GOLDTWIN™

Diameters
3xD: 1.031" - 1.516" NEW
5xD: 1.032" - 1.781"
(26.0mm - 45.0mm)

Bodies
Inch Weldon Shanks
Metric Shanks Available Upon Request

Length/Diameter Ratio
3xD NEW
5xD

Tip Geometry
TPC...-C for Steel & General Purpose

Grade
IN2505

Insert Geometry
SPGX

Large Diameter Drilling Solution with a Quick-Change Tip and Indexable Inserts

Ingersoll Cutting Tools is pleased to introduce the indexable GoldTwin series for machining large diameter applications – a product that guarantees excellent performance and improved productivity.

Ingersoll combines the revolutionary and highly popular GoldTwist tip, with its precision, self-centering tip, achieving excellent hole concentricity, and a newly designed, wiper-style, 4-cornered SPGX insert, achieving improved surface finish. When compared to the conventional indexable drill, the SPGX insert offers double the productivity with its two-effective design.

Additional benefits include a hardened body for excellent rigidity, polished flutes for ease of chip evacuation, through the tool coolant, and excellent wear resistance.

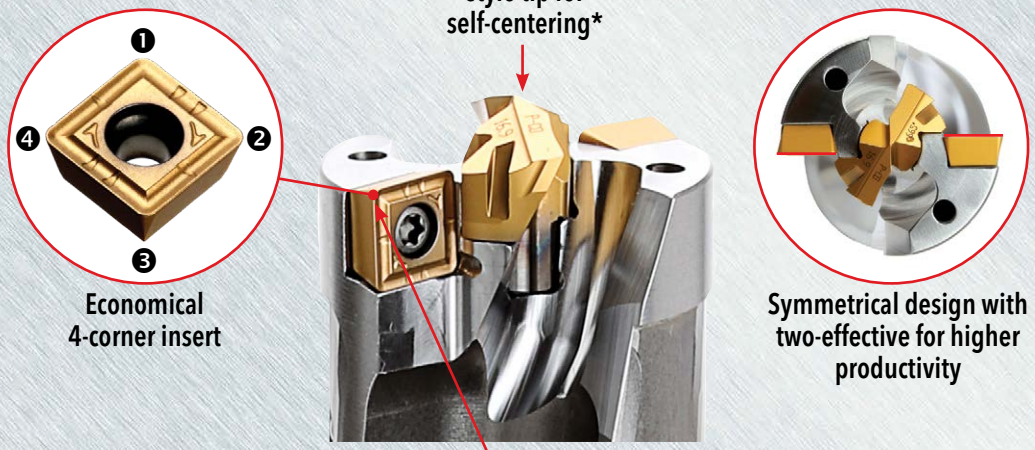
Features:

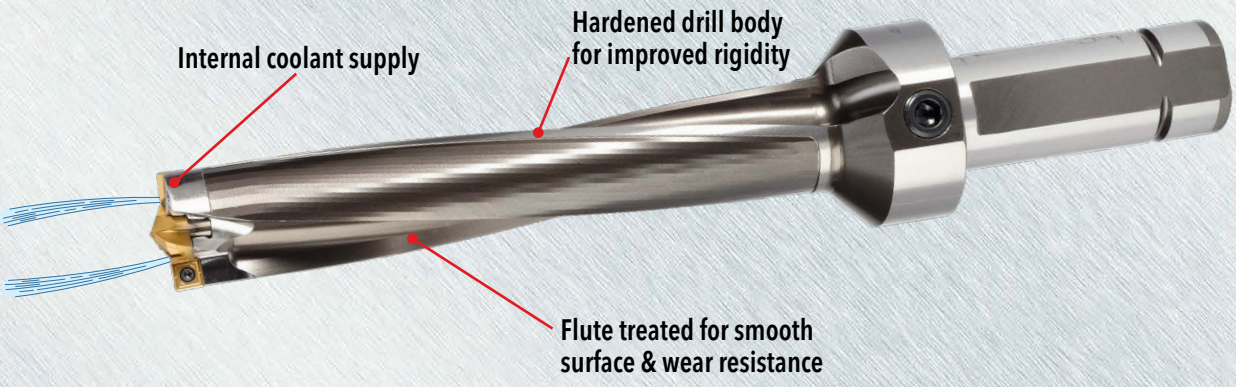
- Hole accuracy IT10-11
- Two effective design means higher productivity
- Precision 4-corner insert with wiper
- Excellent hole straightness and surface finish
- Excellent chip control
- Improved body rigidity
- Self-centering, no need for a pilot hole

INDUSTRY 4.0 PRODUCT ANNOUNCEMENT •UPDATE• 2026

Member IMC Group Ingersoll Cutting Tools

SPECIFICATIONS





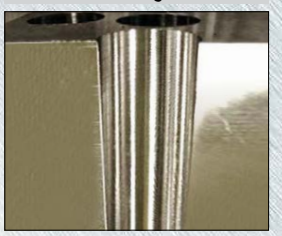
* NOTE: The standard GoldTwist tips are not compatible with GoldTwin bodies.

CASE STUDY 1 - PERFORMANCE TEST

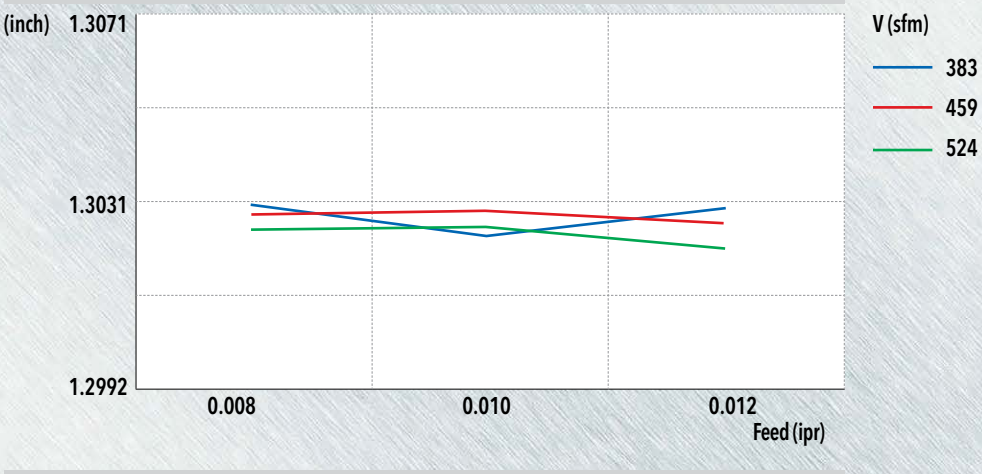
Machine		Vertical machining center (Spindle : BT50)
Coolant		Internal (145 psi)
Material		SAE 4340
Drill		CD3300165N6R01 (1.299")
Head		TPC1690R01-C IN2505 SPGX090408WG IN2505
Cutting speed	V (sfm)	383/459/524
Feed rate	f (ipr)	.008/.010/.012
Hole depth (inch)		6.00" (Through hole)

Chip shape

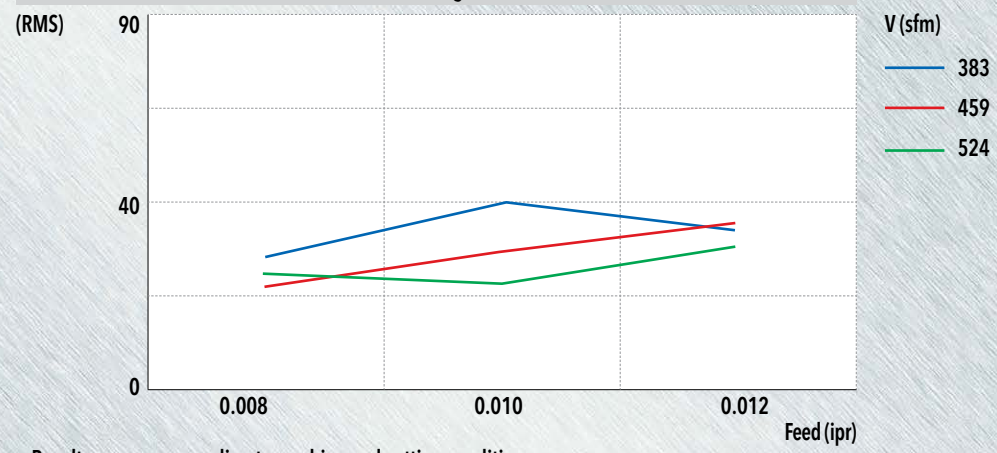
Surface roughness



Hole size



Surface roughness

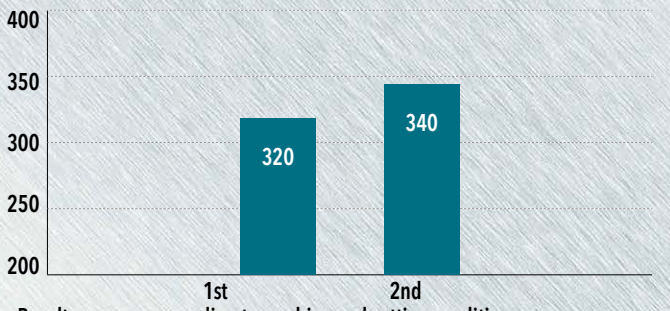


• Results may vary according to machine and cutting conditions

CASE STUDY 2 - TOOL LIFE ON ALLOY STEEL

Machine		Vertical machining center (Spindle : BT50)
Coolant		Internal (145 psi)
Material		Alloy steel (AISI 4140)
Drill		CD3300165N6R01 (1.299")
Head		TPC1690R01-C IN2505 SPGX090408WG IN2505
Cutting speed	V (sfm)	459
Feed rate	f (ipr)	0.010
Hole depth (inch)		6.00" (Through hole)

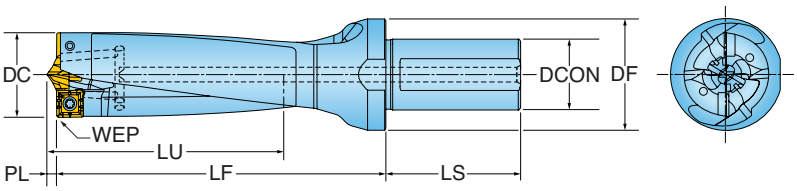
Tool life
(holes/insert)



• Results may vary according to machine and cutting conditions

SERIES CD - 3XD - TIP & INDEXABLE INSERT/DRILL HOLDER (INCH) NEW

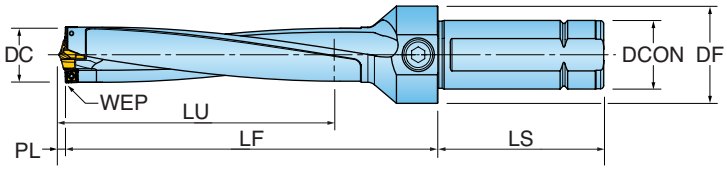
3XD Weldon Style Shank



Part Number	DC Cutting Diameter	PL Point Length	LU Useable Length	LF Functional Length	LS Shank Length	DCON Shank Dia	DF Flange Dia	SSC Seat Size	Center Tip	Locking Key	Outboard Insert
CD2620079N6R03	1.031	0.153	3.110	4.440	2.36	1.25	1.574	15	TPC1590-C	KTD15.0-15.9-C	SPGX060204WG
CD2700081N6R03	1.063	0.161	3.189	4.550	2.36	1.25	1.574	16	TPC1690-C	KTD16.0-16.9-C	
CD2860086N6R03	1.125	0.165	3.385	4.791	2.36	1.25	1.574	17	TPC1790-C	KTD17.0-17.9-C	
CD2870087N6R03	1.130	0.165	3.425	4.830	2.36	1.25	1.574	17	TPC1790-C	KTD17.0-17.9-C	
CD2940088N6R03	1.156	0.153	3.464	4.854	2.36	1.25	1.574	15	TPC1590-C	KTD15.0-15.9-C	SPGX07T308WG
CD3020091N6R03	1.188	0.161	3.582	5.007	2.36	1.25	1.574	16	TPC1590-C	KTD15.0-15.9-C	
CD3180095N6R03	1.250	0.165	3.740	5.204	2.36	1.25	1.574	17	TPC1790-C	KTD17.0-17.9-C	
CD3330100N6R03	1.312	0.153	3.937	5.563	2.36	1.25	1.968	15	TPC1590-C	KTD15.0-15.9-C	SPGX090408WG
CD3490105N6R03	1.375	0.161	4.133	5.795	2.36	1.25	1.968	16	TPC1690-C	KTD16.0-16.9-C	
CD3650110N6R03	1.437	0.170	4.330	6.066	2.36	1.25	1.968	18	TPC1890-C	KTD18.0-18.9-C	
CD3810114N6R03	1.500	0.169	4.488	6.244	2.36	1.25	1.968	17	TPC1790-C	KTD17.0-17.9-C	SPGX110408WG
CD3850115N6R03	1.516	0.169	4.527	6.283	2.36	1.25	1.968	17	TPC1790-C	KTD17.0-17.9-C	

SERIES CD - 5XD - TIP & INDEXABLE INSERT/DRILL HOLDER (INCH)

5XD Weldon Style Shank

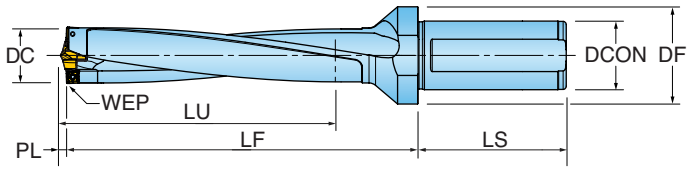


Part Number	DC Cutting Dia. (mm)	DC Cutting Dia. (inch)	PL Point Length	LU Max DOC	LF Functional Length	LS Shank Length	DCON Shank Dia	DF Flange Dia	SSC Seat Size	NPTF	Center Tip	Locking Key	Outboard Insert
CD2600130N6R01	26	1.024	.153	5.118	7.232	3.15	1.25	1.772	15	1/4	TPC1590R01-C	KTD15.0-15.9-C	
CD2620131N6R01	26.2	1.031	.153	5.157	7.232	3.15	1.25	1.772	15	1/4	TPC1590R01-C	KTD15.0-15.9-C	
CD2700135N6R01	27	1.063	.160	5.315	7.472	3.15	1.25	1.772	16	1/4	TPC1690R01-C	KTD16.0-16.9-C	SPGX060204WG
CD2780139N6R01	27.8	1.094	.160	5.472	7.472	3.15	1.25	1.772	16	1/4	TPC1690R01-C	KTD16.0-16.9-C	
CD2800140N6R01	28	1.102	.167	5.512	7.713	3.15	1.25	1.772	17	1/4	TPC1790R01-C	KTD17.0-17.9-C	
CD2860143N6R01	28.6	1.125	.167	5.630	7.713	3.15	1.25	1.772	17	1/4	TPC1790R01-C	KTD17.0-17.9-C	
CD2900145N6R01	29	1.142	.154	5.709	7.882	3.15	1.25	2.165	15	1/4	TPC1590R01-C	KTD15.0-15.9-C	
CD2940147N6R01	29.4	1.156	.154	5.787	7.882	3.15	1.25	2.165	15	1/4	TPC1590R01-C	KTD15.0-15.9-C	
CD3000150N6R01	30	1.181	.160	5.906	8.122	3.15	1.25	2.165	16	1/4	TPC1690R01-C	KTD16.0-16.9-C	
CD3020151N6R01	30.2	1.189	.160	5.945	8.122	3.15	1.25	2.165	16	1/4	TPC1690R01-C	KTD16.0-16.9-C	
CD3100155N6R01	31	1.220	.167	6.102	8.362	3.15	1.25	2.165	17	1/4	TPC1790R01-C	KTD17.0-17.9-C	SPGX07T308WG
CD3180159N6R01	31.8	1.250	.167	6.260	8.362	3.15	1.25	2.165	17	1/4	TPC1790R01-C	KTD17.0-17.9-C	
CD3200160N6R01	32	1.260	.173	6.299	8.602	3.15	1.25	2.165	18	1/4	TPC1890R01-C	KTD18.0-18.9-C	
CD3250163N6R01	32.5	1.280	.173	6.417	8.602	3.15	1.25	2.165	18	1/4	TPC1890R01-C	KTD18.0-18.9-C	
CD3300165N6R01	33	1.299	.153	6.496	8.866	3.15	1.25	2.165	15	1/4	TPC1590R01-C	KTD15.0-15.9-C	
CD3330167N6R01	33.3	1.312	.154	6.575	8.866	3.15	1.25	2.165	15	1/4	TPC1590R01-C	KTD15.0-15.9-C	
CD3400170N6R01	34	1.339	.161	6.693	9.106	3.15	1.25	2.165	16	1/4	TPC1690R01-C	KTD16.0-16.9-C	
CD3410171N6R01	34.1	1.343	.161	6.732	9.106	3.15	1.25	2.165	16	1/4	TPC1690R01-C	KTD16.0-16.9-C	
CD3490175N6R01	34.9	1.375	.161	6.890	9.106	3.15	1.25	2.165	16	1/4	TPC1690R01-C	KTD16.0-16.9-C	SPGX090408WG
CD3500175N6R01	35	1.378	.167	6.890	9.346	3.15	1.25	2.165	17	1/4	TPC1790R01-C	KTD17.0-17.9-C	
CD3570179N6R01	35.7	1.406	.168	7.047	9.346	3.15	1.25	2.165	17	1/4	TPC1790R01-C	KTD17.0-17.9-C	
CD3600180N6R01	36	1.417	.173	7.087	9.587	3.15	1.25	2.165	18	1/4	TPC1890R01-C	KTD18.0-18.9-C	
CD3650182N6R01	36.5	1.437	.173	7.165	9.587	3.15	1.25	2.165	18	1/4	TPC1890R01-C	KTD18.0-18.9-C	
CD3700185N6R01	37	1.457	.161	7.283	9.756	3.15	1.25	2.165	16	1/4	TPC1690R01-C	KTD16.0-16.9-C	
CD3730186N6R01	37.3	1.468	.161	7.323	9.756	3.15	1.25	2.165	16	1/4	TPC1690R01-C	KTD16.0-16.9-C	
CD3800190N6R01	38	1.496	.168	7.480	9.996	3.15	1.25	2.165	17	1/4	TPC1790R01-C	KTD17.0-17.9-C	
CD3810191N6R01	38.1	1.500	.168	7.519	9.996	3.15	1.25	2.165	17	1/4	TPC1790R01-C	KTD17.0-17.9-C	
CD3890194N6R01	38.9	1.531	.168	7.638	9.996	3.15	1.25	2.165	17	1/4	TPC1790R01-C	KTD17.0-17.9-C	
CD3900195N6R01	39	1.535	.174	7.677	10.236	3.15	1.25	2.165	18	1/4	TPC1890R01-C	KTD18.0-18.9-C	
CD3970198N6R01	39.7	1.562	.173	7.795	10.236	3.15	1.25	2.165	18	1/4	TPC1890R01-C	KTD18.0-18.9-C	
CD4000200N6R01	40	1.575	.173	7.874	10.472	3.15	1.25	2.165	19	1/4	TPC1990R01-C	KTD19.0-19.9-C	
CD4050202N6R01	40.5	1.594	.179	7.953	10.472	3.15	1.25	2.165	19	1/4	TPC1990R01-C	KTD19.0-19.9-C	
CD4100205N6R01	41	1.614	.185	8.071	10.713	3.15	1.25	2.165	20	1/4	TPC2090R01-C	KTD20.0-20.9-C	SPGX110408WG
CD4130206N6R01	41.3	1.625	.184	8.110	10.713	3.15	1.25	2.165	20	1/4	TPC2090R01-C	KTD20.0-20.9-C	
CD4200210N6R01	42	1.654	.191	8.268	10.953	3.15	1.25	2.165	21	1/4	TPC2190R01-C	KTD21.0-21.9-C	
CD4280214N6R01	42.8	1.687	.191	8.425	10.953	3.15	1.25	2.165	21	1/4	TPC2190R01-C	KTD21.0-21.9-C	
CD4300215N7R01	43	1.693	.195	8.465	11.193	3.15	1.50	2.362	22	1/4	TPC2290R01-C	KTD22.0-22.9-C	
CD4370218N7R01	43.7	1.719	.195	8.583	11.193	3.15	1.50	2.362	22	1/4	TPC2290R01-C	KTD22.0-22.9-C	
CD4400220N7R01	44	1.732	.202	8.661	11.429	3.15	1.50	2.362	23	1/4	TPC2390R01-C	KTD23.0-23.9-C	
CD4450222N7R01	44.5	1.750	.202	8.740	11.429	3.15	1.50	2.362	23	1/4	TPC2390R01-C	KTD23.0-23.9-C	
CD4500225N7R01	45	1.772	.208	8.858	11.669	3.15	1.50	2.362	24	1/4	TPC2490R01-C	KTD24.0-24.9-C	
CD4520226N7R01	45.2	1.781	.208	8.897	11.669	3.15	1.50	2.362	24	1/4	TPC2490R01-C	KTD24.0-24.9-C	

Notes: Intermediate sizes are available upon request. Hole tolerance, +.006/-.000, under stable conditions.

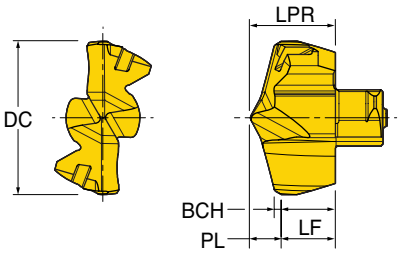
SERIES CD - 5XD - TIP & INDEXABLE INSERT/DRILL HOLDER (METRIC)

5XD Weldon Style Shank



Part Number	DC Cutting Dia. (mm)	PL Point Length	LU Max DOC	LF Functional Length	LS Shank Length	DCON Shank Dia	DF Flange Dia	SSC Seat Size	Center Tip	Locking Key	Outboard Insert
CD2600130JGR00	26.00 mm	3.89 mm	130.0 mm	167.70 mm	60.0 mm	32.0 mm	40.0 mm	15	TPC1590R01-C	KTD15.0-15.9-C	SPGX060204WG
CD2800140JGR00	28.00 mm	4.23 mm	144.0 mm	179.90 mm	60.0 mm	32.0 mm	40.0 mm	17	TPC1790R01-C	KTD17.0-17.9-C	
CD2900145JGR00	29.00 mm	3.93 mm	149.0 mm	145.00 mm	60.0 mm	32.0 mm	40.0 mm	15	TPC1590R01-C	KTD15.0-15.9-C	SPGX07T308WG
CD3000150JGR00	30.00 mm	4.08 mm	154.0 mm	190.30 mm	60.0 mm	32.0 mm	40.0 mm	16	TPC1690R01-C	KTD16.0-16.9-C	
CD3100155JGR00	31.00 mm	4.25 mm	159.0 mm	196.40 mm	60.0 mm	32.0 mm	40.0 mm	17	TPC1790R01-C	KTD17.0-17.9-C	
CD3300165JHR00	33.00 mm	3.89 mm	169.0 mm	210.20 mm	70.0 mm	40.0 mm	50.0 mm	15	TPC1590R01-C	KTD15.0-15.9-C	SPGX090408WG
CD3400170JHR00	34.00 mm	4.08 mm	174.0 mm	216.30 mm	70.0 mm	40.0 mm	50.0 mm	16	TPC1690R01-C	KTD16.0-16.9-C	
CD3500175JHR00	35.00 mm	4.25 mm	179.0 mm	222.40 mm	70.0 mm	40.0 mm	50.0 mm	17	TPC1790R01-C	KTD17.0-17.9-C	
CD3600180JHR00	36.00 mm	4.39 mm	184.0 mm	228.50 mm	70.0 mm	40.0 mm	50.0 mm	18	TPC1890R01-C	KTD18.0-18.9-C	
CD3700185JHR00	37.00 mm	4.08 mm	189.0 mm	232.80 mm	70.0 mm	40.0 mm	50.0 mm	16	TPC1690R01-C	KTD16.0-16.9-C	SPGX110408WG
CD3800190JHR00	38.00 mm	4.28 mm	194.0 mm	238.90 mm	70.0 mm	40.0 mm	50.0 mm	17	TPC1790R01-C	KTD17.0-17.9-C	
CD3900195JHR00	39.00 mm	4.39 mm	199.0 mm	245.00 mm	70.0 mm	40.0 mm	50.0 mm	18	TPC1890R01-C	KTD18.0-18.9-C	
CD4000200JHR00	40.00 mm	4.54 mm	205.0 mm	251.00 mm	70.0 mm	40.0 mm	50.0 mm	19	TPC1990R01-C	KTD19.0-19.9-C	
CD4100205JHR00	41.00 mm	4.68 mm	210.0 mm	257.10 mm	70.0 mm	40.0 mm	50.0 mm	20	TPC2090R01-C	KTD20.0-20.9-C	
CD4200210JHR00	42.00 mm	4.84 mm	215.0 mm	263.10 mm	70.0 mm	40.0 mm	50.0 mm	21	TPC2190R01-C	KTD21.0-21.9-C	
CD4300215JHR00	43.00 mm	4.96 mm	220.0 mm	269.20 mm	70.0 mm	40.0 mm	50.0 mm	22	TPC2290R01-C	KTD22.0-22.9-C	
CD4400220JHR00	44.00 mm	5.12 mm	225.0 mm	275.30 mm	70.0 mm	40.0 mm	50.0 mm	23	TPC2390R01-C	KTD23.0-23.9-C	
CD4500225JHR00	45.00 mm	5.28 mm	230.0 mm	281.20 mm	70.0 mm	40.0 mm	50.0 mm	24	TPC2490R01-C	KTD24.0-24.9-C	

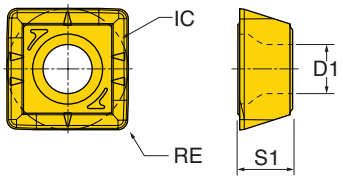
SERIES TPC... -C - DRILL HEAD



Part Number	DC Cutting Dia. (inch)	DC Cutting Dia. (mm)	PL Point Length	LPR Projection Length	LF Functional Length	BCH Corner Chamfer Length	SSC Pocket Size	Grade IN2505
* TPC1590R01-C	.626"	15.9	.125	.343"	.220	.028	15	•
* TPC1690R01-C	.665"	16.9	.132	.366"	.236	.032	16	•
* TPC1790R01-C	.705"	17.9	.108	.390"	.281	.032	17	•
* TPC1890R01-C	.744"	18.9	.144	.413"	.268	.032	18	•
* TPC1990R01-C	.783"	19.9	.150	.433"	.283	.032	19	•
* TPC2090R01-C	.823"	20.9	.157	.457"	.299	.032	20	•
* TPC2190R01-C	.862"	21.9	.163	.476"	.315	.032	21	•
* TPC2290R01-C	.902"	22.9	.170	.500"	.335	.032	22	•
* TPC2390R01-C	.941"	23.9	.176	.524"	.350	.032	23	•
* TPA2490R01-C	.980"	24.9	.183	.539"	.366	.032	24	•

* Note: Standard GoldTwist tips are not compatible with GoldTwin bodies
• Standard Items

SERIES SPGX...WG - INSERT



Part Number	SSC Pocket Size	Dimensions				Grade IN2505	Screw	Torque Spec (in-lbs)	Torx Driver
		D	S1	RE	D1				
SPGX060204WG	6	.239"	.094"	.016"	.103"	•	TS22052I/HG (M2.2X5.2MM)	7-11	HZS.0004
SPGX07T308WG	7	.316"	.156"	.031"	.112"	•	TS25064I (M2.5X6.4MM)	10-15	TD 8
SPGX090408WG	9	.390"	.169"	.031"	.159"	•	SM35-088-60 (M3.5X8.75MM)	25-30	TD 10
SPGX110408WG	11	.457"	.190"	.031"	.175"	•	SE02-82 (M4X9.3MM)	30-35	TD 15

• Standard Items

RECOMMENDED CUTTING CONDITIONS

ISO	Material	Condition	Tensile Strength Rm (N/mm²)	Hardness (HB)	Matl No.	Cutting Speed Vc (SFM)	Feed vs Drill Diameter				
							D= 26-28.9mm 1.024-1.138" SPGX06	D= 29-32.9mm 1.142-1.295" SPGX07	D= 33-36.9mm 1.299-1.453" SPGX09	D= 37-43.9mm 1.457-1.728" SPGX11	D= 44-45.9mm 1.732-1.807" SPGX11
							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	390-650	.008-014	.010-.014	.008-.016	.010-.016	.011-.018
		Annealed	650	190	2	390-650					
		Quenched & Tempered	850	250	3	425-625					
		Annealed	750	220	4	425-625					
		Quenched & Tempered	1000	300	5	425-625					
	Low alloy steel & cast steek (less than 5% alloying elements)	Annealed	600	200	6	325-650	.008-.013	.010-.013	.010-.014	.010-.014	.010-.016
		Quenched & Tempered	930	275	7	325-650					
			1000	300	8	325-650					
			1200	350	9	325-650					
	High alloy steel, cast steel, & tool steel	Annealed	680	200	10	325-525	.008-.013	.010-.013	.010-.014	.010-.014	.010-.016
		Quenched & Tempered	1100	325	11	325-525					
M	Stainless steel & cast stainless steel	Ferritic/martensitic	680	200	12	260-460	.005-.010	.006-.010	.006-.010	.007-.011	.007-.012
		Martensitic	820	240	13	260-460					
		Austenitic	600	180	14	260-460					
K	GreyCast Iron (GG)	Ferritic		160	15	325-825	.010-.018	.010-.018	.012-.020	.012-.020	.014-.022
		Pearlitic		250	16	325-825					
	Cast Iron Nodular (GGG)	Ferritic		180	17	325-825					
		Pearlitic		260	18	325-825					
	Malleable Cast Iron	Ferritic		130	19	325-825					
		Pearlitic		230	20	325-825					
N	Aluminum - wrought alloy	Not cureable		60	21	525-850	.012-.020	.012-.020	.014-.022	.014-.022	.016-.024
		Cured		100	22	525-850					
	Aluminum - cast, alloyed <=12% Si / >12% Si	Not cureable		75	23	525-850					
		Cured		90	24	525-850					
		High temperature		130	25	525-850					
	Copper alloys > 1% Pb	Free cutting		110	26	525-850					
		Brass		90	27	525-850					
		Electrolitic copper		100	28	525-850					
	Non-metallic	Duro & fiber plastics			29	-	-	-	-	-	-
		Hard rubber			30	-	-	-	-	-	-
S	High temp alloys Fe based / Ni or Co based	Annealed		200	31	100-200	.004-.006	.004-.007	.006-.008	.006-.009	.006-.009
		Cured		280	32	100-265					
		Annealed		250	33	100-265					
		Cured		350	34	100-265					
		Cast		320	35	100-265					
	Titanium, Ti alloys		Rm 400		36	100-265	.004-.006	.004-.007	.006-.008	.006-.009	.006-.009
		Alpha+beta alloys cured	Rm 1050		37	100-265					
H	Hardened steel	Hardened		55 HRC	38	65-165	.004-.006	.005-.007	.006-.008	.006-.008	.006-.009
		Hardened		60 HRC	39	65-165					
	Chilled cast iron	Cast		400	40	-	-	-	-	-	-
	Cast iron nodular	Hardened		55 HRC	41	-	-	-	-	-	-

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