17.0
TPA1800R01	TMA1800R01	TKA1800R01	TKA1800R01	18.00	0.7087	0.413	18.0
TPA1810R01	TMA1810R01	TKA1810R01		18.10	0.7126	0.413	18.0

*** Grade IN2505 for ISO P, M and K Geometries/Materials
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GOLDTWIST™ REPLACEABLE TIPS: 18.20MM - 22.22MM DIA

TPA Steels & GP	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	DC Cutting Diameter mm	DC Cutting Diameter inch	LPR Projection Length	SSC Insert Seat Size
TPA1820R01	TMA1820R01	TKA1820R01		18.20	0.7165	0.413	18.0
			TNA1826R01	18.26	0.7188	0.413	18.0
TPA1830R01	TMA1830R01	TKA1830R01		18.30	0.7205	0.413	18.0
TPA1840R01	TMA1840R01	TKA1840R01		18.40	0.7244	0.413	18.0
TPA1850R01	TMA1850R01	TKA1850R01	TNA1850R01	18.50	0.7283	0.413	18.0
TPA1860R01	TMA1860R01	TKA1860R01		18.60	0.7323	0.413	18.0
TPA1870R01	TMA1870R01	TKA1870R01		18.70	0.7362	0.413	18.0
TPA1880R01	TMA1880R01	TKA1880R01		18.80	0.7402	0.413	18.0
TPA1890R01	TMA1890R01	TKA1890R01		18.90	0.7441	0.413	18.0
TPA1900R01	TMA1900R01	TKA1900R01	TNA1900R01	19.00	0.7480	0.433	19.0
TPA1905R01	TMA1905R01	TKA1905R01	TNA1905R01	19.05	0.7500	0.433	19.0
TPA1910R01	TMA1910R01	TKA1910R01		19.10	0.7520	0.433	19.0
TPA1920R01	TMA1920R01	TKA1920R01		19.20	0.7559	0.433	19.0
				19.26	0.7559	0.433	19.0
TPA1930R01	TMA1930R01	TKA1930R01		19.30	0.7598	0.433	19.0
TPA1940R01	TMA1940R01	TKA1940R01		19.40	0.7638	0.433	19.0
TPA1950R01	TMA1950R01	TKA1950R01	TNA1950R01	19.50	0.7677	0.433	19.0
TPA1960R01	TMA1960R01	TKA1960R01		19.60	0.7717	0.433	19.0
TPA1970R01	TMA1970R01	TKA1970R01		19.70	0.7756	0.433	19.0
TPA1980R01	TMA1980R01	TKA1980R01		19.80	0.7795	0.433	19.0
			TNA1984R01	19.84	0.7795	0.433	19.0
TPA1990R01	TMA1990R01	TKA1990R01		19.90	0.7835	0.433	19.0
TPA2000R01	TMA2000R01	TKA2000R01	TNA2000R01	20.00	0.7874	0.344	20.0
TPA2010R01	TMA2010R01	TKA2010R01		20.10	0.7913	0.344	20.0
TPA2020R01	TMA2020R01	TKA2020R01		20.20	0.7953	0.344	20.0
TPA2030R01	TMA2030R01	TKA2030R01		20.30	0.7992	0.344	20.0
TPA2040R01	TMA2040R01	TKA2040R01		20.40	0.8031	0.344	20.0
TPA2050R01	TMA2050R01	TKA2050R01	TNA2050R01	20.50	0.8071	0.344	20.0
TPA2060R01	TMA2060R01	TKA2060R01		20.60	0.8110	0.344	20.0
			TNA2064R01	20.64	0.8125	0.344	20.0
TPA2070R01	TMA2070R01	TKA2070R01		20.70	0.8150	0.344	20.0
TPA2080R01	TMA2080R01	TKA2080R01		20.80	0.8189	0.344	20.0
TPA2090R01	TMA2090R01	TKA2090R01		20.90	0.8228	0.344	20.0
TPA2100R01	TMA2100R01	TKA2100R01	TNA2100R01	21.00	0.8268	0.366	21.0
TPA2110R01	TMA2110R01	TKA2110R01		21.10	0.8307	0.366	21.0
TPA2120R01	TMA2120R01	TKA2120R01		21.20	0.8346	0.366	21.0
TPA2130R01	TMA2130R01	TKA2130R01		21.30	0.8386	0.366	21.0
TPA2140R01	TMA2140R01	TKA2140R01		21.40	0.8425	0.366	21.0
			TNA2143R01	21.43	0.8437	0.366	21.0
TPA2150R01	TMA2150R01	TKA2150R01		21.50	0.8465	0.366	21.0
TPA2160R01	TMA2160R01	TKA2160R01		21.60	0.8504	0.366	21.0
TPA2170R01	TMA2170R01	TKA2170R01		21.70	0.8543	0.366	21.0
TPA2180R01	TMA2180R01	TKA2180R01		21.80	0.8583	0.366	21.0
TPA2190R01	TMA2190R01	TKA2190R01		21.90	0.8622	0.366	21.0
TPA2200R01	TMA2200R01	TKA2200R01	TNA2200R01	22.00	0.8661	0.390	22.0
TPA2210R01	TMA2210R01	TKA2210R01		22.10	0.8701	0.390	22.0
TPA2220R01	TMA2220R01	TKA2220R01		22.20	0.8740	0.390	22.0
TPA2222R01	TMA2222R01	TKA2222R01	TNA2222R01	22.22	0.8750	0.390	22.0

*** Grade IN2505 for ISO P, M and K Geometries/Materials
*** Grade IN05S for ISO N Geometry/Materials

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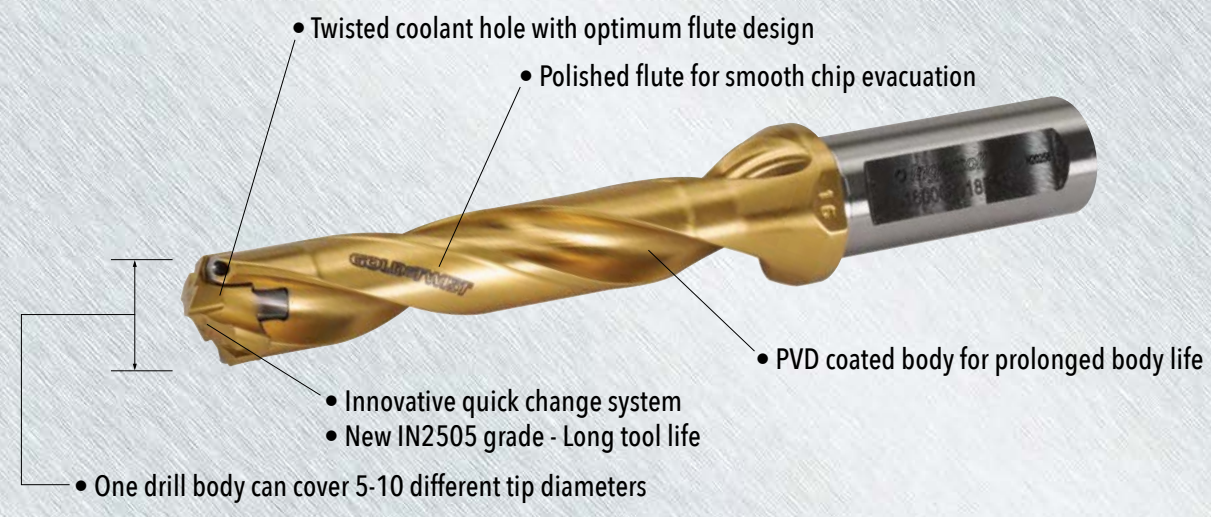
GOLDTWIST™ REPLACEABLE TIPS: 22.30MM - 25.90MM DIA

TPA Steels & GP	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	DC Cutting Diameter		LPR Projection Length	SSC Insert Seat Size
				mm	inch		
TPA2230R01	TMA2230R01	TKA2230R01		22.30	0.8780	0.390	22.0
TPA2240R01	TMA2240R01	TKA2240R01		22.40	0.8819	0.390	22.0
TPA2250R01	TMA2250R01	TKA2250R01		22.50	0.8858	0.390	22.0
TPA2260R01	TMA2260R01	TKA2260R01		22.60	0.8898	0.390	22.0
TPA2270R01	TMA2270R01	TKA2270R01		22.70	0.8937	0.390	22.0
TPA2280R01	TMA2280R01	TKA2280R01		22.80	0.8976	0.390	22.0
TPA2290R01	TMA2290R01	TKA2290R01		22.90	0.9016	0.390	22.0
TPA2300R01	TMA2300R01	TKA2300R01	TNA2300R01	23.00	0.9055	0.413	23.0
TPA2310R01	TMA2310R01	TKA2310R01		23.10	0.9094	0.413	23.0
TPA2320R01	TMA2320R01	TKA2320R01		23.20	0.9134	0.413	23.0
TPA2330R01	TMA2330R01	TKA2330R01		23.30	0.9173	0.413	23.0
TPA2340R01	TMA2340R01	TKA2340R01		23.40	0.9213	0.413	23.0
TPA2350R01	TMA2350R01	TKA2350R01		23.50	0.9252	0.413	23.0
TPA2360R01	TMA2360R01	TKA2360R01		23.60	0.9291	0.413	23.0
TPA2370R01	TMA2370R01	TKA2370R01		23.70	0.9331	0.413	23.0
TPA2380R01	TMA2380R01	TKA2380R01	TNA2380R01	23.80	0.9370	0.413	23.0
TPA2390R01	TMA2390R01	TKA2390R01		23.90	0.9409	0.413	23.0
TPA2400R01	TMA2400R01	TKA2400R01	TNA2400R01	24.00	0.9449	0.433	24.0
TPA2410R01	TMA2410R01	TKA2410R01		24.10	0.9488	0.433	24.0
TPA2420R01	TMA2420R01	TKA2420R01		24.20	0.9528	0.433	24.0
TPA2430R01	TMA2430R01	TKA2430R01		24.30	0.9567	0.433	24.0
TPA2440R01	TMA2440R01	TKA2440R01		24.40	0.9606	0.433	24.0
TPA2450R01	TMA2450R01	TKA2450R01	TNA2450R01	24.50	0.9646	0.433	24.0
TPA2460R01	TMA2460R01	TKA2460R01	TNA2460R01	24.60	0.9685	0.433	24.0
TPA2470R01	TMA2470R01	TKA2470R01		24.70	0.9724	0.433	24.0
TPA2480R01	TMA2480R01	TKA2480R01		24.80	0.9764	0.433	24.0
TPA2490R01	TMA2490R01	TKA2490R01		24.90	0.9803	0.433	24.0
TPA2500R01	TMA2500R01	TKA2500R01	TNA2500R01	25.00	0.9843	0.433	25.0
TPA2510R01	TMA2510R01	TKA2510R01		25.10	0.9882	0.433	25.0
TPA2520R01	TMA2520R01	TKA2520R01		25.20	0.9921	0.433	25.0
TPA2530R01	TMA2530R01	TKA2530R01		25.30	0.9961	0.433	25.0
TPA2540R01	TMA2540R01	TKA2540R01	IN2540R01	25.40	1.0000	0.433	25.0
TPA2550R01	TMA2550R01	TKA2550R01		25.50	1.0039	0.433	25.0
TPA2560R01	TMA2560R01	TKA2560R01		25.60	1.0079	0.433	25.0
TPA2570R01	TMA2570R01	TKA2570R01		25.70	1.0118	0.433	25.0
TPA2580R01	TMA2580R01	TKA2580R01		25.80	1.0157	0.433	25.0
TPA2590R01	TMA2590R01	TKA2590R01		25.90	1.0197	0.433	25.0

*** Grade IN2505 for ISO P, M and K Geometries/Materials
*** Grade IN05S for ISO N Geometry/Materials

● = P ● = M ● = K ● = N ● = S ○ = H

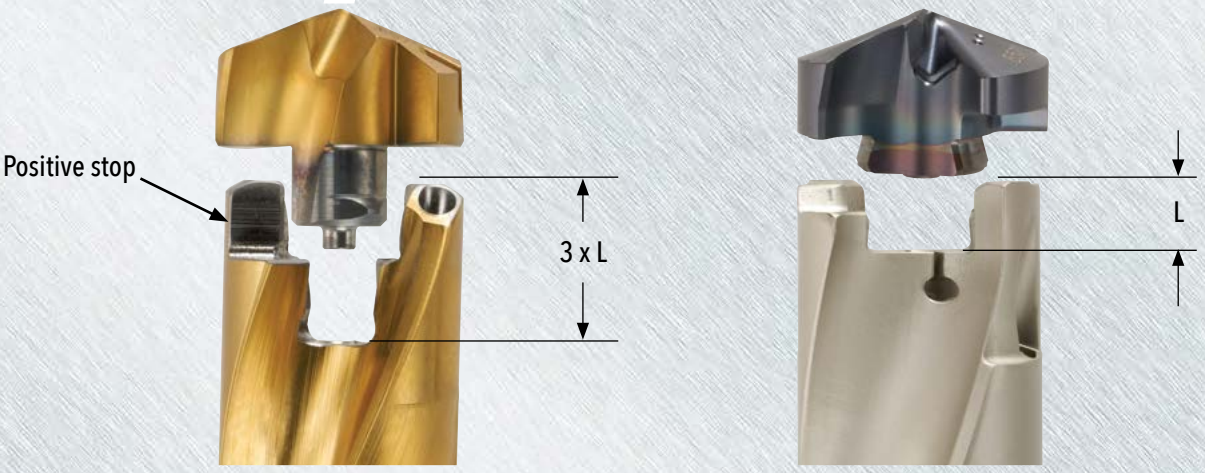
GOLDTWIST™ FEATURES



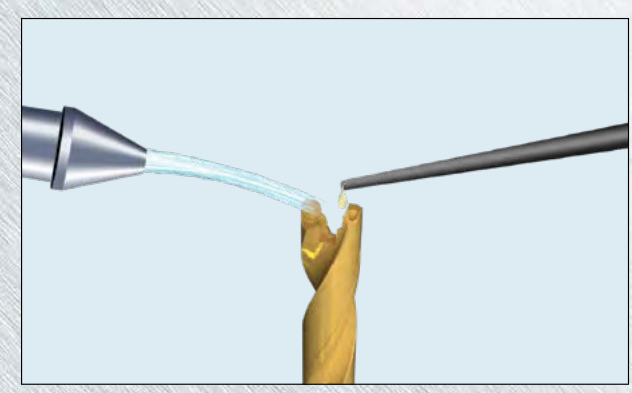
GOLDTWIST™ DRILL BODY COMPARISON: GOLDTWIST VS. QWIK TWIST

The new Gold Twist pocket design's contact/clamping area is three times deeper than our current Qwik Twist drill. The accuracy of the added cylinder to the clamping area improves rigidity and helps reduce internal stresses. The two precision ground positive stop locations improve the drilling tips' position and support.

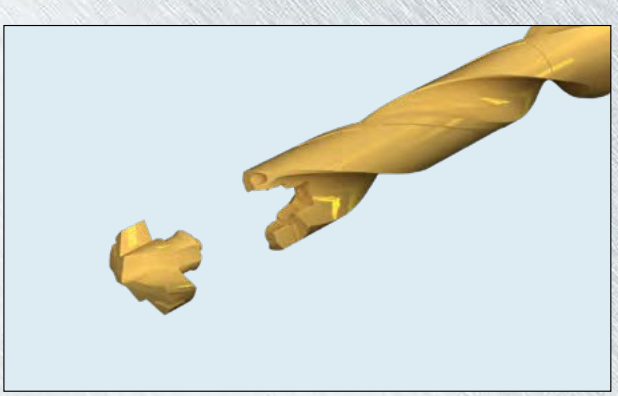
GOLDTWIST™ QWIKTWIST™



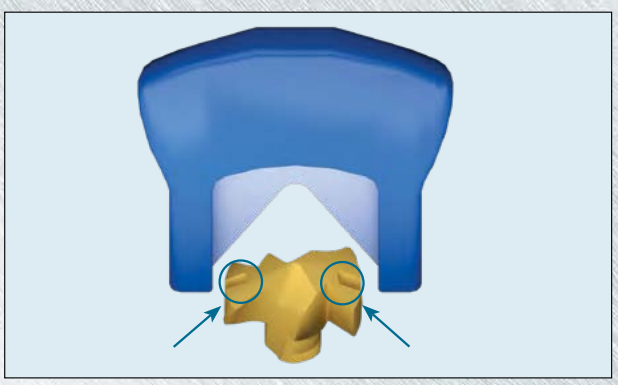
GOLDTWIST™ SET UP (DRILLING TIP MOUNTING PROCEDURE)



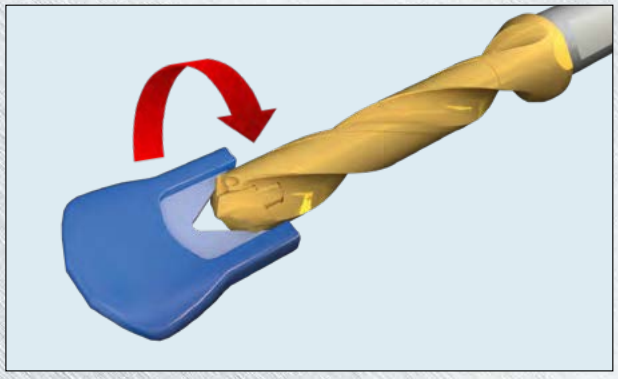
1. Clean the pocket and put oil



2. Mount the drill tip on the pocket



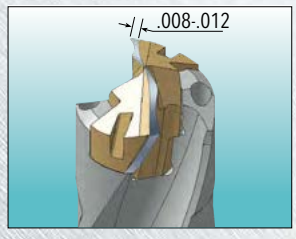
3. Insert key into the slots on tip



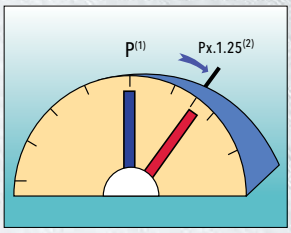
4. Tighten the tip by rotating the key CW

GOLDTWIST™ INDICATION OF HEAD WEAR

Wear Limit

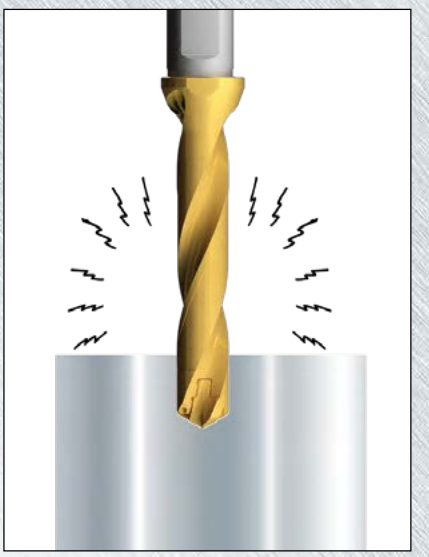


Power Restriction

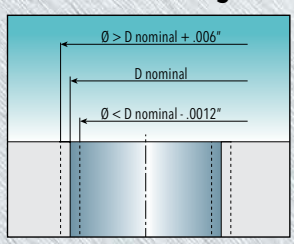


(1) New drilling head
(2) Worn-out drilling head

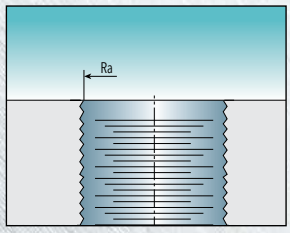
Vibration Noise Drastically Increases



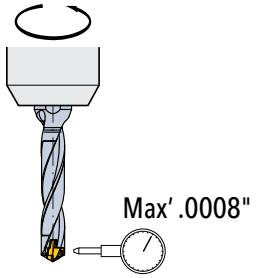
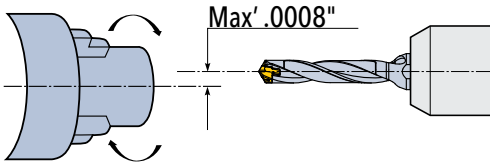
Diameter Change



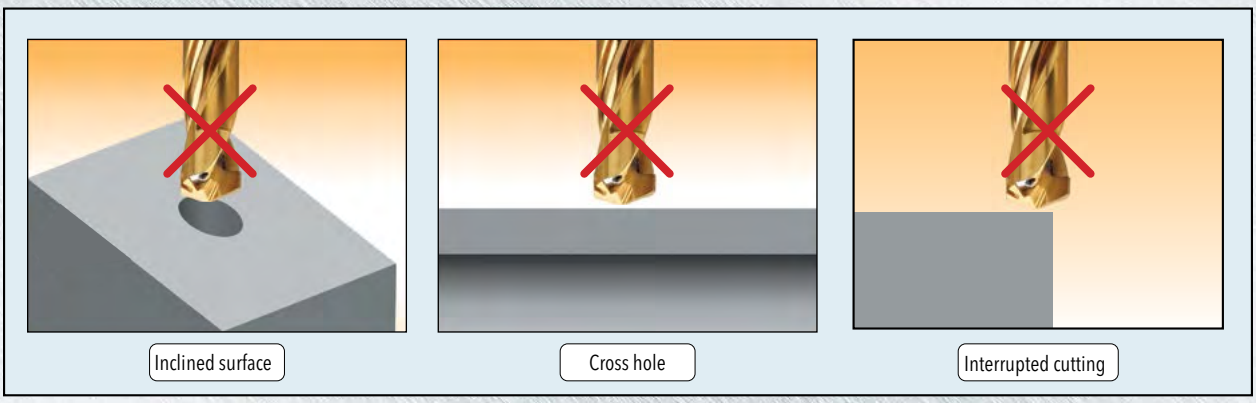
Surface Finish Declines



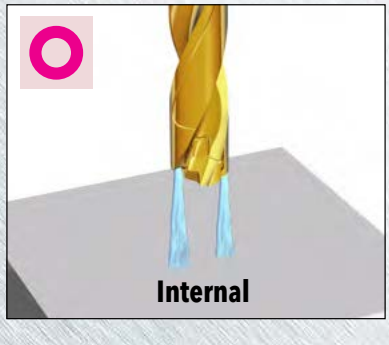
GOLDTWIST™ MAXIMUM RUNOUT

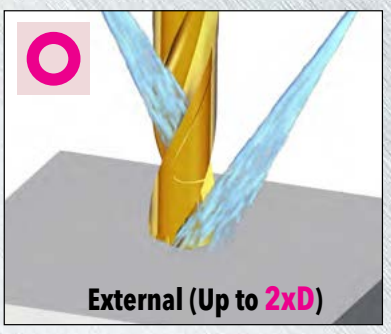
Rotational runout	Stationary runout
	

GOLDTWIST™ DRILLING LIMITATION



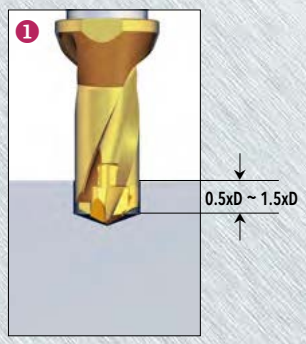
GOLDTWIST™ COOLANT RECOMMENDATIONS



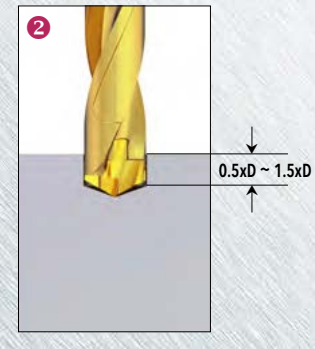


GOLDTWIST™ RECOMMENDED PILOTING PROCEDURE FOR 8XD OR 12XD

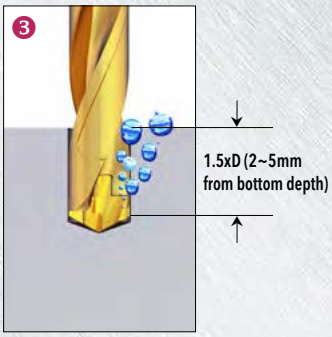
1. Pre-hole 0.5xD~1.5xD deep for centering



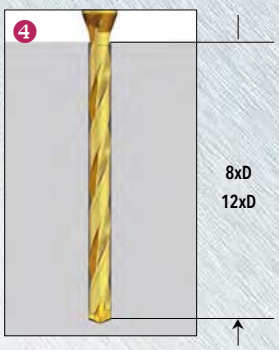
2. Slow rotation and feed during entrance to the pre-hole



3. Maintain for 2-3 seconds and activate the cooling system



4. Continue drilling at recommended cutting conditions



1. Prior to using 8xD or 12xD drills, it is recommended to drill pilot holes from 0.5xD~1.5xD using a short drill (GOLDTWIST 1.5xD holder is recommended).
2. Approach the pre-hole at reduced speed and feed until 2~5mm from it's bottom depth.
3. Increase up to recommended speed and maintain feed rate for 2~3 seconds applying coolant.
4. Start drilling at the recommended feed rate.

GOLDTWIST™ COOLANT PLUG FOR STATIONARY MACHINES

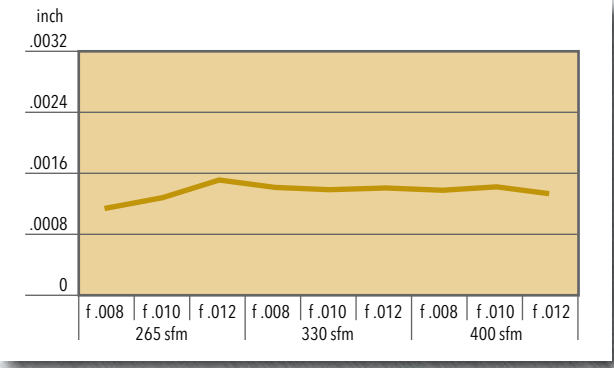
Ingersoll supplies special plugs with an internal thread for coolant connections used on lathes that can be pressed into the cavity on the back end of the shank. Order separately. For use in 1.5xD, 3xD, 5xD, 8xD & 12xD GoldTwist bodies.

Item no.	Description	Shank diameter	Internal thread
7005198	DL-12	.500"	1/16-27
7005199	DL-16	.625"	1/16-27
7005200	DL-20	.750"	1/8-27
7005201	DL-25	1.000"	1/8-27
7005607	DL-32	1.250"	1/8-27

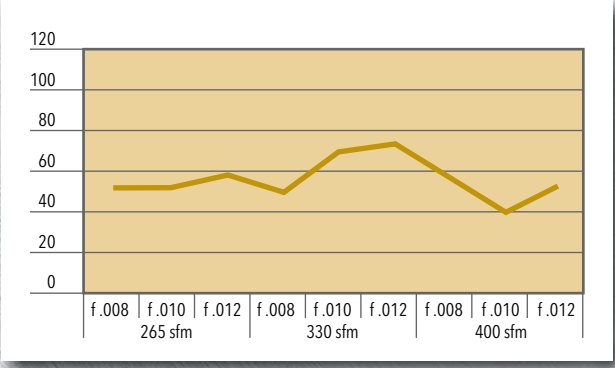
TEST RESULT 1

- Machine: Machining Center (Vertical/BT50)
- Material: Alloy Steel (AISI 4140)
- Drill head: TPA 1300R01 IN2505 (Diameter 13mm)
- Holder: TD 1300065C0R01 (5xD)
- Condition: Internal coolant (145 PSI), Through hole

Drilled Hole Size

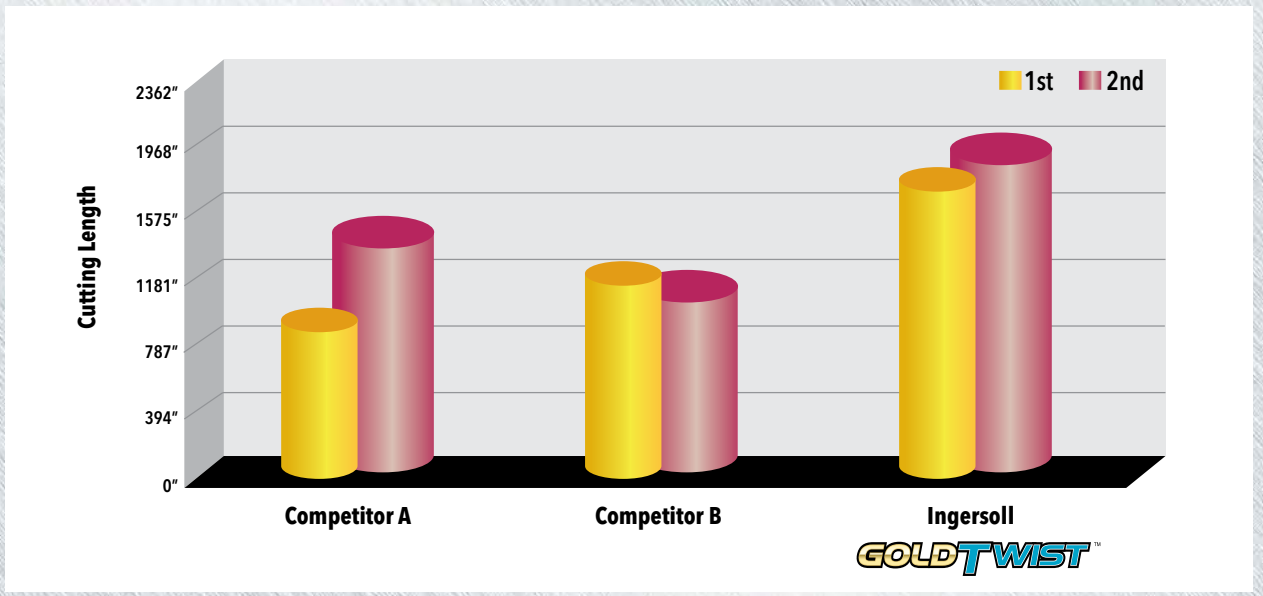


Surface finish (Ra)



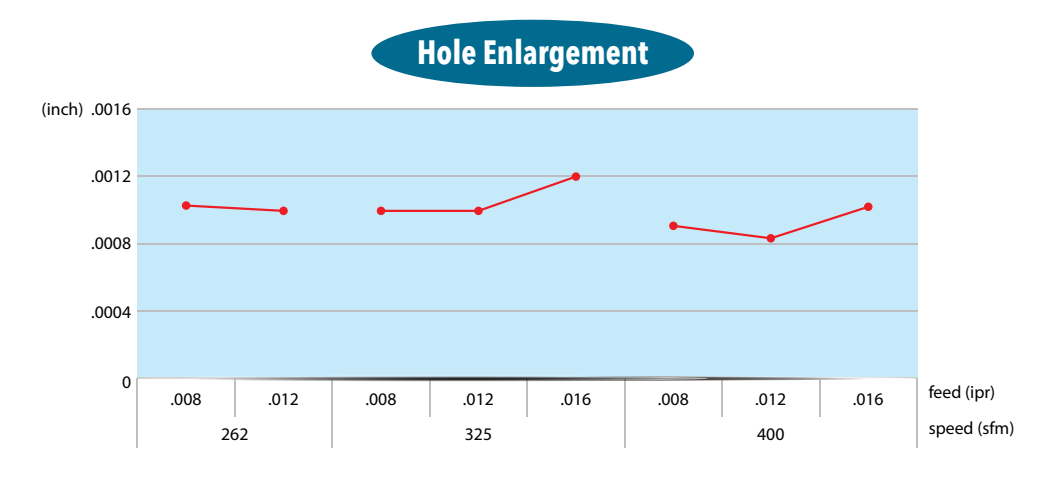
TEST RESULT 2

- Machine: Machining Center (Vertical/BT50)
- Material: Alloy Steel (AISI 4140)
- Drill head: TPA 1300R01 IN2505 (Diameter 13mm)
- Holder: TD 1300065C0R01 (5xD)
- Condition: Internal coolant (145 PSI), Through hole
  - Speed(Vc) 330 SFM, Feed(f) .010 in/rev, Depth(Ap) 2.37"



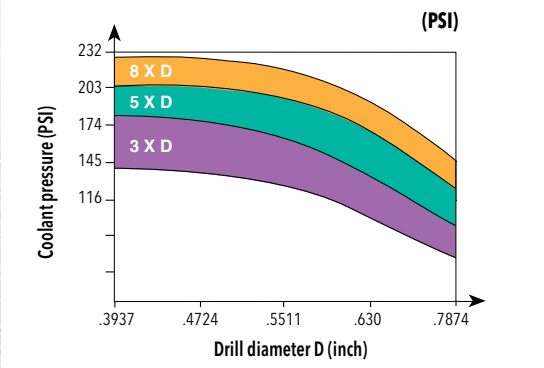
GOLDTWIST™ CASE STUDY

Machine		Machining center (Spindle : Vertical type / BT50)
Cutting conditions	Speed (V)	262 / 328 / 393 (sfm)
	Feed (f)	.008 / .012 / .016 (ipr)
Coolant		Internal (290 psi)
Material		Alloy steel (AISI 4140 / 42CrMo4)
Body		TD1200144S6R01
Head		TPA1200R01 IN2505 (12.0mm)

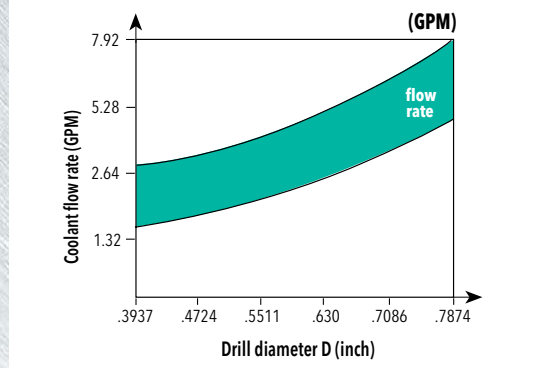


GOLDTWIST™ RECOMMENDATIONS

Recommended coolant pressure (min)



Recommended coolant flow rate



GOLDTWIST™ PACKING

Clamping key for GOLDTWIST™ Tip is enclosed in each holder.

Body

Drill Tip

Availability: In stock

Price: Available in the GAL system

GOLDTWIST™ OPERATING GUIDELINES

ISO	Material	Condition	Tensile Strength Rm (N/mm²)	Hardness (HB)	Matl No.	Cutting Speed Vc (SFM)	Feed vs Drill Diameter					
							D= 6-9.9mm (.275-.390")	D= 10-11.9mm (.394-.469")	D= 12-13.9mm (.472-.547")	D= 14-15.9mm (.551-.626")	D= 16-19.9mm (.630-.783")	D= 20-25.9mm (.787-1.019")
							IPR (inches/rev)					
P	Non-alloy steel <0.25% C & cast steel, >= 0.25% C free cutting <0.55% C steel >= 0.55% C	Annealed	420	125	1	260-360-460	.004 .007 .009	.006 .008 .011	.007 .009 .012	.008 .011 .014	.010 .014 .018	.010 .014 .018
		Annealed	650	190	2	260-345-430						
		Quenched & Tempered	850	250	3	260-330-400						
		Annealed	750	220	4	230-295-360						
		Quenched & Tempered	1000	300	5	165-230-300						
	Low alloy steel & cast steek (less than 5% alloying elements)	Annealed	600	200	6	230-315-400	.004 .007 .010	.006 .008 .011	.006 .009 .013	.007 .010 .014	.009 .012 .016	.010 .014 .018
		Quenched & Tempered	930	275	7	230-295-360						
			1000	300	8	165-230-300						
			1200	350	9	135-180-230						
	High alloy steel, cast steel, & tool steel	Annealed	680	200	10	165-230-300	.004 .006 .008	.005 .006 .007	.006 .008 .010	.007 .009 .011	.008 .010 .012	.009 .011 .013
		Quenched & Tempered	1100	325	11	130-200-265						
M	Stainless steel & cast stainless steel	Ferritic/martensitic	680	200	12	130-180-230	.003 .005 .006	.005 .006 .007	.006 .007 .008	.006 .008 .009	.006 .008 .010	.007 .009 .012
		Martensitic	820	240	13	130-180-230						
		Austenitic	600	180	14	100-165-230						
K	GreyCast Iron (GG)	Ferritic		160	15	300-410-525	.005 .009 .012	.008 .011 .014	.010 .013 .016	.012 .015 .018	.014 .018 .022	.014 .018 .024
		Pearlitic		250	16	265-360-460						
	Cast Iron Nodular (GGG)	Ferritic		180	17	300-450-600						
		Pearlitic		260	18	265-360-460						
	Malleable Cast Iron	Ferritic		130	19	300-410-525						
		Pearlitic		230	20	265-360-460						
N	Aluminum - wrought alloy	Not cureable		60	21	300-510-725	.007 .011 .014	.010 .013 .016	.012 .015 .018	.014 .017 .020	.016 .020 .024	.018 .022 .028
		Cured		100	22	300-510-725						
	Aluminum - cast, alloyed <=12% Si / >12% Si	Not cureable		75	23	300-510-725						
		Cured		90	24	300-510-725						
		High temperature		130	25	265-400-525						
	Copper alloys > 1% Pb	Free cutting		110	26	300-510-725						
		Brass		90	27	300-510-725						
		Electrolitic copper		100	28	300-510-725						
	Non-metallic	Duro & fiber plastics			29	-	- -	- -	- -	- -	- -	
		Hard rubber			30	-						
S	High temp alloys Fe based / Ni or Co based	Annealed		200	31	100-150-200	.001 .003 .004	.003 .004 .005	.004 .005 .006	.005 .006 .007	.005 .006 .008	.006 .007 .009
		Cured		280	32	70-115-165						
		Annealed		250	33	70-115-165						
		Cured		350	34	70-115-165						
		Cast		320	35	70-115-165						
	Titanium, Ti alloys		Rm 400		36	70-115-165	.001 .004 .005	.003 .004 .006	.004 .006 .007	.005 .007 .008	.006 .007 .009	.006 .008 .010
		Alpha+beta alloys cured	Rm 1050		37	70-115-165						
H	Hardened steel	Hardened		55 HRC	38	70-115-165	.001 .004 .005	.003 .004 .006	.004 .006 .007	.005 .007 .008	.006 .007 .009	.006 .008 .010
		Hardened		60 HRC	39	70-115-165						
	Chilled cast iron	Cast		400	40	-	-	-	-	-	-	
	Cast iron nodular	Hardened		55 HRC	41	-	-	-	-	-	-	

* Feed Rates are based on Two Effective - DO NOT DOUBLE.