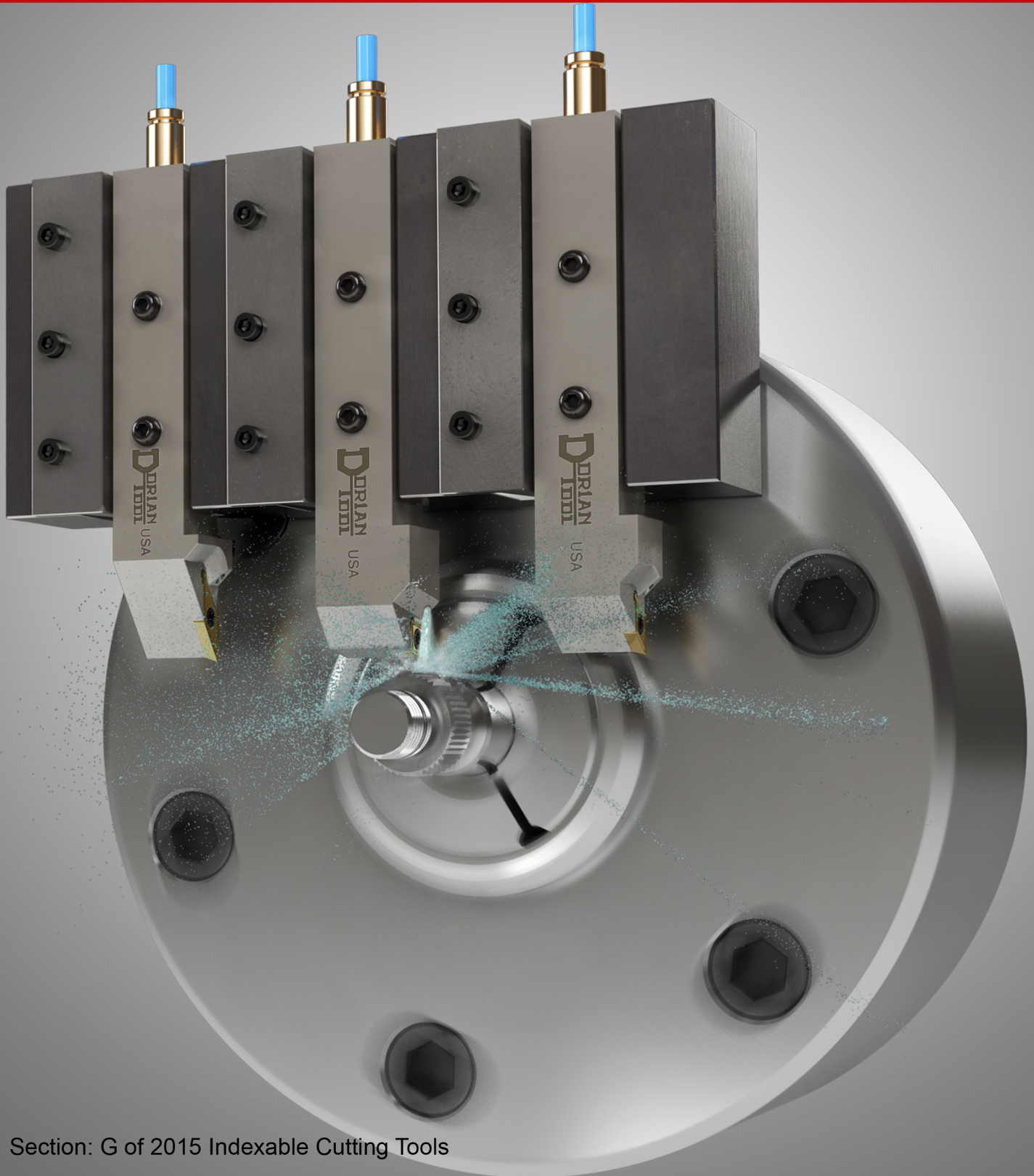




*The First Choice™*  
TECHNOLOGY

# Swiss

Screw Machine Turning Tools with the  
Advanced Thru Coolant Jet-Stream™



Section: G of 2015 Indexable Cutting Tools

## Swiss Screw Machine Tools

### Technical Support

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Jet-Stream™ Thru-Coolant Threading Tools for Swiss Screw Machines (Inch & Metric System)

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Dry Knurling Tools for Swiss Screw Machines (Inch & Metric System)

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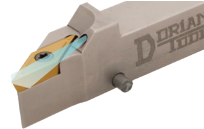


**ASCAC- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 7° Positive  
80° diamond CC\_W inserts



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**ASVNB- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 5° positive  
35° diamond VB\_W inserts



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**SCAC-Inch**  
Dry Turning Tool -  
for 7° Positive  
80° diamond CC\_W inserts



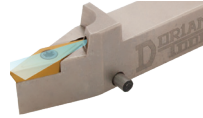
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**ASNC- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 7° Positive  
80° diamond CC\_W inserts



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**ASVVB- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 5° positive  
35° diamond VB\_W inserts



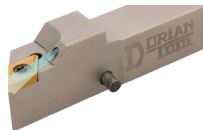
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**SCNC- Inch**  
Dry Turning Tool -  
for 7° Positive  
80° diamond CC\_W inserts



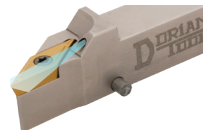
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**ASDAC - Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 7° positive  
55° diamond DC\_W inserts



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**ASVAC- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 7° Positive  
35° diamond VC\_W inserts



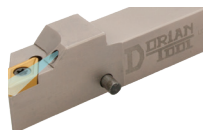
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**SDAC- Inch**  
Dry Turning Tool -  
for 7° positive  
55° diamond DC\_W inserts



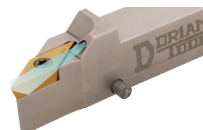
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**ASDNC- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 7° Positive  
55° diamond DC\_W inserts



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**ASVNC- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 7° Positive  
35° diamond VC\_W inserts



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**SDNC- Inch**  
Dry Turning Tool -  
for 7° Positive 55°  
diamond DC\_W inserts



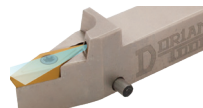
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**ASDPC- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 7° Positive  
55° diamond DC\_W inserts



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**ASVVC- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 7° Positive  
35° diamond VC\_W inserts



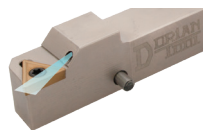
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**SDPC- Inch**  
Dry Turning Tool -  
for 7° Positive 55°  
diamond DC\_W inserts



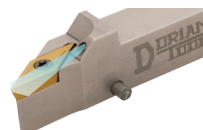
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**ASTAC- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 7° Positive  
Triangle TC\_W inserts



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**ASVNP- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 11° Positive  
35° diamond VP\_W inserts



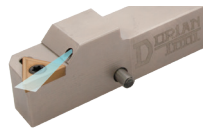
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**STAC- Inch**  
Dry Turning Tool -  
for 7° Positive  
Triangle TC\_W inserts



Page G-20

**ASTNC- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 7° Positive  
Triangle TC\_W inserts



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**ASVVP- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 11° Positive  
35° diamond VP\_W inserts



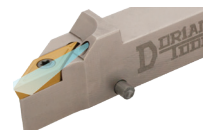
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**SVNB- Inch**  
Dry Turning Tool -  
for 5° Positive  
35° diamond VB\_W inserts



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**ASVAB- Metric / Inch**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 5° Positive  
35° diamond VB\_W inserts



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**ASWNC- Metric**  
Jet-Stream™ Thru Coolant  
Turning Tool - for 7° Positive  
80° trigon WC\_W inserts



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**SWNC- Inch**  
Dry Turning Tool -  
for 7° positive  
80° trigon WC\_W inserts



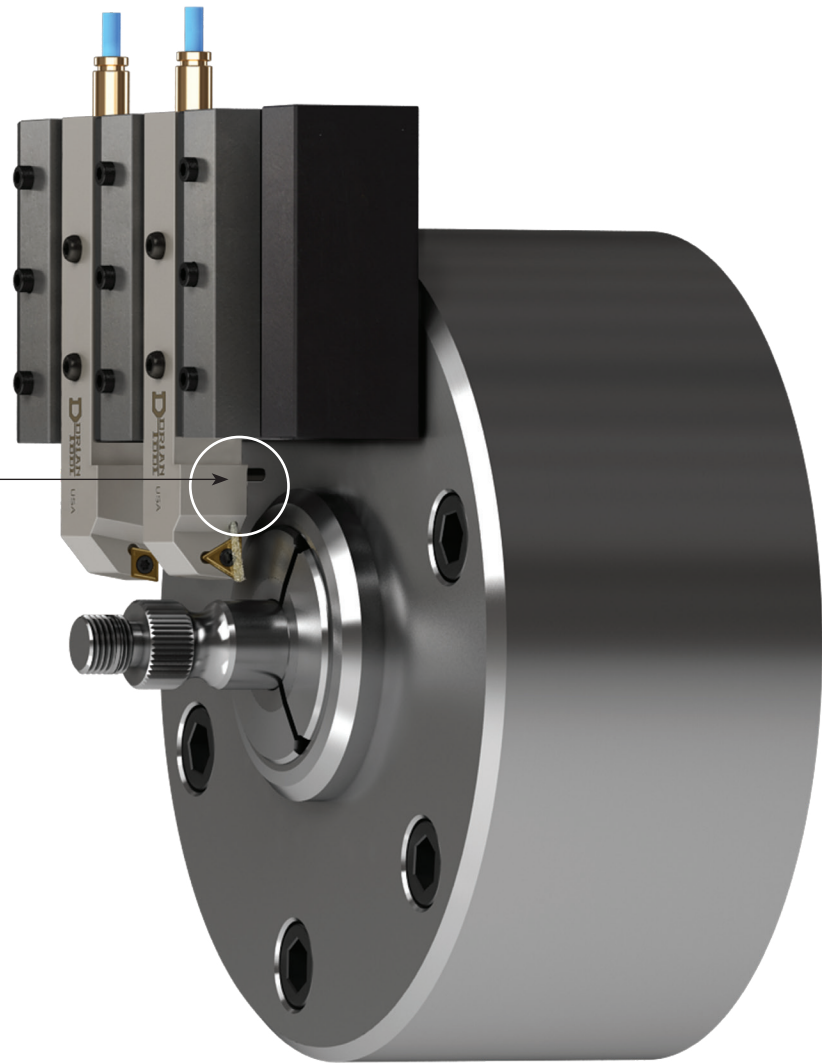
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## Dorian Toolholders for Swiss Screw Machines Feature:

### Zero Tolerance Repeatability with a Qualified Toolholder Stop!

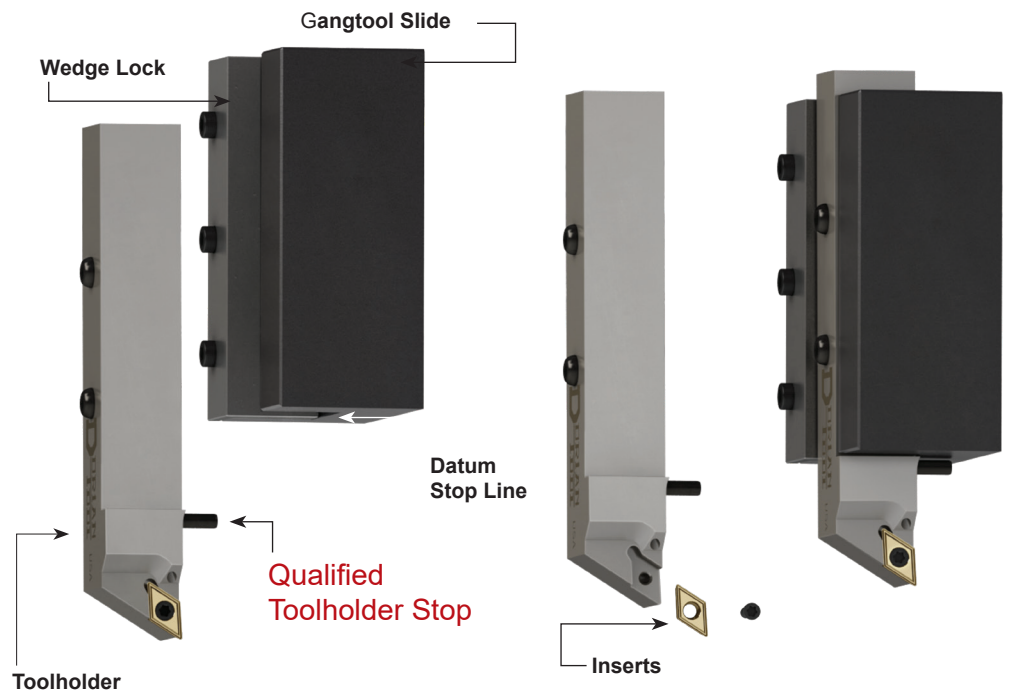
Dorian Toolholders for Swiss Screw Machines are provided with a precision **qualified toolholder stop**  $\pm .025\text{mm}$  (.001").

Toolholders can be moved, repositioned and locked with a **ZERO** tolerance for precise machining repeatability.

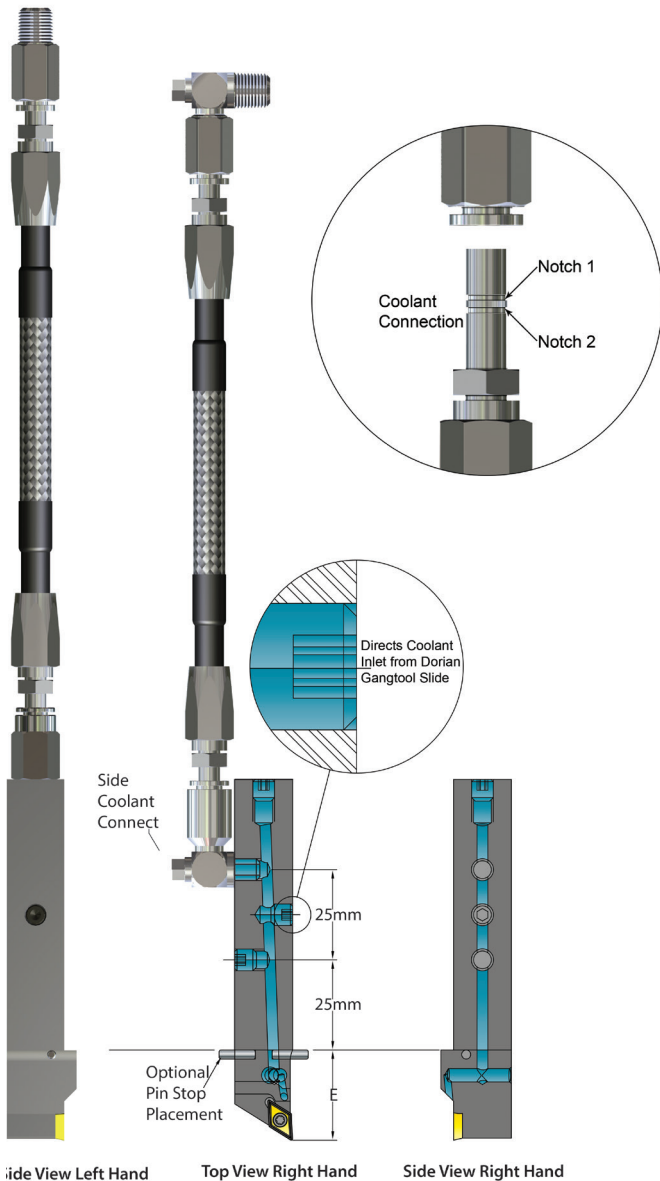


### Simple and Easy Insert Change!

1. Remove the **toolholder** from the **gangtool slide**
2. **Change Inserts**
3. Place toolholder back into the **gangtool slide**
4. Push the **qualified toolholder stop** against the **datum stop line**
5. Lock the **wedge lock** on the **gangtool slide**



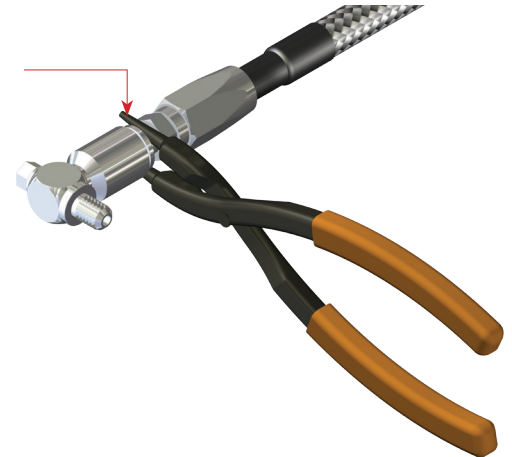
Item	Part Number	UPC No 733101-	Description
			<b>High Pressure Coolant Quick Connection</b> for Standard or High Pressure Applications with Side or End Coolant Connection



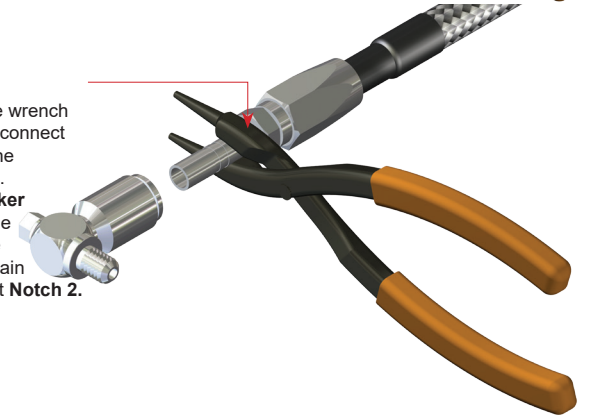
Item	Part Number	UPC No 733101-	Description
1	TD-HP-WRENCH	60076	High Pressure Disconnecting Payer

To Disconnect the Hydraulic Coolant Hose  
Follow Two Safe & Easy Steps:

1. Place the **thinner section** of the wrench-nose between the coolant hose and the connector.



2. Close the wrench and it will disconnect **Notch 1** of the coolant hose. Use the **thicker section** of the wrench-nose and close again to disconnect **Notch 2**.



Swiss Toolholders-High Pressure Coolant Connection 7 Pcs. Kit

Working Pressure

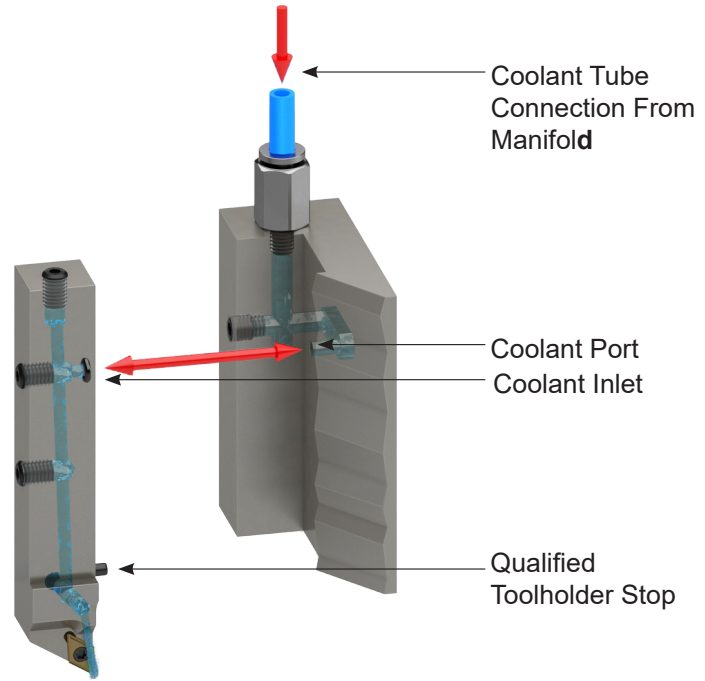


**New Hydraulic Coolant Hose  
For Safe & Easy Disconnection**

Item	Part Number	UPC No 733101-	Description	Bar	PSI
1	DT-HPTU-ASSY	60480	Swiss High Pressure Quick Release Coolant 7 pcs. Kit	200	2800
	DT-HPTU-8X4	60477	8mm High Pressure 8mm Coolant Tubing Only		
2	DT-HP90C-1/8x6	60479	High Pressure Quick Release Straight Intec		
3	DT-HP90C-1/8x6	60479	High Pressure Quick Release Straight Intec		
4	DT-HP90C-1/8x6	60490	1/8" NPT Straight High Pressure Quick Release Connector		
5	DT-HP90C-1/8x6	60489	1/8" NPT 90° Elbow High Pressure Quick Release Connector		
6	DT-HP90C-1/8x6	60487	6mm Straight High Pressure Quick Release Connector		
7	DT-HPTU-8X4	60486	6mm 90° Banjio High Pressure Quick Release Connector		

## Lock and Cool With the Dorian Thru Coolant Gangtool Slide for Swiss Screw Machine!

- Customized GangTool slide for specific machines
- Customized GangTool slide for specific jobs
- Quick toolholder set-up
- Qualified toolholder stop
- Precision tool change repeatability
- Quick and easy insert change
- Locks the toolholder into position and cool
- Coolant will flow direct from the GangTool slide to the toolholder
- No coolant hoses or connectors required
- Clean, Easy and precise tooling set-up



## Custom Dorian Gangtool for Swiss Screw Machines

The customized Dorian Gangtool slide will simplify tooling set-up and direct coolant connection to the toolholders from the Dorian Gangtool.

The Dorian Gangtool slides are built for specific machine models and applications.

The removal and quick set-up of the Dorian Gangtool expands tooling flexibility and job application.

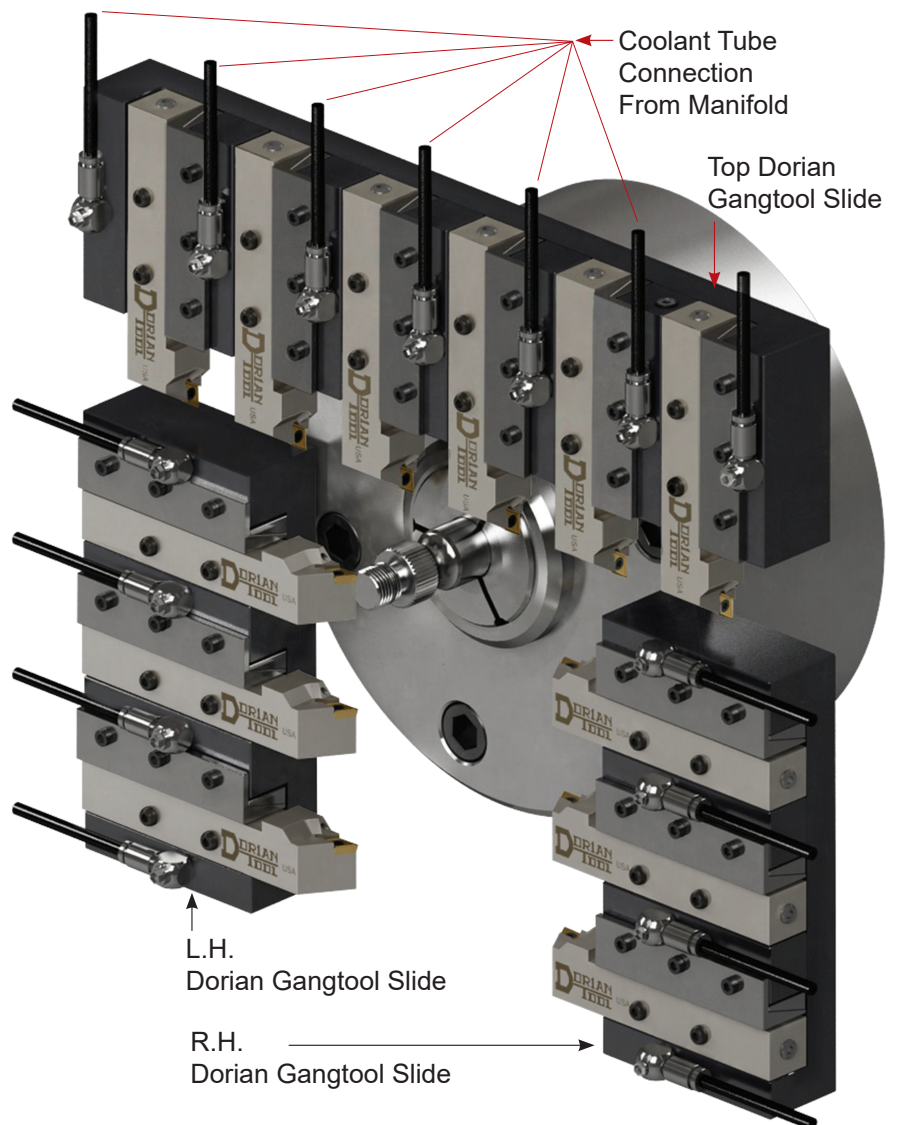
No hoses or fittings are required to cool the insert.

Once the toolholder is locked in the Dorian Gangtool, the coolant flows directly from the manifold; thru the Dorian Gangtool; and into the toolholder, aiming the coolant to the insert cutting edge at high speeds.

The coolant port between the Dorian Gangtool and the toolholder is sealed with an "O" ring.

The toolholders are provided with a qualified tool stop to simplify the removal and repositioning of the toolholders with extreme precision every time the insert is changed.

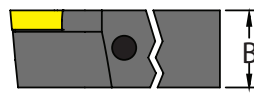
In order for Dorian Tool to build a customized Dorian Gangtool Slide for your machine and needs, fill out the form on page G-7.



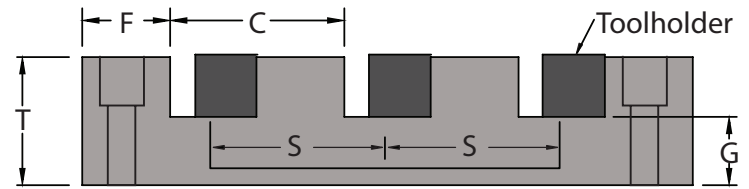
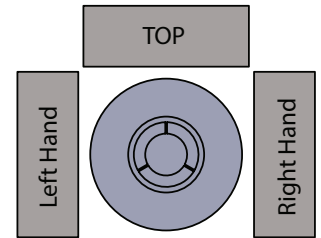
<b>Customized Dorian Gangtool Form</b>	
Complete and Fax to Dorian Tool at 979-282-2951 or email: sales@doriantool.com	
Company Name:	
Contact Name:	
Email:	
Phone No: (    )	
Fax No: (    )	
Address:	

Use Diagram on Right To Complete Table	
Make of Swiss machine:	
Model of Swiss machine:	
Shank size (B):	
Position of Gangtool:	
Bottom thickness (G):	
Spacing between tools (C):	
First station location (F):	
Overall Thickness (T):	
Number of stations (S):	
Overall width (W):	
Overall length (L):	
Bolt hole pattern:	
Bolt size and thread	
Pin location:	
Pin size:	

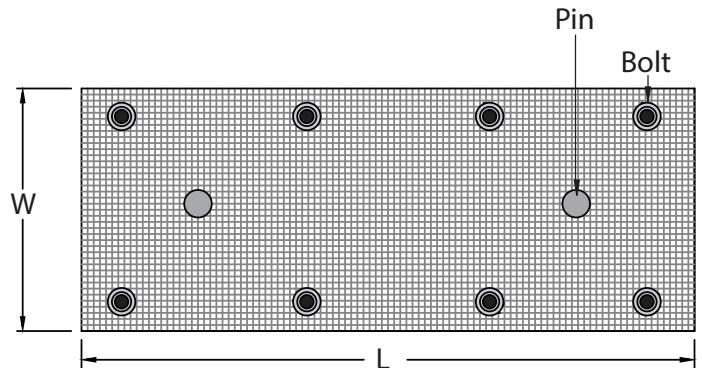
Right Hand Toolholder



Position of Gangtool



Dorian Gangtool



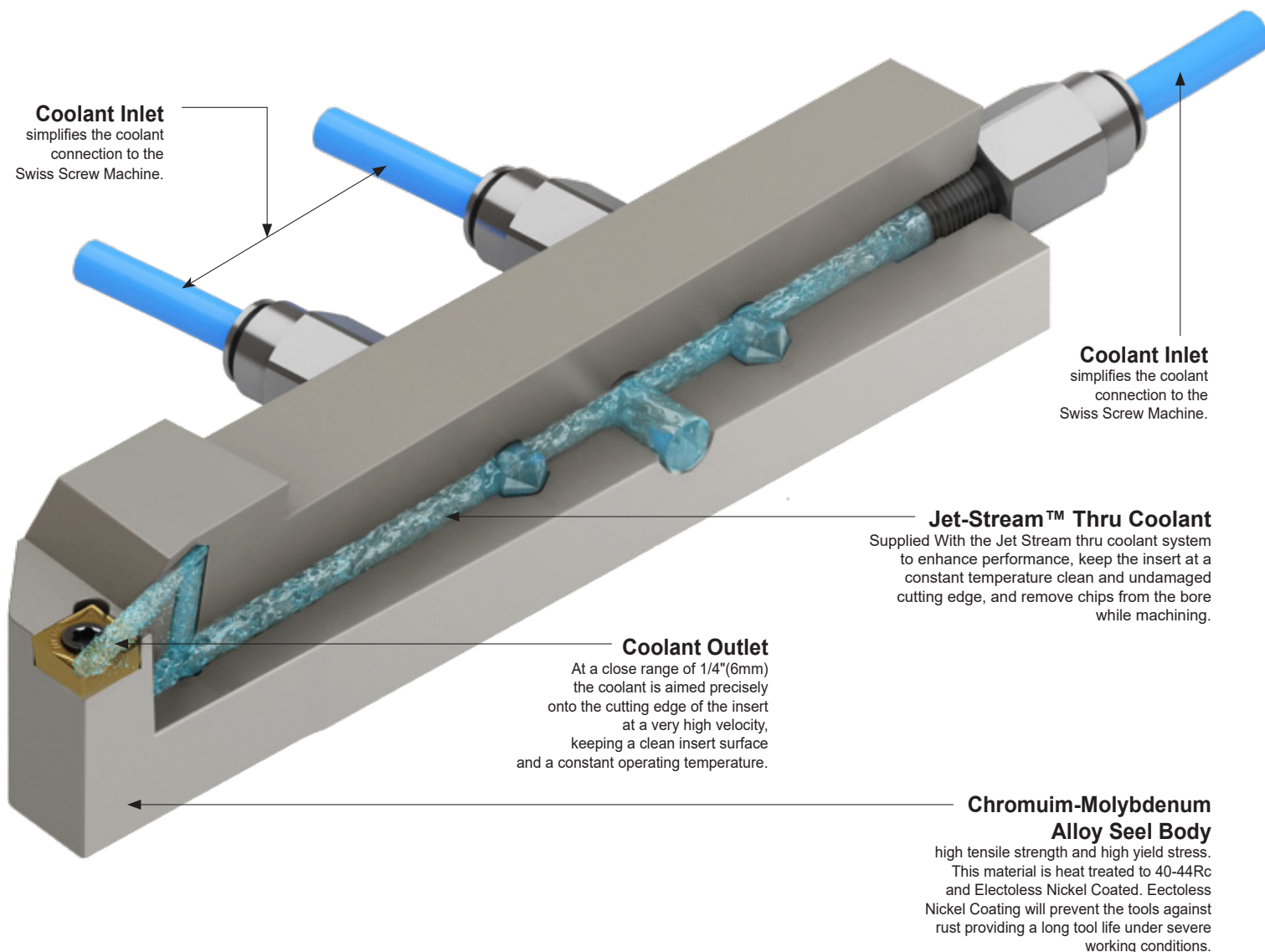
The New Patented Jet-Stream™ System will

## Increase Machining Performance and Insert Life Up to 200%

**When you combine the Dorian Jet-Stream™ tools with a high pressure pump you gain real control of your machining process.**

Damage from heat and chips is eliminated and tools can cut until they wear out. Controlled high-pressure coolant keeps the temperature low; changing the way metal is cut. Tools last longer, chips can't weld to the insert and metal can be cut at much higher surface speeds than ever before. Dangerous decomposition of the chemicals mixed in coolants do not occur at low temperatures. Combining a properly designed high pressure and high volume pumping system and the Dorian Jet Stream tooling system allows surface speed to be increased a minimum of 30%, with some operations improving by 300%!

High-pressure coolant also provides lubricity by blasting lubricating fluid between the chip and the insert at a very high velocity. This increased lubricity combined with much lower temperature and the evacuation of chips often causes surface finishes to have a RMA twice as good as traditional methods.





**The Jet-Stream™ Pressure**

**Forces the Hot Chips to Hydroplane**

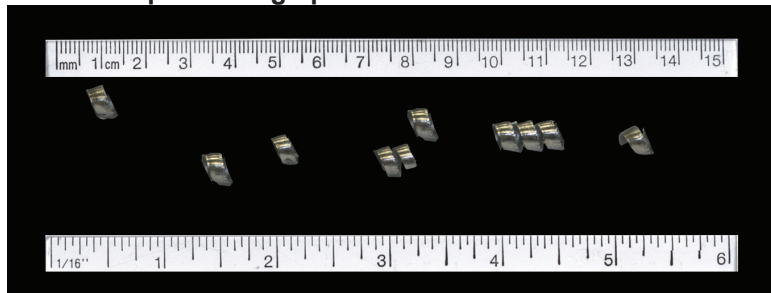
away from the cutting edge of the insert, keeping a clean insert surface and a constant operating temperature.

**Chip damage from long stringy chips:**

Chips cause unpredictable damage. In general, the longer the chips, the harder it is to control and the more damage they cause. Long, stringy chips wrap around boring bars, fill the bottoms of holes, catch on the chucks, cause mechanical problems with loaders, and in many cases require manual removal. All of these slow down the production process and eat away at your profitability. Broken chips that can fall away, or that can be blown out of the cutting zone with coolant force and away from the part and tool are always more desirable.

Many people don't understand the difference between wear and damage. Wear is a predictable part of any mechanical process. Damage, on the other hand, is random, producing the same bell shaped curve that any random. When inserts wear out you can control your production process, when they fail you can not.

**Short chips with high pressure Jet-Stream™ Tools**



**High Pressure**

High Pressure and volume directed into the chip-tool interface never lets the temperature get out of control. The shear zone is short and the chips break over the base material. The part itself is acting as a chip breaker.

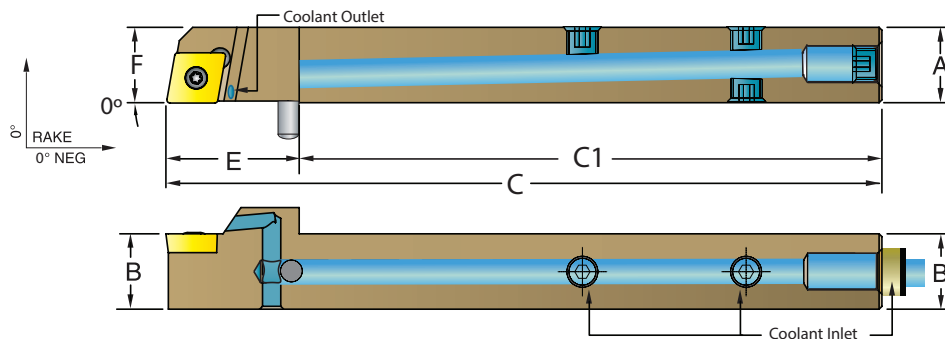
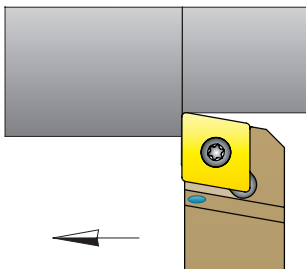
**Long chips made with low pressure standard**



**Standard Pressure**

Low-pressure coolant allows a long shear zone that does not break chips in many materials. The result is long uncontrollable chips.

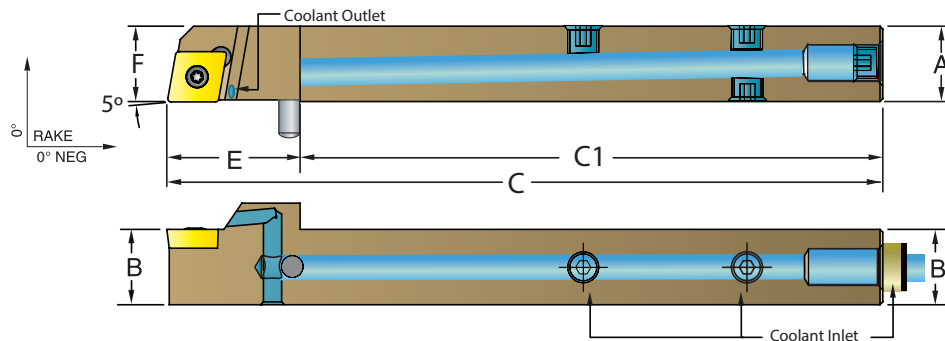
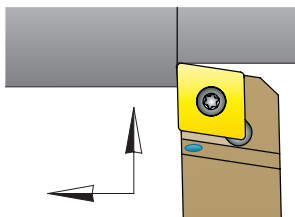
**ASCAC Jet-Stream™ Thru Coolant R/L Toolholder Style A - 0° Side Cutting Edge Angle for 7° positive 80° diamond CC\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	F	CC_W Gage Insert	Insert Torx Screw	Torx Key
	R.H.	L.H.										
ASCACR/L 1010-H06	60754	60755	mm	10	10	100	75	25	10	CCGW-060204	TS-25.45-6M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394	CCGW-21.51		
ASCACR/L 1212-H06	60756	60757	mm	12	12	100	75	25	12	CCGW-060204	TS-25.45-6M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	0.472	CCGW-21.51		
ASCACR/L 1616-H06	60758	60759	mm	16	16	100	75	25	16	CCGW-060204	TS-25.45-6M2	T-8
			inch	0.630	0.630	3.937	2.953	0.984	0.630	CCGW-21.51		
ASCACR/L 1212-H09	60760	60761	mm	12	12	100	75	25	12	CCGW-09T308	TS-35.6-9M1	T-15
			inch	0.472	0.472	3.937	2.953	0.984	0.472	CCGW-32.52		
ASCACR/L 1616-H09	60762	60763	mm	16	16	100	75	25	16	CCGW-09T308	TS-35.6-9M1	T-15
			inch	0.630	0.630	3.937	2.953	0.984	0.630	CCGW-32.52		
ASCACR/L 2020-K09	60764	60765	mm	20	20	125	100	25	20	CCGW-09T308	TS-35.6-9M1	T-15
			inch	0.787	0.787	4.921	3.937	0.984	0.787	CCGW-32.52		
<b>Inch</b>												
Description												
ASCACR/L 08-2A	60692	60693	inch	0.500	0.500	4.000	3.00	1.000	0.500	CCGW-21.51	TS-25.45-6M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	12.70	CCGW-060204		
ASCACR/L 08-3A	60695	60696	inch	0.500	0.500	4.000	3.00	1.000	0.500	CCGW-32.52	TS-4.7-10M1	T-15
			mm	12.70	12.70	101.60	76.2	25.40	12.70	CCGW-09T308		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

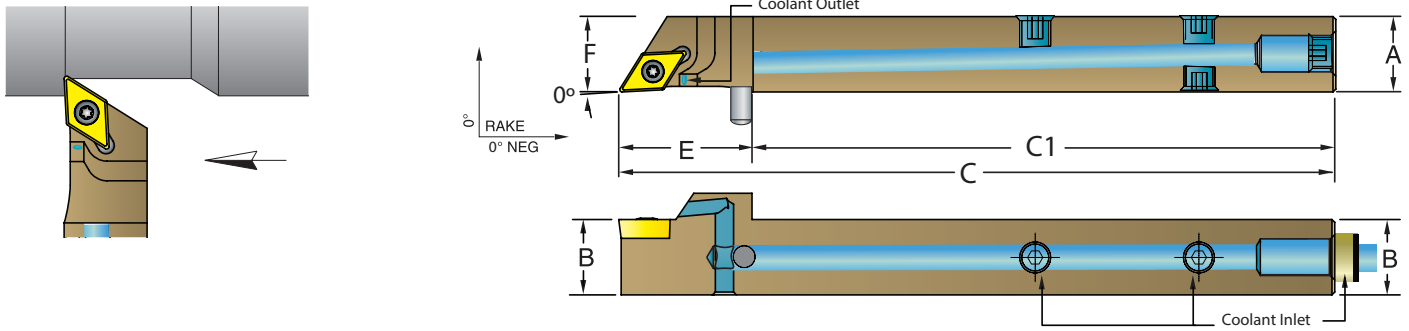
**ASCNC Jet-Stream™ Thru Coolant R/L Toolholder Style N - Negative 5° End or Side Cutting Edge Angle for 7° positive 80° diamond CC\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	F	CC_W Gage Insert	Insert Torx Screw	Torx Key
	R.H.	L.H.										
ASCNCR/L 1010-H06	60770	60771	mm	10	10	100	75	25	10	CCGW-060204	TS-25.45-6M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394	CCGW-21.51		
ASCNCR/L 1212-H06	60772	60773	mm	12	12	100	75	25	12	CCGW-060204	TS-25.45-6M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	0.472	CCGW-21.51		
ASCNCR/L 1616-H06	60774	60775	mm	16	16	100	75	25	16	CCGW-060204	TS-25.45-6M2	T-8
			inch	0.630	0.630	3.937	2.953	0.984	0.630	CCGW-21.51		
ASCNCR/L 1212-H09	60776	60777	mm	12	12	100	75	25	12	CCGW-09T308	TS-35.6-9M1	T-15
			inch	0.472	0.472	3.937	2.953	0.984	0.472	CCGW-32.52		
ASCNCR/L 1616-H09	60778	60779	mm	16	16	100	75	25	16	CCGW-09T308	TS-35.6-9M1	T-15
			inch	0.630	0.630	3.937	2.953	0.984	0.630	CCGW-32.52		
ASCNCR/L 2020-K09	60780	60781	mm	20	20	125	100	25	20	CCGW-09T308	TS-35.6-9M1	T-15
			inch	0.787	0.787	4.921	3.937	0.984	0.787	CCGW-32.52		
<b>Inch</b>												
Description												
ASCNCR/L 08-2A	60698	60699	inch	0.500	0.500	4.000	3.00	1.000	0.500	CCGW-21.51	TS-25.45-6M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	12.70	CCGW-060204		
ASCNCR/L 08-3A	60701	60702	inch	0.500	0.500	4.000	3.00	1.000	0.500	CCGW-32.52	TS-4.7-10M1	T-15
			mm	12.70	12.70	101.60	76.2	25.40	12.70	CCGW-09T308		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

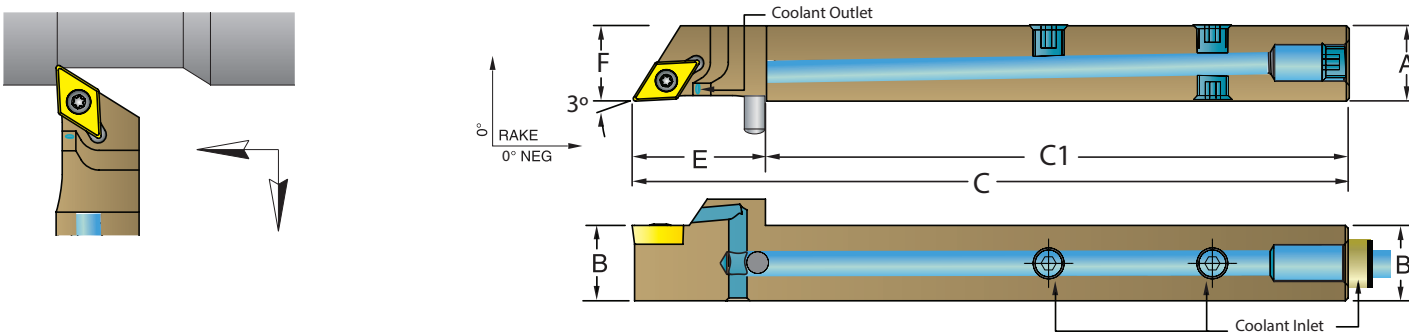
**ASDAC Jet-Stream™ Thru Coolant R/L Toolholder Style A - 0° Side Cutting Edge Angle for 7° positive 55° diamond DC\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	F	DC_W Gage Insert	Insert Torx Screw	Torx Key
	R.H.	L.H.										
ASDACR/L 1010-H07	60798	60799	mm	10	10	100	75	25	10	DCGW-070204	TS-25.45-6M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394	DCGW-21.51		
ASDACR/L 1212-H07	60800	60801	mm	12	12	100	75	25	12	DCGW-070204	TS-25.45-6M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	0.472	DCGW-21.51		
ASDACR/L 1616-H07	60802	60803	mm	16	16	100	75	25	16	DCGW-070204	TS-25.45-6M2	T-8
			inch	0.630	0.630	3.937	2.953	0.984	0.630	DCGW-21.51		
ASDACR/L 1212-H11	60804	60805	mm	12	12	100	75	25	12	DCGW-11T308	TS-4.7-10M1	T-15
			inch	0.472	0.472	3.937	2.953	0.984	0.472	DCGW-32.52		
ASDACR/L 1616-H11	60806	60807	mm	16	16	100	75	25	16	DCGW-11T308	TS-4.7-10M1	T-15
			inch	0.630	0.630	3.937	2.953	0.984	0.630	DCGW-32.52		
ASDACR/L 2020-K11	60808	60809	mm	20	20	125	100	25	20	DCGW-11T308	TS-4.7-10M1	T-15
			inch	0.787	0.787	4.921	3.937	0.984	0.787	DCGW-32.52		
<b>Inch Description</b>												
ASDACR/L 08-2A	60703	60704	inch	0.500	0.500	4.000	3.00	1.000	0.500	DCGW-21.51	TS-25.45-6M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	12.70	DCGW-070204		
ASDACR/L 08-3A	60705	60706	inch	0.500	0.500	4.000	3.00	1.000	0.500	DCGW-32.52	TS-4.7-10M1	T-15
			mm	12.70	12.70	101.60	76.2	25.40	12.70	DCGW-11T308		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

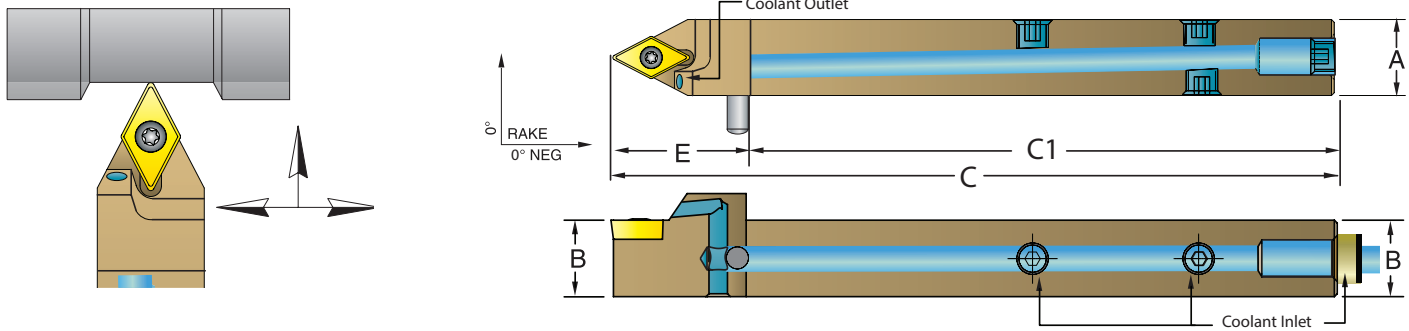
**ASDNC Jet-Stream™ Thru Coolant R/L Toolholder Style N - 3° Side Cutting Edge Angle for 7° positive 55° diamond DC\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	F	DC_W Gage Insert	Insert Torx Screw	Torx Key
	R.H.	L.H.										
ASDNCR/L 1010-H07	60810	60811	mm	10	10	100	75	25	10	DCGW-070204	TS-25.45-6M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394	DCGW-21.51		
ASDNCR/L 1212-H07	60812	60813	mm	12	12	100	75	25	12	DCGW-070204	TS-25.45-6M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	0.472	DCGW-21.51		
ASDNCR/L 1616-H07	60814	60815	mm	16	16	100	75	25	16	DCGW-070204	TS-25.45-6M2	T-8
			inch	0.630	0.630	3.937	2.953	0.984	0.630	DCGW-21.51		
ASDNCR/L 1212-H11	60816	60817	mm	12	12	100	75	25	12	DCGW-11T308	TS-4.7-10M1	T-15
			inch	0.472	0.472	3.937	2.953	0.984	0.472	DCGW-32.52		
ASDNCR/L 1616-H11	60818	60819	mm	16	16	100	75	25	16	DCGW-11T308	TS-4.7-10M1	T-15
			inch	0.630	0.630	3.937	2.953	0.984	0.630	DCGW-32.52		
ASDNCR/L 2020-K11	60820	60821	mm	20	20	125	100	25	20	DCGW-11T308	TS-4.7-10M1	T-15
			inch	0.787	0.787	4.921	3.937	0.984	0.787	DCGW-32.52		
<b>Inch Description</b>												
ASDNCR/L 08-2A	60708	60709	inch	0.500	0.500	4.000	3.00	1.000	0.500	DCGW-21.51	TS-25.45-6M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	12.70	DCGW-070204		
ASDNCR/L 08-3A	60711	60712	inch	0.500	0.500	4.000	3.00	1.000	0.500	DCGW-32.52	TS-4.7-10M1	T-15
			mm	12.70	12.70	101.60	76.2	25.40	12.70	DCGW-11T308		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

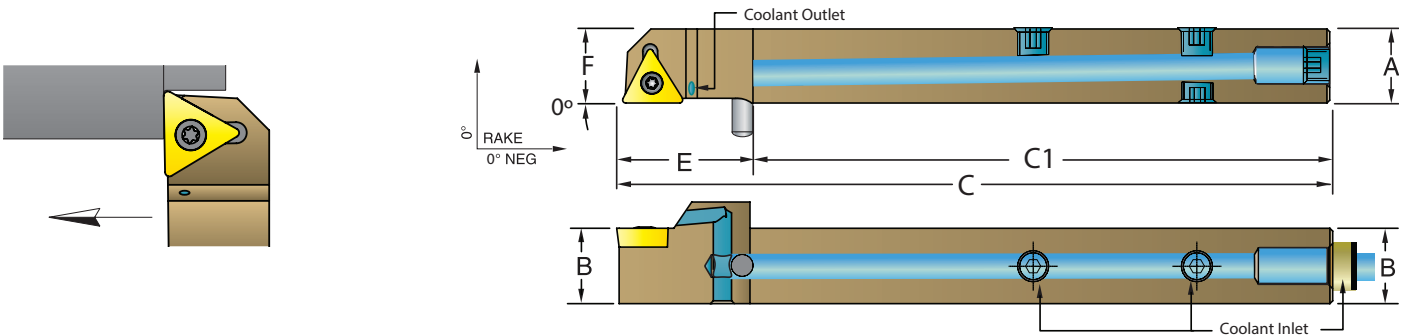
**ASDPC Jet-Stream™ Thru Coolant Neutral Toolholder Style P - 27.5° Side Cutting Edge Angle for 7° positive 55° diamond DC\_W inserts**



Metric Description	UPC No. 733101- Neutral Hand		System	A	B	C	C1	E (Tool Stop)	DC_W Gage Insert	Insert Torx Screw	Torx Key
ASDPCN 1010-H07	60824		mm	10	10	100	75	25	DCGW-070204	TS-25.45-6M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	<b>DCGW-21.51</b>		
ASDPCN 1212-H07	60825		mm	12	12	100	75	25	DCGW-070204	TS-25.45-6M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	<b>DCGW-21.51</b>		
ASDPCN 1212-H11	60826		mm	12	12	100	75	25	DCGW-11T308	TS-4.7-10M1	T-15
			inch	0.472	0.472	3.937	2.953	0.984	<b>DCGW-32.52</b>		
ASDPCN 1616-H11	60827		mm	16	16	100	75	25	DCGW-11T308	TS-4.7-10M1	T-15
			inch	0.630	0.630	3.937	2.953	0.984	<b>DCGW-32.52</b>		
ASDPCN 2020-K11	60828		mm	20	20	125	100	25	DCGW-11T308	TS-4.7-10M1	T-15
			inch	0.787	0.787	4.921	3.937	0.984	<b>DCGW-32.52</b>		
<b>Inch</b>											
Description											
ASDPCN 08-2A	60713		inch	0.500	0.500	4.000	3.00	1.000	<b>DCGW-21.51</b>	TS-25.45-6M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	DCGW-070204		
ASDPCN 08-3A	60714		inch	0.500	0.500	4.000	3.00	1.000	<b>DCGW-32.52</b>	TS-4.7-10M1	T-15
			mm	12.70	12.70	101.60	76.2	25.40	DCGW-11T308		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

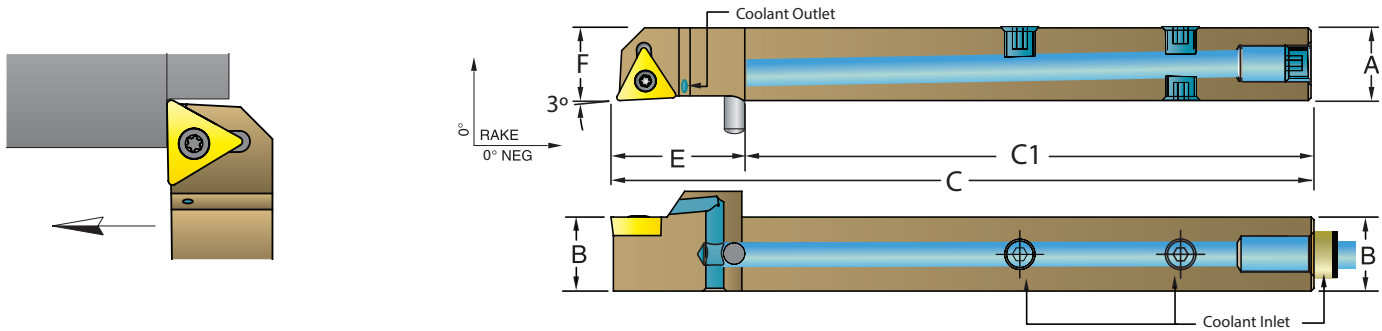
**ASTAC Jet-Stream™ Thru Coolant R/L Toolholder Style A - 0° Side Cutting Edge Angle for 7° positive triangle TC\_W inserts**



Metric Description	UPC No. 733101- R.H. L.H.		System	A	B	C	C1	E (Tool Stop)	F	TC_W Gage Insert	Insert Torx Screw	Torx Key
ASTACR/L 1010-H11	60846	60847	mm	10	10	100	75	25	10	TCGW-110204	TS-25.45-6M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394	<b>TCGW-21.51</b>		
ASTACR/L 1212-H11	60848	60849	mm	12	12	100	75	25	12	TCGW-110204	TS-25.45-6M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	0.472	<b>TCGW-21.51</b>		
ASTACR/L 1616-H11	60850	60851	mm	16	16	100	75	25	16	TCGW-110204	TS-25.45-6M2	T-8
			inch	0.630	0.630	3.937	2.953	0.984	0.630	<b>TCGW-21.51</b>		
ASTACR/L 2020-K11	60852	60853	mm	20	20	125	100	25	20	TCGW-110204	TS-25.45-6M2	T-8
			inch	0.787	0.787	4.921	3.937	0.984	0.787	<b>TCGW-21.51</b>		
<b>Inch</b>												
Description												
ASTACR/L 08-2A	60716	60717	inch	0.500	0.500	4.000	3.00	1.000	0.500	<b>TCGW-21.51</b>	TS-25.45-6M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	12.70	TCGW-110204		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

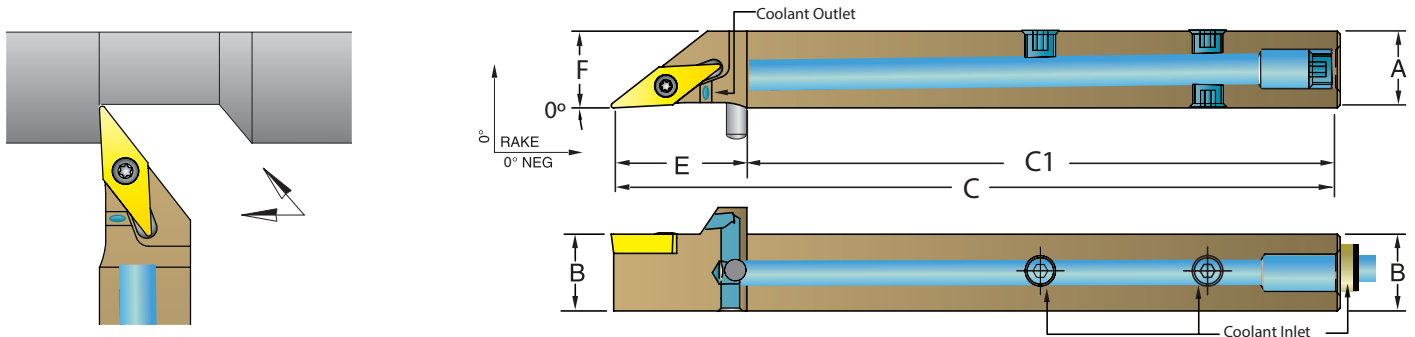
**ASTNC Jet-Stream™ Thru Coolant R/L Toolholder Style N - 3° Side Cutting Edge Angle for 7° positive triangle TC\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	F	TC_W Gage Insert	Insert Torx Screw	Torx Key
	R.H.	L.H.										
ASTNCR/L 1010-H11	60858	60859	mm	10	10	100	75	25	10	TCGW-110204	TS-25.45-6M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394	TCGW-21.51		
ASTNCR/L 1212-H11	60860	60861	mm	12	12	100	75	25	12	TCGW-110204	TS-25.45-6M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	0.472	TCGW-21.51		
ASTNCR/L 1616-H11	60862	60863	mm	16	16	100	75	25	16	TCGW-110204	TS-25.45-6M2	T-8
			inch	0.630	0.630	3.937	2.953	0.984	0.630	TCGW-21.51		
ASTNCR/L 1616-H16	60864	60865	mm	16	16	100	75	25	16	TCGW-16T308	TS-35.6-9M1	T-15
			inch	0.630	0.630	3.937	2.953	0.984	0.630	TCGW-32.52		
ASTNCR/L 2020-K16	60866	60867	mm	20	20	125	100	25	20	TCGW-16T308	TS-35.6-9M1	T-15
			inch	0.787	0.787	4.921	3.937	0.984	0.787	TCGW-32.52		
<b>Inch</b>												
Description												
ASTNCR/L 08-2A	60720	60721	inch	0.500	0.500	4.000	3.00	1.000	0.500	TCGW-21.51	TS-25.45-6M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	12.70	TCGW-110204		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

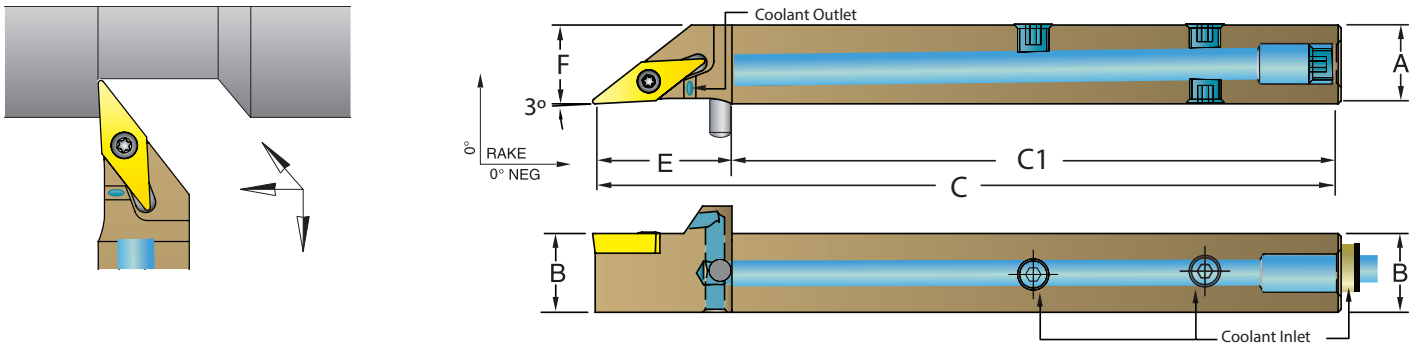
**ASVAB Jet-Stream™ Thru Coolant R/L Toolholder Style A - 0° Side Cutting Edge Angle for 5° positive 35° diamond VB\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	F	VB_W Gage Insert	Insert Torx Screw	Torx Key
	R.H.	L.H.										
ASVABR/L 1010-H11	60870	60871	mm	10	10	100	75	25	10	VBGW-110304	TS-25.45-8M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394	VBGW-221		
ASVABR/L 1212-H11	60872	60873	mm	12	12	100	75	25	12	VBGW-110304	TS-25.45-8M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	0.472	VBGW-221		
ASVABR/L 1212-K16	60874	60875	mm	12	12	107	75	32	12	VBGW-160408	TS-35.6-9M1	T-15
			inch	0.472	0.472	4.213	2.953	1.260	0.472	VBGW-332		
ASVABR/L 1616-K16	60876	60877	mm	16	16	107	75	32	16	VBGW-160408	TS-35.6-9M1	T-15
			inch	0.630	0.630	4.213	2.953	1.260	0.630	VBGW-332		
ASVABR/L 2020-K16	60878	60879	mm	20	20	132	100	32	20	VBGW-160408	TS-35.6-9M1	T-15
			inch	0.787	0.787	5.197	3.937	1.260	0.787	VBGW-332		
<b>Inch</b>												
Description												
ASVABR/L 08-2A	60723	60724	inch	0.500	0.500	4.000	3.00	1.000	0.500	VBGW-110304	TS-25.45-8M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	12.70	VBGW-221		
ASVABR/L 08-3A	60725	60726	inch	0.500	0.500	4.000	3.00	1.000	0.500	VBGW-332	TS-4.7-10M1	T-15
			mm	12.70	12.70	101.60	76.2	25.40	12.70	VBGW-160408		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

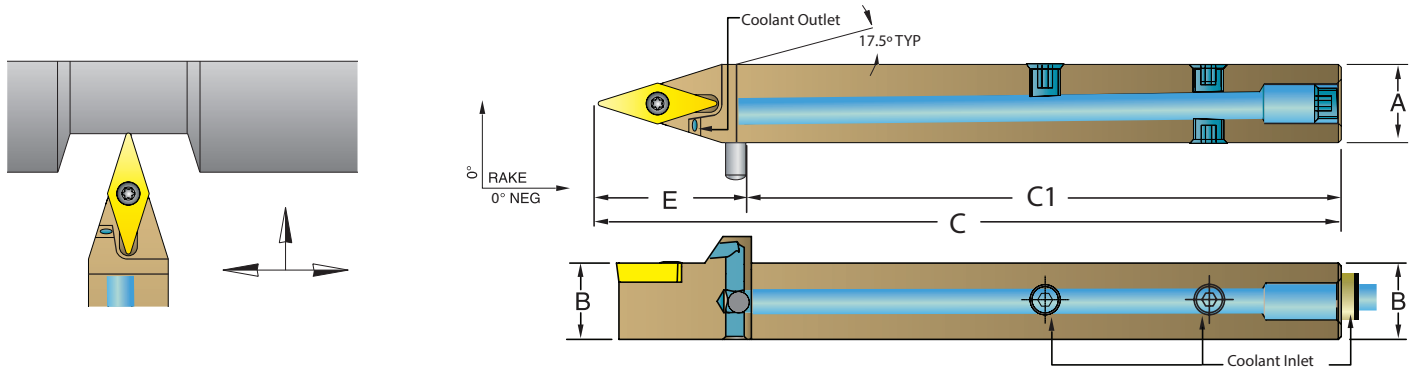
**ASVNB Jet-Stream™ Thru Coolant R/L Toolholder Style N - 3° Side Cutting Edge Angle for 5° positive 35° diamond VB\_W inserts**



Metric		UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	F	VB_W Gage Insert	Insert Torx Screw	Torx Key
Description	R.H.	L.H.											
ASVNB/R/L 1010-H11	60882	60883	mm	10	10	100	75	25	10	10	VBGW-110304	TS-25.45-8M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394	0.394	VBGW-221		
ASVNB/R/L 1212-H11	60884	60885	mm	12	12	100	75	25	12	12	VBGW-110304	TS-25.45-8M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	0.472	0.472	VBGW-221		
ASVNB/R/L 1212-K16	60886	60887	mm	12	12	107	75	32	12	12	VBGW-160408	TS-35.6-9M1	T-15
			inch	0.472	0.472	4.213	2.953	1.260	0.472	0.472	VBGW-332		
ASVNB/R/L 1616-K16	60888	60889	mm	16	16	107	75	32	16	16	VBGW-160408	TS-35.6-9M1	T-15
			inch	0.630	0.630	4.213	2.953	1.260	0.630	0.630	VBGW-332		
ASVNB/R/L 2020-K16	60890	60891	mm	20	20	132	100	32	20	20	VBGW-160408	TS-35.6-9M1	T-15
			inch	0.787	0.787	5.197	3.937	1.260	0.787	0.787	VBGW-332		
<b>Inch</b>													
Description													
ASVNB/R/L 08-2A	60727	60728	inch	0.500	0.500	4.000	3.00	1.000	0.500	0.500	VBGW-221	TS-25.45-8M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	12.70	12.70	VBGW-110304		
ASVNB/R/L 08-3A	60729	60730	inch	0.500	0.500	4.250	3.00	1.250	0.500	0.500	VBGW-332	TS-4.7-10M1	T-15
			mm	12.70	12.70	107.95	76.2	31.75	12.70	12.70	VBGW-160408		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

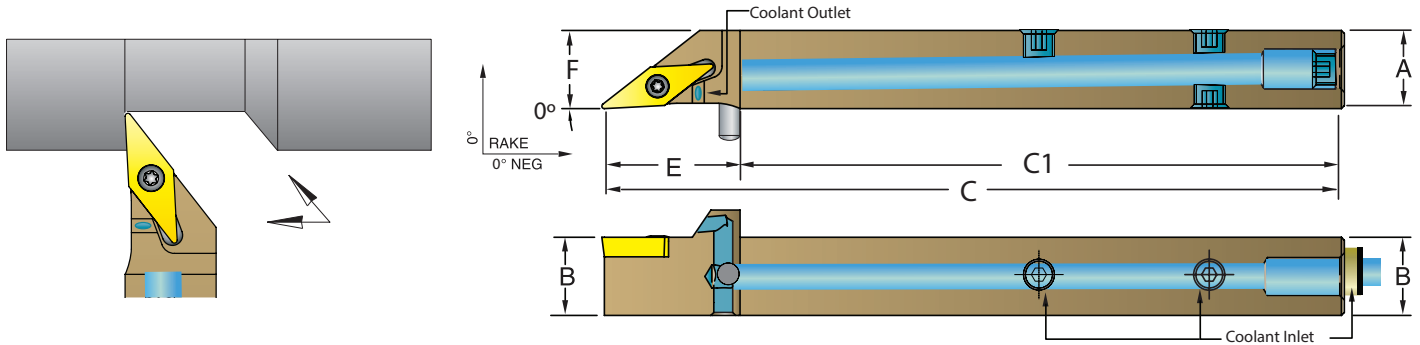
**ASVVB Jet-Stream™ Thru Coolant Neutral Toolholder Style V- 17.5° Side Cutting Edge Angle for 5° positive 35° diamond VB\_W inserts**



Metric		UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	VB_W Gage Insert	Insert Torx Screw	Torx Key	
Description	Neutral												
ASVVB/N 1010-H11	60893		mm	10	10	100	75	25	10	10	VBGW-110304	TS-25.45-8M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394	0.394	VBGW-221		
ASVVB/N 1212-H11	60894		mm	12	12	100	75	25	12	12	VBGW-110304	TS-25.45-8M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	0.472	0.472	VBGW-221		
ASVVB/N 1212-K16	60895		mm	12	12	107	75	32	12	12	VBGW-160408	TS-35.6-9M1	T-15
			inch	0.472	0.472	4.213	2.953	1.260	0.472	0.472	VBGW-332		
ASVVB/N 1616-K16	60896		mm	16	16	107	75	32	16	16	VBGW-160408	TS-35.6-9M1	T-15
			inch	0.630	0.630	4.213	2.953	1.260	0.630	0.630	VBGW-332		
ASVVB/N 2020-K16	60897		mm	20	20	132	100	32	20	20	VBGW-160408	TS-35.6-9M1	T-15
			inch	0.787	0.787	5.197	3.937	1.260	0.787	0.787	VBGW-332		
<b>Inch</b>													
Description													
ASVVB/N 08-2A	60731		inch	0.500	0.500	4.000	3.00	1.000	0.500	0.500	VBGW-221	TS-25.45-8M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	12.70	12.70	VBGW-110304		
ASVVB/N 08-3A	60732		inch	0.500	0.500	4.250	3.00	1.250	0.500	0.500	VBGW-332	TS-4.7-10M1	T-15
			mm	12.70	12.70	107.95	76.2	31.75	12.70	12.70	VBGW-160408		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

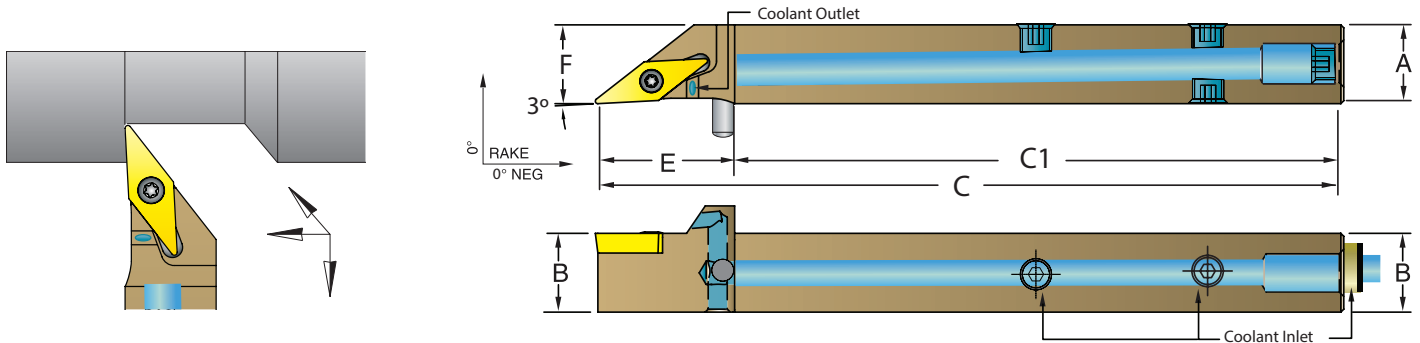
**ASVAC Jet-Stream™ Thru Coolant R/L Toolholder Style A - 0° Side Cutting Edge Angle for 7° positive 35° diamond VC\_W inserts**



<b>Metric</b>		UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	F	VC_W Gage Insert	Insert Torx Screw	Torx Key
Description	R.H.	L.H.											
ASVACR/L 1010-H11	60902	60903	mm	10	10	100	75	25	25	10	VCGW-110304	TS-25.45-8M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394	0.394	VCGW-221		
ASVACR/L 1212-H11	60904	60905	mm	12	12	100	75	25	25	12	VCGW-110304	TS-25.45-8M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	0.472	0.472	VCGW-221		
ASVACR/L 1212-K16	60906	60907	mm	12	12	107	75	32	32	12	VCGW-160408	TS-35.6-9M1	T-15
			inch	0.472	0.472	4.213	2.953	1.260	0.472	0.472	VCGW-332		
ASVACR/L 1616-K16	60908	60909	mm	16	16	107	75	32	32	16	VCGW-160408	TS-35.6-9M1	T-15
			inch	0.630	0.630	4.213	2.953	1.260	0.630	0.630	VCGW-332		
ASVACR/L 2020-K16	60910	60911	mm	20	20	132	100	32	32	20	VCGW-160408	TS-35.6-9M1	T-15
			inch	0.787	0.787	5.197	3.937	1.260	0.787	0.787	VCGW-332		
<b>Inch</b>													
Description													
ASVACR/L 08-2A	60733	60734	inch	0.500	0.500	4.000	3.00	1.000	0.500	0.500	VCGW-221	TS-25.45-8M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	12.70	12.70	VCGW-110304		
ASVACR/L 08-3A	60735	60736	inch	0.500	0.500	4.250	3.00	1.250	0.500	0.500	VCGW-332	TS-4.7-10M1	T-15
			mm	12.70	12.70	107.95	76.2	31.75	12.70	12.70	VCGW-160408		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

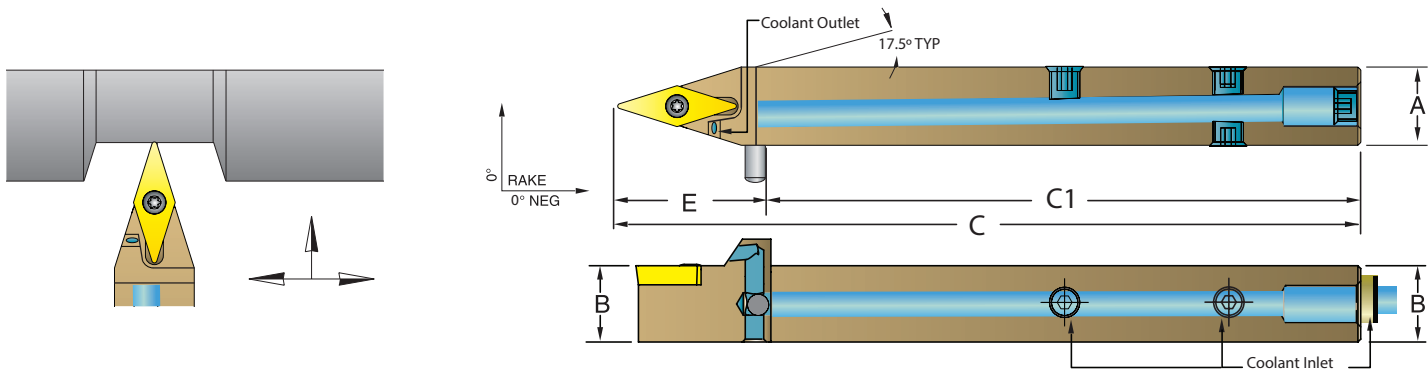
**ASVNC Jet-Stream™ Thru Coolant R/L Toolholder Style N - 3° Side Cutting Edge Angle for 7° positive 35° diamond VC\_W inserts**



<b>Metric</b>		UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	F	VC_W Gage Insert	Insert Torx Screw	Torx Key
Description	R.H.	L.H.											
ASVNCR/L 1010-H11	60914	60915	mm	10	10	100	75	25	25	10	VCGW-110304	TS-25.45-8M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394	0.394	VCGW-221		
ASVNCR/L 1212-H11	60916	60917	mm	12	12	100	75	25	25	12	VCGW-110304	TS-25.45-8M2	T-8
			inch	0.472	0.472	3.937	2.953	0.984	0.472	0.472	VCGW-221		
ASVNCR/L 1616-H11	60918	60919	mm	16	16	100	75	25	25	16	VCGW-110304	TS-25.45-8M2	T-8
			inch	0.630	0.630	3.937	2.953	0.984	0.630	0.630	VCGW-221		
ASVNCR/L 1212-K16	60920	60921	mm	12	12	107	75	32	32	12	VCGW-160408	TS-35.6-9M1	T-15
			inch	0.472	0.472	4.213	2.953	1.260	0.472	0.472	VCGW-332		
ASVNCR/L 1616-K16	60922	60923	mm	16	16	107	75	32	32	16	VCGW-160408	TS-35.6-9M1	T-15
			inch	0.630	0.630	4.213	2.953	1.260	0.630	0.630	VCGW-332		
ASVNCR/L 2020-K16	60924	60925	mm	20	20	132	100	32	32	20	VCGW-160408	TS-35.6-9M1	T-15
			inch	0.787	0.787	5.197	3.937	1.260	0.787	0.787	VCGW-332		
<b>Inch</b>													
Description													
ASVNCR/L 08-2A	60738	60739	inch	0.500	0.500	4.000	3.00	1.000	0.500	0.500	VCGW-221	TS-25.45-8M2	T-8
			mm	12.70	12.70	101.60	76.2	25.40	12.70	12.70	VCGW-110304		
ASVNCR/L 08-3A	60741	60742	inch	0.500	0.500	4.250	3.00	1.250	0.500	0.500	VCGW-332	TS-4.7-10M1	T-15
			mm	12.70	12.70	107.95	76.2	31.75	12.70	12.70	VCGW-160408		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

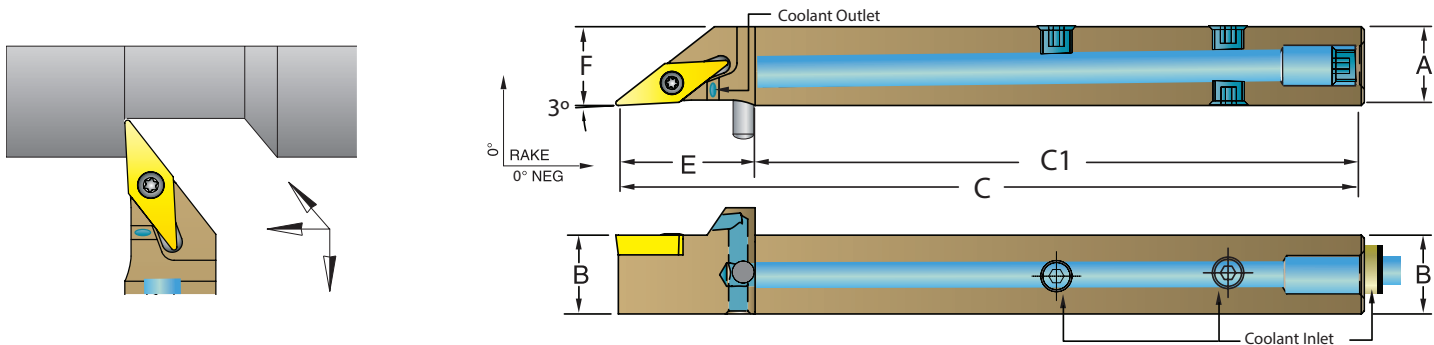
**ASVVC Jet-Stream™ Thru Coolant Neutral Toolholder Style V - 17.5° Side Cutting Edge Angle for 7° positive 35° diamond VC\_W inserts**



Metric		UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	VC_W Gage Insert	Insert Torx Screw	Torx Key
Description	Neutral											
ASVVCN 1010-H11	60927	mm	10	10	100	75	25	VCGW-110304 <b>VCGW-221</b>	TS-25.45-8M2	T-8		
		inch	<b>0.394</b>	<b>0.394</b>	<b>3.937</b>	<b>2.953</b>	<b>0.984</b>					
ASVVCN 1212-H11	60928	mm	12	12	100	75	25	VCGW-110304 <b>VCGW-221</b>	TS-25.45-8M2	T-8		
		inch	<b>0.472</b>	<b>0.472</b>	<b>3.937</b>	<b>2.953</b>	<b>0.984</b>					
ASVVCN 1212-K16	60929	mm	12	12	107	75	32	VCGW-160408 <b>VCGW-332</b>	TS-35.6-9M1	T-15		
		inch	<b>0.472</b>	<b>0.472</b>	<b>4.213</b>	<b>2.953</b>	<b>1.260</b>					
ASVVCN 1616-K16	60930	mm	16	16	107	75	32	VCGW-160408 <b>VCGW-332</b>	TS-35.6-9M1	T-15		
		inch	<b>0.630</b>	<b>0.630</b>	<b>4.213</b>	<b>2.953</b>	<b>1.260</b>					
ASVVCN 2020-K16	60931	mm	20	20	132	100	32	VCGW-160408 <b>VCGW-332</b>	TS-35.6-9M1	T-15		
		inch	<b>0.787</b>	<b>0.787</b>	<b>5.197</b>	<b>3.937</b>	<b>1.260</b>					
<b>Inch</b>												
Description												
ASVVCN 08-2A	60743	inch	<b>0.500</b>	<b>0.500</b>	<b>4.000</b>	<b>3.00</b>	<b>1.000</b>	VCGW-221 VCGW-110304	TS-25.45-8M2	T-8		
		mm	12.70	12.70	101.60	76.2	25.40					
ASVVCN 08-3A	60744	inch	<b>0.500</b>	<b>0.500</b>	<b>4.250</b>	<b>3.00</b>	<b>1.250</b>	VCGW-332 VCGW-160408	TS-4.7-10M1	T-15		
		mm	12.70	12.70	107.95	76.2	31.75					

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

**ASVNP Jet-Stream™ Thru Coolant R/L Toolholder Style N - 3° Side Cutting Edge Angle for 11° positive 35° diamond VP\_W inserts**

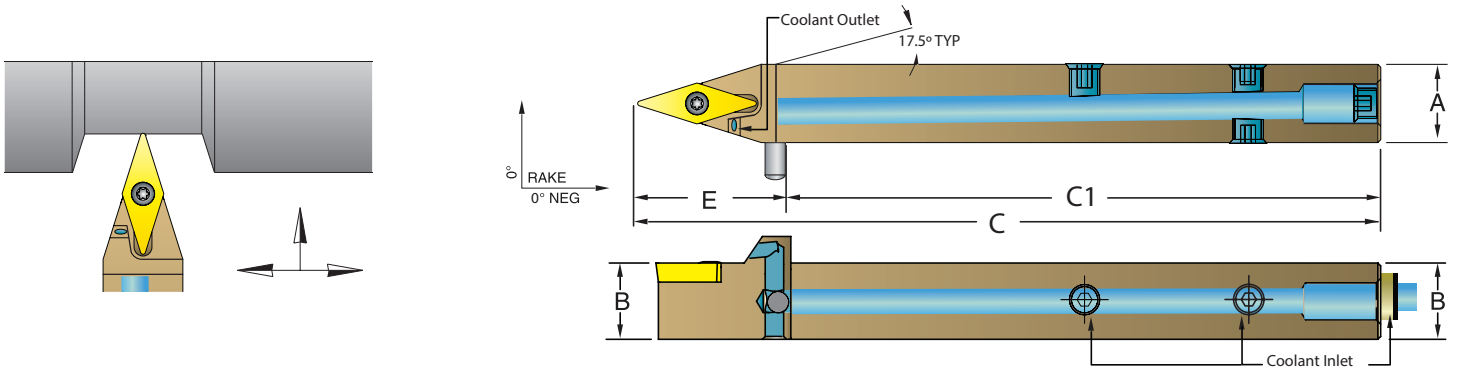


Metric		UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	F	VP_W Gage Insert	Insert Torx Screw	Torx Key
Description	R.H.	L.H.											
ASVNP/R/L 1010-H11	60948	60649	mm	10	10	100	75	25	10	VPGW-110304 <b>VPGW-221</b>	TS-25.45-8M2	T-8	
			inch	<b>0.394</b>	<b>0.394</b>	<b>3.937</b>	<b>2.953</b>	<b>0.984</b>	<b>0.394</b>				
ASVNP/R/L 1212-H11	60950	60951	mm	12	12	100	75	25	12	VPGW-110304 <b>VPGW-221</b>	TS-25.45-8M2	T-8	
			inch	<b>0.472</b>	<b>0.472</b>	<b>3.937</b>	<b>2.953</b>	<b>0.984</b>	<b>0.472</b>				
ASVNP/R/L 1212-K16	60952	60953	mm	12	12	107	75	32	12	VPGW-160408 <b>VPGW-332</b>	TS-35.6-9M1	T-15	
			inch	<b>0.472</b>	<b>0.472</b>	<b>4.213</b>	<b>2.953</b>	<b>1.260</b>	<b>0.472</b>				
ASVNP/R/L 1616-K16	60954	60955	mm	16	16	107	75	32	16	VPGW-160408 <b>VPGW-332</b>	TS-35.6-9M1	T-15	
			inch	<b>0.630</b>	<b>0.630</b>	<b>4.213</b>	<b>2.953</b>	<b>1.260</b>	<b>0.630</b>				
ASVNP/R/L 2020-K16	60956	60957	mm	20	20	132	100	32	20	VPGW-160408 <b>VPGW-332</b>	TS-35.6-9M1	T-15	
			inch	<b>0.787</b>	<b>0.787</b>	<b>5.197</b>	<b>3.937</b>	<b>1.260</b>	<b>0.787</b>				
<b>Inch</b>													
Description													
ASVNP/R/L 08-2A	60745	60746	inch	<b>0.500</b>	<b>0.500</b>	<b>4.000</b>	<b>3.00</b>	<b>1.000</b>	<b>0.500</b>	VPGW-221 VPGW-110304	TS-25.45-8M2	T-8	
			mm	12.70	12.70	101.60	76.2	25.40	12.70				
ASVNP/R/L 08-3A	60747	60748	inch	<b>0.500</b>	<b>0.500</b>	<b>4.250</b>	<b>3.00</b>	<b>1.250</b>	<b>0.500</b>	VPGW-332 VPGW-160408	TS-4.7-10M1	T-15	
			mm	12.70	12.70	107.95	76.2	31.75	12.70				

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.



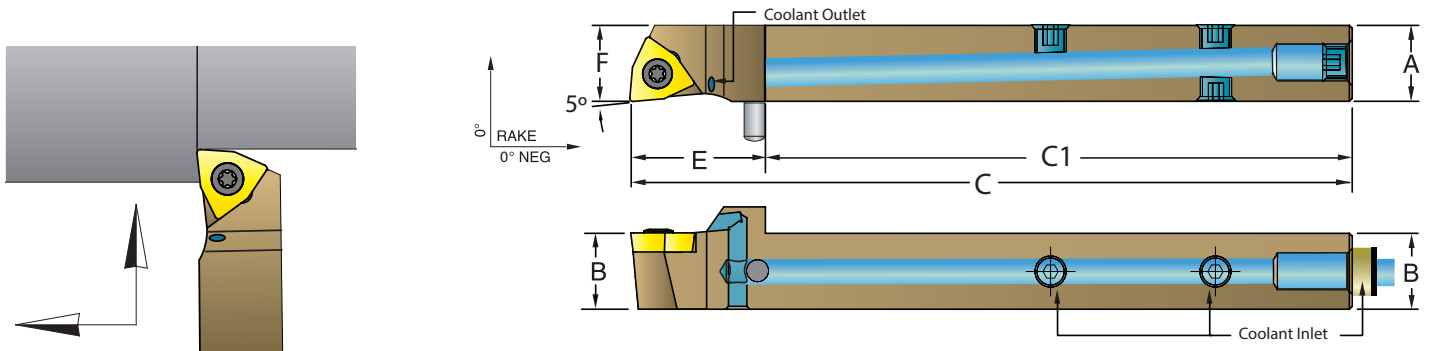
**ASVVP Jet-Stream™ Thru Coolant Neutral Toolholder Style V - 17.5° Side Cutting Edge Angle for 11° positive 35° diamond VP\_W inserts**



Metric		UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	VP_W Gage Insert	Insert Torx Screw	Torx Key
Description	Neutral											
ASVVPN 1010-H11	60959	mm	10	10	100	75	25	VPGW-110304	TS-25.45-8M2	T-8		
		inch	0.394	0.394	3.937	2.953	0.984	VPGW-221				
ASVVPN 1212-H11	60960	mm	12	12	100	75	25	VPGW-110304	TS-25.45-8M2	T-8		
		inch	0.472	0.472	3.937	2.953	0.984	VPGW-221				
ASVVPN 1212-K16	60961	mm	12	12	107	75	32	VPGW-160408	TS-35.6-9M1	T-15		
		inch	0.472	0.472	4.213	2.953	1.260	VPGW-332				
ASVVPN 1616-K16	60962	mm	16	16	107	75	32	VPGW-160408	TS-35.6-9M1	T-15		
		inch	0.630	0.630	4.213	2.953	1.260	VPGW-332				
ASVVPN 2020-K16	60963	mm	20	20	132	100	32	VPGW-160408	TS-35.6-9M1	T-15		
		inch	0.787	0.787	5.197	3.937	1.260	VPGW-332				
Inch		UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	VP_W Gage Insert	Insert Torx Screw	Torx Key
Description												
ASVVPN 08-2A	60749	inch	0.500	0.500	4.000	3.00	1.000	VPGW-221	TS-25.45-8M2	T-8		
		mm	12.70	12.70	101.60	76.2	25.40	VPGW-110304				
ASVVPN 08-3A	60750	inch	0.500	0.500	4.250	3.00	1.250	VPGW-332	TS-4.7-10M1	T-15		
		mm	12.70	12.70	107.95	76.2	31.75	VPGW-160408				

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

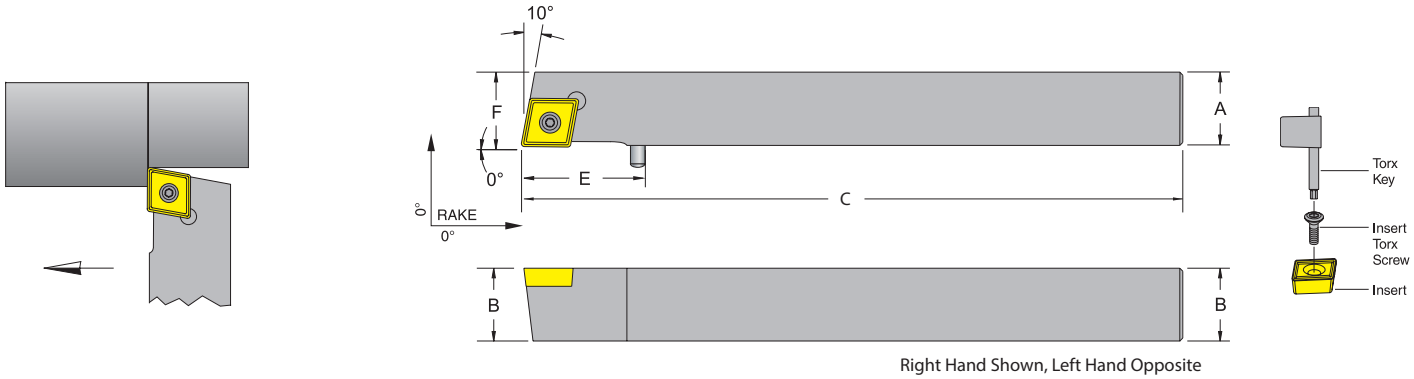
**ASWNC Jet-Stream™ Thru Coolant R/L Toolholder Style N - Negative 5° End or Side Cutting Edge Angle for 7° positive 80° trigon WC\_W inserts**



Metric		UPC No. 733101-		System	A	B	C	E (Tool Stop)	F	WC_W Gage Insert	Insert Torx Screw	Torx Key
Description	R.H.	L.H.										
ASWNCR/L 1616-H06	60974	60975	mm	16	16	100	25	16	WCGW-06T308	TS-35.6-9M1	T-15	
			inch	0.630	0.630	3.937	0.984	0.630	WCGW-32.52			
ASWNCR/L 2020-K06	60976	60977	mm	20	20	125	25	20	WCGW-06T308	TS-35.6-9M1	T-15	
			inch	0.787	0.787	4.921	0.984	0.787	WCGW-32.52			

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For turning inserts see pages IV - A-89.

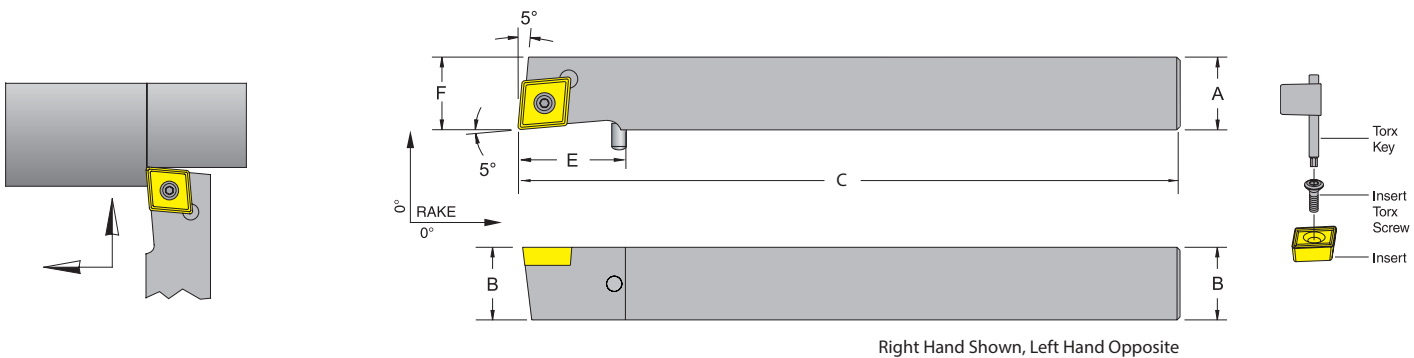
**SCAC R/L Toolholder Style A - 0° Side Cutting Edge Angle for 7° positive 80° diamond CC\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	E (Tool Stop)	F	CC_W Gage Insert	Insert Torx Screw	Torx Key
	R.H.	L.H.									
SCACR/L 1010-M06	60500	60501	mm	10	10	150	25	10	CCGW-060204	TS-25.45-6M2	T-8
SCACR/L 1212-M09	60502	60503	mm	12	12	150	25	12	CCGW-09T308	TS-4.7-10M1	T-15
SCACR/L 1616-M09	60504	60505	mm	16	16	150	25	16			
SCACR/L 2020-M09	60506	60507	mm	20	20	150	25	20			
<b>Inch</b>											
Description											
SCACR/L 06-2D	51780	51781	inch	0.375	0.375	6.000	1.000	0.375	CCGW-21.51	TS-25.45-6M2	T-8
SCACR/L 08-3D	51782	51783	inch	0.500	0.500	6.000	1.000	0.500	CCGW-32.52	TS-4.7-10M1	T-15
SCACR/L 10-3D	51786	51787	inch	0.625	0.625	6.000	1.000	0.625			
SCACR/L 12-3D	51758	51760	inch	0.750	0.750	6.000	1.000	0.750			

For turning inserts see pages IV - A-89.

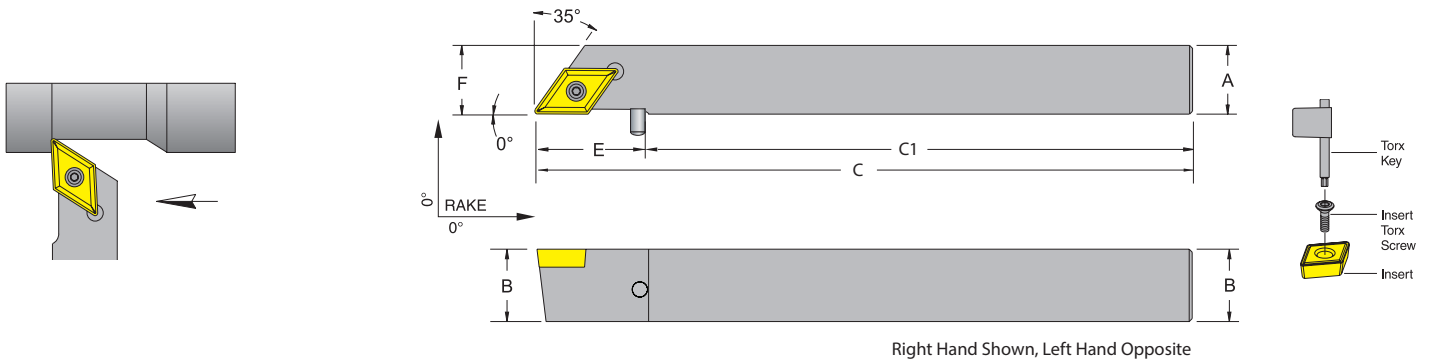
**SCNC R/L Toolholder Style N - Negative 5° End or Side Cutting Edge Angle for 7° positive 80° diamond CC\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	E (Tool Stop)	F	CC_W Gage Insert	Insert Torx Screw	Torx Key
	R.H.	L.H.									
SCNCR/L 1010-M06	60508	60509	mm	10	10	150	25	10	CCGW-060204	TS-25.45-6M2	T-8
SCNCR/L 1212-M06	60510	60511	mm	12	12	150	25	12	CCGW-09T308	TS-4.7-10M1	T-15
SCNCR/L 1212-M09	60513	60514	mm	12	12	150	25	12			
SCNCR/L 1616-M09	60515	60516	mm	16	16	150	25	16			
SCNCR/L 2020-M09	60517	60518	mm	20	20	150	25	20			
<b>Inch</b>											
Description											
SCNCR/L 06-2D	51843	51845	inch	0.375	0.375	6.000	1.000	0.375	CCGW-21.51	TS-25.45-6M2	T-8
SCNCR/L 08-2D	51847	51849	inch	0.500	0.500	6.000	1.000	0.500	CCGW-32.52	TS-4.7-10M1	T-15
SCNCR/L 08-3D	51850	51851	inch	0.500	0.500	6.000	1.000	0.500			
SCNCR/L 10-3D	51855	51857	inch	0.625	0.625	6.000	1.000	0.625			
SCNCR/L 12-3D	52238	52239	inch	0.750	0.750	6.000	1.000	0.750			

For turning inserts see pages IV - A-89.

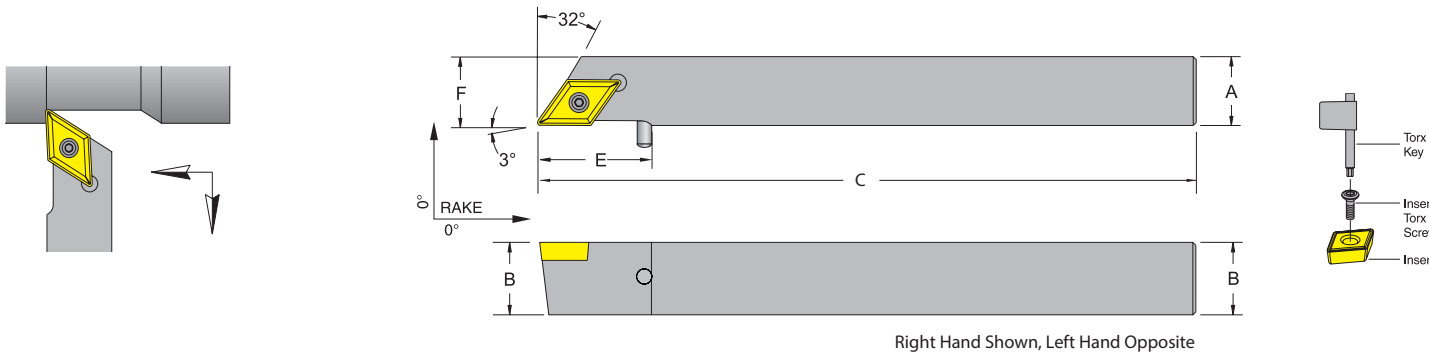
**SDAC R/L Toolholder Style A - 0° Side Cutting Edge Angle for 7° positive 55° diamond DC\_W inserts**



Metric		UPC No. 733101-		System	A	B	C	E (Tool Stop)	F	DC_W Gage Insert	Insert Torx Screw	Torx Key
Description	R.H.	L.H.										
SDACR/L 1010-M07	60519	60520	mm	10	10	150	25	10	DCGW-070204	TS-25.45-6M2	T-8	
SDACR/L 1212-M07	60521	60522	mm	12	12	150	25	12				
SDACR/L 1212-M11	60523	60524	mm	12	12	150	25	12	DCGW-11T308	TS-4.7-10M1	T-15	
SDACR/L 1616-M11	60525	60526	mm	16	16	150	25	16				
SDACR/L 2020-M11	60527	60528	mm	20	20	150	25	20				
Inch		UPC No. 733101-		System	A	B	C	E (Tool Stop)	F	DC_W Gage Insert	Insert Torx Screw	Torx Key
Description	R.H.	L.H.										
SDACR/L 06-2D	51917	51919	inch	0.375	0.375	6.000	1.000	0.375	DCGW-21.51	TS-25.45-6M2	T-8	
SDACR/L 08-2D	51921	51923	inch	0.500	0.500	6.000	1.000	0.500				
SDACR/L 08-3D	51925	51926	inch	0.500	0.500	6.000	1.000	0.500	DCGW-32.52	TS-4.7-10M1	T-15	
SDACR/L 10-3D	51927	51928	inch	0.625	0.625	6.000	1.000	0.625				
SDACR/L 12-3D	52240	52241	inch	0.750	0.750	6.000	1.000	0.750				

For turning inserts see pages IV - A-89.

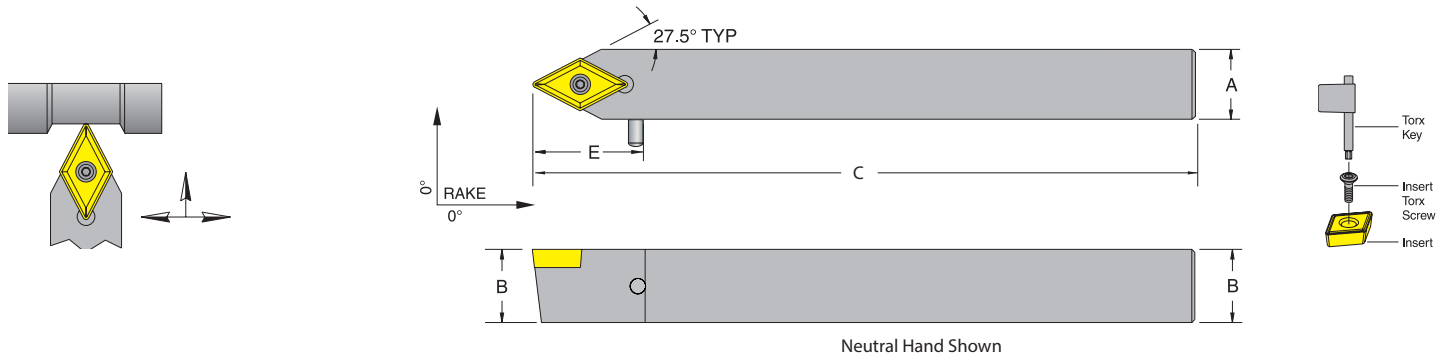
**SDNC R/L Toolholder Style N - 3° Side Cutting Edge Angle for 7° positive 55° diamond DC\_W inserts**



Metric		UPC No. 733101-		System	A	B	C	E (Tool Stop)	F	DC_W Gage Insert	Insert Torx Screw	Torx Key
Description	R.H.	L.H.										
SDNCR/L 1010-M07	60529	60530	mm	10	10	150	25	10	DCGW-070204	TS-25.45-6M2	T-8	
SDNCR/L 1212-M07	60531	60532	mm	12	12	150	25	12				
SDNCR/L 1616-M11	60533	60534	mm	16	16	150	25	16	DCGW-11T308	TS-4.7-10M1	T-15	
SDNCR/L 2020-M11	60535	60536	mm	20	20	150	25	20				
SDNCR/L 06-2D	51929	51930	inch	0.375	0.375	6.000	1.000	0.375				DCGW-21.51
SDNCR/L 08-2D	51931	51933	inch	0.500	0.500	6.000	1.000	0.500				
SDNCR/L 10-3D	52256	52257	inch	0.625	0.625	6.000	1.000	0.625	DCGW-32.52	TS-4.7-10M1	T-15	
SDNCR/L 12-3D	52242	52243	inch	0.750	0.750	6.000	1.000	0.750				

For turning inserts see pages IV - A-89.

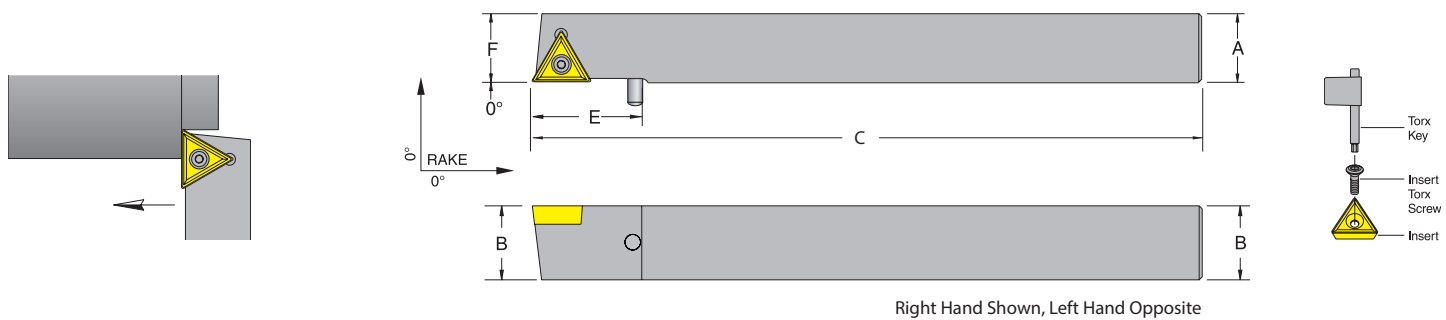
**SDPC Neutral Toolholder Style P - 27.5° Side Cutting Edge Angle for 7° positive 55° diamond DC\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	E (Tool Stop)	DC_W Gage Insert	Insert Torx Screw	Torx Key
	Neutral									
SDPCN 1010-M07	60537		mm	10	10	150	25	DCGW-070204	TS-25.45-6M2	T-8
SDPCN 1212-M07	60538		mm	12	12	150	25			
SDPCN 1212-M11	60539		mm	12	12	150	25			
SDPCN 1616-M11	60540		mm	16	16	150	25	DCGW-11T308	TS-4.7-10M1	T-15
SDPCN 2020-M11	60541		mm	20	20	150	25			
<b>Inch</b>										
Description										
SDPCN 06-2D	51942		inch	0.375	0.375	6.000	1.000	DCGW-21.51	TS-25.45-6M2	T-8
SDPCN 08-2D	51943		inch	0.500	0.500	6.000	1.000			
SDPCN 08-3D	51944		inch	0.500	0.500	6.000	1.000			
SDPCN 10-3D	51945		inch	0.625	0.625	6.000	1.000	DCGW-32.52	TS-4.7-10M1	T-15
SDPCN 12-3D	52244		inch	0.750	0.750	6.000	1.000			

For turning inserts see pages IV - A-89.

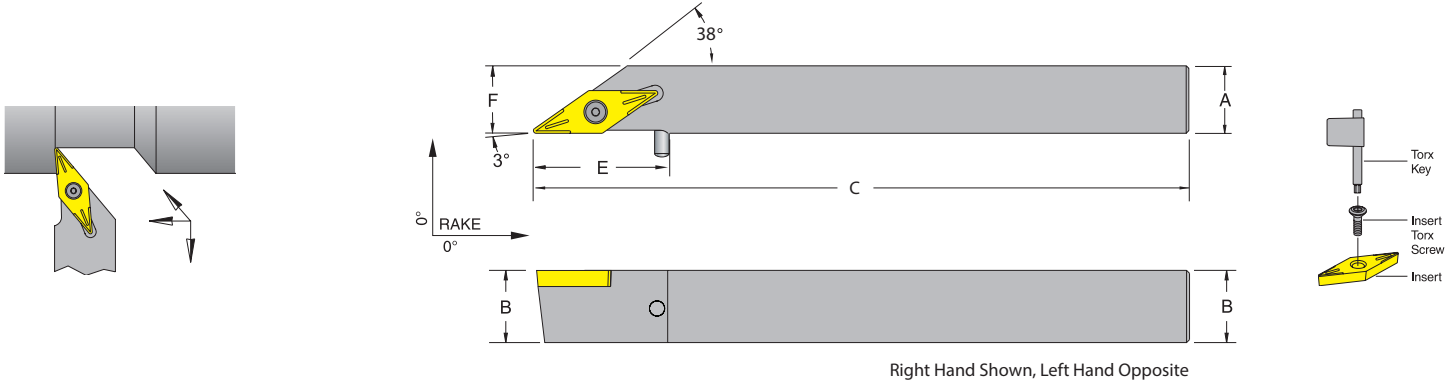
**STAC R/L Toolholder Style A - 0° Side Cutting Edge Angle for 7° positive triangle TC\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	E (Tool Stop)	F	TC_W Gage Insert	Insert Torx Screw	Torx Key
	R.H.	L.H.									
STACR/L 1010-M11	60542	60543	mm	10	10	150	25	10	TCGW-110204	TS-25.45-6M2	T-8
STACR/L 1212-M11	60544	60545	mm	12	12	150	25	12			
STACR/L 1616-M16	60547	60548	mm	16	16	150	25	16			
STACR/L 2020-M16	60549	60550	mm	20	20	150	25	20	TCGW-16T308	TS-4.7-10M1	T-15
<b>Inch</b>											
Description											
STACR/L 06-2D	51548	51549	inch	0.375	0.375	6.000	1.000	0.375	TCGW-21.51	TS-25.45-6M2	T-8
STACR/L 08-2D	51550	51551	inch	0.500	0.500	6.000	1.000	0.500			
STACR/L 10-3D	51554	51555	inch	0.625	0.625	6.000	1.000	0.625			
STACR/L 12-3D	52245	52246	inch	0.750	0.750	6.000	1.000	0.750	TCGW-32.52	TS-4.7-10M1	T-15

For turning inserts see pages IV - A-89.

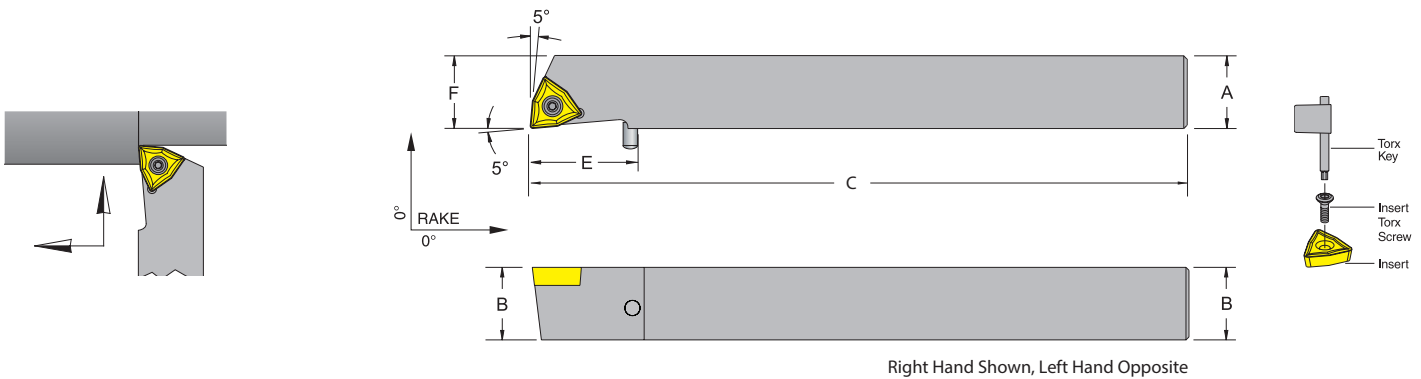
**SVNB R/L Toolholder Style N - 3° Side Cutting Edge Angle for 5° positive 35° diamond VB\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	E (Tool Stop)	F	VB_W Gage Insert	Insert Torx Screw	Torx Key
	R.H.	L.H.									
SVNBR/L 1010-M11	60551	60552	mm	10	10	150	25	10	VBGW-110304	TS-25.45-8M2	T-8
SVNBR/L 1212-M11	60553	60554	mm	12	12	150	25	12			
SVNBR/L 1616-M16	60555	60556	mm	16	16	150	32	16	VBGW-160408	TS-4.7-10M1	T-15
SVNBR/L 2020-M16	60557	60558	mm	20	20	150	32	20			
<b>Inch Description</b>											
SVNBR/L 06-2D	51990	51991	inch	0.375	0.375	6.000	1.000	0.375	VBGW-221	TS-25.45-8M2	T-8
SVNBR/L 08-2D	51992	51993	inch	0.500	0.500	6.000	1.000	0.500			
SVNBR/L 10-3D	51994	51995	inch	0.625	0.625	6.000	1.250	0.625	VBGW-332	TS-4.7-10M1	T-15
SVNBR/L 12-3D	52252	52253	inch	0.750	0.750	6.000	1.250	0.750			

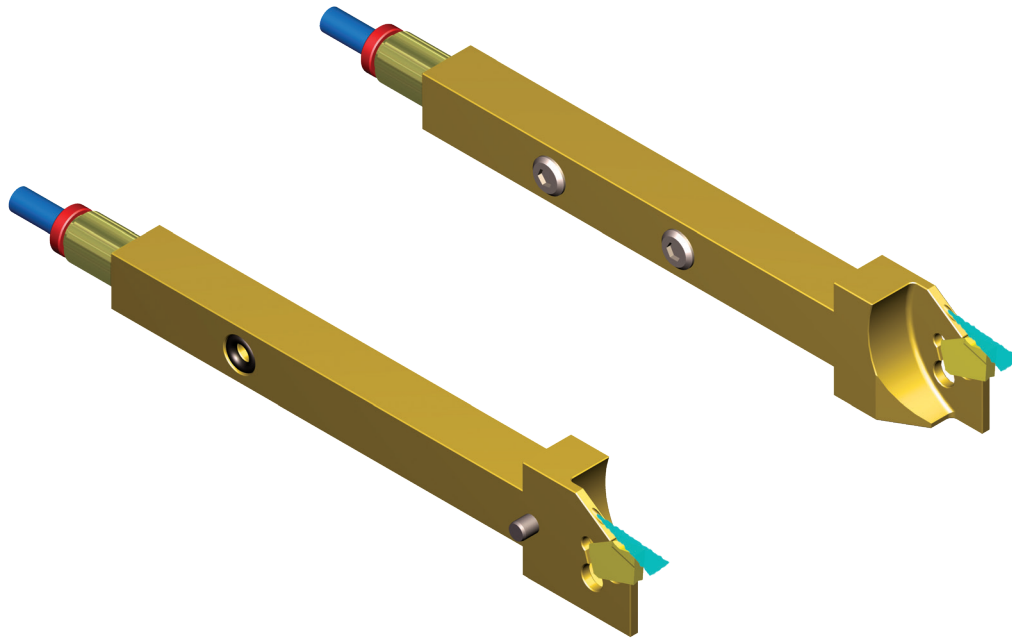
For turning inserts see pages IV - A-89.

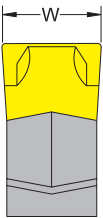
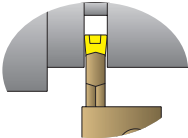
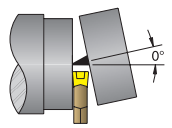
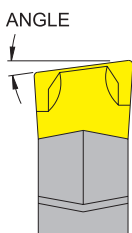
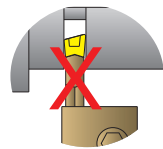
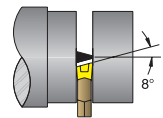
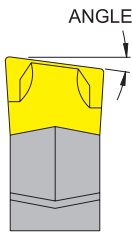
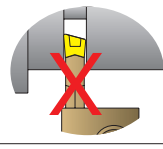
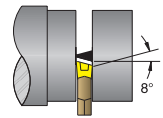
**SWNC R/L Toolholder Style N - Negative 5° End or Side Cutting Edge Angle for 7° positive 80° trigon WC\_W inserts**



Metric Description	UPC No. 733101-		System	A	B	C	E (Tool Stop)	F	WC_W Gage Insert	Insert Torx Screw	Torx Key
	R.H.	L.H.									
SWNCR/L 1616-M06	60559	60560	mm	16	16	150	25	16	WCGW-06T308	TS-4.7-10M1	T-15
SWNCR/L 2020-M06	60561	60562	mm	20	20	150	25	20			
<b>Inch Description</b>											
SWNCR/L 10-3D	51132	51133	inch	0.625	0.625	6.000	1.000	0.625	WCGW-32.52	TS-4.7-10M1	T-15
SWNCR/L 12-3D	52254	52255	inch	0.750	0.750	6.000	1.000	0.750			

For turning inserts see pages IV - A-89.

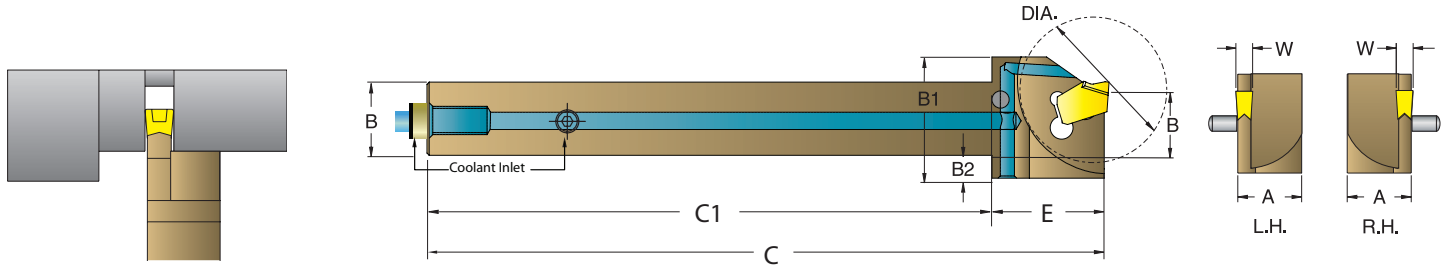


Insert Lead Angle	Application	Pros	Cons
 <p>NEUTRAL</p>	<p>Grooving</p> 	<ul style="list-style-type: none"> <li>• Flat diameter</li> </ul>	<ul style="list-style-type: none"> <li>• Cannot turn</li> </ul>
	<p>Parting Off</p> 	<ul style="list-style-type: none"> <li>• Long insert life</li> <li>• Straight cut</li> </ul>	<ul style="list-style-type: none"> <li>• Parting part will have a center nipple.</li> <li>• The neutral insert will not be able to cut on the center nipple, because the part will fall off before the center nipple is removed.</li> </ul>
 <p>RIGHT HAND</p>	<p>NO Grooving</p> 	<ul style="list-style-type: none"> <li>• None, cannot groove</li> </ul>	<ul style="list-style-type: none"> <li>• Grooving diameter will not be straight</li> <li>• Cannot turn</li> </ul>
	<p>Parting Off</p> 	<ul style="list-style-type: none"> <li>• Clean cut on the part-off part</li> </ul>	<ul style="list-style-type: none"> <li>• The blade will have the tendency to move away, moving toward the leading angle creating a concave surface to the part-off part.</li> </ul>
 <p>LEFT HAND</p>	<p>NO Grooving</p> 	<ul style="list-style-type: none"> <li>• None, cannot groove</li> </ul>	<ul style="list-style-type: none"> <li>• Grooving diameter will not be straight</li> <li>• Cannot turn</li> </ul>
	<p>Parting Off</p> 	<ul style="list-style-type: none"> <li>• Clean cut on the chuck part</li> </ul>	<ul style="list-style-type: none"> <li>• The blade will have the tendency to move away, moving toward the leading angle creating a concave surface to the part-off part.</li> </ul>

Left angle insert to be used when the cutting rotation is L.H.

**ASGTH Jet-Stream™ Thru Coolant Cut-Off Toolholder** - Right and Left Hand for SGTN Cut-Off Inserts for Swiss Screw Machines

The square shank design of the Cut-Off toolholder ensures a precise center line of the insert with respect to the center of the work-piece, when the toolholder is mounted directly on the CNC turret. Inserts are securely held in Slot Grip toolholders by a tapered locking system. No additional clamping devices are required. Slot Grip Cut-Off toolholders come in a broad selection of shank sizes.

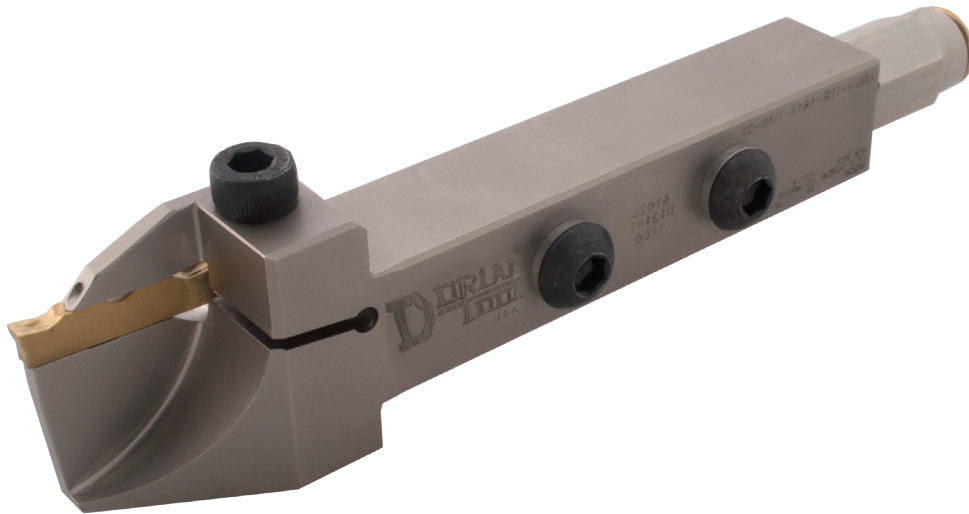


Metric Description	UPC No. 733101-		System	A (th)	B	B1	B2	C	C1	E (Tool Stop)	F	Max. Diameter	W		Gage Insert
	R.H.	L.H.													
ASGTHR/L 1010-H02	62922	62923	mm	10	10	20	5	100	75	25	10	28	2.0	2.5	SGTN-2.0
			inch	0.394	0.394	0.787	0.197	3.937	2.953	0.984	0.394	1.102	0.079	0.098	
ASGTHR/L 1212-H02	62924	62925	mm	12	12	20	3	100	75	25	12	28	2.0	2.5	
			inch	0.472	0.472	0.787	0.118	3.937	2.953	0.984	0.472	1.102	0.079	0.098	
ASGTHR/L 1616-H02	62926	62927	mm	16	16	21	0	100	75	25	16	28	2.0	2.5	
			inch	0.630	0.630	0.826	0.000	3.937	2.953	0.984	0.630	1.102	0.079	0.098	
ASGTHR/L 2020-K02	62928	62929	mm	20	20	25	0	125	100	25	20	32	2.0	2.5	SGTN-2.0
			inch	0.787	0.787	0.984	0.000	4.921	3.937	0.984	0.787	1.260	0.079	0.098	
ASGTHR/L 2525-K02	62930	62931	mm	25	25	30	0	132	100	32	25	40	2.0	2.5	SGTN-2.0
			inch	0.984	0.984	1.181	0.000	5.197	3.937	1.260	0.984	1.575	0.079	0.098	
ASGTHR/L 1010-H03	62932	62933	mm	10	10	20	5	100	75	25	10	28	3.0		SGTN-3.0
			inch	0.394	0.394	0.787	0.197	3.937	2.953	0.984	0.394	1.102	0.118		
ASGTHR/L 1212-H03	62934	62935	mm	12	12	20	3	100	75	25	12	32	3.0		
			inch	0.472	0.472	0.787	0.118	3.937	2.953	0.984	0.472	1.260	0.118		
ASGTHR/L 1616-H03	62936	62937	mm	16	16	24	3	100	75	25	16	32	3.0		
			inch	0.630	0.630	0.945	0.118	3.937	2.953	0.984	0.630	1.260	0.118		
ASGTHR/L 2020-K03	62938	62939	mm	20	20	25	0	125	100	25	20	36	3.0		SGTN-3.0
			inch	0.787	0.787	0.984	0.000	4.921	3.937	0.984	0.787	1.417	0.118		
ASGTHR/L 2525-K03	62940	62941	mm	25	25	31	0	132	100	32	25	52	3.0		SGTN-3.0
			inch	0.984	0.984	1.220	0.000	5.197	3.937	1.260	0.984	2.047	0.118		
Inch Description	UPC No. 733101-		System	A (th)	B	B1	B2	C	C1	E (Tool Stop)	F	Max. Diameter	W		Gage Insert
	R.H.	L.H.													
ASGTHR/L 08-2A	62942	62943	inch	0.500	0.500	0.787	.090	4.000	3.000	1.000	0.500	1.102	0.079	0.098	SGTN-2.0
			mm	12.7	12.7	20.0	2.28	101.6	76.2	25.4	12.7	28.0	2.0	2.5	
ASGTHR/L 16-2C	62944	62945	inch	1.000	1.000	1.181	0.000	5.000	3.750	1.250	1.000	1.575	0.079	0.098	SGTN-2.0
			mm	25.40	25.40	30.00	0.00	127.00	95.25	31.75	25.40	40.0	2.0	2.5	
ASGTHR/L 08-3A	62946	62947	inch	0.500	0.500	0.787	.090	4.000	3.000	1.000	0.500	1.260	3.0		SGTN-3.0
			mm	12.7	12.7	20.0	2.28	101.6	76.2	25.4	12.7	32.0	0.118		
ASGTHR/L 16-3C	62948	62949	inch	1.000	1.000	1.181	0.000	5.000	3.750	1.250	1.000	2.047	3.0		SGTN-3.0
			mm	25.40	25.40	30.00	0.00	127.00	95.25	31.75	25.40	51.99	0.118		

Optional high pressure coolant connectors are sold separate, see page G-5 for details. For cut-off inserts see pages F-78 - F-79.

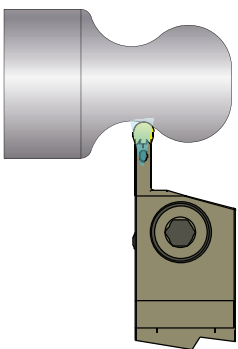
## Three Depths of Cut

1. **SHORT** Depth of Cut : Grooving Max 12mm to 18mm
2. **MEDIUM** Depth of Cut : Grooving Max 24.mm to 28mm
3. **LONG** Depth of Cut : Grooving Max 36mm to 40mm

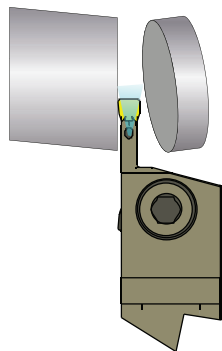


## For 5 Different Applications!

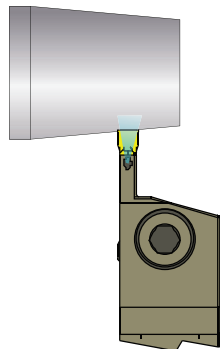
**Profiling**  
Application



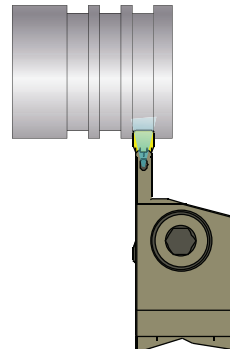
**Part-off**  
Application



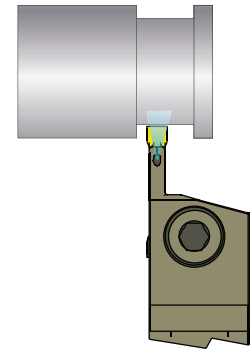
**Turning**  
Application



**Grooving**  
Application

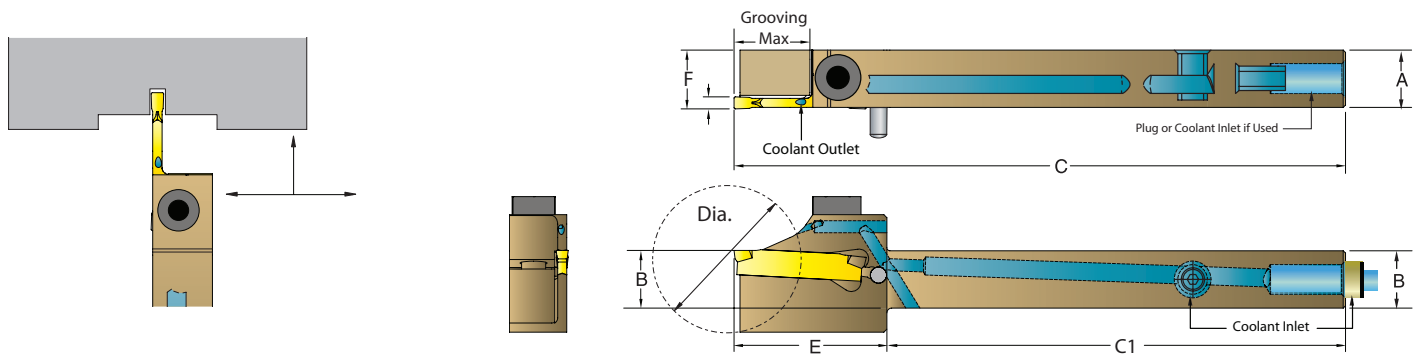


**Turning & Grooving**  
Application





**ADDN Jet-Stream™ Thru Coolant External Turning, Grooving & Cut-off Toolholders**

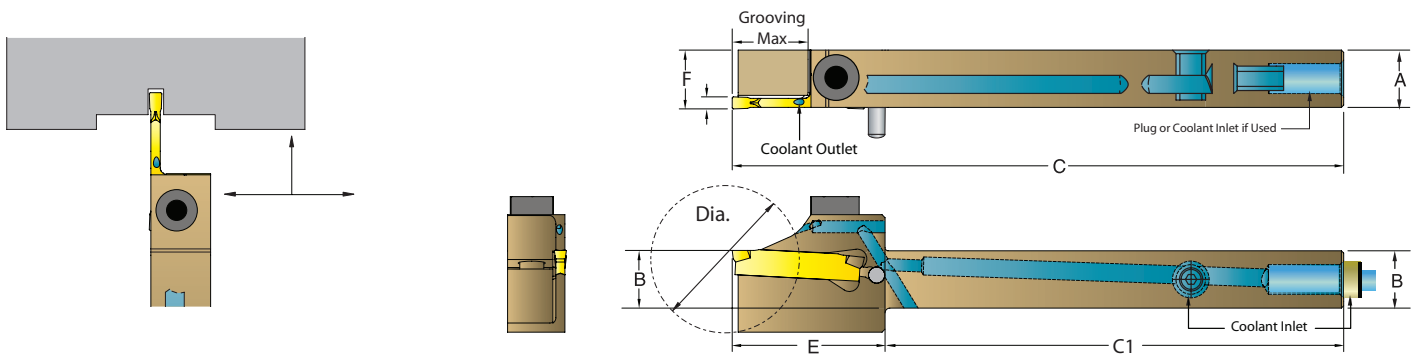


**SHORT Depth of Cut :**  
**Grooving Max 12 to 18mm (0.236" to 0.354")**

Metric Description	UPC No. 733101-		Insert Size	A	B	E (Tool Stop)	C	C1	F	Grooving Max	Dia. Max.	Insert	Lock Screw	Hex Key
	R.H.	L.H.												
ADDN-TFR/L-1010-H20-06	61000	61001	2/2.5 mm <b>.079/0.098 inch</b>	10 <b>0.394</b>	10 <b>0.394</b>	32 <b>1.260</b>	107 <b>4.213</b>	75 <b>2.953</b>	10 <b>0.394</b>	6 <b>0.236</b>	12 <b>0.472</b>	DN_-22_N-20	CS-M0416	AHK-3M
ADDN-TFR/L-1212-H20-06	61002	61003	2/2.5 mm <b>.079/0.098 inch</b>	12 <b>0.472</b>	12 <b>0.472</b>	32 <b>1.260</b>	107 <b>4.213</b>	75 <b>2.953</b>	12 <b>0.472</b>	6 <b>0.236</b>	12 <b>0.472</b>	DN_-22_N-20	CS-M0520	AHK-4M
ADDN-TFR/L-1212-H30-09	61008	61009	3 mm <b>0.118 inch</b>	12 <b>0.472</b>	12 <b>0.472</b>	32 <b>1.260</b>	107 <b>4.213</b>	75 <b>2.953</b>	12 <b>0.472</b>	9 <b>0.354</b>	18 <b>0.709</b>	DN_-22_N-30-	CS-M0520	AHK-4M
ADDN-TFR/L-1616-H20-06	61004	61005	2/2.5 mm <b>.079/0.098 inch</b>	16 <b>0.630</b>	16 <b>0.630</b>	32 <b>1.260</b>	107 <b>4.213</b>	75 <b>2.953</b>	16 <b>0.630</b>	6 <b>0.236</b>	12 <b>0.472</b>	DN_-22_N-20	CS-M0520	AHK-4M
ADDN-TFR/L-1616-H30-09	61006	61007	3 mm <b>0.118 inch</b>	16 <b>0.630</b>	16 <b>0.630</b>	32 <b>1.260</b>	107 <b>4.213</b>	75 <b>2.953</b>	16 <b>0.630</b>	9 <b>0.354</b>	18 <b>0.709</b>	DN_-22_N-30-	CS-M0520	AHK-4M
ADDN-TFR/L-2020-K20-06	61028	61029	2/2.5 mm <b>.079/0.098 inch</b>	20 <b>0.787</b>	20 <b>0.787</b>	32 <b>1.260</b>	132 <b>5.197</b>	100 <b>3.937</b>	20 <b>0.787</b>	6 <b>0.236</b>	12 <b>0.472</b>	DN_-22_N-20	CS-M0520	AHK-4M
ADDN-TFR/L-2020-K30-09	61030	61031	3 mm <b>0.118 inch</b>	20 <b>0.787</b>	20 <b>0.787</b>	32 <b>1.260</b>	132 <b>5.197</b>	100 <b>3.937</b>	20 <b>0.787</b>	9 <b>0.354</b>	18 <b>0.709</b>	DN_-22_N-30-	CS-M0520	AHK-4M
<b>Inch</b>														
Description														
ADDN-TFR/L-08-20A-06	61040	61041	<b>.079/0.098 inch</b> 2/2.5 mm	<b>0.500</b> 12.7	<b>0.500</b> 12.7	<b>1.250</b> 32	<b>4.250</b> 108	<b>3.000</b> 76	<b>0.500</b> 12.7	<b>0.236</b> 6	<b>0.472</b> 12	DN_-22_N-20	CS-M0416	AHK-3M
ADDN-TFR/L-08-30A-09	61042	61043	<b>0.118 inch</b> 3 mm	<b>0.500</b> 12.7	<b>0.500</b> 12.7	<b>1.250</b> 32	<b>4.250</b> 108	<b>3.000</b> 76	<b>0.500</b> 12.7	<b>0.354</b> 9	<b>0.709</b> 18	DN_-22_N-30-	CS-M0520	AHK-4M

For turning, grooving and parting off see pages F-4 - F-6.

ADDN Jet-Stream™ Thru Coolant External Turning, Grooving & Cut-off Toolholders

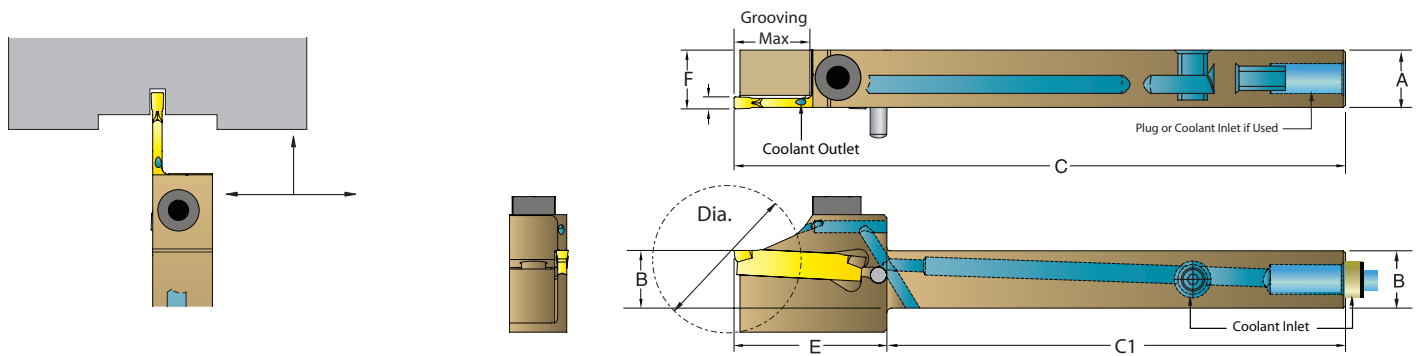


**MEDIUM Depth of Cut :**  
**Grooving Max 24 to 28mm (0.472" to 0.551")**

Metric Description	UPC No. 733101-		Insert Size	A	B	E (Tool Stop)	C	C1	F	Grooving Max	Dia. Max.	Insert	Lock Screw	Hex Key
	R.H.	L.H.												
ADDN-TFR/L-1010-H20-12	61010	61011	2/2.5 mm <b>.079/0.098 inch</b>	10	10	32	107	75	10	12	24	DN_-22_N-20	CS-M0416	AHK-3M
ADDN-TFR/L-1212-H20-12	61012	61013	2/2.5 mm <b>.079/0.098 inch</b>	12	12	32	107	75	12	12	24	DN_-22_N-20	CS-M0520	AHK-4M
ADDN-TFR/L-1212-H30-14	61018	61019	3 mm <b>0.118 inch</b>	12	12	32	107	75	12	14	28	DN_-22_N-30-	CS-M0520	AHK-4M
ADDN-TFR/L-1616-H20-12	61014	61015	2/2.5 mm <b>.079/0.098 inch</b>	16	16	32	107	75	16	12	24	DN_-22_N-20	CS-M0520	AHK-4M
ADDN-TFR/L-1616-H30-14	61016	61017	3 mm <b>0.118 inch</b>	16	16	32	107	75	16	14	28	DN_-22_N-30-	CS-M0520	AHK-4M
ADDN-TFR/L-2020-K20-12	61032	61033	2/2.5 mm <b>.079/0.098 inch</b>	20	20	32	132	100	20	12	24	DN_-22_N-20	CS-M0520	AHK-4M
ADDN-TFR/L-2020-K30-14	61034	61035	3 mm <b>0.118 inch</b>	20	20	32	132	100	20	14	28	DN_-22_N-30-	CS-M0520	AHK-4M
<b>Inch</b>														
Description														
ADDN-TFR/L-08-20A-12	61044	61045	2/2.5 mm <b>.079/0.098 inch</b>	12.7	12.7	32	108	76	12.7	12	24	DN_-22_N-20	CS-M0416	AHK-3M
ADDN-TFR/L-08-30A-14	61046	61047	3 mm <b>0.118 inch</b>	12.7	12.7	32	108	76	12.7	14	28	DN_-22_N-30-	CS-M0520	AHK-4M

For turning, grooving and parting off see pages F-4 - F-6.

**ADDN Jet-Stream™ Thru Coolant External Turning, Grooving & Cut-off Toolholders**



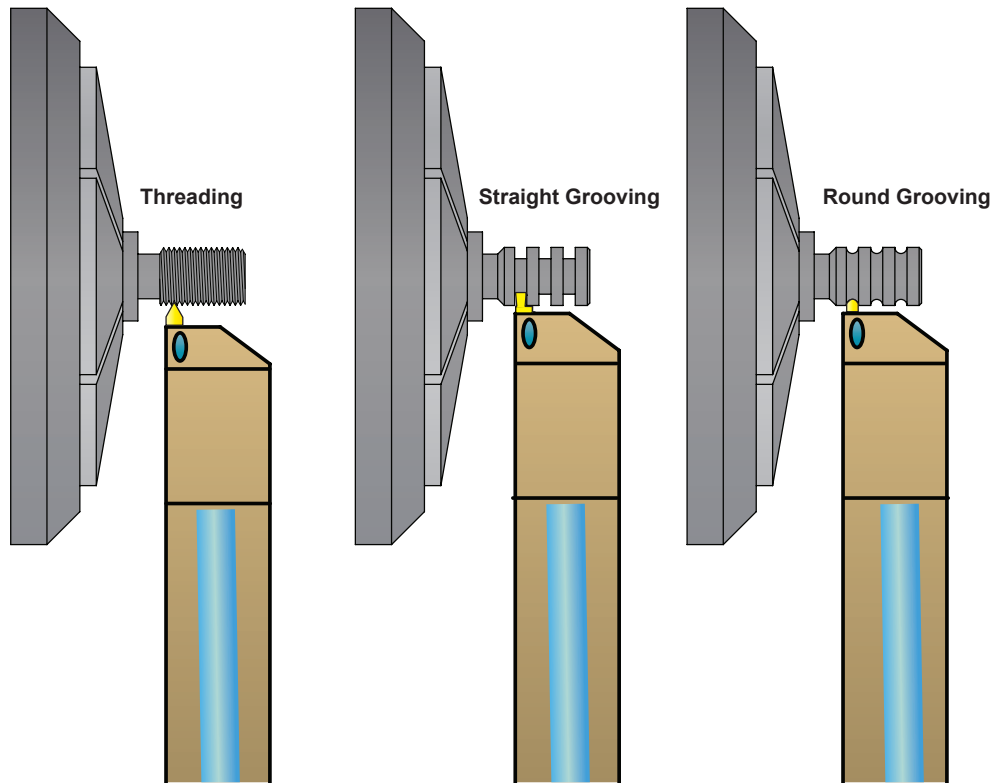
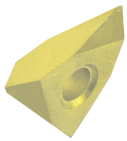
**LONG Depth of Cut :  
Grooving Max 36 to 40mm (0.709")**

<b>Metric</b>		UPC No. 733101-		Insert Size	A	B	E (Tool Stop)	C	C1	F	Grooving Max	Dia. Max.	Insert	Lock Screw	Hex Key
Description	R.H.	L.H.													
ADDN-TFR/L-1010-H20-18	61020	61021	2/2.5 mm .079/0.098 inch	10 0.394	10 0.394	32 1.260	107 4.213	75 2.953	10 0.394	18 0.709	36 1.417	DN_-22_N-20	CS-M0416	AHK-4M	
ADDN-TFR/L-1212-H20-18	61022	61023	2/2.5 mm .079/0.098 inch	12 0.472	12 0.472	32 1.260	107 4.213	75 2.953	12 0.472	18 0.709	36 1.417	DN_-22_N-20	CS-M0520	AHK-4M	
ADDN-TFR/L-1616-H20-18	61024	61025	2/2.5 mm .079/0.098 inch	16 0.630	16 0.630	32 1.260	107 4.213	75 2.953	16 0.630	18 0.709	36 1.417	DN_-22_N-20	CS-M0520	AHK-4M	
ADDN-TFR/L-1616-H30-20	61026	61027	3 mm 0.118 inch	16 0.630	16 0.630	32 1.260	107 4.213	75 2.953	16 0.630	20 0.787	40 1.575	DN_-22_N-30-	CS-M0520	AHK-4M	
ADDN-TFR/L-2020-K20-18	61036	61037	2/2.5 mm .079/0.098 inch	20 0.787	20 0.787	32 1.260	132 5.197	100 3.937	20 0.787	18 0.709	36 1.417	DN_-22_N-20	CS-M0520	AHK-4M	
ADDN-TFR/L-2020-K30-20	61038	61039	3 mm 0.118 inch	20 0.787	20 0.787	32 1.260	132 5.197	100 3.937	20 0.787	20 0.787	40 1.575	DN_-22_N-30-	CS-M0520	AHK-4M	
<b>Inch</b>															
Description															
ADDN-TFR/L-08-20A-18	61048	61049	.079/0.098 inch 2/2.5 mm	0.500 12.7	0.500 12.7	1.250 32	4.250 108	3.000 76	0.500 12.7	0.709 18	1.417 36	DN_-22_N-30-	CS-M0520	AHK-4M	

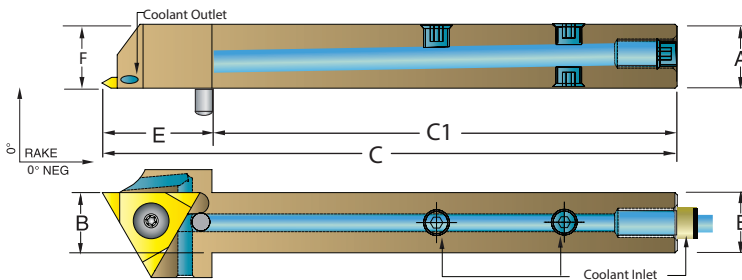
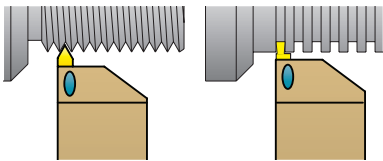
For turning, grooving and parting off see pages F-4 - F-6.

**On Edge**  
Threading  
& Grooving  
for Swiss Screw Machines

3 Cutting Edges



**ASTVO Jet-Stream™ Thru Coolant Threading Toolholder- Right and Left Hand for On Edge TNMC Inserts**



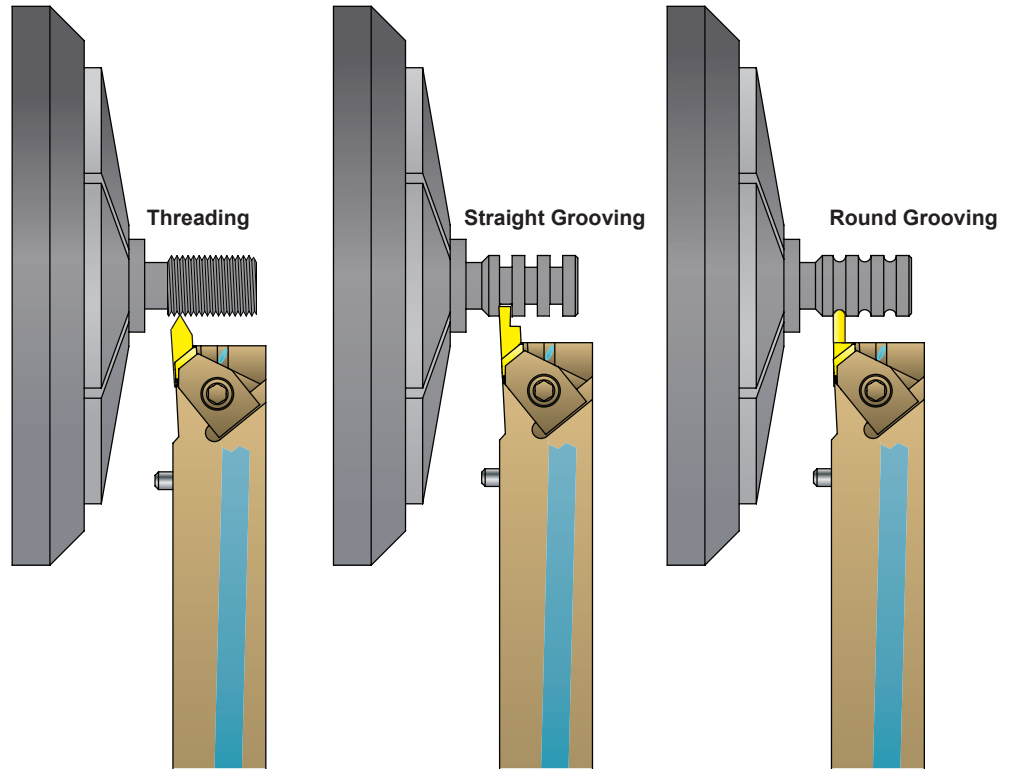
Metric Description	UPC No. 733101-		System	A	B	C	C1	E (Gage Stop)	F	Insert Gage	Insert Screw	Torx Key
	R.H.	L.H.										
ASTVOR/L 1010-H16	61098	61099	mm	10	10	100	75	25	10	TNMC-322	GTS-1M	T-10
			inch	0.394	0.394	3.937	2.953	0.984	0.394			
ASTVOR/L 1212-H16	61100	61101	mm	12	12	100	75	25	12			
			inch	0.472	0.472	3.937	2.953	0.984	0.472			
ASTVOR/L 1616-H16	61102	61103	mm	16	16	100	75	25	16			
			inch	0.630	0.630	3.937	2.953	0.984	0.630			
ASTVOR/L 2020-K16	61104	61105	mm	20	20	125	100	25	20			
			inch	0.787	0.787	4.921	3.937	0.984	0.787			
<b>Inch</b>												
Description												
ASTVOR/L 08-3A	61112	61113	inch	0.500	0.500	4.000	3.000	1.000	0.500	TNMC-322	GTS-1M	T-10
			mm	12.7	12.7	101.6	76.2	25.4	12.7			

For threading inserts see pages E-13 - E-50.

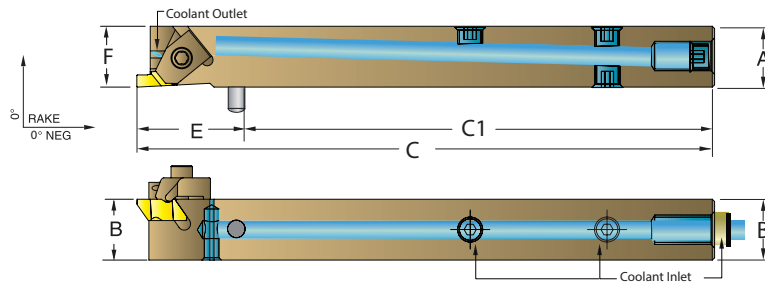
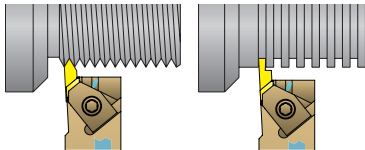
# DorNotch

Threading & Grooving  
for Swiss Screw Machines

2 Cutting Edges



**ANS Jet-Stream™ Thru Coolant Threading Toolholder - Right and Left Hand for DorNotch V Thread Inserts**



Metric Description	UPC No. 733101-		System	A	B	C	C1	E (Tool Stop)	F	Insert Gage	Clamp	Clamp Screw
	R.H.	L.H.										
ANSR/L 1010-H02	61086	61087	mm	10	10	100	75	25	10	NG-2R* NG-2L**	CM-74* CM-75**	S-310M
			inch	0.394	0.394	3.937	2.953	0.984	0.394			
ANSR/L 1212-H02	61088	61089	mm	12	12	100	75	25	12	NG-3R* NG-3L**	CM-72* CM-73**	S-412M
			inch	0.472	0.472	3.937	2.953	0.984	0.472			
ANSR/L 1616-H02	61090	61091	mm	16	16	100	75	25	16	NG-3R* NG-3L**	CM-72* CM-73**	S-412M
			inch	0.630	0.630	3.937	2.953	0.984	0.630			
ANSR/L 1212-H03	61092	61093	mm	12	12	100	75	25	12	NG-3R* NG-3L**	CM-72* CM-73**	S-412M
			inch	0.472	0.472	3.937	2.953	0.984	0.472			
ANSR/L 1616-H03	61094	61095	mm	16	16	100	75	25	16	NG-3R* NG-3L**	CM-72* CM-73**	S-412M
			inch	0.630	0.630	3.937	2.953	0.984	0.630			
ANSR/L 2020-K03	61096	61097	mm	20	20	125	100	25	20			
			inch	0.787	0.787	4.921	3.937	0.984	0.787			
<b>Inch</b>												
ANSR/L 08-2A	61108	61109	inch	0.500	0.500	4.000	3.000	1.000	0.500	NG-2R* NG-2L**	CM-74* CM-75**	S-310M
			mm	12.7	12.7	101.6	76.2	25.4	12.7			
ANSR/L 08-3A	61110	61111	inch	0.500	0.500	4.000	3.000	1.000	0.500	NG-3R* NG-3L**	CM-72* CM-73**	S-412M
			mm	12.7	12.7	101.6	76.2	25.4	12.7			

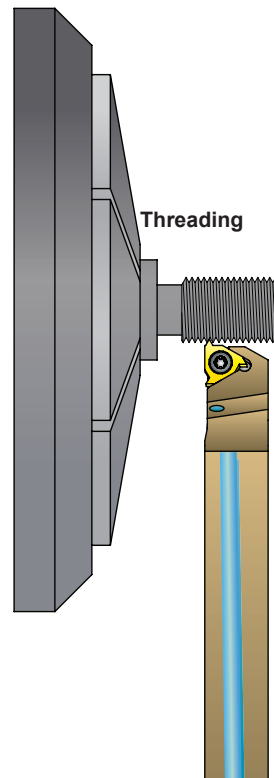
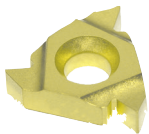
For threading inserts see pages E-13 - E-50.

\*For R.H. tool. \*\*For L.H. tool.

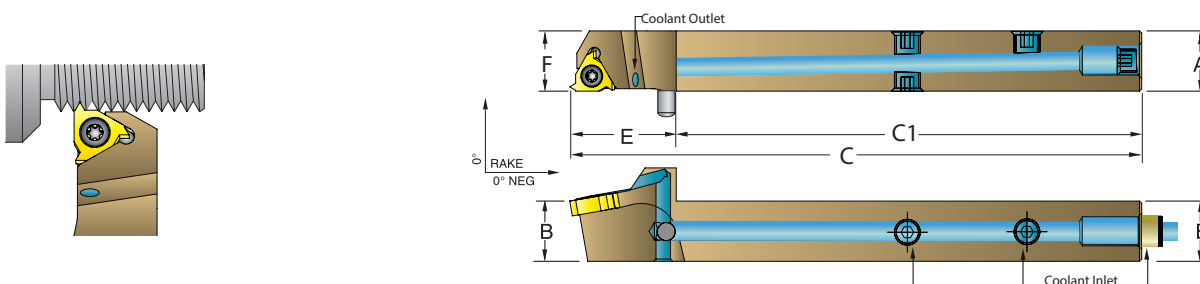
# Laydown Threading

for Swiss Screw Machines

## 3 Cutting Edges



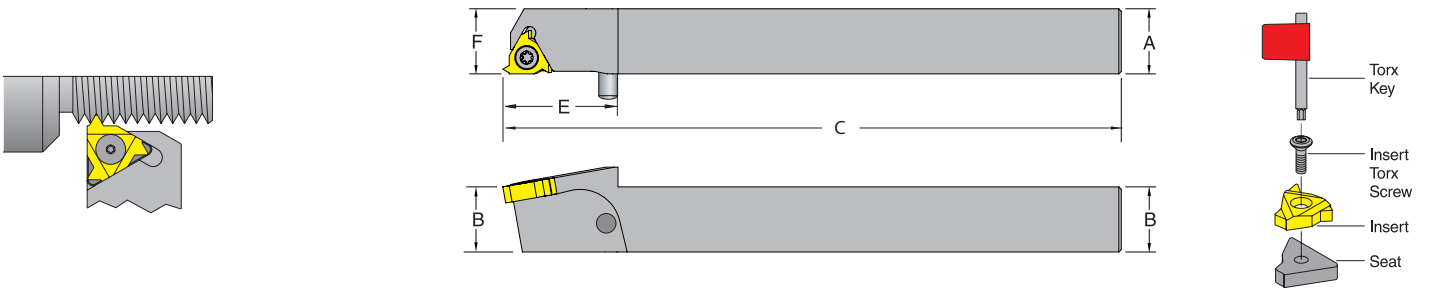
ASE Jet-Stream™ Thru Coolant Threading Toolholder - Right and Left Hand for LayDown Insert



Metric Description	UPC No. 733101-		System	A	B	C	C1	E (Gage Stop)	F	Insert Gage	Shim Seat	Insert Screw	Torx Key
	R.H.	L.H.											
ASER/L 1010-H11	61078	61079	mm	10	10	100	75	25	10	11-A60	None	TS-25.45-6M2	T-8
			inch	0.394	0.394	3.937	2.953	0.984	0.394				
ASER/L 1212-H11	61080	61081	mm	12	12	100	75	25	12	16-G60	GXE/I-16	TS-3.5-14M1	T-15
			inch	0.472	0.472	3.937	2.953	0.984	0.472				
ASER/L 1616-H16	61082	61083	mm	16	16	100	75	25	16	16-G60	GXE/I-16	TS-3.5-14M1	T-15
			inch	0.630	0.630	3.937	2.953	0.984	0.630				
ASER/L 2020-K16	61084	61085	mm	20	20	125	100	25	20	11-A60	None	TS-25.45-6M2	T-8
			inch	0.787	0.787	4.921	3.937	0.984	0.787				
<b>Inch</b>													
Description													
ASER/L 08-11A	61106	61107	inch	0.500	0.500	4.000	3.000	1.000	0.500	11-A60	None	TS-25.45-6M2	T-8
			mm	12.7	12.7	101.6	76.2	25.4	12.7				

For threading inserts see pages E-13 - E-50.

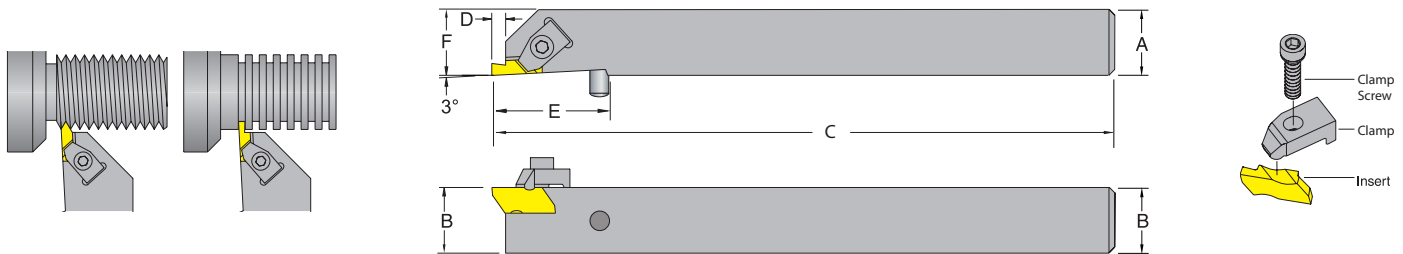
**SE Threading Toolholder Right and Left Hand for LayDown Insert**



Metric Description	UPC No. 733101-		System	A	B	C	E (Gage Stop)	F	Insert Gage	Shim Seat	Insert Screw	Torx Key
	R.H.	L.H.										
SER/L 1010-M11	60563	60564	mm	10	10	150	25	10	11-A60	None	TS-25.45-6M2	T-8
SER/L 1212-M11	60565	60566	mm	12	12	150	25	12	11-A60	None	TS-25.45-6M2	T-8
SER/L 1616-M16	60567	60568	mm	16	16	150	25	16	16-G60	GXE/I-16	TS-3.5-14M1	T-10
SER/L 2020-M16	60569	60570	mm	20	20	150	25	20	16-G60	GXE/I-16	TS-3.5-14M1	T-10
<b>Inch</b>												
Description												
SER/L 06-11D	58422	58423	inch	0.375	0.375	6.000	1.000	0.375	11-A60	None	TS-25.45-6M2	T-8
SER/L 08-11D	58426	58427	inch	0.500	0.500	6.000	1.000	0.500	11-A60	None	TS-25.45-6M2	T-8
SER/L 10-16D	58430	58431	inch	0.625	0.625	6.000	1.000	0.625	16-G60	GXE/I-16	TS-3.5-14M1	T-15
SER/L 12-16D	58434	58435	inch	0.750	0.750	6.000	1.000	0.750	16-G60	GXE/I-16	TS-3.5-14M1	T-15

For threading inserts see pages E-13 - E-50.

**NS Threading Toolholder Right and Left Hand for DorNotch V Thread Inserts**



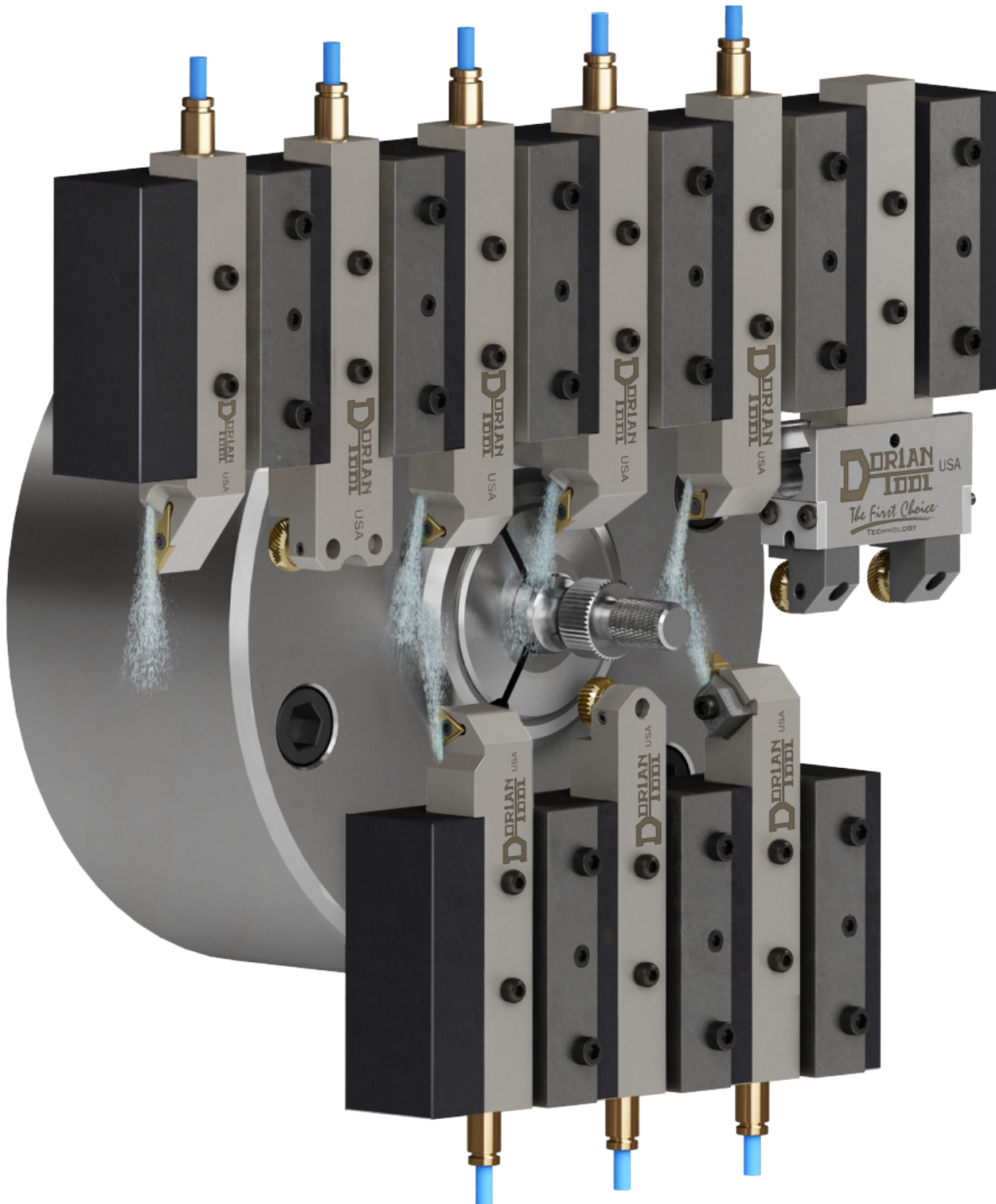
Metric Description	UPC No. 733101-		System	A	B	C	E (Gage Stop)	F	Insert Gage	Clamp	Clamp Screw
	R.H.	L.H.									
NSR/L 1010-M02	60571	60572	mm	10	10	150	25	10	NG-2R* NG-2L**	CM-182* CM-183**	S-310M
NSR/L 1212-M02	60573	60574	mm	12	12	150	25	12			
NSR/L 1616-M02	60575	60576	mm	16	16	150	25	16	NG-2R* NG-2L**	CM-74* CM-75**	S-310M
NSR/L 2020-M02	60577	60578	mm	20	20	150	25	20			
NSR/L 2020-M03	60579	60580	mm	20	20	150	32	20	NG-3R* NG-3L**	CM-72* CM-73**	S-412M
<b>Inch</b>											
Description											
NSR/L 06-2D	58772	58773	inch	0.375	0.375	6.000	1.000	0.375	NG-2R* NG-2L**	CM-182* CM-183**	S-310M
NSR/L 08-2D	58776	58777	inch	0.500	0.500	6.000	1.000	0.500			
NSR/L 10-2D	58780	58781	inch	0.625	0.625	6.000	1.000	0.625	NG-2R* NG-2L**	CM-74* CM-75**	S-310M
NSR/L 12-2D	58438	58439	inch	0.750	0.750	6.000	1.000	0.750			
NSR/L 12-3D	58442	58443	inch	0.750	0.750	6.000	1.250	0.750	NG-3R* NG-3L**	CM-72* CM-73**	S-412M

For threading inserts see pages E-13 - E-50.

\*For R.H. tool. \*\*For L.H. tool.

# Swiss Screw Machine Knurling Tools

Featuring The New Jet-Stream™ Thru Coolant System

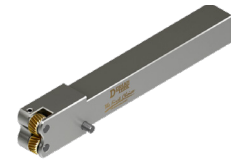




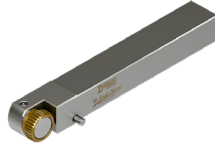
**SWTCFKT\_B :**  
Single wheel  
thru coolant fixed knurling tool  
for swiss screw machines  
(Page G-34)



**DWTCFKT\_B :**  
Double wheel  
thru coolant fixed knurling tool  
for swiss screw machines  
(Page G-35)



**SSWTCFKT :**  
Shoulder single wheel  
thru coolant fixed knurling tool  
for swiss screw machines  
(Page G-36)



**SDWTCFKT :**  
Shoulder double wheel  
thru coolant fixed knurling tool  
for swiss screw machines  
(Page G-37)



**SSWFKT :**  
Shoulder single wheel knurl tool  
for turret style machines  
(Page G-39)



**SWFKT :**  
Single wheel fixed knurling tool  
for turret style machines  
(Page G-38)



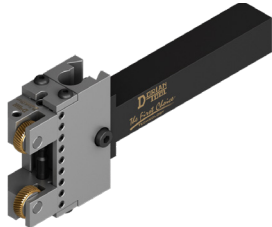
**SSCK-DW-SW2/4:**  
Shoulder self-centering knurling tool  
for swiss screw machines  
(Page G-41)



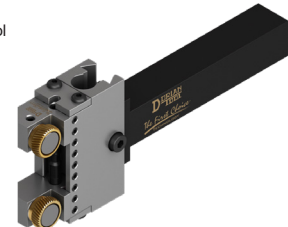
**SCKN-DW-D/M:**  
Self-Centering knurling tool  
for swiss screw machines  
(Page G-40)



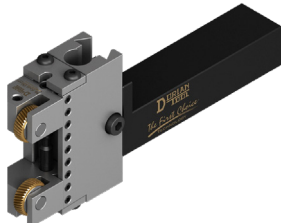
**SMSCNC-7-D-0CL :**  
Straddle CNC- Forming knurling tool  
with a symmetrical center line  
for swiss screw machines  
(Page G-42)



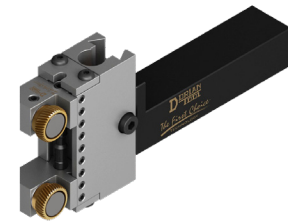
**SMCNC 7-2-0CL :**  
Straddle CNC-Shoulder knurling tool  
with a symmetrical center line  
for swiss screw machines  
(Page G-43)



**SCNC-7-D :**  
Straddle CNC forming knurl tool  
for turret style machines  
(Page G-44)



**SCNC-7-2 :**  
Shoulder CNC straddle  
knurl tool for turret style machines  
(Page G-45)



**CNC109\_M :**  
Side mount shoulder  
style square shank knurling tool  
for swiss screw machines  
(Page G-46)



**CNC109\_4 :**  
Side Mount flange style  
square shank knurling tool  
for swiss screw machines  
(Page G-47)



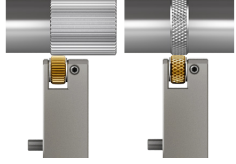
**3WSKT :**  
Three wheel knurling tool  
with optional square shanks  
for swiss screw machines  
(Page G-49)



**3WRKT :**  
Three wheel knurling tool  
with optional round shanks  
for swiss screw machines  
(Page G-49)



## SWTCFKT\_B : Single wheel thru coolant fixed knurling tool



- Specifically designed for Swiss style screw machines
- Single wheel knurling tool for general purposes applications.
- Knurl wheel is mounted between thrust washers to ensure a smooth and even rotation of the knurl while knurling is performed.
- Straight and Diamond knurl pattern
- TiN coated knurling wheels.

## Resulting Knurl Pattern

## Recommended Use:

Straight pattern with straight wheel.



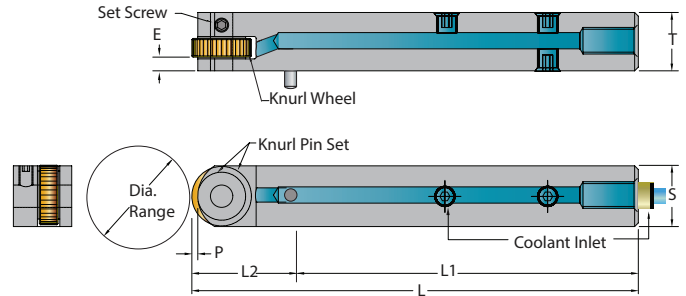
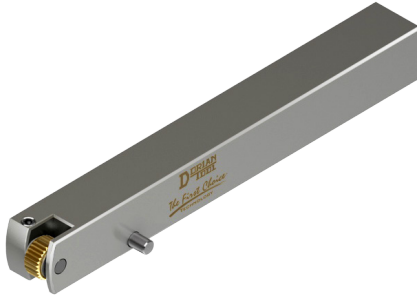
Male 60° diamond pattern with female wheel.



Female 60° diamond pattern with male wheel.



Best for straight pattern



Metric Description	UPC No. 733101-	S	Knurl Wheel Style	Knurl Pin Set Desc.	UPC No. 733101-	Set Screw	DIA. Range	E	L	L1	L2 (Tool Stop)	P	T
								0.08"	3.740"	2.953"	0.787"	0.040"	0.472"
SWTCFKT-8-B	22925	8mm 0.315"	B *	KPS-12-38-C	28900	M2.5-.45	Unlimited	2.0 0.08"	95 3.740"	75 2.953"	20.0 0.787"	1.0 0.040"	12.0 0.472"
SWTCFKT-10-B	22926	10mm 0.394"	B *	KPS-12-38-C	28900	M2.5-.45	Unlimited	2.0 0.08"	100 3.937"	75 2.953"	25.0 0.984"	1.0 0.040"	12.0 0.472"
SWTCFKT-12-B	22927	12mm 0.472"	B *	KPS-12-38-C	28900	M2.5-.45	Unlimited	2.0 0.08"	100 3.937"	75 2.953"	25.0 0.984"	1.0 0.040"	12.0 0.472"
SWTCFKT-16-B	22928	16mm 0.630"	B *	KPS-12-38-C	28900	M2.5-.45	Unlimited	2.0 0.08"	100 3.937"	75 2.953"	25.0 0.984"	1.0 0.040"	15.9 0.625"
SWTCFKT-20-B	22929	20mm 0.787"	B *	KPS-12-38-C	28900	M2.5-.45	Unlimited	2.0 0.08"	125 4.921"	100 3.937"	25.0 0.984"	1.0 0.040"	20.0 0.787"
<b>Inch</b>													
Description													
SWTCFKT-50-B	22930	0.500" 12.70mm	B *	KPS-12-38-C	28900	M2.5-.45	Unlimited	0.08" 2.0	4.000" 101.6	3.000" 76.2	1.000" 25.4	0.040" 1.0	0.500" 12.7

Supplied with 1 straight beveled TiN coated knurl wheel, \* 30 TPI. **Warning:** may cause deflection on small diameters, and too much pressure on large diameters.

## DWTCFKT\_B : Double wheel thru coolant fixed knurling tool



- Specifically designed for Swiss style screw machines
- Twin knurl wheels for straight or diamond pattern
- Knurl wheels are mounted between thrust washers to ensure a smooth and even rotation of the knurl while knurling is performed.
- TiN coated knurling wheels.

### Resulting Knurl Pattern

Straight pattern with straight wheel.

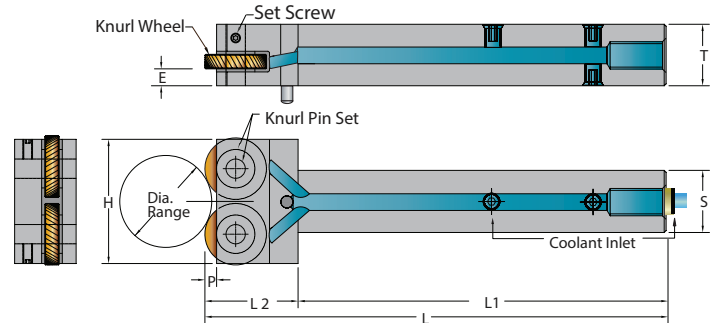
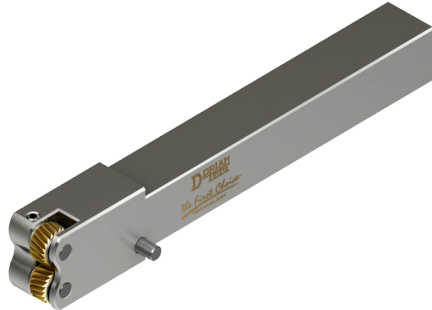


Male 60° diamond pattern with diagonal wheel.



### Recommended Use:

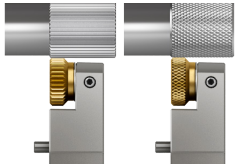
Best for diamond pattern



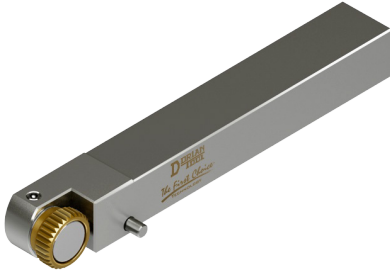
Metric Description	UPC No. 733101-	S	Knurl Wheel Style	Knurl Pin Set Desc.	UPC No. 733101-	Set Screw	DIA. Range	E	H	L	L1	L2 (Tool Stop)	P	T
DWTCFKT-8-B	22935	8mm 0.315"	B *	KPS-12-38-C	28900	M2.5-.45	3.0 & UP .118" & UP	2.0 0.08"	16.5 0.650"	95 3.740"	75 2.953"	20.0 0.787"	1.0 0.040"	12.0 0.472"
DWTCFKT-10-B	22936	10mm 0.394"	B *	KPS-12-38-C	28900	M2.5-.45	3.0 & UP .118" & UP	2.0 0.08"	16.5 0.650"	100 3.937"	75 2.953"	25.0 0.984"	1.0 0.040"	12.0 0.472"
DWTCFKT-12-B	22937	12mm 0.472"	B *	KPS-12-38-C	28900	M2.5-.45	3.0 & UP .118" & UP	2.0 0.08"	16.5 0.650"	100 3.937"	75 2.953"	25.0 0.984"	1.0 0.040"	12.0 0.472"
DWTCFKT-16-B	22938	16mm 0.630"	B *	KPS-12-38-C	28900	M2.5-.45	3.0 & UP .118" & UP	2.0 0.08"	16.5 0.650"	100 3.937"	75 2.953"	25.0 0.984"	1.0 0.040"	15.9 0.625"
DWTCFKT-20-B	22939	20mm 0.787"	B *	KPS-12-38-C	28900	M2.5-.45	3.0 & UP .118" & UP	2.0 0.08"	20.0 0.787"	125 4.921"	100 3.937"	25.0 0.984"	1.0 0.040"	20.0 0.787"
<b>Inch</b>														
Description														
DWTCFKT-50-B	22940	0.500" 12.70mm	B *	KPS-12-38-C	28900	M2.5-.45	.118" & UP 3.0 & UP	0.08" 2	0.500" 12.7	4.000" 101.6	3.000" 76.2	1.000" 25.4	0.040" 1.0	0.500" 12.7

Supplied with 1 set of diagonal beveled TiN coated knurl wheels, \* 30 TPI. **Warning**, may cause deflection on small diameters, and too much pressure on large diameters.

## SSWTCFKT : Shoulder single wheel thru coolant fixed knurling tool



- Specifically designed for Swiss style screw machines
- Designed to knurl up to a shoulder and up against the guide bushing
- Precision square shank
- Single knurl wheel for general purpose
- Knurl wheel is mounted on a thrust washer to ensure a smooth and even rotation of the knurl while knurling is performed
- TiN coated knurling wheels.



### Resulting Knurl Pattern

Straight pattern with straight wheel.

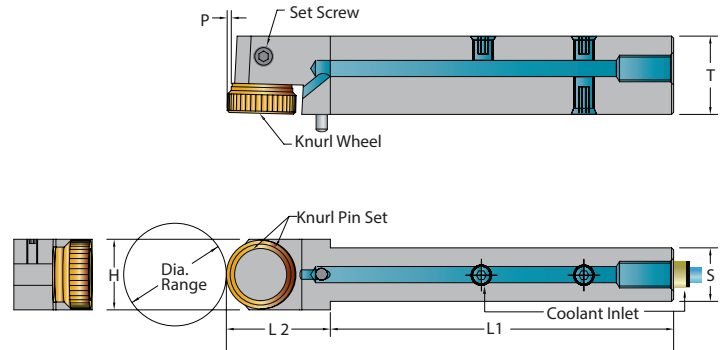


Male 60° diamond pattern with female wheel.



### Recommended Use:

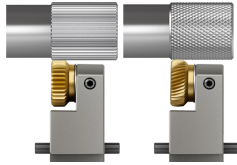
Best for straight pattern with female wheel.



Metric Description	UPC No. 733101-	S	Knurl Wheel Style	Knurl Pin Set Desc.	UPC No. 733101-	Set Screw	DIA. Range	H	L	L1	Tool Stop L2	P	T
SSWTCFKT-10-2	22945	10mm <b>0.394"</b>	SW2	SW2.0P-1S	29050	M3x.5	Unlimited	12.7 <b>0.500"</b>	100 <b>3.937"</b>	75 <b>2.953"</b>	25.0 <b>0.984"</b>	1.3 <b>0.050"</b>	14.3 <b>0.562"</b>
SSWTCFKT-12-2	22946	12mm <b>0.472"</b>	SW2	SW2.0P-1S	29050	M3x.5	Unlimited	12.7 <b>0.500"</b>	100 <b>3.937"</b>	75 <b>2.953"</b>	25.0 <b>0.984"</b>	1.3 <b>0.050"</b>	14.3 <b>0.562"</b>
SSWTCFKT-16-2	22947	16mm <b>0.630"</b>	SW2	SW2.0P-1S	29050	M3x.5	Unlimited	16.0 <b>0.630"</b>	100 <b>3.937"</b>	75 <b>2.953"</b>	25.0 <b>0.984"</b>	1.3 <b>0.050"</b>	16.0 <b>0.630"</b>
SSWTCFKT-20-2	22948	20mm <b>0.787"</b>	SW2	SW2.0P-1S	29050	M3x.5	Unlimited	20.0 <b>0.787"</b>	125 <b>4.921"</b>	100 <b>3.937"</b>	25.0 <b>0.984"</b>	1.3 <b>0.050"</b>	20.0 <b>0.787"</b>
<b>Inch</b>													
Description													
SSWTCFKT-50-2	22949	<b>0.500"</b> 12.70mm	SW2	SW2.0P-1S	29050	M3x.5	Unlimited	<b>0.500"</b> 12.7	<b>4.000"</b> 101.6	<b>3.000"</b> 76.2	<b>1.000"</b> 25.4	<b>0.050"</b> 1.3	<b>0.562"</b> 14.3

Supplied with 1 straight beveled TiN coated knurl wheel, \* 30 TPI. **Warning**, may cause deflection on small diameters, and too much pressure on large diameters.

## SDWTCFKT : Shoulder double wheel thru coolant fixed knurling tool



- Specifically designed for Swiss style screw machines
- Designed to knurl up to a shoulder and up against the guide bushing
- Precision square shank
- Twin knurl wheels for straight or diamond pattern
- Knurl wheels are mounted on a thrust washer to ensure a smooth and even rotation of the knurl while knurling is performed.
- TiN coated knurling wheels.



### Resulting Knurl Pattern

Straight pattern with straight wheel.

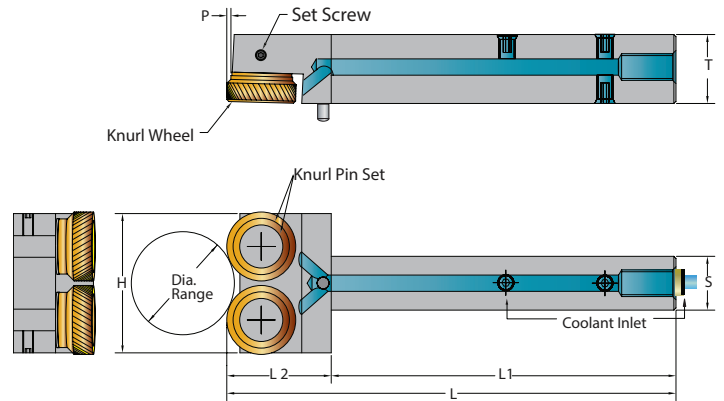


Male 60° diamond pattern with diagonal wheels.



### Recommended Use:

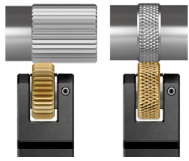
Best for diamond pattern



Metric Description	UPC No. 733101-	S	Knurl Wheel Style	Knurl Pin Set Desc.	UPC No. 733101-	Set Screw	DIA. Range	H	L	L1	Tool Stop L2	P	T
SDWTCFKT-10-2	22955	10mm 0.394"	SW2	SW2.0P-2S	29055	M3x.5	6.35 & UP .250" & UP	26.4 1.04"	100 3.937"	75 2.953"	25.0 0.984"	1.3 0.050"	14.3 0.562"
SDWTCFKT-12-2	22956	12mm 0.472"	SW2	SW2.0P-2S	29055	M3x.5	6.35 & UP .250" & UP	26.4 1.04"	100 3.937"	75 2.953"	25.0 0.984"	1.3 0.050"	14.3 0.562"
SDWTCFKT-16-2	22957	16mm 0.630"	SW2	SW2.0P-2S	29055	M3x.5	6.35 & UP .250" & UP	26.4 1.04"	100 3.937"	75 2.953"	25.0 0.984"	1.3 0.050"	16.0 0.630"
SDWTCFKT-20-2	22958	20mm 0.787"	SW2	SW2.0P-2S	29055	M3x.5	6.35 & UP .250" & UP	26.4 1.04"	125 4.921"	100 3.937"	25.0 0.984"	1.3 0.050"	20.0 0.787"
<b>Inch</b>													
Description													
SDWTCFKT-50-2	22959	0.500" 12.70mm	SW2	SW2.0P-2S	29055	M3x.5	.250" & UP 6.35 & UP	1.04" 26.4	4.000" 101.6	3.000" 76.2	1.000" 25.4	0.050" 1.3	0.562" 14.3

Supplied with 1 set of diagonal beveled TiN coated knurl wheels , \* 30 TPI, **Warning**, may cause deflection on small diameters, and too much pressure on large diameters.

## SWFKT : Single wheel fixed knurling tool for turret style machines



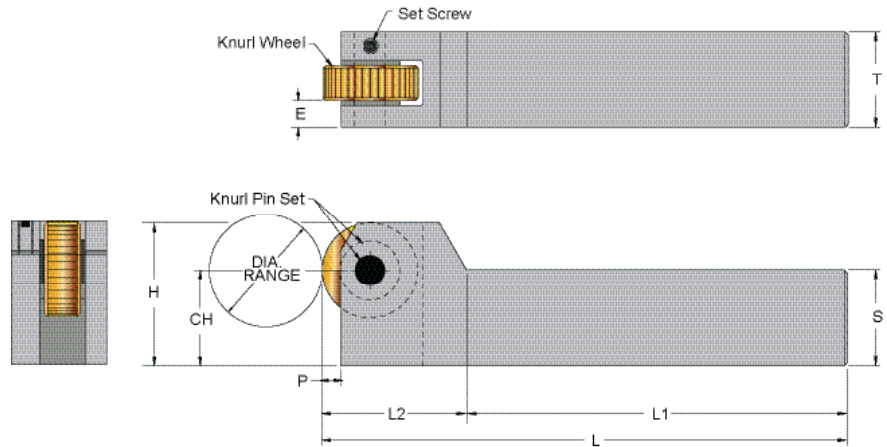
- For Turret Style Machines
- Precision square shank with preset center height.
- Single wheel knurling tool for general purposes applications.
- Knurl wheel is mounted between thrust washers to ensure a smooth and even rotation of the knurls while knurling is performed.
- Straight and Diamond knurl pattern.

## Resulting Knurl Pattern

## Recommended Use:

- Straight pattern with straight wheel.
- Male 60° diamond pattern with female wheel.
- Female 60° diamond pattern with male wheel.

Best for straight pattern



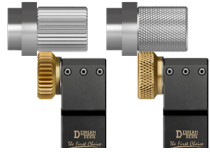
Inch Description	UPC No. 733101-	CH & S inch	Dia. Range	E	H	L	L1	L2	P	T	Knurl Wheel Style	Knurl Pin Set		Set Screw
												Desc.	UPC No. 733101-	
SWFKT-50-D	21730	0.500	Unlimited	0.150	0.750	3.625	2.750	0.875	0.060	0.500	D *	KPS-18-50	28805	M3x.5x3
SWFKT-100-O	21750	1.000	Unlimited	0.280	1.500	5.500	4.000	1.500	0.190	1.000	O **	KPS-31-100	28845	M4x.7x8

Metric Description	UPC No. 733101-	CH & S mm	Dia. Range	E	H	L	L1	L2	P	T	Knurl Wheel Style	Knurl Pin Set		Set Screw
												Desc.	UPC No. 733101-	
SWFKT-831-B	21705	8	Unlimited	2.0	12.7	66.7	50.8	15.9	0.8	9.5	B *	KPS-12-38	28800	M3x.5x3
SWFKT-10-D	21715	10	Unlimited	3.8	15.9	85.7	63.5	22.2	1.5	12.7	D *	KPS-18-50	28805	M3x.5x3
SWFKT-12-D	21725	12	Unlimited	3.8	19.1	92.1	69.9	22.2	1.5	12.7	D *	KPS-18-50	28805	M3x.5x3
SWFKT-162-D	21765	16	Unlimited	3.8	22.2	101.6	76.2	25.4	1.5	15.9	D *	KPS-18-62	28810	M3x.5x3
SWFKT-20-M	21735	20	Unlimited	6.4	31.8	120.7	82.6	38.1	4.8	19.1	M **	KPS-31-75	28840	M3x.5x5
SWFKT-25-O	21745	25	Unlimited	7.1	38.1	139.7	101.6	38.1	4.8	25.4	O **	KPS-31-100	28845	M4x.7x8

\* SUPPLIED WITH ONE (1) STRAIGHT HIGH SPEED BEVELED TIN COATED KNURL WHEEL, \*30 TPI (0.8mm), \*\*25 TPI (1.0mm). WARNING: MAY CAUSE DEFLECTION ON SMALL PART DIAMETERS, AND TOO MUCH PRESSURE ON LARGE DIAMETERS.

## SSWFKT : Double wheel fixed thru coolant shoulder knurl tool



- For Turret Style Machines
- Designed to knurl up to a shoulder
- Precision square shank
- Single knurl wheel for general purpose
- Knurl wheel is mounted on a thrust washer to ensure a smooth and even rotation of the knurl while knurling is performed

## Resulting Knurl Pattern

Straight pattern with straight wheel.

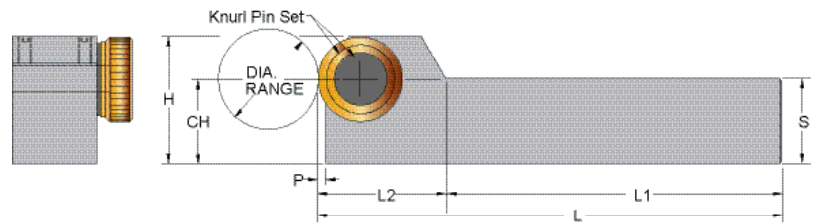
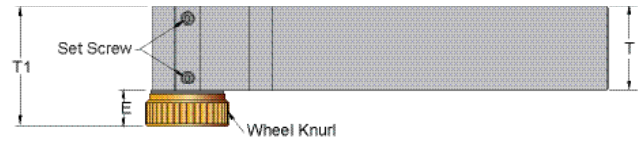


Male 60° diamond pattern with female wheel.



## Recommended Use:

Best for straight pattern



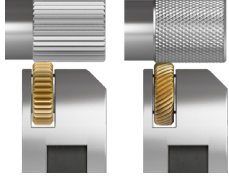
Inch Description	UPC No. 733101-	CH & S inch	Dia. Range	E	H	L	L1	L2	P	T	T1	Knurl Wheel Style	Knurl Pin Set		
													Desc.	UPC No. 733101-	Set Screw
SSWFKT-50-2	21781	0.500	Unlimited	0.265	0.750	3.375	2.750	0.625	0.050	0.500	0.765	SW2 *	SW2.0P-1S	29050	M3x.5x3
SSWFKT-100-4	21793	1.000	Unlimited	0.410	1.500	5.250	4.000	1.250	0.050	1.000	1.410	SW4 **	SW4.0P-1S	29080	M4x.7x5

Metric Description	UPC No. 733101-	CH & S mm	Dia. Range	E	H	L	L1	L2	P	T	T1	Knurl Wheel Style	Knurl Pin Set		
													Desc.	UPC No. 733101-	Set Screw
SSWFKT-10-2	21775	10	Unlimited	6.7	15.9	79.4	63.5	15.9	1.3	12.7	19.4	SW2 *	SW2.0P-1S	29050	M3x.5x3
SSWFKT-12-2	21779	12	Unlimited	6.7	19.1	85.7	69.9	15.9	1.3	12.7	19.4	SW2 *	SW2.0P-1S	29050	M3x.5x3
SSWFKT-162-2	21783	16	Unlimited	6.7	22.2	92.1	76.2	15.9	1.3	15.9	22.6	SW2 *	SW2.0P-1S	29050	M3x.5x3
SSWFKT-20-4	21787	20	Unlimited	10.4	31.8	114.3	82.6	31.8	1.3	19.1	29.5	SW4 **	SW4.0P-1S	29080	M4x.7x5
SSWFKT-25-4	21791	25	Unlimited	10.4	38.1	133.4	101.6	31.8	1.3	25.4	35.8	SW4 **	SW4.0P-1S	29080	M4x.7x5

SUPPLIED WITH ONE (1) BEVELED STRAIGHT HIGH SPEED TIN COATED KNURL WHEEL, \* 30 TPI (0.8mm), \*\* 25 TPI (1.00mm). WARNING: MAY CAUSE DEFLECTION ON SMALL PART DIAMETERS, AND TOO MUCH PRESSURE ON LARGE DIAMETERS.

## SCKN-DW-D/M - Self-Centering Knurling Tool



- For Turret Style Machines
- Precision square shank with preset center height.
- Twin knurl wheels for Straight and Diamond pattern.
- Knurl wheels are mounted between thrust washers to ensure smooth & even rotation of knurls while knurling is performed.
- Self-centering knurling head for a precise alignment.

### Resulting Knurl Pattern

Straight pattern with straight wheel.

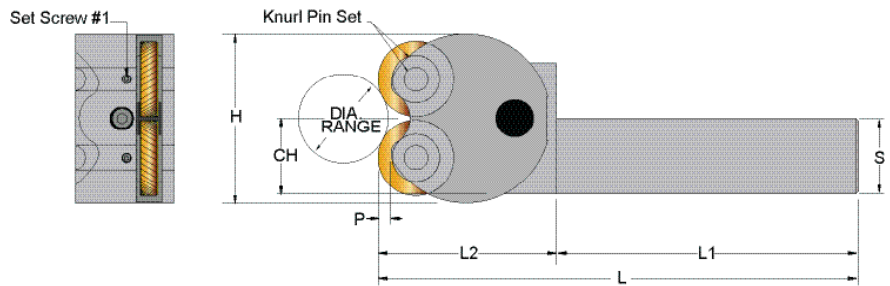
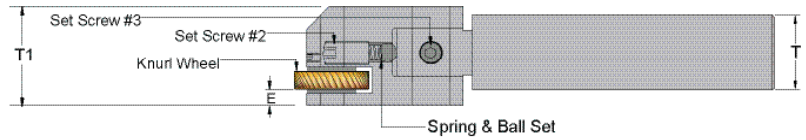


Male 60° diamond pattern with diagonal wheel.



### Recommended Use:

For best results, use beveled knurl wheels. In Feed the knurling tool into the blank until the right pattern is generated, then End Feed.



Inch Description	UPC No. 733101-	CH & S inch	Dia. Range	E	H	L	L1	L2	P	T	T1	Knurl Wheel Style	Knurl Pin Set		Set Screw			Spring & Ball Set	UPC No. 733101-
													Desc.	UPC No. 733101-	No. 1	No. 2	No. 2		
SCKN-50-DW-D	22111	0.500	1/4" & up	.115	1.375	4.125	2.75	1.375	.030	0.625	0.750	D *	KPS-18-50	28805	M3x.5x3	M6x1.0x6	M5x.8x5	STBL-18	28525
SCKN-100-DW-M	22131	1.000	5/16" & up	.211	2.250	6.375	4.00	2.375	.170	1.000	1.312	M **	KPS-31-100	28845	M3x.5x3	M8x1.25x8	M6x1.0x12	STBL-25	28530

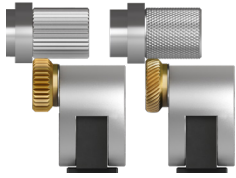
  

Metric Description	UPC No. 733101-	CH & S mm	Dia. Range	E	H	L	L1	L2	P	T	T1	Knurl Wheel Style	Knurl Pin Set		Set Screw			Spring & Ball Set	UPC No. 733101-
													Desc.	UPC No. 733101-	No. 1	No. 2	No. 2		
SCKN-10-DW-D	22161	10	6,4 & up	2.9	34.9	98.4	63.5	34.9	0.8	12.7	19.1	D *	KPS-18-50	28805	M3x.5x3	M6x1.0x6	M5x.8x5	STBL-18	28525
SCKN-12-DW-D	22106	12		2.9	34.9	104.8	69.9	34.9	0.8	15.9	19.1	D *	KPS-18-50	28805	M3x.5x3	M6x1.0x6	M5x.8x5	STBL-18	28525
SCKN-162-DW-D	22115	16		2.9	34.9	111.1	76.2	34.9	0.8	15.9	19.1	D *	KPS-18-50	28805	M3x.5x3	M6x1.0x6	M5x.8x5	STBL-18	28525
SCKN-20-DW-M	22116	20	8 & up	5.4	57.2	142.9	82.6	60.3	4.3	19.1	33.3	M **	KPS-31-100	28845	M3x.5x3	M8x1.25x8	M6x1.0x12	STBL-25	28530
SCKN-25-DW-M	22126	25		5.4	57.2	161.9	101.6	60.3	4.3	25.4	33.3	M **	KPS-31-100	28845	M3x.5x3	M8x1.25x8	M6x1.0x12	STBL-25	28530

SUPPLIED WITH ONE (1) SET OF BEVELED DIAGONAL HIGH SPEED KNURL WHEELS, \*30 TPI (0.8mm), \*\*25 TPI (1.0mm). WARNING: MAY CAUSE DEFLECTION ON SMALL PART DIAMETERS, AND TOO MUCH PRESSURE ON LARGE DIAMETERS



## SSCK-DW-SW2/4 - Shoulder Self-Centering Knurling Tool



- For Turret Style Machines
- Designed to knurl against a square shoulder.
- Precision square shank with preset center height.
- Twin knurl wheels for Straight and Diamond pattern.
- Knurl wheels are mounted between thrust washers to ensure smooth & even rotation of knurls while knurling is performed.
- Self-centering knurling head for a precise alignment

### Resulting Knurl Pattern

Straight pattern with straight wheel.

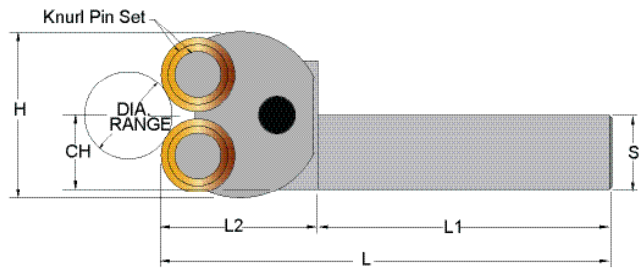
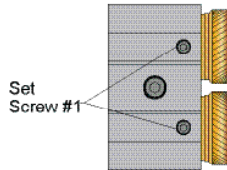
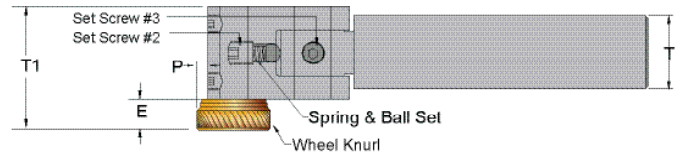


Male 60° diamond pattern with diagonal wheels.



### Recommended Use:

For best results, use beveled knurl wheels. In Feed the knurling tool into the blank until the right pattern is generated, then End Feed.



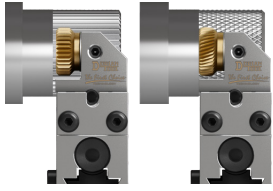
Inch Description	UPC No. 733101-	CH & S inch	Dia. Range	E	H	L	L1	L2	P	T	T1	Knurl Wheel Style	Knurl Pin Set		Set Screw			Spring & Ball Set	UPC No. 733101-
													Desc.	UPC No. 733101-	No. 1	No. 2	No. 2		
SSCK-50-DW-2	22220	0.500	1/4" & up	.265	1.375	4.125	2.75	1.375	.050	0.625	1.015	SW2 *	SW2.0P-2S	29055	M3x.5x3	M6x1.0x6	M5x.8x5	STBL-18	28525
SSCK-100-DW-4	22250	1.000	5/16" & up	.410	2.250	6.125	4.00	2.125	.050	1.000	1.660	SW4 **	SW4.0P-2S	29085	M5x.8x5	M8x1.25x8	M6x1.0x12	STBL-25	28530

Metric Description	UPC No. 733101-	CH & S mm	Dia. Range	E	H	L	L1	L2	P	T	T1	Knurl Wheel Style	Knurl Pin Set		Set Screw			Spring & Ball Set	UPC No. 733101-
													Desc.	UPC No. 733101-	No. 1	No. 2	No. 2		
SSCK-10-DW-2	22205	10	6.4 & up	6.7	34.9	98.4	63.5	34.9	1.3	12.7	22.6	SW2 *	SW2.0P-2S	29055	M3x.5x3	M6x1.0x6	M5x.8x5	STBL-18	28525
SSCK-12-DW-2	22215	12		6.7	34.9	104.8	69.9	34.9	1.3	15.9	22.6	SW2 *	SW2.0P-2S	29055	M3x.5x3	M6x1.0x6	M5x.8x5	STBL-18	28525
SSCK-162-DW-2	22218	16		6.7	34.9	111.1	76.2	34.9	1.3	15.9	22.6	SW2 *	SW2.0P-2S	29055	M3x.5x3	M6x1.0x6	M5x.8x5	STBL-18	28525
SSCK-20-DW-4	22235	20	8 & up	10.4	57.2	136.5	82.6	54.0	1.3	19.1	42.2	SW4 **	SW4.0P-2S	29085	M5x.8x5	M8x1.25x8	M6x1.0x12	STBL-25	28530
SSCK-25-DW-4	22245	25		10.4	57.2	155.6	101.6	54.0	1.3	25.4	42.2	SW4 **	SW4.0P-2S	29085	M5x.8x5	M8x1.25x8	M6x1.0x12	STBL-25	28530

SUPPLIED WITH ONE (1) SET OF BEVELED DIAGONAL HIGH SPEED TIN COATED KNURL WHEELS, \*30 TPI (.8mm), \*\*25 TPI (1.0mm). WARNING: MAY CAUSE DEFLECTION ON SMALL PART DIAMETERS, AND TOO MUCH PRESSURE ON LARGE DIAMETERS.

## SMSCNC-7-D-OCL : Straddle CNC- Forming knurling tool with a symmetrical center line



- Specifically designed for Swiss style screw machines
- Precision square shank
- Twin knurl wheels for straight or diamond pattern
- Knurl wheels are mounted between thrust washers to ensure a smooth and even rotation of the knurl while knurling is performed.
- Forked style holding arms hold the wheel with maximum rigidity while knurling is performed during heavy knurling
- Straddle style application is best for very small diameters where the opposing wheels offer more support on the part

### Resulting Knurl Pattern

Straight pattern with straight wheel.

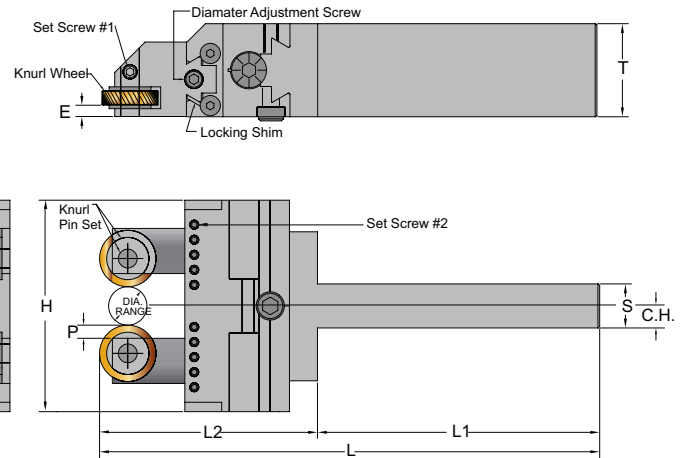
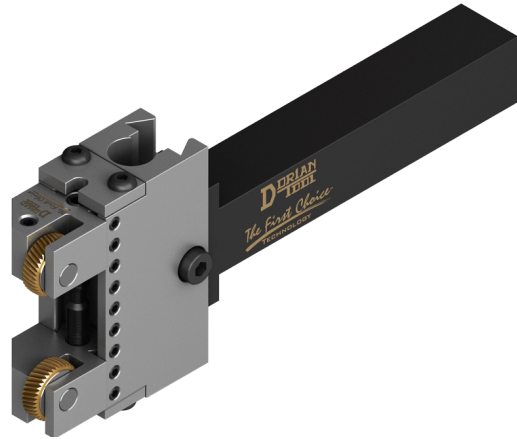


Male 60° diamond pattern with diagonal wheel.



### Recommended Use:

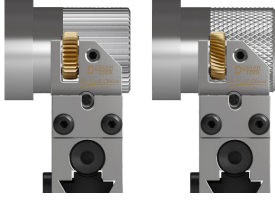
Best for heavy duty knurling and/or when deflection of the material is a concern.



Metric Description	UPC No. 733101-S	Knurl Wheel Style	Knurl Pin Set		Set Screw		** Dia. Range	E	H	L	L1	Tool Stop L2	P	T	
			Desc.	UPC No. 733101-	#1	#2									
SMSCNC-10-7-D-OCL	20230	10mm 0.394"	D *	KPS-18-50-C	28905	M4x.7	M3x.5	Up to 12 Up to .500"	3.2 0.125"	52.4 2.062"	114.3 4.500"	63.5 2.500"	50.8 2.000"	2.5 0.098"	19.1 .750"
SMSCNC-12-7-D-OCL	20235	12mm 0.472"	D *	KPS-18-50-C	28905	M4x.7	M3x.5	Up to 12 Up to .500"	3.2 0.125"	52.4 2.062"	120.7 4.750"	69.9 2.750"	50.8 2.000"	2.5 0.098"	19.1 .750"
SMSCNC-16-7-D-OCL	20240	16mm 0.630"	D *	KPS-18-50-C	28905	M4x.7	M3x.5	Up to 12 Up to .500"	3.2 0.125"	52.4 2.062"	120.7 4.750"	69.9 2.750"	50.8 2.000"	2.5 0.098"	19.1 .750"
SMSCNC-20-7-D-OCL	20245	20mm 0.787"	D *	KPS-18-50-C	28905	M4x.7	M3x.5	Up to 12 Up to .500"	3.2 0.125"	52.4 2.062"	120.7 4.750"	69.9 2.750"	50.8 2.000"	2.5 0.098"	19.1 .750"
<b>Inch</b>															
SMSCNC-50-7-D-OCL	20231	0.500" 12.70mm	D *	KPS-18-50-C	28905	M4x.7	M3x.5	Up to .500" Up to 12	0.125" 3.2	2.062" 52.4	4.750" 120.7	2.750" 69.9	2.000" 50.8	0.098" 2.5	0.750" 19.1
SMSCNC-100-7-D-OCL	20246	1.000" 25.4mm	D *	KPS-18-50-C	28905	M4x.7	M3x.5	Up to .500" Up to 12	0.125" 3.2	2.062" 52.4	5.500" 139.7	3.500" 88.9	2.000" 50.8	0.098" 2.5	1.000" 25.4

\* Supplied with 1 set of diagonal beveled TiN coated knurl wheels, 30 TPI. The tool has the capability to adjust the wheels to touching (Ø Dia.). But, physically applying a knurl on the smallest diameters may not be possible.

## SMCNC-7-2-OCL : Straddle CNC-Shoulder knurling tool with a symmetrical center line



- Specifically designed for Swiss style screw machines
- Designed to knurl up to a shoulder and up against the guide bushing
- Precision square shank
- Twin knurl wheels for straight or diamond pattern
- Knurl wheels are mounted on a thrust washer to ensure a smooth and even rotation of the knurl while knurling is performed.
- Straddle style application is best for very small diameters where the opposing wheels offer more support on the part.

### Resulting Knurl Pattern

Straight pattern with straight wheel.

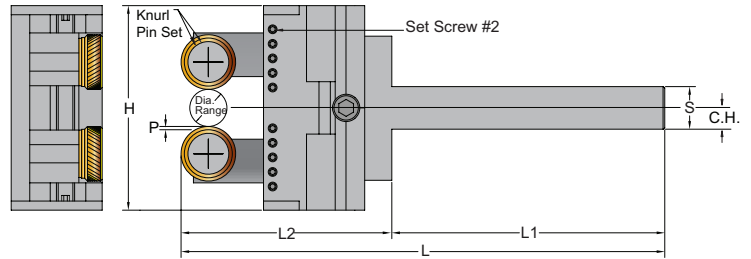
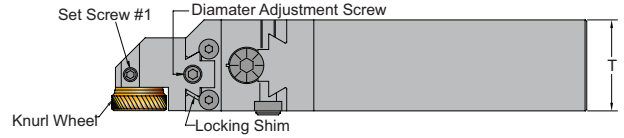
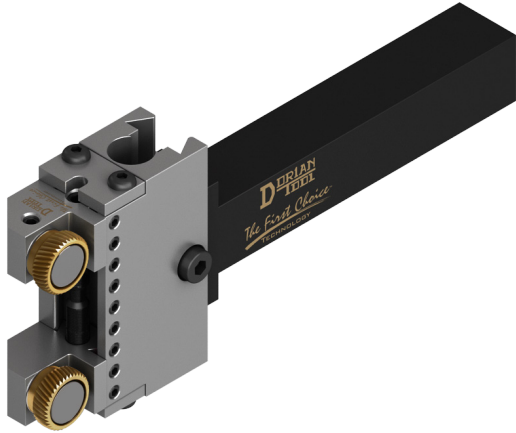


Male 60° diamond pattern with diagonal wheels.



### Recommended Use:

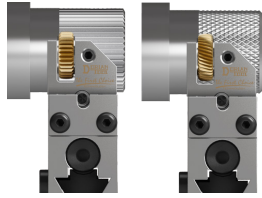
Best for knurling up to a shoulder and/or when deflection of the material is a concern.



Metric Description	UPC No. 733101-S	Knurl Wheel Style	Knurl Pin Set Desc.	UPC No. 733101-	Set Screw		** Dia. Range	H	L	L1	Tool Stop L2	P	T	
					#1	#2								
SMCNC-10-7-2-OCL	20255	10mm 0.394"	SW2 *	SW2.0P-2S	29055	M4x.7	M3x.5	Up to 12 Up to .500"	52.4 2.062"	114.3 4.500"	63.5 2.500"	50.8 2.000"	1.3 0.050"	19.1 .750"
SMCNC-12-7-2-OCL	20260	12mm 0.472"	SW2 *	SW2.0P-2S	29055	M4x.7	M3x.5	Up to 12 Up to .500"	52.4 2.062"	120.7 4.750"	69.9 2.750"	50.8 2.000"	1.3 0.050"	19.1 .750"
SMCNC-16-7-2-OCL	20265	16mm 0.630"	SW2 *	SW2.0P-2S	29055	M4x.7	M3x.5	Up to 12 Up to .500"	52.4 2.062"	120.7 4.750"	69.9 2.750"	50.8 2.000"	1.3 0.050"	19.1 .750"
SMCNC-20-7-2-OCL	20270	20mm 0.787"	SW2 *	SW2.0P-2S	29055	M4x.7	M3x.5	Up to 12 Up to .500"	52.4 2.062"	120.7 4.750"	69.9 2.750"	50.8 2.000"	1.3 0.050"	19.1 .750"
<b>Inch</b>														
Description														
SMCNC-50-7-2-OCL	20256	0.500" 12.70mm	SW2 *	SW2.0P-2S	29055	M4x.7	M3x.5	Up to .500" Up to 12	2.062" 52.4	4.750" 120.7	2.750" 69.9	2.000" 50.8	0.050" 1.3	0.750" 19.1
SMCNC-100-7-2-OCL	20261	1.000" 25.4mm	SW2 *	SW2.0P-2S	29055	M4x.7	M3x.5	Up to .500" Up to 12	2.062" 52.4	5.50" 139.7	3.500" 88.9	2.000" 50.8	0.050" 1.3	1.000" 25.4

\* Supplied with 1 set of diagonal beveled TiN coated knurl wheels, 30 TPI \*\*The tool has the capability to adjust wheels to touching, but physically applying a knurl on the smallest diameters may not be possible.

## SCNC-7-D - Straddle CNC - Forming knurling tool



- For Turret Style Machines
- Precision square shank
- Twin knurl wheels for straight or diamond pattern
- Knurl wheels are mounted between thrust washers to ensure a smooth and even rotation of the knurl while knurling is performed.
- Forked style holding arms hold the wheel with maximum rigidity while knurling is performed during heavy knurling
- Straddle style application best for very small diameters where the opposing wheels offer more support on the part

## Resulting Knurl Pattern

Straight pattern with straight wheel.

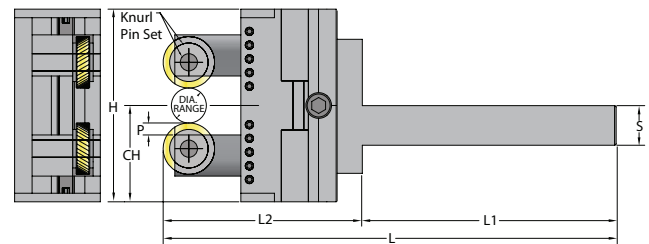
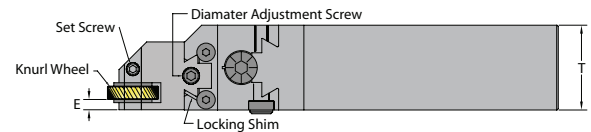
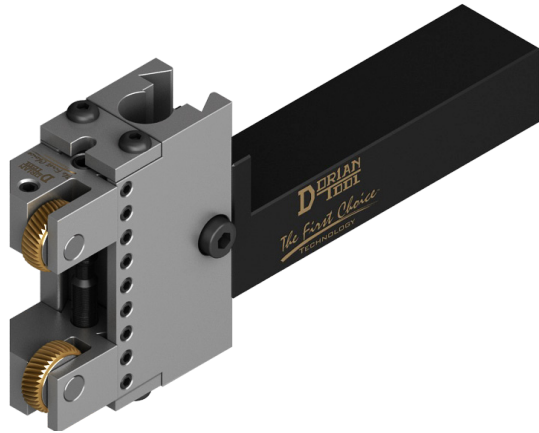


Male 60° diamond pattern with diagonal wheel.



## Recommended Use:

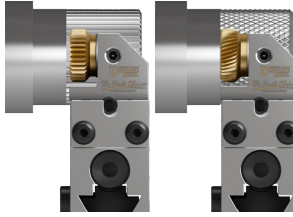
Application, best for heavy duty knurling and/or when deflection of the material is a concern.



Metric Description	UPC No. 733101-	C.H. & S	Knurl Wheel Style	Knurl Pin Set Desc.	UPC No. 733101-	Set Screw	** Dia. Range	E	H	L	L1	Tool Stop L2	P	T
SCNC-10-7-D	20205	10mm <b>0.394"</b>	D *	KPS-18-50-C	28905	M3x.5	Up to 12 <b>Up to .500"</b>	3.2 <b>0.125"</b>	52.4 <b>2.062"</b>	114.3 <b>4.500"</b>	63.5 <b>2.500"</b>	50.8 <b>2.000"</b>	2.5 <b>0.098"</b>	19.1 <b>.750"</b>
SCNC-12-7-D	20215	12mm <b>0.472"</b>	D *	KPS-18-50-C	28905	M3x.5	Up to 12 <b>Up to .500"</b>	3.2 <b>0.125"</b>	52.4 <b>2.062"</b>	120.7 <b>4.750"</b>	69.9 <b>2.750"</b>	50.8 <b>2.000"</b>	2.5 <b>0.098"</b>	19.1 <b>.750"</b>
SCNC-162-7-D	20225	16mm <b>0.630"</b>	D *	KPS-18-50-C	28905	M3x.5	Up to 12 <b>Up to .500"</b>	3.2 <b>0.125"</b>	52.4 <b>2.062"</b>	120.7 <b>4.750"</b>	69.9 <b>2.750"</b>	50.8 <b>2.000"</b>	2.5 <b>0.098"</b>	19.1 <b>.750"</b>
SCNC-20-7-D	20216	20mm <b>0.787"</b>	D *	KPS-18-50-C	28905	M3x.5	Up to 12 <b>Up to .500"</b>	3.2 <b>0.125"</b>	73.0 <b>2.875"</b>	161.9 <b>6.375"</b>	88.9 <b>3.500"</b>	73.0 <b>2.875"</b>	2.5 <b>0.098"</b>	25.4 <b>1.0"</b>
SCNC-25-7-D	20218	25mm <b>1.000"</b>	D *	KPS-18-50-C	28905	M3x.5	Up to 12 <b>Up to .500"</b>	3.2 <b>0.125"</b>	73.0 <b>2.875"</b>	161.9 <b>6.375"</b>	101.6 <b>4.000"</b>	73.0 <b>2.875"</b>	2.5 <b>0.098"</b>	25.4 <b>1.0"</b>
<b>Inch</b>														
SCNC-37-7-D	20210	<b>0.375"</b> 9.5mm	D *	KPS-18-50-C	28905	M3x.5	Up to .500" Up to 12	<b>0.125"</b> 3.2	<b>2.062"</b> 52.4	<b>4.500"</b> 114.3	<b>2.500"</b> 63.5	<b>2.000"</b> 50.8	<b>0.098"</b> 2.5	<b>0.750"</b> 19.1
SCNC-50-7-D	20220	<b>0.500"</b> 12.7mm	D *	KPS-18-50-C	28905	M3x.5	Up to .500" Up to 12	<b>0.125"</b> 3.2	<b>2.062"</b> 52.4	<b>4.750"</b> 120.7	<b>2.750"</b> 69.9	<b>2.000"</b> 50.8	<b>0.098"</b> 2.5	<b>0.750"</b> 19.1
SCNC-162-7-D	20225	<b>0.625"</b> 15.9mm	D *	KPS-18-50-C	28905	M3x.5	Up to .500" Up to 12	<b>0.125"</b> 3.2	<b>2.062"</b> 52.4	<b>4.750"</b> 120.7	<b>2.750"</b> 69.9	<b>2.000"</b> 50.8	<b>0.098"</b> 2.5	<b>0.750"</b> 19.1
SCNC-75-7-D	20211	<b>0.750"</b> 19.1mm	D *	KPS-18-50-C	28905	M3x.5	Up to .500" Up to 12	<b>0.125"</b> 3.2	<b>2.875"</b> 73.0	<b>6.375"</b> 161.9	<b>3.500"</b> 88.9	<b>2.875"</b> 73.0	<b>0.098"</b> 2.5	<b>1.000"</b> 25.4
SCNC-100-7-D	20221	<b>1.000"</b> 25.4mm	D *	KPS-18-50-C	28905	M3x.5	Up to .500" Up to 12	<b>0.125"</b> 3.2	<b>2.875"</b> 73.0	<b>6.375"</b> 161.9	<b>4.000"</b> 101.6	<b>2.875"</b> 73.0	<b>0.098"</b> 2.5	<b>1.000"</b> 25.4

\* Supplied with 1 set of diagonal beveled TiN coated knurl wheels, 25 TPI \*\*The tool has the capability to adjust wheels to touching, but physically applying a knurl on the smallest diameters may not be possible.

## SCNC-7-2 - Shoulder CNC- Straddle knurling tool



- For Turret Style Machines
- Specifically designed for Swiss style screw machines
- Designed to knurl up to a shoulder and up against the guide bushing
- Precision square shank
- Twin knurl wheels for straight or diamond pattern
- Knurl wheels are mounted on a thrust washer to ensure a smooth and even rotation of the knurl while knurling is performed.
- Straddle style application is best for very small diameters where the opposing wheels offer more support on the part.

### Resulting Knurl Pattern

Straight pattern with straight wheel.

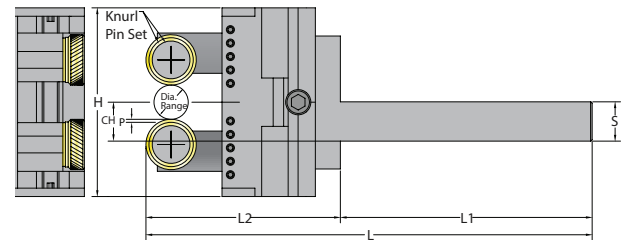
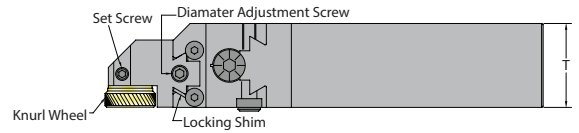
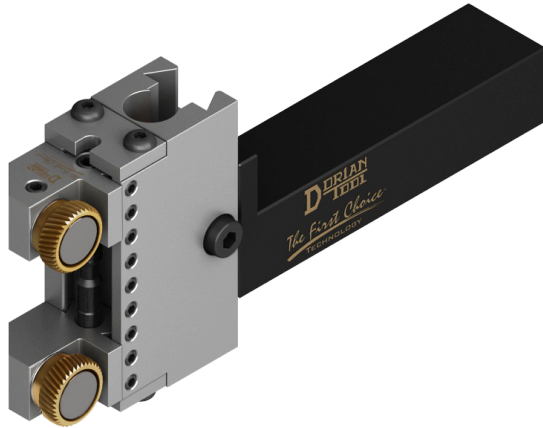


Male 60° diamond pattern with diagonal wheels.



### Recommended Use:

Application, best for knurling up to a shoulder and/or when deflection of the material is a concern.



Metric Description	UPC No. 733101-	C.H. & S	Knurl Wheel Style	Knurl Pin Set		Set Screw	** Dia. Range	H	L	L1	Tool Stop L2	P	T
				Desc.	UPC No. 733101-								
SCNC-10-7-2	20180	10mm <b>0.394"</b>	SW2 *	SW2.0P-2S	29055	M3x.5	Up to 12 <b>Up to .500"</b>	52.4 <b>2.062"</b>	114.3 <b>4.500"</b>	63.5 <b>2.500"</b>	50.8 <b>2.000"</b>	1.3 <b>.050"</b>	19.1 <b>.750"</b>
SCNC-12-7-2	20185	12mm <b>0.472"</b>	SW2 *	SW2.0P-2S	29055	M3x.5	Up to 12 <b>Up to .500"</b>	52.4 <b>2.062"</b>	120.7 <b>4.750"</b>	69.9 <b>2.750"</b>	50.8 <b>2.000"</b>	1.3 <b>.050"</b>	19.1 <b>.750"</b>
SCNC-162-7-2	20190	16mm <b>0.630"</b>	SW2 *	SW2.0P-2S	29055	M3x.5	Up to 12 <b>Up to .500"</b>	52.4 <b>2.062"</b>	120.7 <b>4.750"</b>	69.9 <b>2.750"</b>	50.8 <b>2.000"</b>	1.3 <b>.050"</b>	19.1 <b>.750"</b>
SCNC-20-7-2	20191	20mm <b>0.787"</b>	SW2 *	SW2.0P-2S	29055	M3x.5	Up to 25 <b>Up to 1.00"</b>	73.0 <b>2.875"</b>	161.9 <b>6.375"</b>	88.9 <b>3.500"</b>	73.0 <b>2.875"</b>	1.3 <b>.050"</b>	25.4 <b>1.000"</b>
SCNC-25-7-2	20192	25mm <b>1.000"</b>	SW2 *	SW2.0P-2S	29055	M3x.5	Up to 25 <b>Up to 1.00"</b>	73.0 <b>2.875"</b>	161.9 <b>6.375"</b>	101.6 <b>4.000"</b>	73.0 <b>2.875"</b>	1.3 <b>.050"</b>	25.4 <b>1.000"</b>
<b>Inch</b>													
SCNC-37-7-2	20195	<b>0.375"</b> 9.5mm	SW2 *	SW2.0P-2S	29055	M3x.5	<b>Up to .500"</b> Up to 12	<b>2.062"</b> 52.4	<b>4.500"</b> 114.3	<b>2.500"</b> 63.5	<b>2.000"</b> 50.8	<b>.050"</b> 1.3	<b>0.750"</b> 19.1
SCNC-50-7-2	20200	<b>0.500"</b> 12.7mm	SW2 *	SW2.0P-2S	29055	M3x.5	<b>Up to .500"</b> Up to 12	<b>2.062"</b> 52.4	<b>4.750"</b> 120.7	<b>2.750"</b> 69.9	<b>2.000"</b> 50.8	<b>.050"</b> 1.3	<b>0.750"</b> 19.1
SCNC-162-7-2	20190	<b>0.625"</b> 15.9mm	SW2 *	SW2.0P-2S	29055	M3x.5	<b>Up to .500"</b> Up to 12	<b>2.062"</b> 52.4	<b>4.750"</b> 120.7	<b>2.750"</b> 69.9	<b>2.000"</b> 50.8	<b>.050"</b> 1.3	<b>0.750"</b> 19.1
SCNC-75-7-2	20196	<b>0.750"</b> 19.1mm	SW2 *	SW2.0P-2S	29055	M3x.5	<b>Up to 1.00"</b> Up to 25	<b>2.875"</b> 73.0	<b>6.375"</b> 161.9	<b>3.500"</b> 88.9	<b>2.875"</b> 73.0	<b>.050"</b> 1.3	<b>1.000"</b> 25.4
SCNC-100-7-2	20201	<b>1.000"</b> 25.4mm	SW2 *	SW2.0P-2S	29055	M3x.5	<b>Up to 1.00"</b> Up to 25	<b>2.875"</b> 73.0	<b>6.375"</b> 161.9	<b>4.000"</b> 101.6	<b>2.875"</b> 73.0	<b>.050"</b> 1.3	<b>1.000"</b> 25.4

\* Supplied with 1 set of diagonal beveled TIN coated knurl wheels, 30 TPI \*\*The tool has the capability to adjust wheels to touching, but physically applying a knurl on the smallest diameters may not be possible.

## CNC109\_M - Side Mount Flange Style Square Shank Knurling Tool



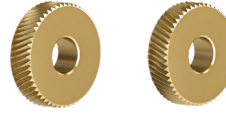
- Precision square shank with preset center height is offset to the side of the tool to allow for better indexing clearance.
- Self-Centering knurling head for a precise alignment to the working part.
- Wheels are held in a flange for heavy duty knurling
- Twin knurl wheels for Straight and Diamond pattern.
- Knurl wheels are mounted between the thrust washer to ensure a smooth and even rotation of the knurls while knurling is performed.

## Resulting Knurl Pattern

Straight pattern with straight wheel.

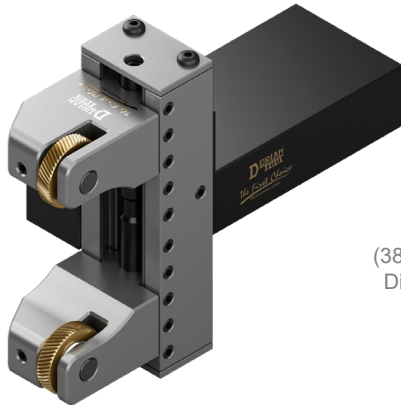


Male 60° diamond pattern with diagonal wheel.

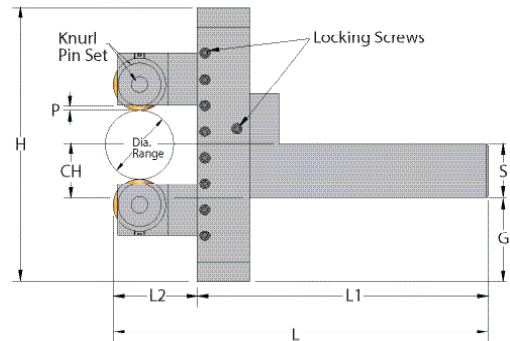
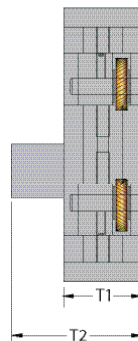
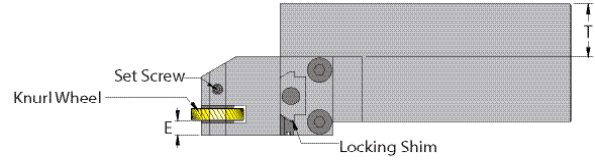


## Recommended Use:

For best results, use beveled knurl wheels. In Feed the knurling tool into blank until the right pattern is created, then End Feed.



1.5" & 2.5"  
(38mm & 63.5mm)  
Diameter Range



Inch Description	UPC No. 733101-			Dia. Range	E	G	H	L	L1	L2	P	T	T1	T2	Knurl Wheel Style	Knurl Arm Set **		Set Screw
	R.H.	L.H.	CH & S inch													Supplied	Optional	
<b>1.5 Diameter Range</b>																		
CNC109-75-15-M-R/L	21449	21452	0.75	0-1.50"	0.250	1.250	4.000	5.875	4.250	1.625	0.188	1.00	1.50	2.50	M*	W109-3-25-M	W109-3-25-4	M5x.8x5
CNC109-100-15-M-R/L	21450	21453	1.00		0.250	1.000	4.000	6.625	5.000	1.625	0.188	1.00	1.50	2.50	M*	W109-3-25-M	W109-3-25-4	M5x.8x5
CNC109-125-15-M-R/L	21451	21454	1.25		0.250	0.750	4.000	6.625	5.000	1.625	0.188	1.25	1.50	2.75	M*	W109-3-25-M	W109-3-25-4	M5x.8x5
<b>2.5 Diameter Range</b>																		
CNC109-75-25-M-R/L	21461	21464	0.75	.125-2.50"	0.250	1.688	4.875	6.062	4.250	1.812	0.188	1.00	1.50	2.50	M*	W109-3-25-M	W109-3-25-4	M5x.8x5
CNC109-100-25-M-R/L	21462	21465	1.00		0.250	1.437	4.875	6.812	5.000	1.812	0.188	1.00	1.50	2.50	M*	W109-3-25-M	W109-3-25-4	M5x.8x5
CNC109-125-25-M-R/L	21463	21466	1.25		0.250	1.188	4.875	6.812	5.000	1.812	0.188	1.25	1.50	2.75	M*	W109-3-25-M	W109-3-25-4	M5x.8x5
Metric Description	UPC No. 733101-			Dia. Range	E	G	H	L	L1	L2	P	T	T1	T2	Knurl Wheel Style	Knurl Arm Set **		Set Screw
R.H.	L.H.	CH & S mm	Supplied													Optional		
<b>1.5 Diameter Range</b>																		
CNC109-20-15-M-R/L	21443	21446	20	0-38	6.4	31.8	101.6	154.0	108.0	46.0	4.8	25.4	38.1	63.5	M*	W109-3-25-M	W109-3-25-4	M5x.8x5
CNC109-25-15-M-R/L	21444	21447	25		6.4	25.4	101.6	173.0	127.0	46.0	4.8	25.4	38.1	63.5	M*	W109-3-25-M	W109-3-25-4	M5x.8x5
CNC109-32-15-M-R/L	21445	21448	32		6.4	19.1	101.6	173.0	127.0	46.0	4.8	31.8	38.1	69.9	M*	W109-3-25-M	W109-3-25-4	M5x.8x5
<b>2.5 Diameter Range</b>																		
CNC109-20-25-M-R/L	21455	21458	20	3.2-63.5	6.4	42.9	123.8	154.0	108.0	46.0	4.8	25.4	38.1	63.5	M*	W109-3-25-M	W109-3-25-4	M5x.8x5
CNC109-25-25-M-R/L	21456	21459	25		6.4	36.5	123.8	173.0	127.0	46.0	4.8	25.4	38.1	63.5	M*	W109-3-25-M	W109-3-25-4	M5x.8x5
CNC109-32-25-M-R/L	21457	21460	32		6.4	30.2	123.8	173.0	127.0	46.0	4.8	31.8	38.1	69.9	M*	W109-3-25-M	W109-3-25-4	M5x.8x5

\* SUPPLIED WITH ONE (1) SET OF BEVELED DIAGONAL HIGH SPEED TIN COATED KNURL WHEELS, 25 TPI (1.00mm). \*\* THIS TOOL HAS THE CAPABILITY TO ADJUST THE WHEELS UNTIL THEY TOUCH, BUT PHYSICALLY APPLYING A KNURL ON SMALL DIAMETERS MAY NOT BE POSSIBLE. \*\* See Page G-48 for optional arms and specifications.

## CNC109\_4 - Side Mount Shoulder Style Square Shank Knurling Tool



- Precision square shank with preset center height is offset to the side of the tool to allow for better indexing clearance.
- Self-Centering knurling head for a precise alignment to the working part.
- Twin knurl wheels for Straight and Diamond pattern.
- Knurl wheels are mounted between the thrust washers to ensure a smooth and even rotation of the knurls while knurling is performed.

## Resulting Knurl Pattern

Straight pattern with straight wheel.

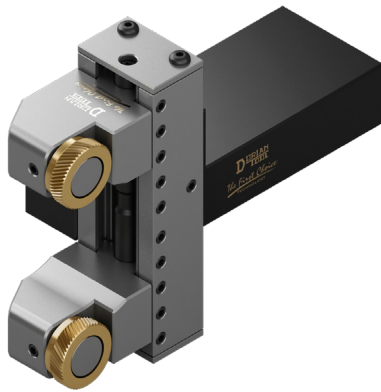


Male 60° diamond pattern with diagonal wheels.

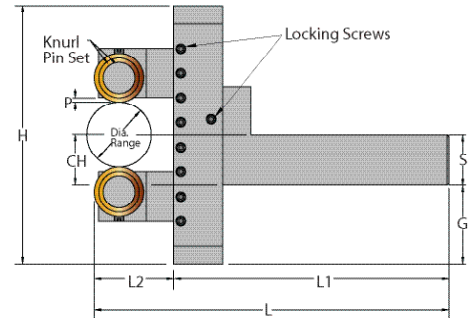
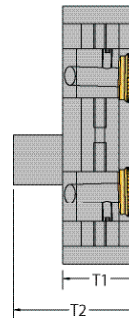
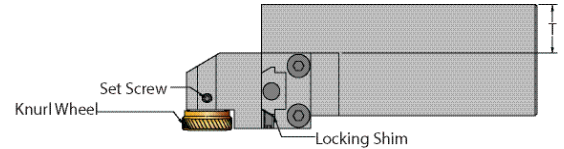


## Recommended Use:

For best results, use beveled knurl wheels. In Feed the knurling tool into the blank until the right pattern is generated, then End Feed.



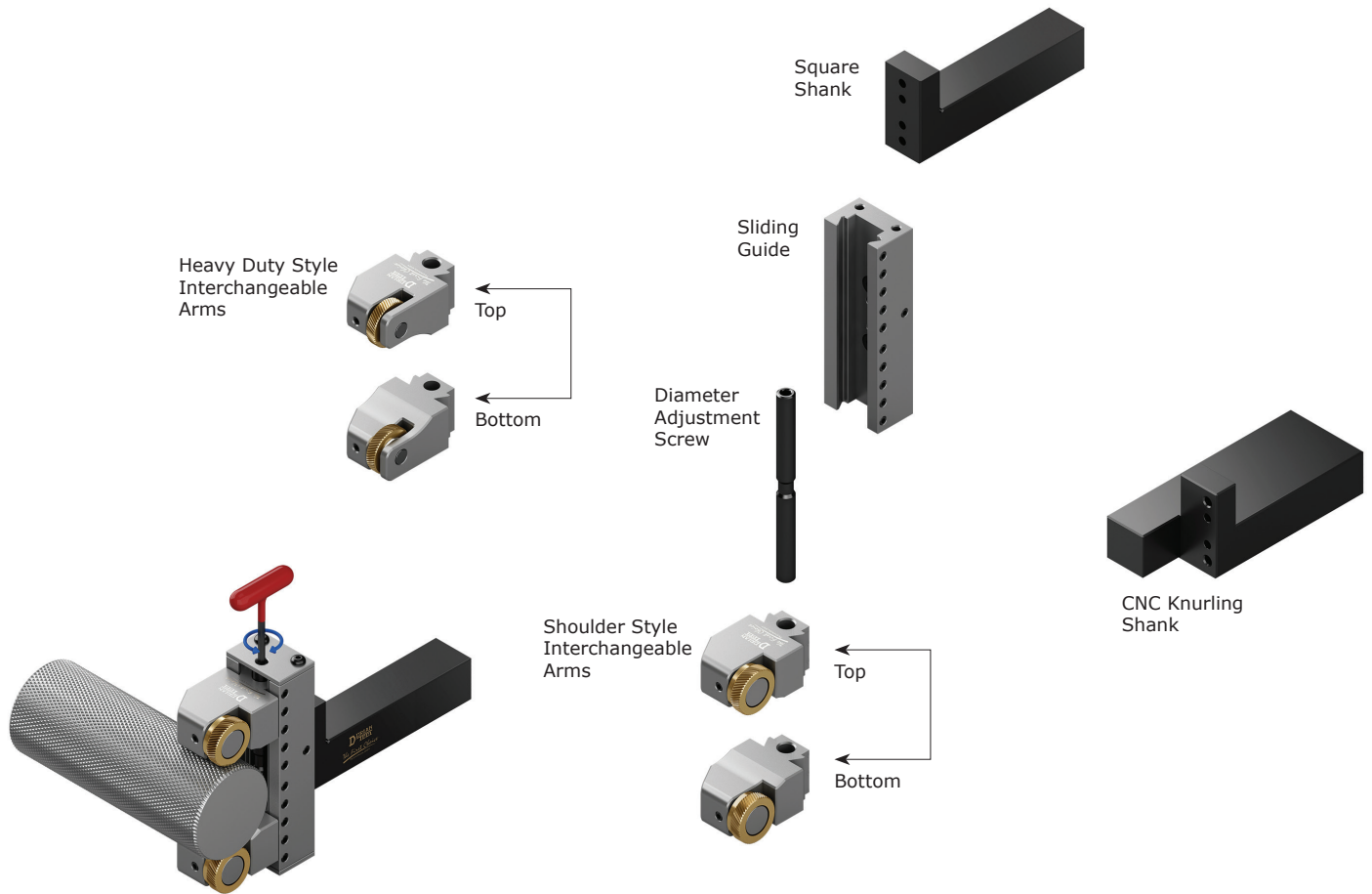
1.5" & 2.5"  
(38mm & 63,5mm)  
Diameter Range



Inch Description	UPC No. 733101-			Dia. Range	G	H	L	L1	L2	P	T	T1	T2	Knurl Wheel Style	Knurl Arm Set **		Set Screw
	R.H.	L.H.	CH & S inch												Supplied	Optional	
<b>1.5 Diameter Range</b>																	
CNC109-75-15-4-R/L	21473	21476	0.75	0-1.50"	1.250	4.000	6.062	4.250	1.812	0.050	1.000	1.500	2.500	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5
CNC109-100-15-4-R/L	21474	21477	1.00		1.000	4.000	6.812	5.000	1.812	0.050	1.000	1.500	2.500	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5
CNC109-125-15-4-R/L	21475	21478	1.25		0.750	4.000	6.812	5.000	1.812	0.050	1.250	1.500	2.750	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5
<b>2.5 Diameter Range</b>																	
CNC109-75-25-4-R/L	21485	21488	0.75	.125-2.50 "	1.688	4.875	6.062	4.250	1.812	0.050	1.00	1.500	2.50	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5
CNC109-100-25-4-R/L	21486	21489	1.00		1.437	4.875	6.812	5.000	1.812	0.050	1.00	1.500	2.50	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5
CNC109-125-25-4-R/L	21487	21490	1.25		1.188	4.875	6.812	5.000	1.812	0.050	1.25	1.500	2.75	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5
<b>Metric</b>																	
Metric Description	UPC No. 733101-			Dia. Range	G	H	L	L1	L2	P	T	T1	T2	Knurl Wheel Style	Knurl Arm Set **		Set Screw
	R.H.	L.H.	CH & S mm												Supplied	Optional	
<b>1.5 Diameter Range</b>																	
CNC109-20-15-4-R/L	21467	21470	20	0-38	31.8	101.6	154.0	108.0	46.0	1.3	25.4	38.1	63.5	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5
CNC109-25-15-4-R/L	21468	21471	25		25.4	101.6	173.0	127.0	46.0	1.3	25.4	38.1	63.5	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5
CNC109-32-15-4-R/L	21469	21472	32		19.1	101.6	173.0	127.0	46.0	1.3	31.8	38.1	69.9	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5
<b>2.5 Diameter Range</b>																	
CNC109-20-25-4-R/L	21479	21482	20	3.2-63.5	42.9	123.8	154.0	108.0	46.0	1.3	25.4	38.1	63.5	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5
CNC109-25-25-4-R/L	21480	21483	25		36.5	123.8	173.0	127.0	46.0	1.3	25.4	38.1	63.5	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5
CNC109-32-25-4-R/L	21481	21484	32		30.2	123.8	173.0	127.0	46.0	1.3	31.8	38.1	69.9	SW4*	W109-3-25-4	W109-3-25-M	M5x.8x5

\* SUPPLIED WITH ONE (1) SET OF BEVELED DIAGONAL HIGH SPEED TIN COATED KNURL WHEELS, 25 TPI (1.00mm). \*\* THIS TOOL HAS THE CAPABILITY TO ADJUST THE WHEELS UNTIL THEY TOUCH, BUT PHYSICALLY APPLYING A KNURL ON SMALL DIAMETERS MAY NOT BE POSSIBLE. \*\* See Page G-48 for optional arms and specifications.

## Heavy Duty & Shoulder Style Interchangeable Arms For Diametral Knurling Tools



### Interchangeable W109 Arms Sets for **1.5** Diameter Capacity Tools

<b>Heavy Duty Style Set</b>						<b>Heavy Duty Style</b>	<b>Shoulder Style</b>
Description	UPC No. 733101-	Knurl Wheel Style	Knurl Pin Set	Part No.733101-	All Set Screws		
W109-3-15-M	22844	M*	KPS-31-100	28845	M5-.8		
<b>Shoulder Style Set</b>							
Description	UPC No. 733101-	Knurl Wheel Style	Knurl Pin Set	Part No.733101-	All Set Screws		
W109-3-15-4	22846	SW4*	SW4.0P-2S	29085	M5-.8		

### Interchangeable W109 Arms Sets for **2.5** Diameter Capacity Tools

<b>Heavy Duty Style Set</b>						<b>Heavy Duty Style</b>	<b>Shoulder Style</b>
Description	UPC No. 733101-	Knurl Wheel Style	Knurl Pin Set	Part No.733101-	All Set Screws		
W109-3-25-M	22848	M*	KPS-31-100	28845	M5-.8		
<b>Shoulder Style Set</b>							
Description	UPC No. 733101-	Knurl Wheel Style	Knurl Pin Set	Part No.733101-	All Set Screws		
W109-3-25-4	22849	SW4*	SW4.0P-2S	29085	M5-.8		

\* Knurl wheels sold separately.



## 3WSKT -Three wheel knurling tool with optional round or square shanks

- Made of Heat Treated precision ground alloy steel.
- The dovetail guide and adjustable arms insure the most possible accuracy and rigidity.
- A precise scroll gear allows for infinite diameter settings.
- Scaled dial makes setting the diameter easy.
- This tool is engineered for most required knurling jobs in Screw Machine, C.N.C. Lathe, and Turret Lathe Applications.
- Square shank can be reversed for right hand or left hand operation.
- Square shank with preset center height.

## Resulting Knurl Pattern

**Straight** pattern with straight wheel.



**Male 60° diamond** pattern with diagonal wheels.



## Recommended Use:

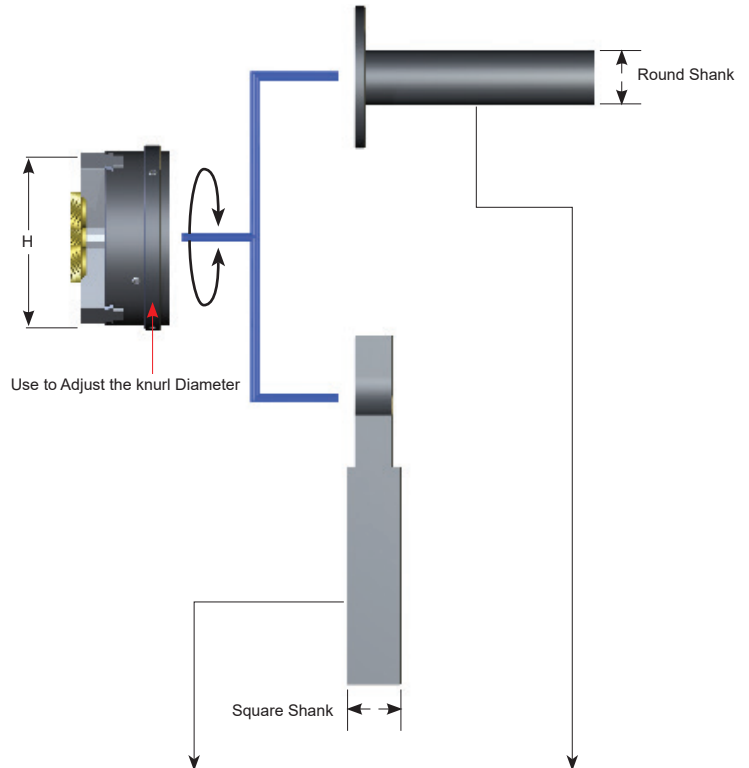
For best results, use beveled knurl wheels. End Feed the knurling tool into the blank until the desired length of the knurl is done.

**The Three Wheel Knurling Tools can knurl up to a shoulder, minimum diameter of .085" (2.16mm) up to 1-1/2" (38,1mm) diameter, and infinite lengths. For Screw Machine, C.N.C. Lathe, and Turret Lathe Applications**

Optional 3WRKT Round Shank



Optional 3WSKT Square Shank



3 Wheels Knurling Tool Head Specification						
Desc.	UPC No. 733101-	Capacity	H	Knurl Wheel Style	Knurl Pin Set	UPC No. 733101-
3WKT-06-2	23004	2.16mm to 6.4mm .085" to 0.250"	44.5mm 1.75"	SW2 *	SW2.0P-3S	29060
3WKT-12-2	23009	2.16mm to 12.7mm .085" to 0.50"	57.2mm 2.25"	SW2 *	SW2.0P-3S	29060
3WKT-25-2	23024	3.2mm to 25.4mm 0.125" to 1.00"	76.2mm 3.00"	SW2 *	SW2.0P-3S	29060
3WKT-40-2	23034	4.75mm to 38.1mm .187" to 1.50"	108mm 4.25"	SW2 *	SW2.0P-3S	29060

Optional Square Shank			
Desc.	UPC No. 733101-	Shank Size	
		Square	Length
3WSKT-06-12	23096	12mm	75mm
3WSKT-06-50	23095	.500"	3.00"
3WSKT-06-162	23097	16mm .625"	88mm 3.50"
3WSKT-06-20	23098	20mm	100mm
3WSKT-06-75	23099	.750"	4.00"
3WSKT-12-162	23082	16mm .625"	88mm 3.50"
3WSKT-12-20	23100	20mm	100mm
3WSKT-12-75	23102	.750"	4.00"
3WSKT-12-25	23101	25mm	125mm
3WSKT-12-100	23078	1.00"	5.00"
3WSKT-25-20	23103	20mm	100mm
3WSKT-25-75	23079	.750"	4.00"
3WSKT-25-25	23104	25mm	125mm
3WSKT-25-100	23080	1.00"	5.00"
3WSKT-40-25	23113	25mm	125mm
3WSKT-40-100	23081	1.00"	5.00"

Optional Round Shank			
Desc.	UPC No. 733101-	Shank Size	
		Dia.	Length
3WRKT-06-12	23105	12mm	75mm
3WRKT-06-50	23110	.500"	3.00"
3WRKT-06-162	23106	16mm .625"	88mm 3.50"
3WRKT-06-20	23107	20mm	100mm
3WRKT-06-75	23111	.750"	4.00"
3WRKT-12-162	23115	16mm .625"	88mm 3.50"
3WRKT-12-20	23116	20mm	100mm
3WRKT-12-75	23112	.750"	4.00"
3WRKT-12-25	23117	25mm	125mm
3WRKT-12-100	23114	1.00"	5.00"
3WRKT-25-20	23125	20mm	100mm
3WRKT-25-75	23130	.750"	4.00"
3WRKT-25-25	23126	25mm	125mm
3WRKT-25-100	23124	1.00"	5.00"
3WRKT-40-25	23135	25mm	125mm
3WRKT-40-100	23140	1.00"	5.00"

Knurl Tool Head and Optional Shanks are Sold Separately.  
Supplied with 1 set of Beveled diagonal high speed knurl wheels, 30 TPI (.8mm)

