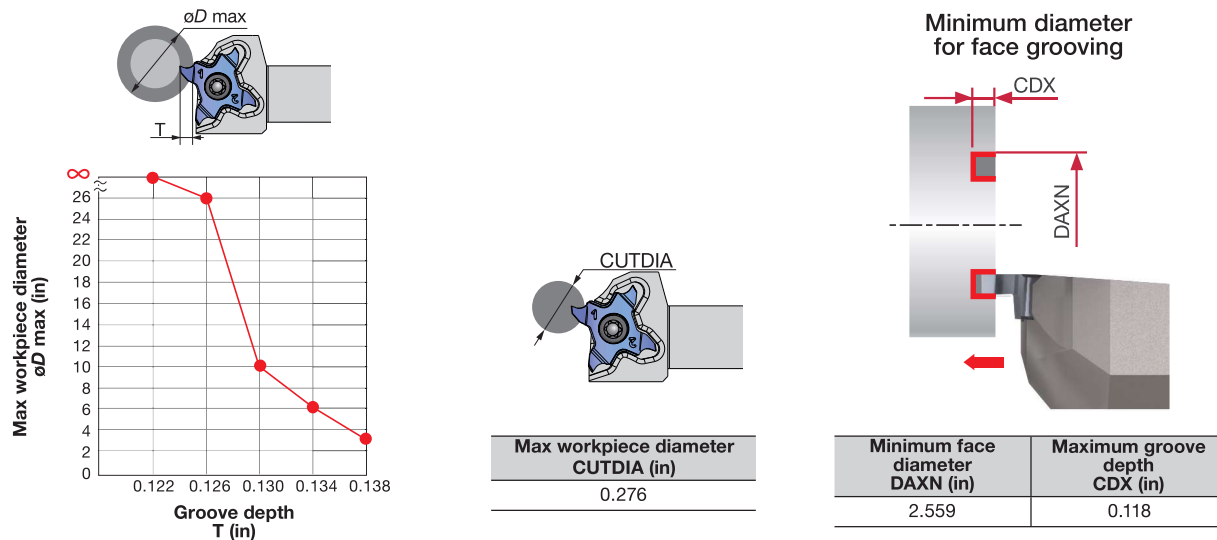


PRECAUTIONS OF PROCESSING



*Groove depth and max workpiece diameter (ϕD max)
 Maximum workpiece diameter is limited relative to depth of cut in order to avoid collision between insert and workpiece.

STANDARD CUTTING CONDITIONS

TCS18R (3D chipbreaker), TCG18R/L (honed edge)

ISO	Workpiece materials	Grades	Cutting speed Vc (sfm)	Feed: f (ipr)	
				TCG	TCS
P	Low carbon steel 1015, etc.	AH7025	262 - 591	0.001 - 0.005	0.001 - 0.006
	Carbon steel, Alloy steel 1055, etc.	AH7025	262 - 591	0.001 - 0.005	0.001 - 0.006
	Prehardened steel NAK80, PX5, etc.	AH7025	262 - 591	0.001 - 0.005	0.001 - 0.006
M	Stainless steel S30400, etc.	AH7025	164 - 394	0.001 - 0.005	0.001 - 0.006
K	Gray cast iron No.250B, No.300B, etc.	AH7025	164 - 591	0.001 - 0.005	0.001 - 0.006
	Ductile cast iron 60-40-18, 80-55-06, etc.	AH7025	164 - 591	0.001 - 0.005	0.001 - 0.006
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	98 - 262	0.001 - 0.005	0.001 - 0.006
	Superalloys Inconel718, etc.	AH7025	66 - 197	0.001 - 0.005	0.001 - 0.006

TCP18R/L (lightly honed edge) / TCP18R/L-F (sharp edge)

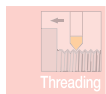
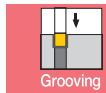
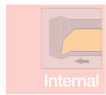
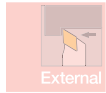
ISO	Workpiece materials	Priority	Grades	Cutting speed Vc (sfm)	Feed f (ipr)
P	Low carbon steel 1015, etc.	First choice	SH725	262 - 591	0.001 - 0.004
		Toughness	AH725	262 - 591	0.001 - 0.004
	Carbon steel, Alloy steel 1055, etc.	First choice	SH725	262 - 591	0.001 - 0.004
		Toughness	AH725	262 - 591	0.001 - 0.004
M	Prehardened steel NAK80, PX5, etc.	First choice	SH725	262 - 591	0.001 - 0.004
		Toughness	AH725	262 - 591	0.001 - 0.004
	Stainless steel S30400, etc.	First choice	SH725	164 - 394	0.001 - 0.004
		Toughness	AH725	164 - 394	0.001 - 0.004
K	Gray cast iron No.250B, No.300B, etc.	First choice	AH725	164 - 591	0.001 - 0.004
		Sharpness	SH725	164 - 591	0.001 - 0.004
	Ductile cast iron 60-40-18, 80-55-06, etc.	First choice	AH725	164 - 591	0.001 - 0.004
		Sharpness	SH725	164 - 591	0.001 - 0.004
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	98 - 262	0.001 - 0.004
		Toughness	AH725	98 - 262	0.001 - 0.004
	Superalloys Inconel718, etc.	First choice	SH725	66 - 197	0.001 - 0.004
		Toughness	AH725	66 - 197	0.001 - 0.004



STANDARD CUTTING CONDITIONS

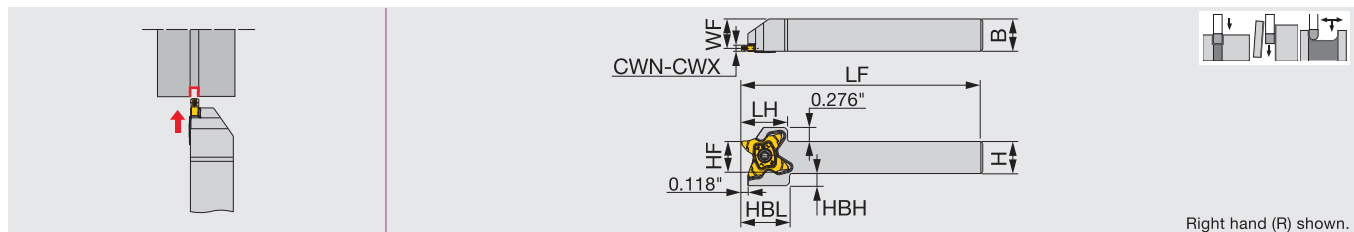
TCT18R/L (for threading / lightly honed edge) / TCT18FR (for threading / sharp edge)

ISO	Workpiece material	Priority	Grades	Cutting speed Vc (sfm)	Pitch (in)	TPI
P	Low carbon steel 1015, etc.	First choice	SH725	197 - 492	0.016 - 0.079	64 - 12
		Toughness	AH725	197 - 492	0.031 - 0.118	32 - 8
	Carbon steel, Alloy steel 1055, etc.	First choice	SH725	197 - 492	0.016 - 0.079	64 - 12
		Toughness	AH725	197 - 492	0.031 - 0.118	32 - 8
M	Prehardened steel NAK80, PX5, etc.	First choice	SH725	197 - 492	0.016 - 0.079	64 - 12
		Toughness	AH725	197 - 492	0.031 - 0.118	32 - 8
K	Gray cast iron No.250B, No.300B, etc.	First choice	AH725	164 - 328	0.031 - 0.118	32 - 8
		Sharpness	SH725	164 - 328	0.016 - 0.079	64 - 12
	Ductile cast iron 60-40-18, 80-55-06, etc.	First choice	AH725	164 - 328	0.031 - 0.118	32 - 8
		Sharpness	SH725	164 - 328	0.016 - 0.079	64 - 12
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	98 - 328	0.016 - 0.079	64 - 12
		Toughness	AH725	98 - 328	0.031 - 0.118	32 - 8
	Superalloys Inconel718, etc.	First choice	SH725	98 - 328	0.016 - 0.079	64 - 12
		Toughness	AH725	98 - 328	0.031 - 0.118	32 - 8



TETRAFORCE STCR/L-27

External grooving toolholder



Inch	CWN	CWX	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque
STCR/L06-27	0.02	0.125	0.375	0.375	5.000	0.906	0.945	0.375	0.315	0.374	TC*27...	1.84
STCR/L08-27	0.02	0.125	0.500	0.500	5.000	0.906	0.945	0.500	0.440	0.287	TC*27...	1.84
STCR/L10-27	0.02	0.125	0.625	0.625	5.000	0.906	0.945	0.625	0.570	0.236	TC*27...	1.84
STCR/L12-27	0.02	0.125	0.750	0.750	5.000	0.906	0.945	0.750	0.690	0.118	TC*27...	1.84
STCR/L16-27	0.02	0.125	1.000	1.000	5.000	0.906	-	1.000	0.940	-	TC*27...	1.84

Torque: Recommended clamping torque: lbs-ft

SPARE PARTS



Designation	Screw	Wrench
STCR**-27	SR16-212-01397L	T-2010/5
STCL**-27	SR16-212-01397	T-2010/5

Reference pages: STCR/L-27:

Inserts → G092 - G095, Standard cutting conditions → G095