NPA

NEW

New Product Announcement

Member IMC Group Ingersoll Cutting Tools

HOLEMAKING

WINTWIST™

Featuring ChipoSurfer™ adaption

Diameter Range

0.2362–0.2520″ (6.00–6.40 mm)

0.3150–0.3307″ (8.00–8.40 mm)

0.3937–0.4094″ (10.00–10.40 mm)

Body

2xD

Adaptions

ChipSurfer T06 and T08

Geometries

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

Grades

IN2505
IN05S

Materials

- Steel
- Stainless Steel
- Cast Iron
- Non-Ferrous
- High-Temp Alloys

Modular Quick Change Drilling with T06 & T08 ChipSurfer Adaption

- Accommodates a wide range of applications using the ChipSurfer connections.
- Simplified setup for multi-spindle and Swiss-type machines.
- Straight flute suitable for horizontal applications.
- Compatible with existing GoldTwist tips.
- Coolant thru.

See it in action! »

WINSFEED™ ADVANCED MACHINING

ingersoll-imc.com

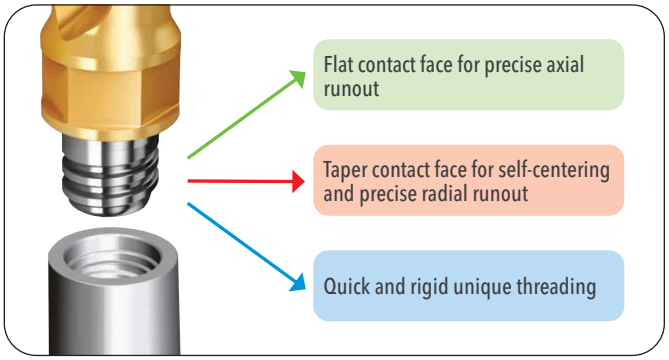
Adaption

Ingersoll is excited to introduce another addition to the Holemaking family of products which feature GoldTwist bodies with a threaded ChipSurfer connection. New bodies feature a durable and precise connection which assures ultimate performance for achieving accurate cylindricity and hole surface quality in drilling.

The new bodies are designed with internal coolant holes by use of advanced 3D printing technology. The new ChipSurfer connection offers a wide range of new machining methods such as short overhangs on multi-spindle and Swiss type machines and long overhangs by utilizing ChipSurfer tungsten carbide shanks combined with all GoldTwist tip geometries.

Features & Benefits

- Versatility - compatible with ALL ChipSurfer (T06 & T08) holders.
- Shorter tool lengths allow for easy use on multi-spindle and Swiss-type machines.
- Modular design reduces set-up and tool change times.
- Straight flute for better chip evacuation on horizontal appliations.
- Compatible with all indexable GoldTwist tips.
- Flat face contact for precise axial runout.
- Taper face contact for self-centering and precision radial runout.



Compatible with various ChipSurfer shank types

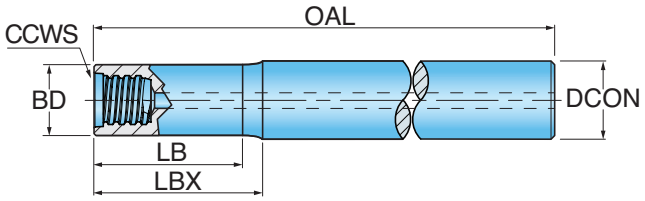
Necked shank: S*T* series -steel, heavy metal, carbide

Cone neck shank: S*T* series -steel, heavy metal, carbide

No neck shank: S*T* series -steel, heavy metal, carbide

Series S_T_SA / DA

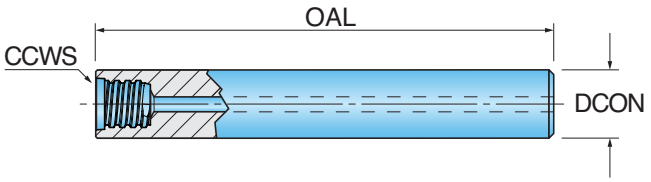
STEEL SHANK, NECKED



Part Number	DCON Shank Dia.	CCWS Connection Code Workpiece Side	LB Body Length	LBX Body Length Max.	OAL Overall Length	BD Body Dia.	CNSC Coolant Entry Style Code	CXSC Coolant Exit Style Code
INCH								
S037T06SA-06-01	0.375	Chip Surfer T06	0.600	0.670	3.000	0.364	1	1
S050T08SA-06-01	0.500	Chip Surfer T08	0.590	0.600	3.500	0.480	1	1
METRIC								
S010T06DA012-01	10.00 mm	Chip Surfer T06	10.60 mm	12.00 mm	75.00 mm	9.60 mm	1	1
S012T08DA014-01	12.00 mm	Chip Surfer T08	13.00 mm	14.00 mm	90.00 mm	11.60 mm	1	1
S012T08DA042-01	12.00 mm	Chip Surfer T08	41.00 mm	42.00 mm	90.00 mm	11.60 mm	1	1

Series S_T_HA

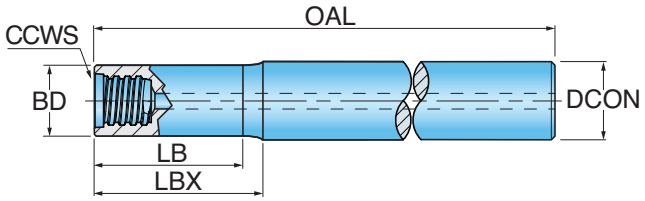
HEAVY METAL SHANK, NO NECK



Part Number	DCON Shank Dia	CCWS Connection Code Workpiece Side	OAL Overall Length	CNSC Coolant Entry Style Code	CXSC Coolant Exit Style Code
INCH					
S037T06HA-45-01	0.375	Chip Surfer T06	4.500	1	1
S050T08HA-56-01	0.500	Chip Surfer T08	5.500	1	1

Series S_T_CA

CARBIDE SHANK, NECKED

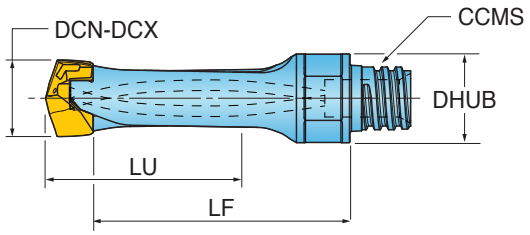


Part Number	DCON Shank Dia.	CCWS Connection Code Workpiece Side	LB Body Length	LBX Body Length Max.	OAL Overall Length	BD Body Dia.	CNSC Coolant Entry Style Code	CXSC Coolant Exit Style Code
INCH								
S037T06CA-12-01	0.375	Chip Surfer T06	1.200	1.270	4.000	0.364	1	1
S050T08CA-15-01	0.500	Chip Surfer T08	1.500	1.580	4.500	0.480	1	1
METRIC								
S012T08CA020-02	12.00 mm	Chip Surfer T08	18.00 mm	20.00 mm	70.00 mm	11.50 mm	1	1
S012T08CA040-02	12.00 mm	Chip Surfer T08	38.00 mm	40.00 mm	90.00 mm	11.50 mm	1	1
S012T08CA060-01	12.00 mm	Chip Surfer T08	59.00 mm	60.00 mm	110.00 mm	11.50 mm	1	1
S012T08CA080-01	12.00 mm	Chip Surfer T08	79.00 mm	80.00 mm	130.00 mm	11.50 mm	1	1

Drilling Coolant

2xD • Series TD_T_

CHIPSURFER



Part Number	DCN Cutting Dia. Min.	DCX Cutting Dia. Max.	SSC Seat Size Code	LU Usable Length	LF Functional Length	CCMS Conn. Code Machine Side	DHUB Hub Dia.	Clamping Key
	INCH (MM)	INCH (MM)						
TD0600012T06R00	0.2362 (6.00 mm)	0.2520 (6.40 mm)	6	0.5118	0.945	T06	0.378	KTD6.0-9.9
TD0800019T06R00	0.3150 (8.00 mm)	0.3307 (8.40 mm)	8	0.6772	1.082	T06	0.378	KTD6.0-9.9
TD1000020T08R00	0.3937 (10.00 mm)	0.4094 (10.4 mm)	10	0.8465	1.323	T08	0.465	KTD10.0-19.9

Operating Guidelines

ISO	Material		Condition	Tensile Strength (N/mm2)	Hardness HB	Material Group No.	Cutting Speed Vc (SFM)	Feed vs. Drill Diameter (In/Rev)		
								D=6.0-6.4	D=8.0-8.4	D=10.0-10.4
								(.236-.252)	(.315-.331)	(.394-.409)
								IPR (inches/rev)		
P	Non-alloy steel and cast steel, free cutting steel	<0.25%C	Annealed	420	125	1	260-460	.003-.005	.005-.008	.006-.011
		≥0.25%C	Annealed	650	190	2	260-430			
		<0.55%C	Quenched and tempered	850	250	3	260-400			
		≥0.55%C	Annealed	750	220	4	230-360			
			Quenched and tempered	1000	300	5	165-300			
	Low alloy steel and cast steel (less than 5% of alloying elements)		Annealed	600	200	6	230-400	.003-.006	.005-.010	.005-.011
			Quenched and tempered	930	275	7	230-360			
				1000	300	8	165-300			
				1200	350	9	130-230			
	High alloy steel, cast steel and tool steel		Annealed	680	200	10	165-300	.003-.005	.005-.008	.005-.008
			Quenched and tempered	1100	325	11	130-260			
M	Stainless steel and cast steel		Ferritic/martensitic	680	200	12	130-230	.003-.004	.004-.006	.005-.007
			Martensitic	820	240	13	130-230			
			Austenitic	600	180	14	100-230			
K	Grey cast iron (GG)		Ferritic/pearlitic	-	160	15	300-530	.005-.007	.006-.012	.008-.014
			Pearlitic	-	250	16	260-460			
	Cast iron nodular (GGG)		Ferritic	-	180	17	300-595			
			Pearlitic	-	260	18	260-460			
	Malleable cast iron		Ferritic	-	130	19	300-530			
			Pearlitic	-	230	20	260-460			
N	Aluminum-wrought alloy		Not curable	-	60	21	300-725	.006-.012	.008-.014	.010-.016
			Cured	-	100	22	300-725			
	Alum.-cast, alloyed	≤12% Si	Not curable	-	75	23	300-725			
			Cured	-	90	24	300-725			
		>12% Si	High temperature	-	130	25	265-525			
	Copper alloys	>1% Pb	Free cutting	-	110	26	300-725			
			Brass	-	90	27	300-725			
			Electrolitic copper	-	100	28	300-725			
	Non-metallic		Duroplastics, fiber plastics	-	-	29	-	-	-	-
			Hard rubber	-	-	30	-	-	-	-
S	High temp. alloys	Fe based	Annealed	-	200	31	100-200	.002-.003	.002-.004	.003-.005
			Cured	-	280	32	70-165			
		Ni or Co based	Annealed	-	250	33	70-165			
			Cured	-	350	34	70-165			
			Cast	-	320	35	70-165			
	Titanium and Ti alloys		-	Rm 400	-	36	70-165		.002-.005	.003-.006
			Alpa+bata alloys cured	Rm 1050	-	37	70-165			

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases.