

KNURLING TOOL HOLDERS

SERIES 323: MEDA - SUPERIOR IMPORT
SERIES 930: EAGLE ROCK - USA

SINGLE KNURL TOOL

- Shiny black finish.
- Holder size : 4" x 1/2" x 1/2"
- Knurl size : 3/4" x 1/4" x 1/4"
- Includes 1 Medium Cut H.S.S. Knurl.



Order No. 3230001	Price	
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PIVOT HEAD KNURLING TOOL

- Self adjusting pivot head.
- Shiny black finish.
- Holder size : 4-1/2" x 1/2" x 1/2"
- Knurl size : 3/4" x 3/8" x 1/4"
- Includes 1 pair of Medium Cut H.S.S. Knurls.



Order No. 3230002	Price	
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SELF ADJUSTING HEAD KNURLING TOOLS

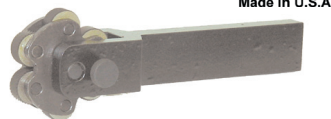
Knurling tool with double knurl, self-centering head for manual lathes. Includes one set of Medium Pitch Diagonal (BL and BR) pattern knurls to produce a 30° diamond pattern on your part.



Size of Holder	Knurl Dimensions	MEDA		EAGLE ROCK	
		Order No.	Price	Order No.	Price
5/16 x 3/4 x 5	5/8 x 5/16 x 7/32	3230020		9300710	
3/8 x 7/8 x 5-1/2	5/8 x 5/16 x 7/32	3230100		9301012	
1/2 x 1-1/8 x 6-1/2	3/4 x 3/8 x 1/4	3230101		9301416	
5/8 x 1-3/8 x 7-1/2	3/4 x 3/8 x 1/4	3230102		9301618	
7/8 x 1-3/4 x 9	1 x 3/8 x 5/16	-		9302436	

REVOLVING HEAD KNURLING TOOLS

Revolving head knurling tool with double knurl and self-centering head for manual lathes. Includes one set each of Coarse, Medium and Fine pitch diagonal (BL and BR) pattern knurls to produce a 30° diamond pattern on your part.

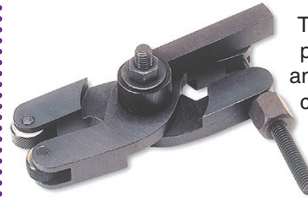


Size of Holder	Knurl Dimensions	MEDA		EAGLE ROCK	
		Order No.	Price	Order No.	Price
5/16 x 3/4 x 5	5/8 x 5/16 x 7/32	3233000		9300150	
3/8 x 7/8 x 5-1/2	5/8 x 5/16 x 7/32	3233100		9300151	
1/2 x 1-1/8 x 6-1/2	3/4 x 3/8 x 1/4	1965000		9300152	
5/8 x 1-3/8 x 7-1/2	3/4 x 3/8 x 1/4	3233102		9300153	

KNURLING TOOLS

"CLAMP TYPE"

SERIES 323:



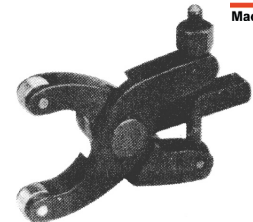
These knurling tools fit regular toolposts and square toolpost turrets of any lathes including CNC lathes and chuckers. Since knurling pressure is absorbed between the two knurls there is no pressure on the lathe, compound, centers or cross feed screw. Depth of knurling can be pre-set for production work before start of operation. Knurling pattern is clear and sharp. Easily removable pins make it simple to change knurls. Furnished with one set of medium diamond pattern knurls but can be used with any other knurls. Knurl dimensions for both models: 3/4" Dia. x 3/8" Width x 1/4" Bore.

For Use On Work Diameters From:	Total Length of Tool	Shank Size	Order No.	Price
1/16 - 2-1/4	6	1/2 x 5/8	1970001	
2-1/4 - 4-1/2	8-1/4	5/8 x 3/4	1970002	

KNURLING TOOLS

"SCISSOR TYPE"

SERIES 930:



These knurling tools fit regular toolposts and square toolpost turrets of any lathes including CNC lathes and chuckers. Since knurling pressure is absorbed between the two knurls there is no pressure on the lathe, compound, centers or cross feed screw. Depth of knurling can be pre-set for production work before start of operation. Knurling pattern (straight of diamond) is clear and sharp. Easily removable pins make it simple to change knurls. Furnished with one set of medium diamond pattern knurls but can be used with any other knurls. Knurl dimensions for both models: 3/4" Dia. x 3/8" Width x 1/4" Bore.

Knurls and Knurl Pins are now quickly and easily replaced while still in your machine to minimize down time. Tool strength has been greatly increased to endure even your worst CNC application. Our exclusive CNC shanks are solid, one piece construction that are offset to allow for virtually no turret overhang of the knurls. Knurling pressures are absorbed by the tool not your bed, compound, centers or feed screw. This new generation of Scissor is certainly one of the best knurling tools you can buy.

Capacity	Shank	Knurl Size	Order No.	Price
0-2 1/8"	5/8 Center	3/4 x 3/8 x 1/4	9300112	
0-2 1/8"	3/4 Round	3/4 x 3/8 x 1/4	9300115	
0-2 1/8"	3/4 RH	3/4 x 3/8 x 1/4	9300116	
0-2 1/8"	3/4 LH	3/4 x 3/8 x 1/4	9300117	
0-2 1/8"	1" Round	3/4 x 3/8 x 1/4	9300118	
0-2 1/8"	1" RH	3/4 x 3/8 x 1/4	9300119	
0-2 1/8"	1" LH	3/4 x 3/8 x 1/4	9300120	
2 1/8-4"	3/4 Center	3/4 x 3/8 x 1/4	9300121	
2 1/8-4"	3/4 Round	3/4 x 3/8 x 1/4	9300122	
2 1/8-4"	3/4 RH	3/4 x 3/8 x 1/4	9300123	
2 1/8-4"	3/4 LH	3/4 x 3/8 x 1/4	9300124	
2 1/8-4"	1" Round	3/4 x 3/8 x 1/4	9300127	
2 1/8-4"	1" RH	3/4 x 3/8 x 1/4	9300128	
2 1/8-4"	1" LH	3/4 x 3/8 x 1/4	9900130	



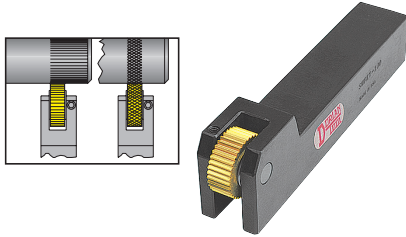
KNURLING

TOOLS FOR YOUR CNC



SERIES 930:

MACHINE TOOL ACCESSORIES

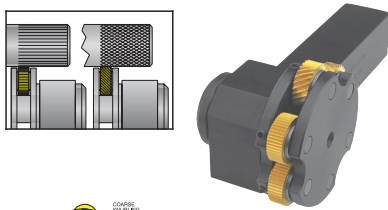


SWFKT - Single Wheel Fixed Knurling Tool for Manual or CNC Lathes

Precision square shank with preset center height. Single knurl wheel for straight and diamond pattern. Knurl wheel is mounted between the thrust washers to ensure smooth and even rotation of the knurl while knurling is performed. Best used for straight patterns or bump knurling a diamond pattern.

Center Height	Shank Size	Desc.	Order No	Price	Knurl Wheel Supplied	Knurl Pin Set	Order No.	Price
.500	.500 x .500	SWFKT-50-D	6121730					
.750	.750 x .750	SWFKT-75-M	6121740		MDR/L-25C	KPS-31-75	6128840	
1.00	1.00 x 1.00	SWFKT-100-O	6121750		ODR/L-25C	KPS-31-100	6128845	

Tool supplied with one 25 or 30 TPI knurling wheels for straight pattern. A complete selection of knurl wheel pitches available.

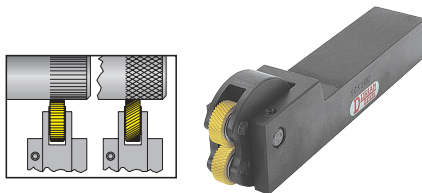
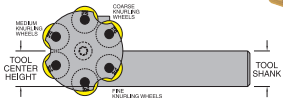


3SHKT - Three Swivel Head Knurling Tool

Designed to knurl multiple applications with one tool. Precision square shank with preset center height. 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. Self-centering knurling head for precise alignment to the working part.

Center Height	Shank Size	Desc.	Order No	Price	Knurl Wheel Supplied	Knurl Pin Set	Order No.	Price
.500	.500 x .750	3SHKT-50-D	6121510		DDR/L-30C	KPS-18-50	6128805	
.750	.750 x 1.00	3SHKT-75-M	6121530		MDR/L-16C			
1.00	1.00 x 1.00	3SHKT-100-M	6121540		MDR/L-25C	KPS-31-100	6128845	

A complete selection of knurl wheel pitches available.

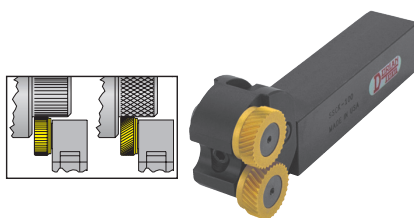
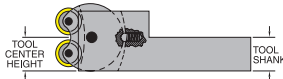


SCK - Self-Centering Knurling Tool for CNC Lathe

Specifically designed for CNC lathe. Precision square shank with preset center height. 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. Self-centering knurling head for a precise alignment to the working part.

Center Height	Shank Size	Desc.	Order No	Price	Knurl Wheel Supplied	Knurl Pin Set	Order No.	Price
.500	.500 x .750	SCK-50-D	6122111		DDR/L-30C	KPS-18-50	6128805	
.750	.750 x 1.25	SCK-75-D	6122121					
1.00	1.00 x 1.20	SCK-100-D	6122131		MDR/L-25C	KPS-31-75	6128845	

Tool supplied with one set of 25 or 30 TPI knurling wheels for diamond pattern. A complete selection of knurl wheel pitches available.

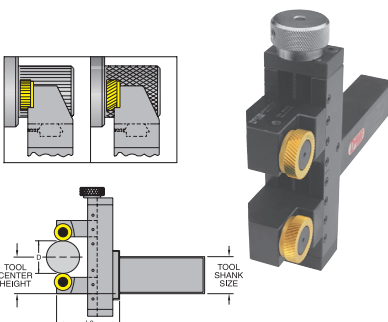
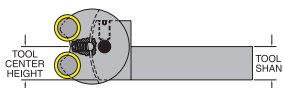


SSCK - Shoulder Self-Centering Knurling Tool for CNC Lathe

Specifically designed for CNC lathe. 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 the thrust washers to ensure a smooth and even rotation of the knurls while knurling is performed. Supplied with Cobalt TIC/N Coated SW series knurl wheels. Self-centering knurling head for a precise alignment to the working part.

Center Height	Shank Size	Desc.	Order No.	Price	Knurl Wheel Supplied	Knurl Pin Set	Order No.	Price
.500	.500 x .625	SSCK-50-2	6122220		SW2R/L-30C	SW2.0P-2S	6129055	
.750	.750 x .750	SSCK-75-4	6122240					
1.00	1.00 x 1.00	SSCK-100-4	6122250		SW4R/L-25C	SW4.0P-2S	6129085	

Tool supplied with one set of 25 or 30 TPI knurling wheels for diamond pattern. A complete selection of knurl wheel pitches available.



KTW109 - Diametral Shoulder Knurling Tool with a Self-Centering Adjustable Floating Straddle

This tool is designed when pressure and deflection are a problem. The knurling heads are able to "float" somewhat and center on the workpiece, compensating for any off-centering. Precise square shank with preset center height. A diametral adjustment screw regulates the depth of the knurl pattern and diameter size.

Refer to the CNC-000-7 when tool clearance is a problem.

Center Height	Shank Size	D Max	L2	Desc.	Order No	Price	Knurl Wheel Style & size	Knurl Pin Set	Order No.	Price
0.75	.750 x 1.00	2.0	3.125	KTW109-75-2-4	6122810		SW4R/L-25C	SW4.0P-2S	6129085	
1.00	1.00 x 1.00	2.0	3.125	KTW109-100-2-4	6122820					

Tool supplied with one set of 25 TPI knurling wheels for diamond pattern. A complete selection of knurl wheel pitches available.



MODULAR KNURLING TOOLS FOR YOUR CNC

SERIES 930:



Made in U.S.A.

Modular Versatility

The CNC Modular Knurling Tool is a tooling system which combines exceptional versatility, rigidity, ease of handling, and simplicity. Knurl wheels, heads, and shanks can be combined to build your own knurling tool to fit any work application and machine.

Precise Adjustable Center Height

The dovetail mounting of the shank and head insures that the tool will be rigid and adjustable yet easy to use. By turning the adjustment screw clockwise or counterclockwise the center height of the head can be adjusted. Each eighth turn of the screw, which is marked on the screw, moves the head .004". After the desired center height has been reached, tightening the lock screw ensures that the head will remain in position while knurling a part.

Method of Knurling

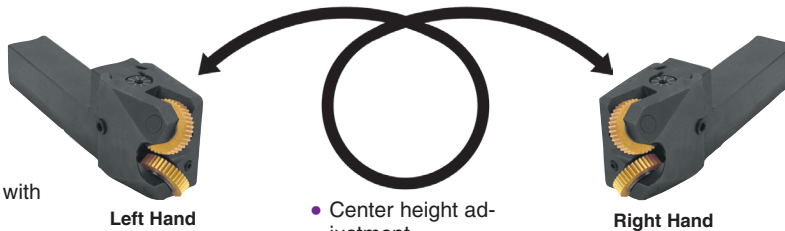
Knurl forming action displaces the material creating a perfect knurl pattern while sacrificing speeds and feeds. The force applied through forming is increased in larger diameters making knurling difficult and slow. Knurling cutting action cuts a perfect knurl pattern 10 to 20 times faster than a forming knurl tool becoming applicable for CNC use. It is engineered to knurl any material, including thin wall tubing, with minimum stress to the spindle and compound lathe.

- Precision square shank with preset center height.
- Right or Left hand applications.
- One shank fits all heads.

- One head fits all shanks.
- Easy set-up.
- Center height adjustment.
- Interchangeable knurlheads.

- High productivity.
- Best knurl quality.
- Low production cost.
- Cutting - 10 to 20 times faster.

One shank fits all heads.



One head fits all shanks.

- Precision square shank with preset center height.
- Right or Left hand applications.
- Easy set-up.

- Center height adjustment.
- Interchangeable knurl heads.

- High productivity.
- Best knurl quality.
- Low production cost.
- Cutting - 10 to 20 times faster.

CNC-000-1-2



CUTTING Small cutting range: 5/16" to 1-1/2".

- Minimum stress on the machine, and faster than knurl forming action.
- Twin straight SW series knurl wheels for diamond pattern. Allows tool to knurl close to a square shoulder.
- Supplied with SW2S-30C cobalt knurl wheels - Tin coated. Adds longer life and better performance to the knurl wheels.

Desc.	Order No.	Price	Shank Size	Tool Length
CNC-75-1-2	6120410		.750	5.500
CNC-100-1-2	6120420		1.00	6.750
CNC-125-1-2	6120430		1.25	7.250

CNC-000-2-R

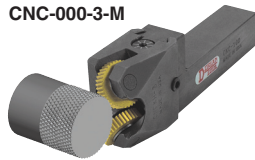


CUTTING Heavy duty cutting range: 1" to 5".

- Minimum stress on the machine, and faster than knurl forming action.
- Twin straight R series knurl wheels for diamond pattern. Supplies more rigidity for larger diameters
- Knurl wheels are mounted between thrust washers. Ensures smooth and even rotation of the knurls.
- Supplied with RS-25-C cobalt knurl wheels - Tin coated. Adds longer life and better performance to the knurl wheels.

Desc.	Order No.	Price	Shank Size	Tool Length
CNC-75-2-R	6120510		.750	5.50
CNC-100-2-R	6120520		1.00	6.75
CNC-125-2-R	6120530		1.25	7.25

CNC-000-3-M



CUTTING Extra heavy duty cutting range: 2" & up.

- Minimum stress on the machine, and faster than knurl forming action.
- Twin straight M series knurl wheels for diamond pattern. Supplies more rigidity for larger diameters
- Knurl wheels are mounted between thrust washers. Ensures smooth and even rotation of the knurls.
- Supplied with MS-25-C cobalt knurl wheels - Tin coated. Adds longer life and better performance to the knurl wheels.

Desc.	Order No.	Price	Shank Size	Tool Length
CNC-75-3-M	6120610		.750	5.625
CNC-100-3-M	6120620		1.00	6.875
CNC-125-3-M	6120630		1.25	7.375

CNC-000-5-O



FORMING Straight bump.

- Great quality of knurl pattern.
- Single O series knurl wheel for straight or diamond pattern. Narrow knurl applications, up to .394" wide
- Knurl wheel is mounted between thrust washers. Ensures smooth and even rotation of the knurl.
- Supplied with OS25-C cobalt knurl wheel - Tin coated. Adds longer life and better performance to the knurl wheel.

Desc.	Order No.	Price	Shank Size	Tool Length
CNC-75-5-O	6120710		.750	5.50
CNC-100-5-O	6120720		1.00	6.75
CNC-125-5-O	6120730		1.25	7.25

CNC-000-7



FORMING Small diameter range: up to 1".

- Better quality of knurl pattern.
- Compact design. Allows more clearance for the tool head.
- Twin R series knurl wheels for straight or diamond pattern. Supplies more rigidity for compact design.
- Supplied with RDR/L-30-C cobalt knurl wheels - Tin coated. Adds longer life and better performance to the knurl wheel.
- Self-centering knurling head. Precise alignment to the working part.

Desc.	Order No.	Price	Shank Size	Tool Length
CNC-75-7-R	6120910		.750	5.75
CNC-100-7-R	6120920		1.00	7.00
CNC-125-7-R	6120930		1.25	7.50



HIGH SPEED STEEL

KNURLS

SERIES 459:

Knurls are individually cut to obtain sharp, perfectly formed teeth - then heat treated and tempered.

Available with: 14 (coarse), 21 (medium), and 33 (fine) teeth per inch.

NOTE: RH Knurling is produced with LH Knurls. LH Knurling is produced with RH Knurls. Male Diamond Knurling is produced by RH and LH Knurls in pairs.



Dimensions Dia. x Thick. x Hole Dia.	Teeth Per Inch	Straight	RH Diagonal	LH Diagonal	Price
5/8 x 5/16 x 7/32"	14	4590140	4590141	4590142	
	21	4590210	4590211	4590212	
	33	4590330	4590331	4590332	
3/4 x 3/8 x 1/4"	14	2550140	2550141	2550142	
	21	2550210	2550211	2550212	
	33	2550330	2550331	2550332	

MACHINE TOOL ACCESSORIES



KNURL WHEELS

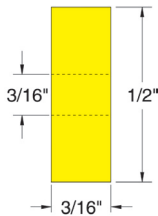
SERIES 916:



Circular Pitch Knurls are made to extremely high standards from the finest materials available. Knurls are individually hob cut and lapped to a smooth hard finish to give longer life and impart a smooth clean surface to the knurled part.

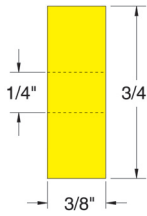
Knurls available in High Speed, Cobalt, TIC/N - Coated, beveled, and diametral pitch.

"C" Series
High Speed



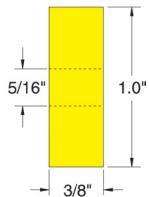
TPI	Included Tooth Angle	Order No.		
		Pattern		
		Straight	Diagonal Right	Diagonal Left
16	90°	0024502	0024610	0024718
20	90°	0024504	0024612	0024720
25	90°	0024506	0024614	0024722
30	90°	0024508	0024616	0024724
35	90°	0024510	0024618	0024726
40	90°	0024512	0024620	0024728
50	70°	0024514	0024622	0024730
80	70°	0024516	0024624	0024732
Price				

"A" Series
High Speed



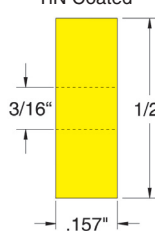
TPI	Included Tooth Angle	Order No.		
		Pattern		
		Straight	Diagonal Right	Diagonal Left
10	90°	0023502	9923634	0023766
12	90°	0023504	0023636	0023768
14	90°	0023506	0023638	0023770
16	90°	0023508	0023640	0023772
20	90°	0023510	0023642	0023774
25	90°	0023512	0023644	0023776
30	90°	0023514	0023646	0023778
35	90°	0023516	0023648	0023780
40	90°	0023518	0023650	0023782
50	70°	0023520	0023652	0023784
80	70°	0023522	0023654	0023786
Price				

"O" Series
High Speed



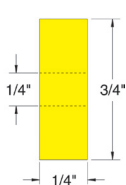
TPI	Included Tooth Angle	Order No.		
		Pattern		
		Straight	Male Diamond	Female Diamond
12	90°	0025606	-	-
14	90°	9925608	-	-
16	90°	0025610	-	-
20	90°	0025612	9926008	0026074
25	90°	0025614	9026010	0026076
30	90°	0025616	9926012	0026078
Price				

"D" Series
Cobalt,
TiN Coated



TPI	Included Tooth Angle	Order No.		
		Pattern		
		Straight	Diagonal Right	Diagonal Left
20	90°	25031	925085	25139
30	90°	25035	25089	25143
40	90°	25039	25093	25147
Price				

"S" Series
High Speed



TPI	Included Tooth Angle	Order No.		
		Pattern		
		Straight	Diagonal Right	Diagonal Left
16	90°	0026808	0026930	0027054
20	90°	0026810	9926932	0027056
25	90°	0026812	9926934	0027058
30	90°	0026814	9926936	0027060
40	90°	0026818	0026940	0027064
50	70°	0026820	0026942	0027066
Price				

Quality Knurling Tools



The Choice Is Yours!!!

(Continued)



KNURL WHEELS

SERIES 916:
(Continued)

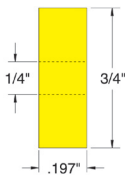


Circular Pitch Knurls are made to extremely high standards from the finest materials available. Knurls are individually hob cut and lapped to a smooth hard finish to give longer life and impart a smooth clean surface to the knurled part.

Knurls available in High Speed, Cobalt, TIC/N - Coated, beveled, and diametral pitch.

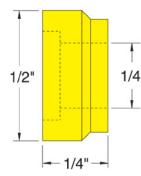
- “SW” knurling wheels are technically designed to knurl against a square shoulder.
- With super precise workmanship, the wheels are made of heat treated High Cobalt Steel to withstand severe knurling operation.
- Knurl wheels are Titanium Nitrate coated to reduce the coefficient of friction when knurling, increasing the quality and the force of knurling as well as the life of the knurl wheels.
- All SW Series knurl wheels are available only in cobalt and tin coated.

“R” Series
Cobalt



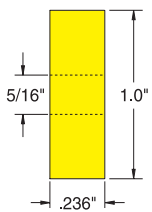
TPI	Included Tooth Angle	Order No.		
		Pattern		
		Straight	Diagonal Right	Diagonal Left
10	90°	0026502	0026564	0026626
12	90°	0026504	0026566	0026628
14	90°	0026506	0026568	0026630
16	90°	0026508	0026570	0026632
20	90°	0026510	0026572	0026634
25	90°	0026512	0026574	0026636
30	90°	0026514	0026576	0026638
35	90°	0026516	0026578	0026640
40	90°	0026518	9926580	0026642
50	70°	0026520	0026582	0026644
Price				

“SW2” Series
Cobalt



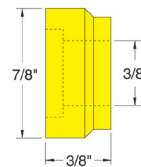
TPI	Included Tooth Angle	Order No.		
		Pattern		
		Straight	Diagonal Right	Diagonal Left
16	90°	0027402	-	-
20	90°	0027404	-	-
25	90°	0027406	0027456	0027506
30	90°	0027408	0027458	0027508
35	90°	0027410	-	-
40	90°	0027412	-	-
50	70°	0027414	-	-
Price				

“M” Series
Cobalt



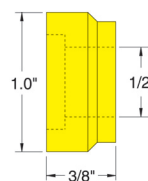
TPI	Included Tooth Angle	Order No.		
		Pattern		
		Straight	Diagonal Right	Diagonal Left
12	90°	0025306	0025372	0025438
14	90°	0025308	0025374	0025440
16	90°	9925310	0025376	0025442
20	90°	0025312	0025378	0025444
25	90°	0025314	0025380	0025446
30	90°	9925316	0025382	0025448
Price				

“SW3.5” Series
Cobalt



TPI	Included Tooth Angle	Order No.		
		Pattern		
		Straight	Diagonal Right	Diagonal Left
14	90°	-	0027756	0027810
20	90°	9927706	0027760	-
25	90°	9927708	0027762	0027816
Price				

“SW4” Series
Cobalt



TPI	Included Tooth Angle	Order No.		
		Pattern		
		Straight	Diagonal Right	Diagonal Left
14	90°	0028002	0028056	0028110
16	90°	0028004	0028058	0028112
20	90°	0028006	0028060	0028114
25	90°	0028008	0028062	0028116
30	90°	0028010	0028064	0028118
35	90°	0028012	0028066	0028120
40	90°	0028014	0028068	0028122
Price				



While we show some of the most popular **KNURLS** we can supply many more styles; please inquire.