



## Chinese OCTG Threading Inserts

*Represented by* **Shanghai Jingoo**






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# Brand and application of carbide

## Brand and application of carbide

BRAND		Introduce of use performance and application
0124		With good red-hardness and toughness, suitable for the high-effective threading machine tooling the dry steel, intermediate grade and high-grade steel (such as J55, K55, N80, L80 etc.) tubing, casing threading and connecting threading.
0326		With good high-intensity and red-hardness, meanwhile own excellent impact resistance. Suitable for the high-effective threading machine tooling the intermediate and high grade steel (such as N80, P110, etc.) tubing, casing and connecting threading.
0127		With better integrated mechanical features and stability machinability, can be used in tooling the dry grade, intermediate grade and high grade steel (such as H40, J55, M65, C75, N80 etc.) tubing, casing and connecting threading.
0327		With high-intensity and good red-hardness. It can be used in tooling the threading of drilling rod, oil drill collar and sucker rod.
GY17		In accordance with the different usage, it can be coated or un-coated. For its good red-hardness and toughness, this brand is suitable for tooling the specialized chipbreaker of the thread chaser and some other tools.



## A Carbide Threading Inserts For Oil Pipe

The code introduction of carbide threading inserts for oil pipe A-003

(1) Type and data of API tubing and casing round threading A-004

Collinet series round threading inserts A-005

PMC series round threading inserts A-007

Papilionaceous series round threading inserts A-009

Double-hole series round threading inserts A-010

Double-side series round threading inserts A-011

Big triangle series round threading inserts A-013

Common threading machine inserts A-014

(2) Type and data of API casing buttress threading A-015

Collinet series buttress threading inserts A-017

PMC series buttress threading inserts A-019

Papilionaceous series buttress threading inserts A-020

Double-hole series buttress threading inserts A-021

Diamond inserts A-022

Vertical inserts A-023

(3) Special threading form of tubing and casing for oil pipe A-024

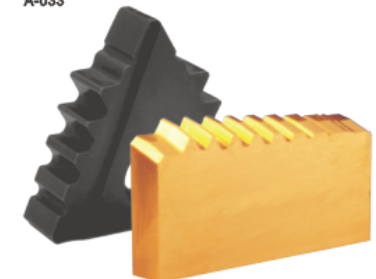
(4) Thread type of oil drillrod connectors A-025

Data and application range of oil drillrod connectors A-026

Oil drillrod threading inserts A-027

(5) Milling pipe threading A-032

Type of milling pipe threading A-033



The code introduction of carbide threading inserts for oil pipe

e.g. B 5B W 2 ----- 2 III  
 ① ② ③ ④ ⑤ ⑥

Introduction:

① Stands for the threading machine or company name.

“SK” stands for the insert used for the NC threading machine.

“BP” “BC” stands for the insert used for the specific NC threading machine.

If not used for the NC threading machine, do not show any code.

② Stands for the code of thread types or thread pitch

8P=1/8' ' (=3.175mm) V type round thread of tubing and casing (taper 1:16)

10 P=1/10' ' (=2.540mm) V type round thread of tubing (taper 1:16)

5B P=1/5' ' (=5.080mm) buttress thread of casing (taper 1:16)

4Y1 P=1/4' ' (=6.350mm) V -0.038R thread of oil drillrod connector (taper 1:6)

4Y2 P=1/4' ' (=6.350mm) V -0.038R thread of oil drillrod connector (taper 1:4)

5Y3 P=1/5' ' (=5.080mm) V -0.040 thread of oil drillrod connector (taper 1:4)

4Y4 P=1/4' ' (=6.350mm) V -0.050 thread of oil drillrod connector (taper 1:4)

4Y5 P=1/4' ' (=6.350mm) V -0.050 thread of oil drillrod connector (taper 1:6)

6Y6 P=1/6' ' (=4.233mm) V -0.055 thread of oil drillrod connector (taper 1:8)

4Y7 P=1/4' ' (=6.350mm) V -0.065 thread of oil drillrod connector (taper 1:6)

③ W--- external thread

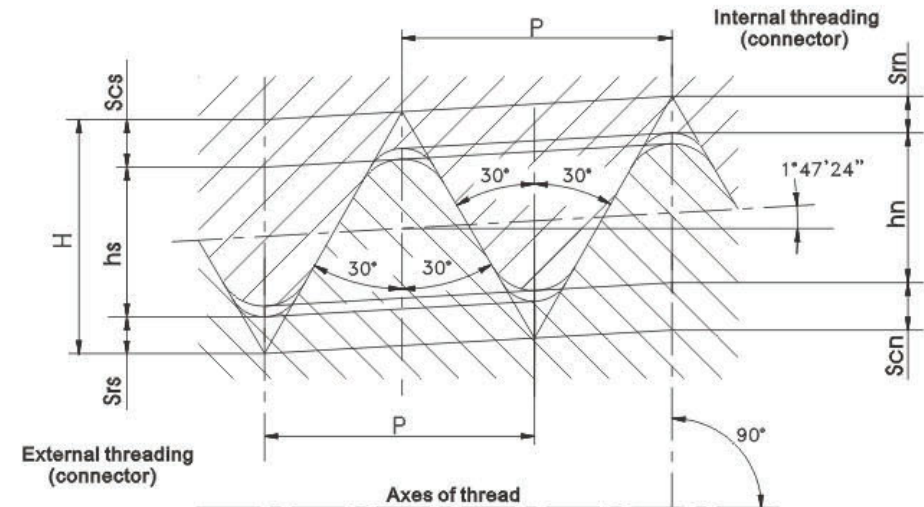
N--- -internal thread

④ The character 1 2 3 4 stands for the number of the edges

⑤ The character 1 2 3 8 stands for the number of the teeth per edge

⑥ The character I II stands for the different teeth types. If only one type, don't show any code

(1) The type of API tubing and casing round thread

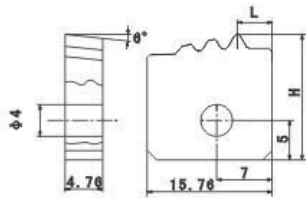


Data of tubing and casing round threading

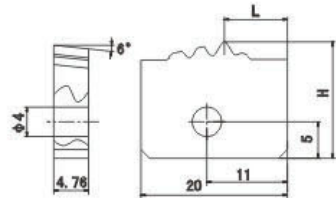
Parameter of thread	8 tooth / inch	10 tooth / inch
Pitch	3.175	2.54
Height of the primitive triangle degree	2.75	2.20
Height of the tooth	1.81	1.412
Scraping height of crest	0.508	0.432
Scraping height of bottom	0.432	0.356



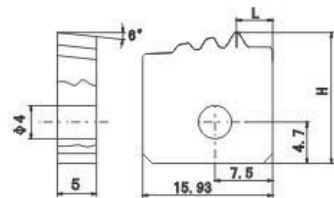
## External threading insert



Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
C8W1-31 (15°)	8	1:16	API round tubing thread	15.54	5.98	BXCQW1BI	01, 03	24, 26
C8W1-32 (15°)	8	1:16	API round tubing thread	15.86	4.393	BXCQW1BI	01, 03	24, 26
C10W1-31	10	1:16	API round tubing thread	15.16	5.67	BXCQW1BI	01, 03	24, 26
C10W1-32	10	1:16	API round tubing thread	15.45	4.4	BXCQW1BI	01, 03	24, 26

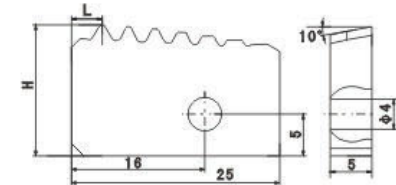


Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
C8W1-31 (12°)	8	1:16	API round tubing thread	15.6	10.2	BXCQW1BII	01, 03	24, 26
C8W1-32 (12°)	8	1:16	API round tubing thread	15.9	8.61	BXCQW1BII	01, 03	24, 26

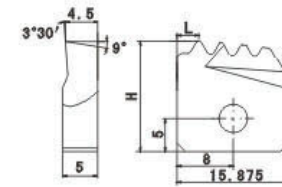


Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
C8W1-3	8	1:16	API round tubing and casing thread	15.75	4.4	BXCQW1BI	01, 03	24, 26
C10W1-4	10	1:16	API round tubing thread	15.75	2.5	BXCQW1BI	01, 03	24, 26

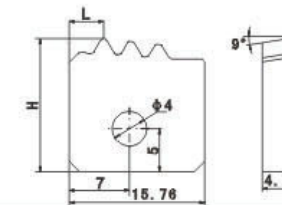
## Internal threading insert



Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
C8N1-7	8	1:16	API round tubing and casing thread	15.715	3.7	XCQN1BIII	01, 03	24, 26
C10N1-8	10	1:16	API round tubing thread	15.49	2.5	XCQN1BIII	01, 03	24, 26



Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
C8N1-4	8	1:16	API round tubing and casing thread	15.7	3.1	XCQN1BII	01, 03	24, 26
C10N1-5	10	1:16	API round tubing thread	15.75	2.5	XCQN1BII	01, 03	24, 26

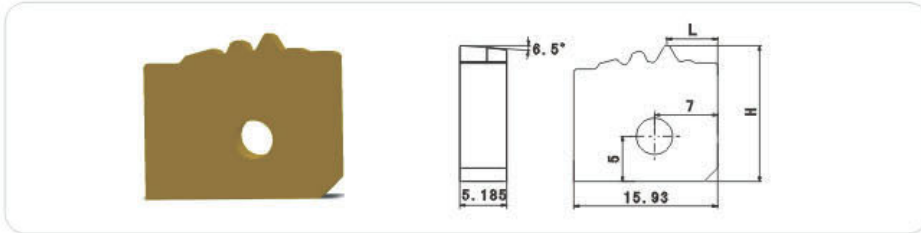


Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
C8N1-3	8	1:16	API round tubing and casing thread	15.5	4.0	XCQN1BI	01, 03	24, 26
C8N1-3F	8	1:16	API round tubing and casing thread	15.7	3.15	XCQN1BI	01, 03	24, 26

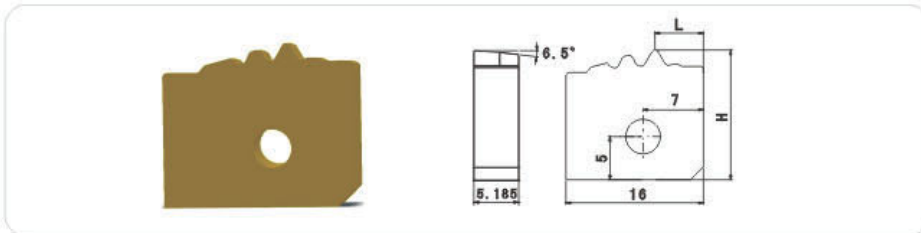
P.S: C8N1-3F is the threading insert for reversing feed.



## External threading insert

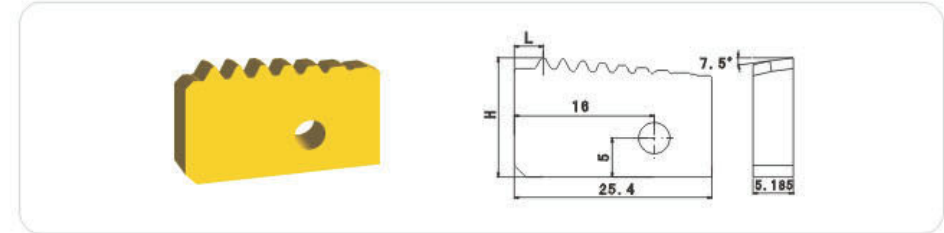


Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
P8W1-31 (12°)	8	1:16	API round casing thread	14.7	7.72	XP8W1-31、XP8W1B	01, 03	24, 26
P8W1-32 (12°)	8	1:16	API round casing thread	14.96	6.67	XP8W1-32、XP8W1B	01, 03	24, 26
P8W1-33 (12°)	8	1:16	API round casing thread	15.04	5.61	XP8W1-33、XP8W1B	01, 03	24, 26
BP8W1-31 (15°)	8	1:16	API round tubing thread	14.71	7.72	XP8W1-31、XP8W1B	01, 03	24, 26
BP8W1-32 (15°)	8	1:16	API round tubing thread	14.96	6.67	XP8W1-32、XP8W1B	01, 03	24, 26
BP8W1-33 (15°)	8	1:16	API round tubing thread	15.04	5.61	XP8W1-33、XP8W1B	01, 03	24, 26



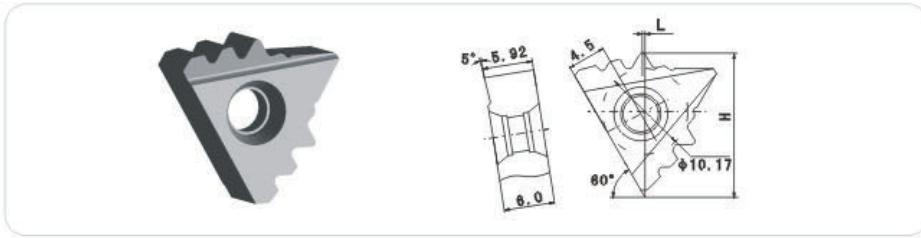
Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
P10W1-31	10	1:16	API round tubing thread	14.315	7.3	XP10W1-31、XP10W1B	01, 03	24, 26
P10W1-32	10	1:16	API round tubing thread	14.57	6.46	XP10W1-32、XP10W1B	01, 03	24, 26
P10W1-33	10	1:16	API round tubing thread	14.65	5.61	XP10W1-33、XP10W1B	01, 03	24, 26

## Internal threading insert



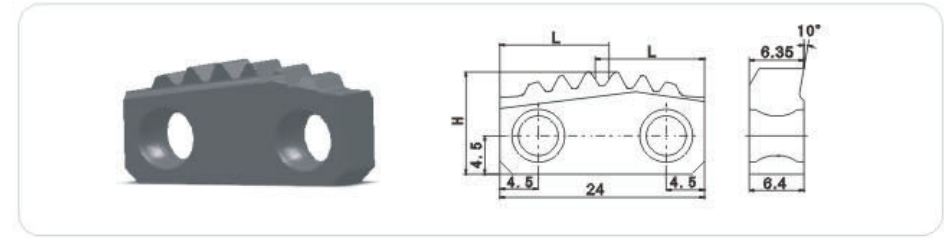
Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
P10N1-8	10	1:16	API round tubing thread	15.34	3.7	XP10N1-8、BXPQN1C	01, 03	24, 26
P8N1-7	8	1:16	API round tubing casing thread	15.715	3.7	XP8N1-7、XP8N1-7A XP8N1-7B、BXPQN1C	01, 03	24, 26

## External threading insert



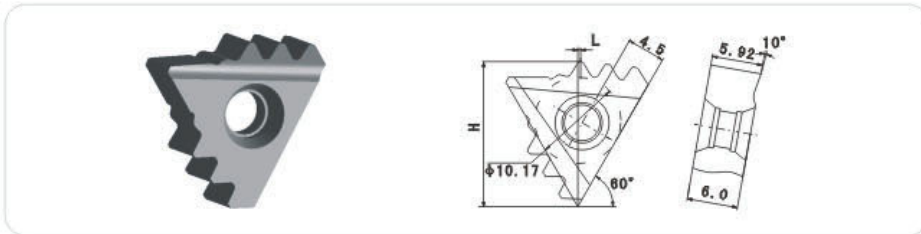
Ordering code	Teeth/Inch	Taper	Thread form	H	L	Material	Coat
B8W2-3 (15°)	8	1:16	API round tubing thread	17.09	0.32	01, 03	24, 26
B8W2-3 (12°)	8	1:16	API round casing thread	17.09	0.32	01, 03	24, 26
B10W2-4	10	1:16	API round tubing thread	17.09	0.01	01, 03	24, 26

## External threading insert



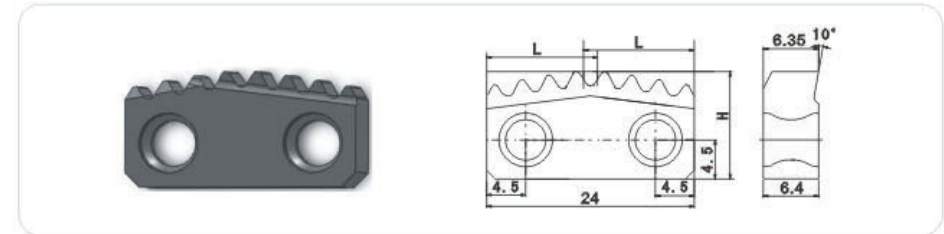
Ordering code	Teeth/Inch	Taper	Thread form	H	L	Material	Coat
S8W2-3	8	1:16	API round tubing and casing thread	12	12.815	01, 03	24, 26

## Internal threading insert

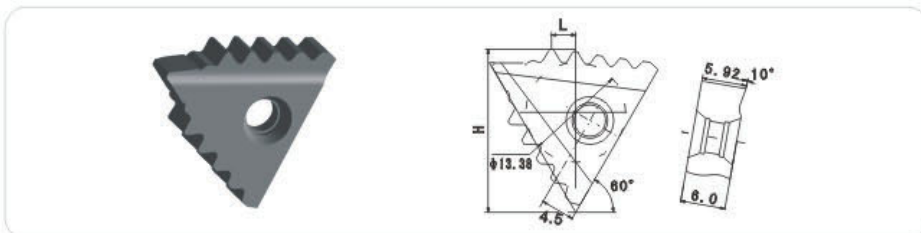


Ordering code	Teeth/Inch	Taper	Thread form	H	L	Material	Coat
B8N2-3	8	1:16	API round tubing and casing thread	17.09	0.32	01, 03	24, 26
B10N2-4	10	1:16	API round tubing thread	17.09	0.01	01, 03	24, 26

## Internal threading insert

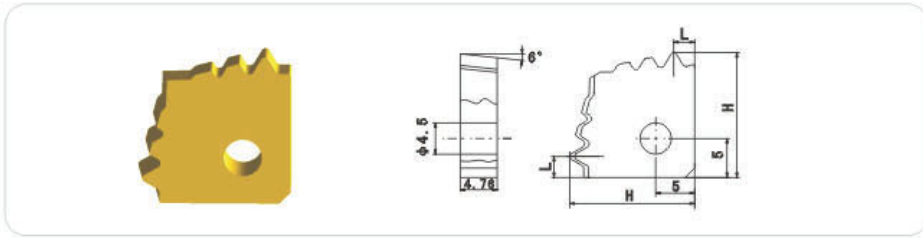


Ordering code	Teeth/Inch	Taper	Thread form	H	L	Material	Coat
SSN2-4	8	1:16	API round tubing and casing thread	12.4	12.815	01, 03	24, 26



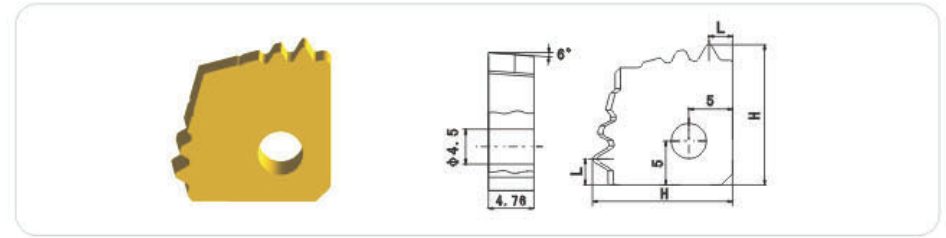
Ordering code	Teeth/Inch	Taper	Thread form	H	L	Material	Coat
B8N2-5	8	1:16	API round tubing and casing thread	21.84	3.24	01, 03	24, 26

## External threading insert

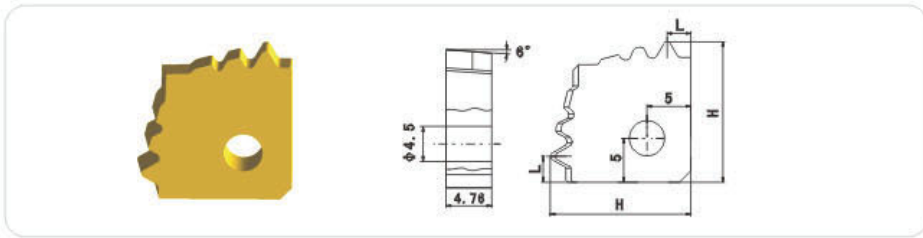


Ordering code	Teeth/inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
BC10W2-31	10	1:16	API round tubing thread	15.3	3.97	TA2118B	01, 03	24, 26
BC10W2-32	10	1:16	API round tubing thread	15.59	2.7	TA2118B	01, 03	24, 26
BC8W2-31 (15°)	8	1:16	API round tubing thread	15.54	4.29	TA2118B	01, 03	24, 26
BC8W2-32 (15°)	8	1:16	API round tubing thread	15.86	2.7	TA2118B	01, 03	24, 26
BC8W2-31 (12°)	8	1:16	API round casing thread	15.54	4.29	TA2118B	01, 03	24, 26
BC8W2-32 (12°)	8	1:16	API round casing thread	15.86	2.7	TA2118B	01, 03	24, 26

## External threading insert



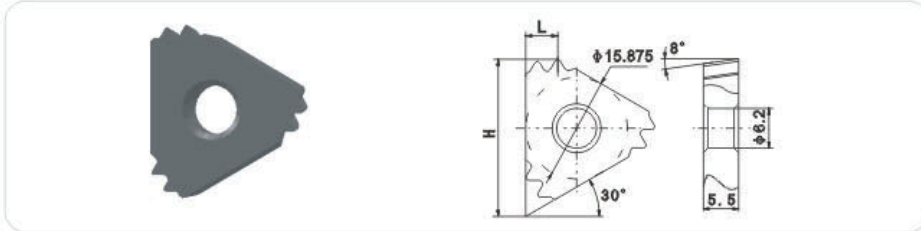
Ordering code	Teeth/inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
BM10W2-4	10	1:16	API round tubing thread	15.6	2.7	TA2118B	01, 03	24, 26
BM8W2-3 (15°)	8	1:16	API round tubing thread	16.0	2.7	TA2118B	01, 03	24, 26



Ordering code	Teeth/inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
BP10W2-31	10	1:16	API round tubing thread	15.2	4.39	TA2118B	01, 03	24, 26
BP10W2-32	10	1:16	API round tubing thread	15.53	3.547	TA2118B	01, 03	24, 26
BP10W2-33	10	1:16	API round tubing thread	15.6	2.7	TA2118B	01, 03	24, 26
BP8W2-31 (15°)	8	1:16	API round tubing thread	15.67	4.817	TA2118B	01, 03	24, 26
BP8W2-32 (15°)	8	1:16	API round tubing thread	15.92	3.76	TA2118B	01, 03	24, 26
BP8W2-33 (15°)	8	1:16	API round tubing thread	16	2.7	TA2118B	01, 03	24, 26

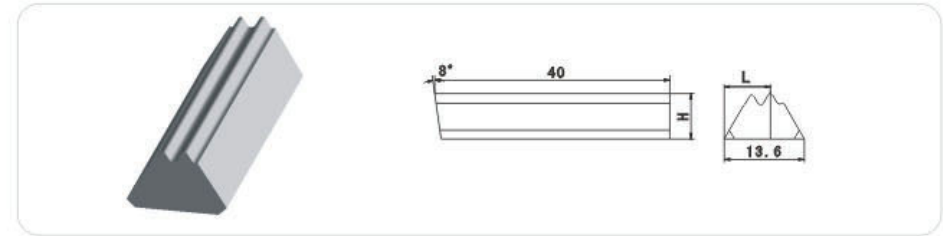


## External threading insert



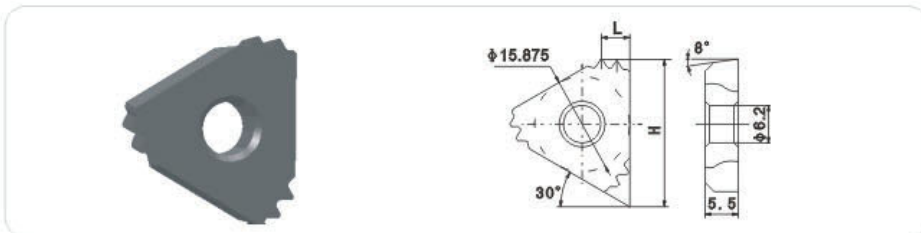
Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
8W3-2	8	1:16	API round tubing and casing thread	24.3	5.0	J10 (8) W3-DXQ	01, 03	24, 26
10W3-2	10	1:16	API round tubing thread	24.5	4.7	J10 (8) W3-DXQ	01, 03	24, 26

## Strip external threading insert



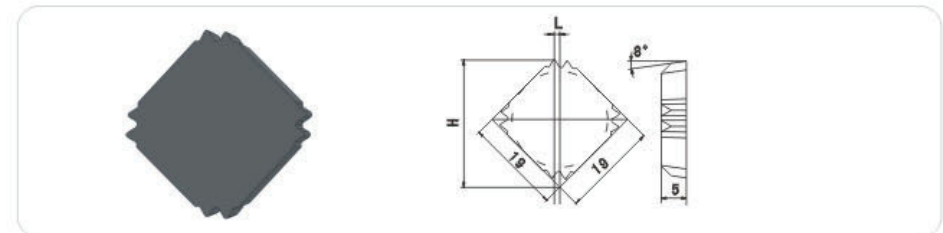
Ordering code	Teeth/Inch	Taper	thread form	H	L	Material	Coat
8W1-2	8	1:16	API round tubing and casing thread	7.7	7.85	01, 03	24, 26
10W1-2	10	1:16	API round tubing thread	7.7	7.2	01, 03	24, 26

## Internal threading insert



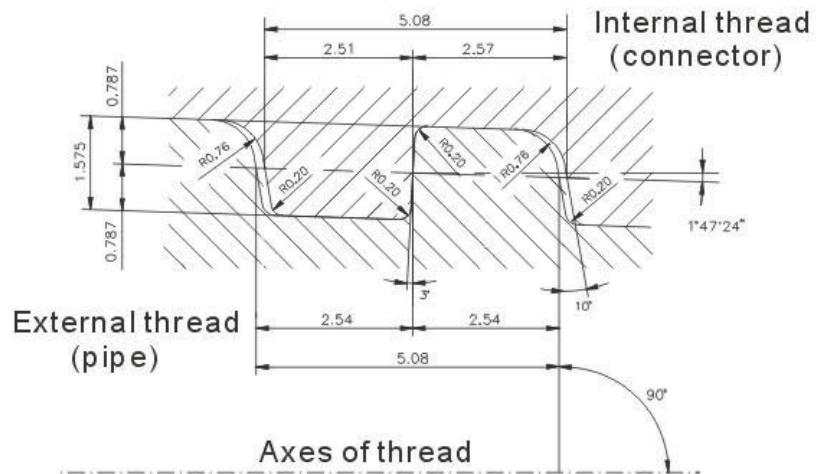
Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
8N3-2	8	1:16	API round tubing and casing thread	24.3	5.0	J10 (8) N3-DXQ	01, 03	24, 26
10N3-2	10	1:16	API round tubing thread	24.5	4.7	J10 (8) N3-DXQ	01, 03	24, 26

## Square internal threading insert

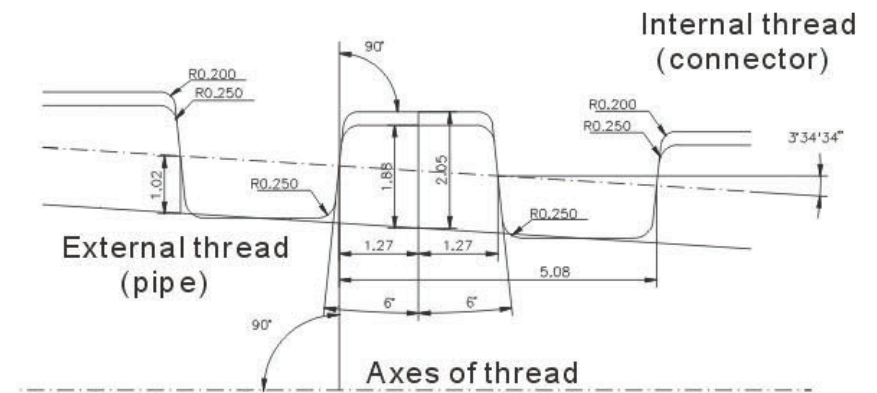


Ordering code	Teeth/Inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
8N4-2	8	1:16	API round tubing and casing thread	25	1.35	M10 (8) N4-DXQ	01, 03	24, 26
10N4-2	10	1:16	API round tubing thread	25.2	1.1	M10 (8) N4-DXQ	01, 03	24, 26

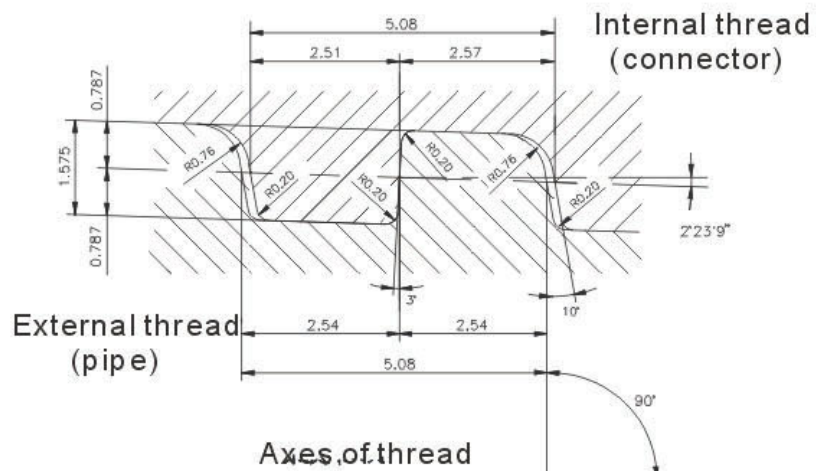
## (2) Type and data of API casing buttress threading



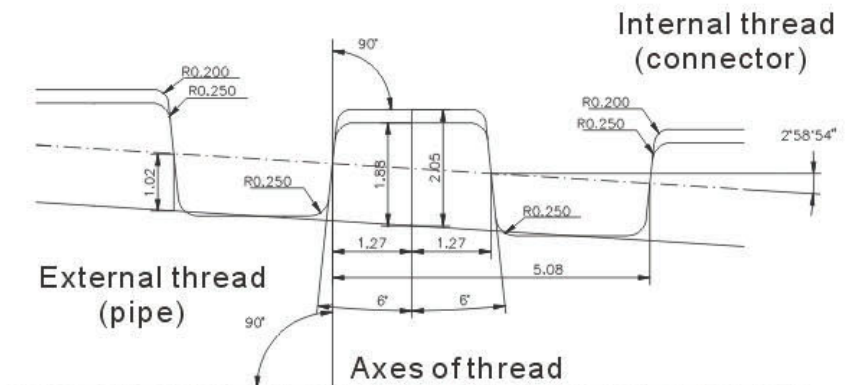
Form and dimension of buttress casing threading ( diameter=  $4\frac{1}{2}$ "- $13\frac{3}{8}$ " ,5 tooth/25.4mm,taper 1:16)



Form of extreme-line casing threading ( $5$ "- $7\frac{5}{8}$ " ,6tooth/25.4mm,taper 1:8)

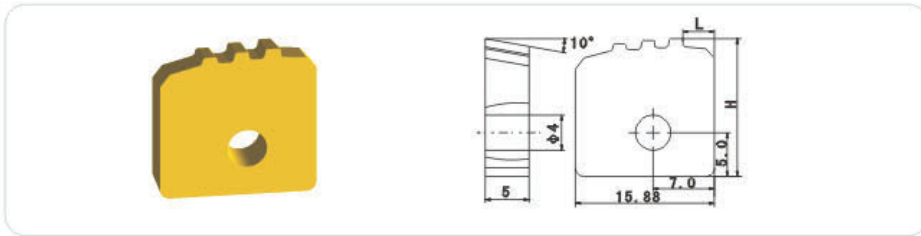


Form and dimension of buttress casing threading(diameter  $\geq 16$ " ,5tooth/25.4m,taper 1:12)

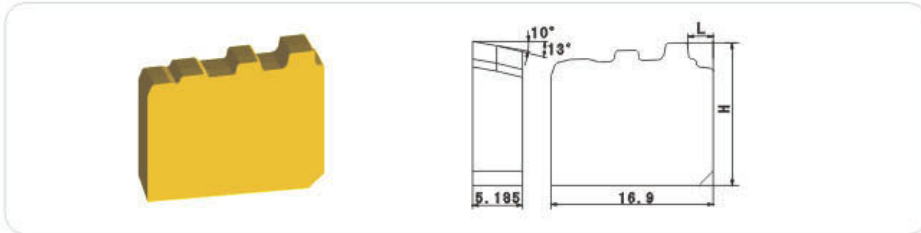


Form of extreme-line casing threading ( $8\frac{5}{8}$ "-  $10\frac{3}{4}$ " ,5tooth/25.4mm,taper 1:9.6)

## External threading insert

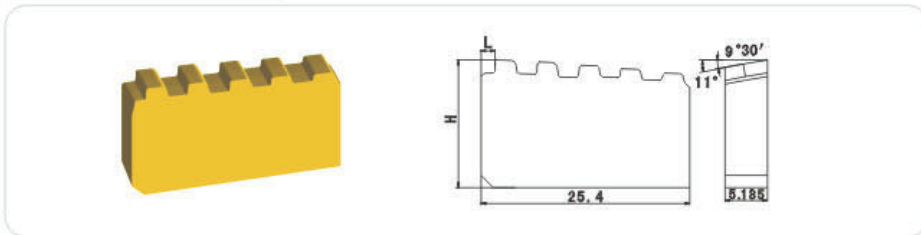


Ordering code	Teeth/inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
P5BW1-3	5	1:16	API buttress thread	15.73	1.85	BXCQW1-B1	01, 03	24, 26



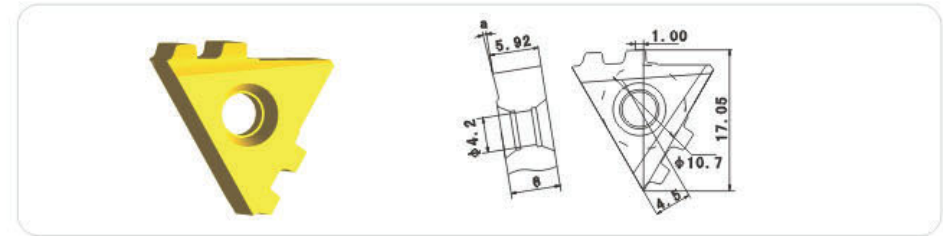
Ordering code	Teeth/inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
P5BW1-31	5	1:16	API buttress thread	14.60	4.37	XP5BW1-31, XP5BW1-B	01, 03	24, 26
P5BW1-32	5	1:16	API buttress thread	14.86	2.63	XP5BW1-32, XP5BW1-B	01, 03	24, 26
P5BW1-33	5	1:16	API buttress thread	15.00	0.88	XP5BW1-33, XP5BW1-B	01, 03	24, 26

## Internal threading insert



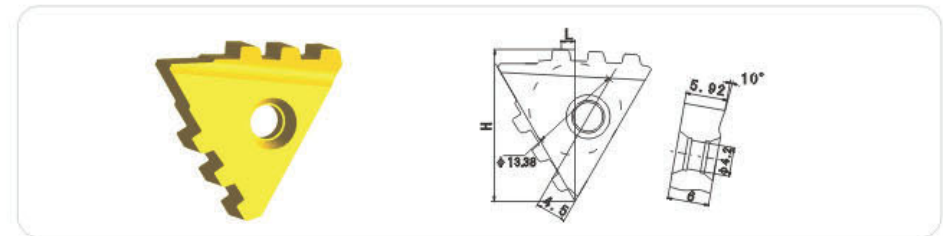
Ordering code	Teeth/inch	Taper	Thread form	H	L	Chipbreaker	Material	Coat
P5BN1-5	5	1:16	API buttress thread	15.608	1.7	XP5BN1-5, BXPQ1C	01, 03	24, 26
P5BN1-5S	5	1:16	API buttress thread	15.608	1.8	XP5BN1-5A	01, 03	24, 26

## External threading insert



Ordering code	Teeth/inch	Taper	thread form	$\alpha$	material	coat
B5BW2-2	5	1:16	API buttress thread	10°	01, 03	24, 26
B5BW2-2 III	5	1:16	API buttress thread	5°	01, 03	24, 26

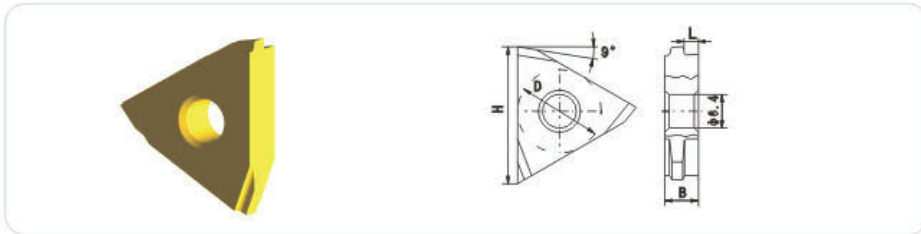
## Internal threading insert



Ordering code	Teeth/inch	Taper	thread form	H	L	material	coat
B5BN2-3	5	1:16	API buttress thread	22.075	2.0	01, 03	24, 26

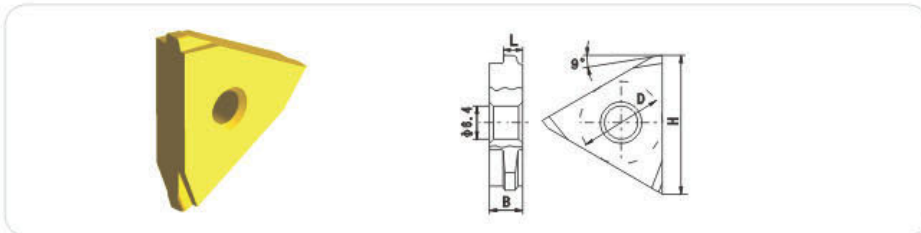


### External threading insert

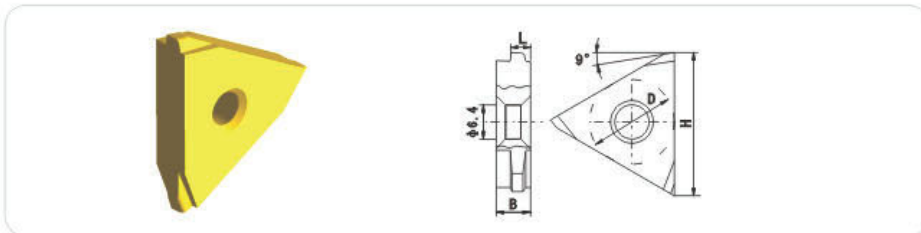


Ordering code	Teeth/inch	Taper	Thread form	H	L	D	B	Material	Coat
5BWL3	5	1:16	API buttress thread	26.2	2.76	16	6.45	01, 03	24, 26
T5BWL3	5	1:16	API buttress thread	26.7	2.65	15.875	6.90	01, 03	24, 26

### Internal threading insert

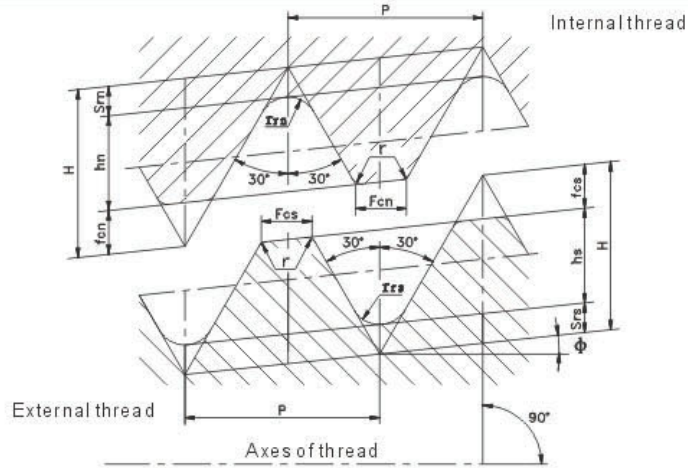


Ordering code	Teeth/inch	Taper	Thread form	H	L	D	B	Material	Coat
5BNL3	5	1:16	API buttress thread	26.7	3.69	16	6.45	01, 03	24, 26
T5BNL3	5	1:16	API buttress thread	26.75	3.40	15.875	6.90	01, 03	24, 26

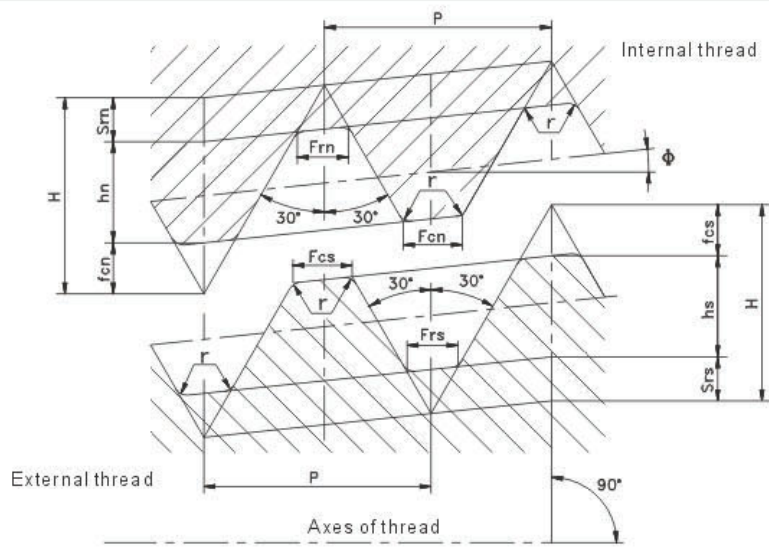


Ordering code	Teeth/inch	Taper	Thread form	H	L	D	B	Material	Coat
T5BNL3-1KT	5	1:16	API buttress thread	26.75	3.40	15.875	6.45	01, 03	24, 26

Thread type of oil drillrod connectors



Thread form of V-0.03R V-0.040 & V-0.050



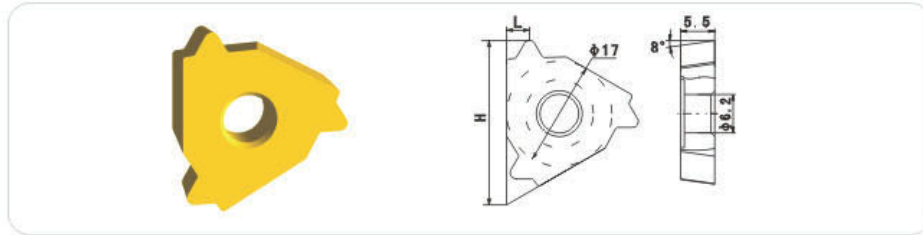
Thread form of V-0.055 & V-0.065

Data and application range of oil drillrod connector threading

unit:mm

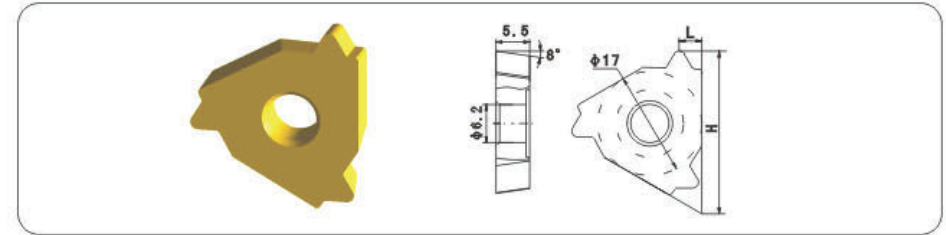
Code of thread	Y1	Y2	Y3	Y4	Y5	Y6	Y7	
	V-0.038R	V-0.038R	V-0.040	V-0.050	V-0.050	V-0.055	V-0.065	
Pitch	Teeth/Inch	4	4	5	4	4	6	4
	P	6.350	6.350	5.080	6.350	6.350	4.233	6.35
Height of primitive Triangle degree h	5.487	5.471	4.376	5.471	5.487	3.660	5.487	
Height of tooth type Hn=hs	3.095	3.083	2.933	3.742	3.755	1.420	2.831	
Scraping height of crest Sm=srs frn=frs	1.426	1.423	0.875	1.094	1.097	1.209	1.426	
Width of tooth crest Fcn=fcs	0.965	0.965	0.508	0.635	0.635	1.031	1.229	
Width of tooth bottom Frn=frs	1.651	1.651	1.016	1.270	1.270	1.397	1.651	
Circle-arc radius of tooth Bottom rm=rss	-----	-----	-----	-----	-----	1.194	1.422	
Rounded radius of Crest scraping r	0.965	0.965	0.508	0.635	0.635	-----	-----	
Taper angle of Thread 2tgQ	1: 6	1: 4	1: 4	1: 4	1: 6	1: 8	1: 6	
Application range	NC23-NC50	NC56-NC77	2 3/8"-4 1/2" REG 3 1/2" FH 4 1/2" FH	5 1/2" REG 7 5/8" REG 8 5/8" REG	6 5/8" REG 5 1/2" FH 6 5/8" FH	NC10-NC16	4" FH 2 3/8"-5 1/2" IF	

## I type drillrod external threading insert



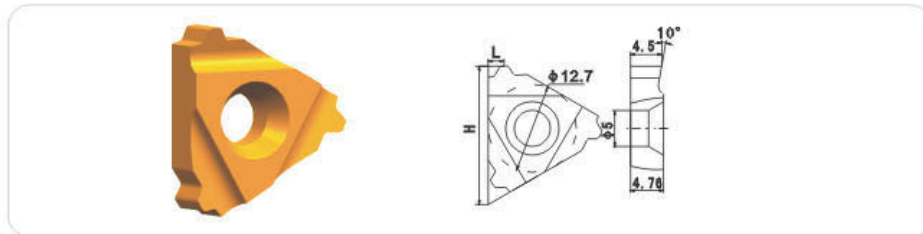
Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
4Y1W3-1	4	1:6	V-0.038R	26.51	3.7	01, 03	24, 26
4Y2W3-1	4	1:4	V-0.038R	26.51	3.7	01, 03	24, 26
5Y3W3-1	5	1:4	V-0.040	26.96	3.7	01, 03	24, 26
4Y4W3-1	4	1:4	V-0.050	26.83	3.7	01, 03	24, 26
4Y5W3-1	4	1:6	V-0.050	26.83	3.7	01, 03	24, 26
4Y5W3-1T	4	1:12	V-0.050	26.83	3.7	01, 03	24, 26
4Y7W3-1	4	1:6	V-0.065	26.24	3.7	01, 03	24, 26
MZ4Y1W3-1	4	1:16	V-0.038R	26.51	3.7	01, 03	24, 26

## I type drillrod internal threading insert

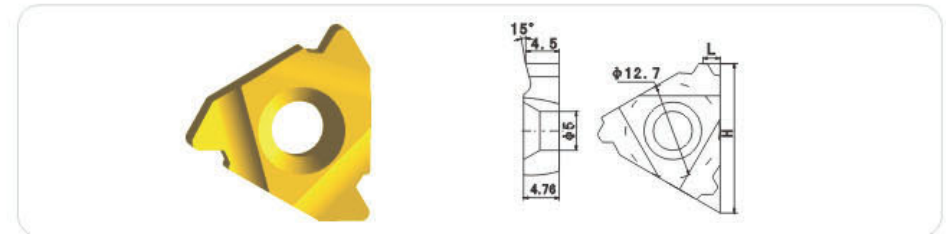


Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
4Y1N3-1	4	1:6	V-0.038R	26.51	3.7	01, 03	24, 26
4Y1N3-1T	4	1:6	V-0.038R	26.9	3.7	01, 03	24, 26
4Y2N3-1	4	1:4	V-0.038R	26.51	3.7	01, 03	24, 26
5Y3N3-1	5	1:4	V-0.040	26.96	3.7	01, 03	24, 26
4Y4N3-1	4	1:4	V-0.050	26.83	3.7	01, 03	24, 26
4Y5N3-1	4	1:6	V-0.050	26.83	3.7	01, 03	24, 26
4Y5N3-1T	4	1:12	V-0.050	26.83	3.7	01, 03	24, 26
4Y7N3-1	4	1:6	V-0.065	26.24	3.7	01, 03	24, 26
MZ4Y1N3-1	4	1:16	V-0.038R	26.51	3.7	01, 03	24, 26

P.S:4Y1N3-1T is the left hand insert.



Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
22ER6APIT	6	1:8	V-0.055	20	2.3	01, 03	24, 26
6Y6W3-1	6	1:8	V-0.055	20	2.3	01, 03	24, 26

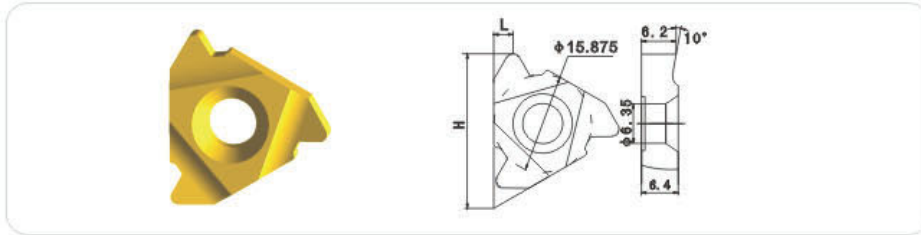


Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
22NR6APIT	6	1:8	V-0.055	20	2.3	01, 03	24, 26
6Y6N3-1	6	1:8	V-0.055	20	2.3	01, 03	24, 26

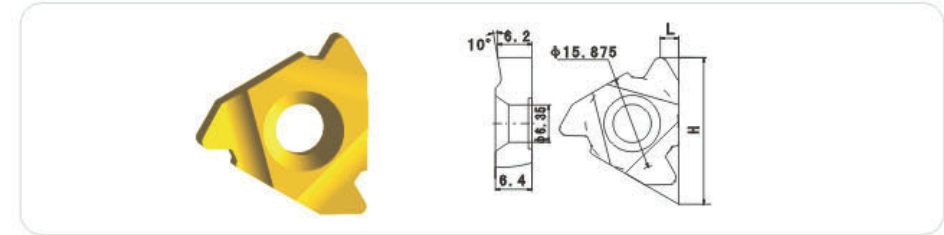


## || Type drillrod external threading insert

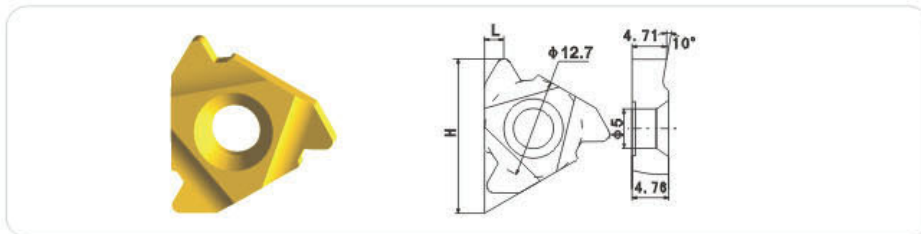
## || type drillrod internal threading insert



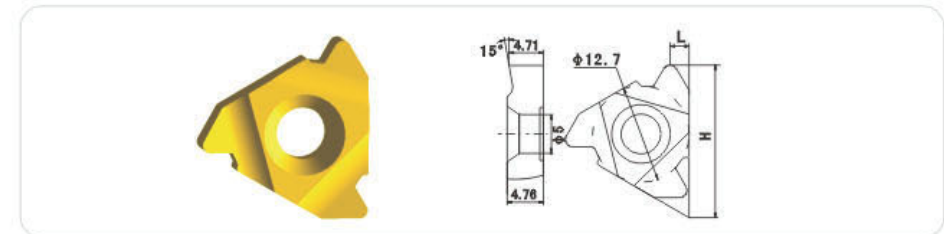
Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
27ER4Y1	4	1:6	V-0.038R	25.40	2.8	01, 03	24, 26
27ER4Y5	4	1:6	V-0.050	25.30	3.2	01, 03	24, 26



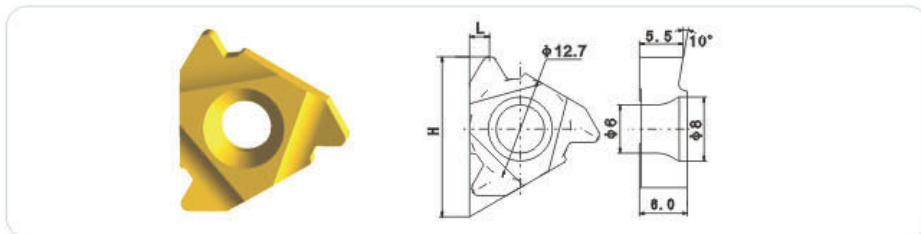
Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
27NR4Y1	4	1:6	V-0.038R	25.40	2.8	01, 03	24, 26
27NR4Y5	4	1:6	V-0.050	25.30	3.2	01, 03	24, 26



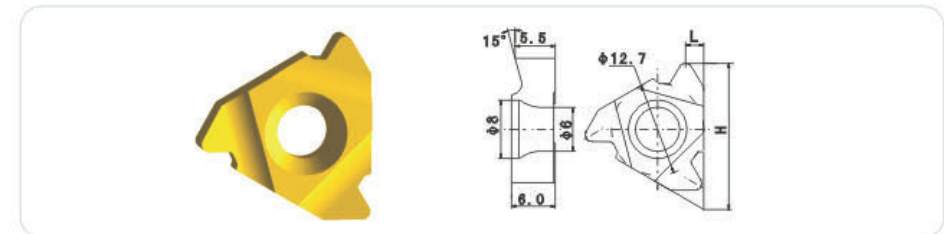
Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
22ER4Y1	4	1:6	V-0.038R	20	2.5	01, 03	24, 26



Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
22NR4Y1	4	1:6	V-0.038R	20.00	2.5	01, 03	24, 26

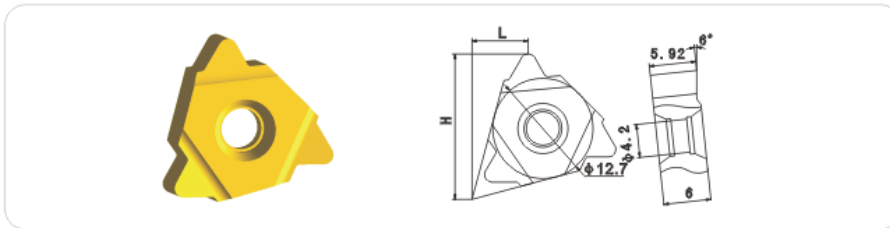


Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
22ER4Y1SV	4	1:6	V-0.038R	20.30	2.5	01, 03	24, 26
22ER4Y5SV	4	1:6	V-0.050	20.15	2.8	01, 03	24, 26



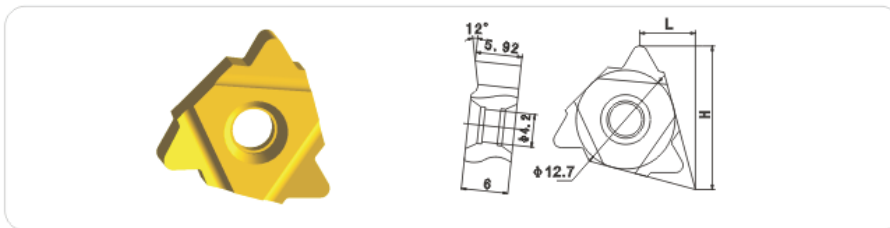
Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
22NR4Y1SV	4	1:6	V-0.038R	20.3	2.5	01, 03	24, 26
22NR4Y5SV	4	1:6	V-0.050	20.15	2.8	01, 03	24, 26

### ||| Type drillrod external threading insert



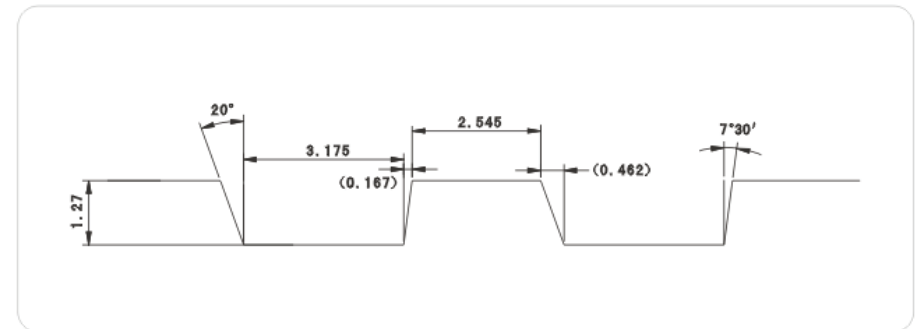
Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
B4Y1W3-1	4	1:6	V-0.038R	18.43	7.13	01, 03	24, 26
B4Y1W3-1T	4	1:16	V-0.038R	18.43	7.13	01, 03	24, 26
B4Y2W3-1	4	1:4	V-0.038R	18.43	7.13	01, 03	24, 26
B5Y3W3-1	5	1:4	V-0.040	18.58	7.13	01, 03	24, 26
B4Y4W3-1	4	1:4	V-0.050	18.43	7.13	01, 03	24, 26
B4Y5W3-1	4	1:6	V-0.050	18.43	7.13	01, 03	24, 26
B4Y5W3-1T	4	1:16	V-0.050	18.50	7.3	01, 03	24, 26

### ||| type drillrod internal threading insert

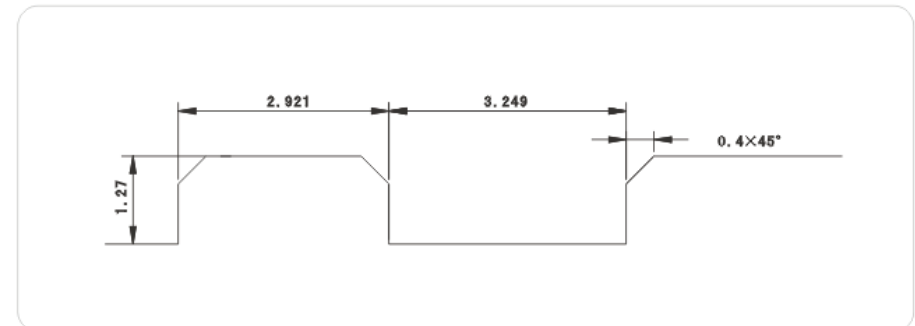


Ordering code	Teeth/Inch	Taper	Form	H	L	Material	Coat
B4Y1N3-1	4	1:6	V-0.038R	18.43	7.13	01, 03	24, 26
B4Y1N3-1T	4	1:16	V-0.038R	18.43	7.13	01, 03	24, 26
B4Y2N3-1	4	1:4	V-0.038R	18.43	7.13	01, 03	24, 26
B5Y3N3-1	5	1:4	V-0.040	18.58	7.13	01, 03	24, 26
B4Y4N3-1	4	1:4	V-0.050	18.43	7.13	01, 03	24, 26
B4Y5N3-1	4	1:6	V-0.050	18.43	7.13	01, 03	24, 26
B4Y5N3-1T	4	1:16	V-0.050	18.50	7.3	01, 03	24, 26

### Milling pipe threading

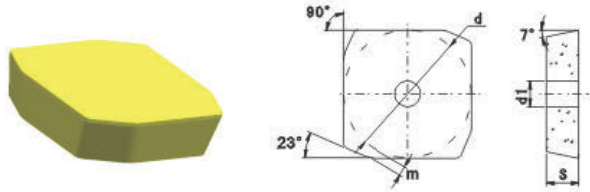


Dimensions of two gyade buttress short tooth syn-thread(FJWP)



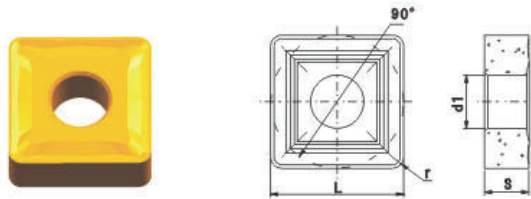
Dimensions of two gyade regularly rectangle short tooth syn-thread(TSWP)

## (1) External circle turning insert , boring insert

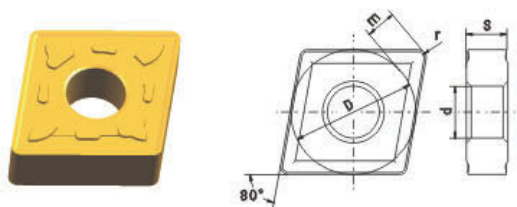


Ordering code	d	s	d1	m
C/26417	25.0	6.35	5.0	1.84

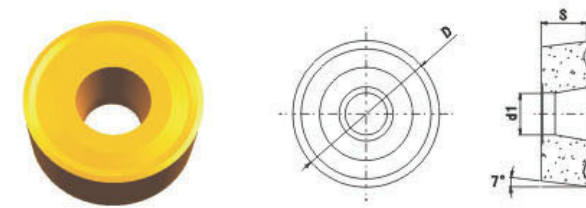
P.S: The New API code is c/26417(30), means the 23° change to 30°



Ordering code	L	d	s	d1	r
SNMM090308	9.525	9.525	3.8	3.18	0.8
SNMG120412	12.7	12.7	4.76	5.16	1.2
SNMM250724	25.4	25.4	7.64	9.12	2.4
SNMG250924	25.4	25.4	9.525	9	2.4

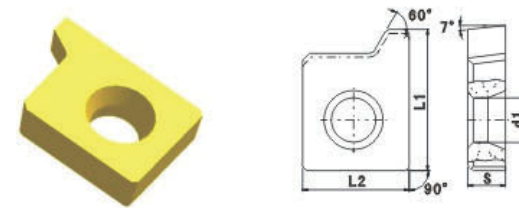


Ordering code	L	d	s	d1	r
CNMG120404	12.9	12.7	4.76	5.16	0.4
CNMG120408	12.9	12.7	4.76	5.16	0.8

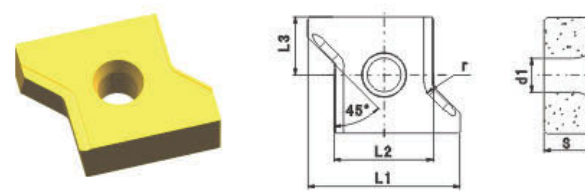


Ordering code	D	s	d1
RCMX1606M0	16	6.35	5.2

## (2) Chamfering insert. Edging face insert



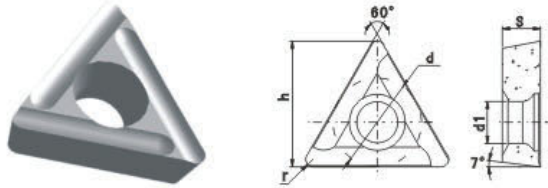
Ordering code	L1	L2	s	d1
C/20943	17.78	12.76	4.76	5.58



Ordering code	L1	L2	L3	s	d1	r
C-32246B-T	25	16.25	7.7	7.94	5.5	1.5
C/32246/B	25.0	16.0	9.0	7.93	5.74	2.0

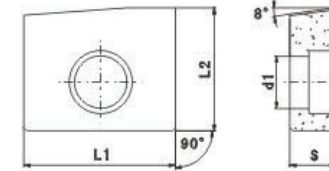
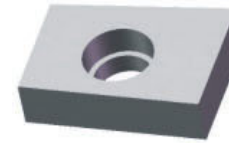


## (3) Delurring Insert

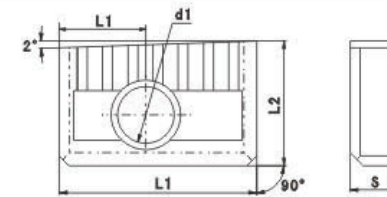
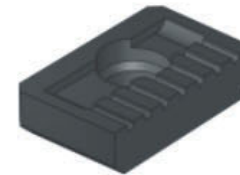


Ordering code	d	h	s	d1	r
TCMX16T308-FR	9.525	13.1	3.97	4.5	0.8
TCMX16T304-FR	9.525	13.5	3.97	4.5	0.4

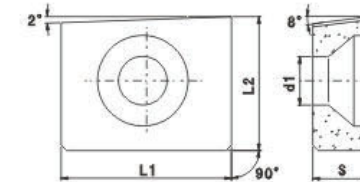
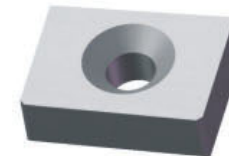
## The shim for collnet series threading inserts



Ordering code	L <sub>1</sub>	L <sub>2</sub>	d <sub>1</sub>	s	Insert
TQ2-6	15.65	12.7	5.4	5	C8W1-31 (15°), C8W1-32 (15°) C10W1-31, C10W1-32

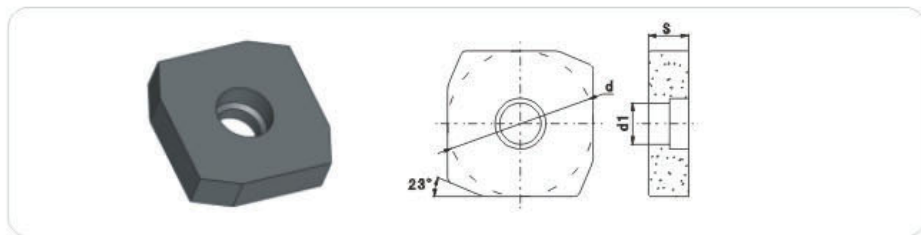


Ordering code	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	d <sub>1</sub>	s	Insert
C/28681	19.9	12.6	8.7	5.7	5	C5BW1-31, C5BW1-32 C8W1-31 (12°), C8W1-32 (12°)



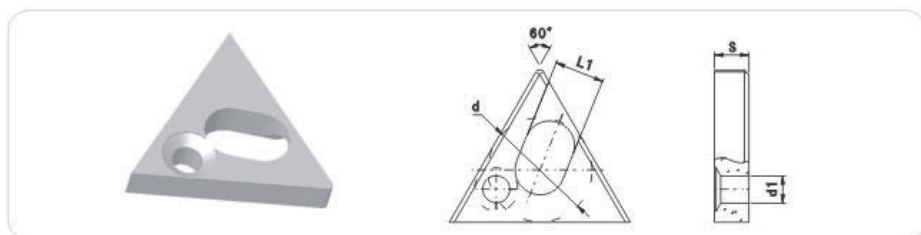
Ordering code	L <sub>1</sub>	L <sub>2</sub>	d1	d2	s	Insert
TQ2-3	25.5	12.91	5.29	6.46	4.76	C8N1-7, C10N1-8

## (4) Shim

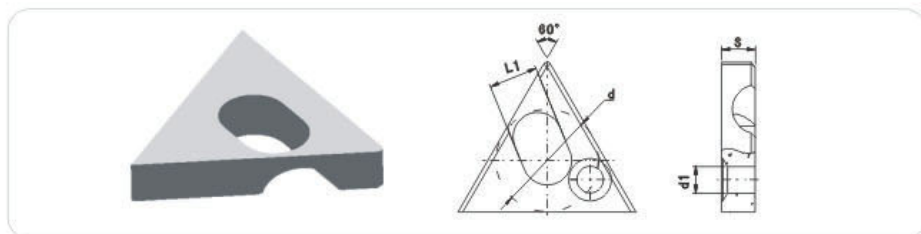


Ordering code	d	d <sub>1</sub>	s	Insert
0/26418	22.5	6.6	6.35	0/26417

### Shim for Hertel series threading inserts



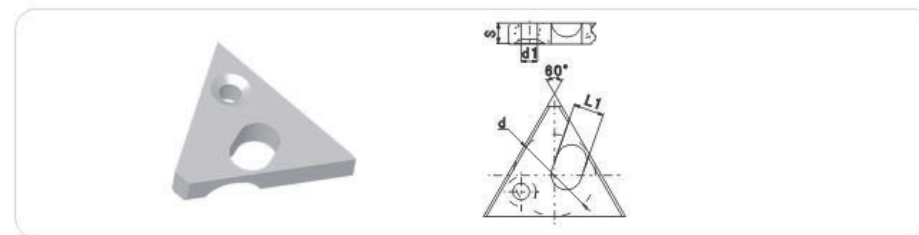
Ordering code	L <sub>1</sub>	d	s	d <sub>1</sub>	Insert
169.523	4.8	9.6	3.18	2.5	B8N2-3H, B10N2-4H



Ordering code	L <sub>1</sub>	d	s	d <sub>1</sub>	Insert
169.798	4.8	9.67	3.18	2.5	B8W2-3H, B10W2-4H B5BW2-2

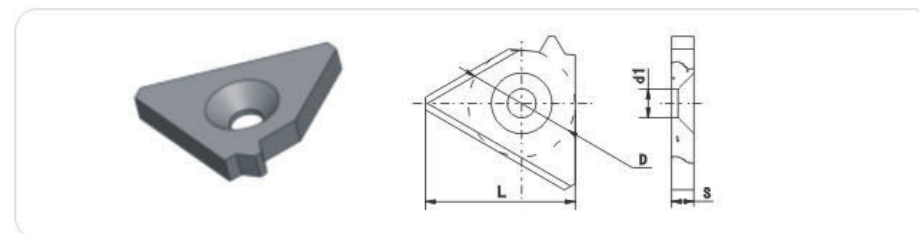
## (4) Shim

### Shim for Hertel series threading inserts

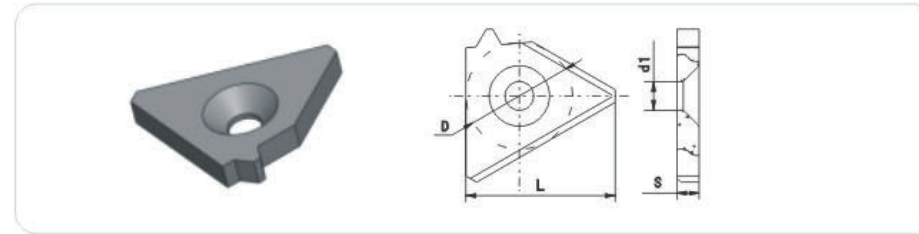


Ordering code	L <sub>1</sub>	d	s	d <sub>1</sub>	Insert
169.973	20.7	12.38	3.18	2.5	B5BN2-3

### Shim for drillrod series threading inserts



Ordering code	L	D	d <sub>1</sub>	s	Insert
J4 (5) N3-DD	23.5	16.8	4.5	3.5	4Y1N3-1, 4Y2N3-1, 4Y4N3-1, 4Y5N3-1, 4Y7N3-1, 5Y3N3-1

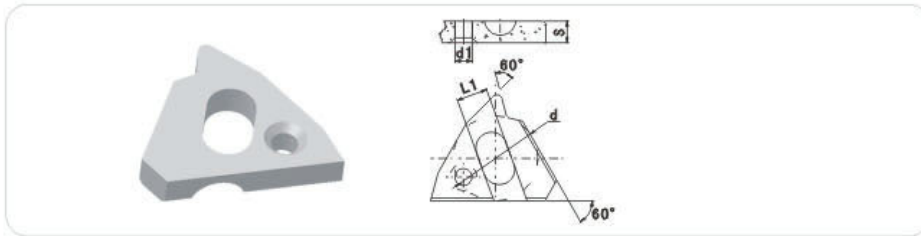


Ordering code	L	D	d <sub>1</sub>	s	Insert
J4 (5) W3-DD	23.5	16.8	4.5	3.5	4Y1W3-1, 4Y2W3-1, 4Y4W3-1, 4Y5W3-1, 4Y7W3-1, 5Y3W3-1

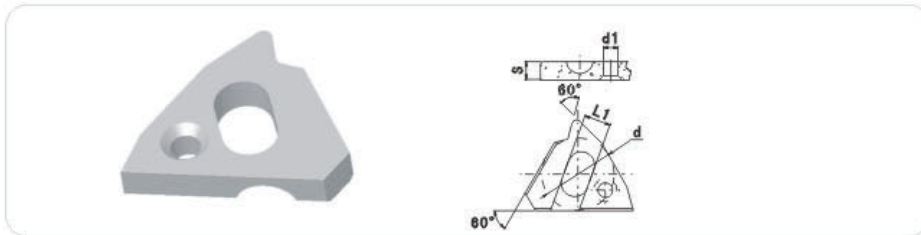
## (4) Shim

## (5) Chipbreaker

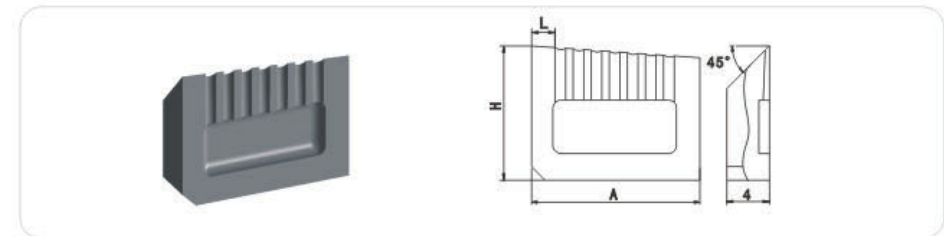
### Chipbreaker for Colinet series threading inserts



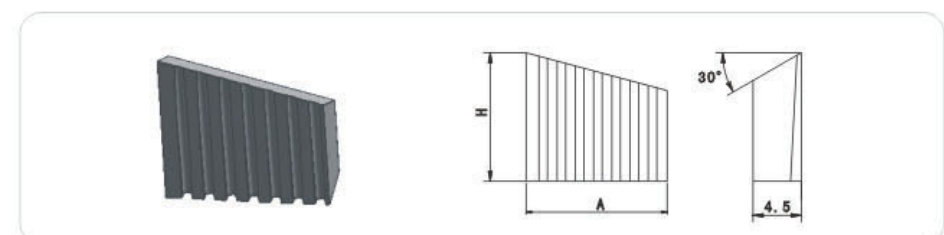
Ordering code	L <sub>1</sub>	d	S	d <sub>1</sub>	Insert
169. 737	4. 6	12. 5	3. 18	2. 5	B4Y1N3-1, B4Y2N3-1, B4Y4N3-1, B4Y5N3-1, B4Y7N3-1, B5Y3N3-1



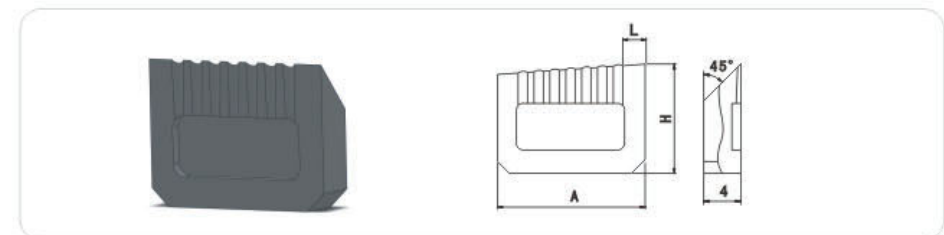
Ordering code	L <sub>1</sub>	d	S	d <sub>1</sub>	Insert
169. 537	4. 6	12. 5	3. 18	2. 5	B4Y1W3-1, B4Y2W3-1, B4Y4W3-1, B4Y5W3-1, B4Y7W3-1, B5Y3W3-1



Ordering code	A	H	L	Insert
BXCQW1BI	15. 76	12. 6	2. 2	C8W1-31 (15°), C8W1-32 (15°), C10W1-31, C10W1-32
BXCQW1BII	20	12	1. 9	C8W1-31 (12°), C8W1-32 (12°), C5BW1-31, C5BW1-32
BXCQW1BIII	25. 10	13. 0	2. 0	C5BW1-5, BC5BW1-5D



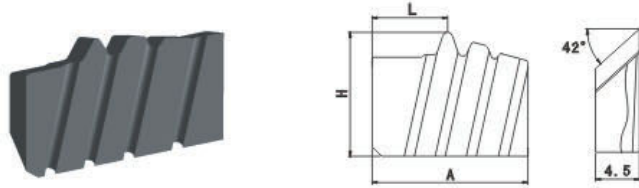
Ordering code	A	H	Insert
TA2118B	12. 5	12. 5	double-side round threading insert



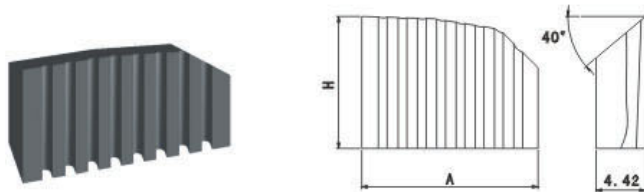
Ordering code	A	H	L	Insert
XCQN1BI	15. 75	12. 6	2. 4	C8N1-3, C8N1-3F
XCQN1BII	15. 80	12. 7	1. 3	C8N1-4, C10N1-5
XCQN1BIII	25. 20	12. 7	2. 4	C8N1-7, C10N1-8, C5BN1-5



## Chipbreaker for PMC series threading inserts

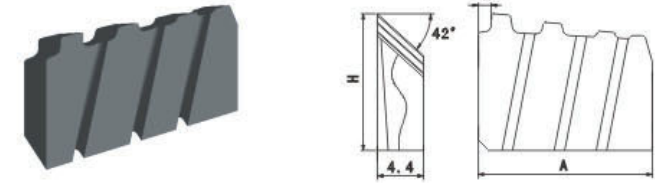


Ordering code	A	H	L	Insert
XP8W1-31	15.93	12.66	7.72	P8W1-31 (12°) 、P8W1-31 (15°)
XP8W1-32	15.93	13	6.67	P8W1-32 (12°) 、P8W1-32 (15°)
XP8W1-33	15.93	13.4	5.61	P8W1-33 (12°) 、P8W1-33 (15°)
XP10W1-31	16	12.82	7.3	P10W1-31
XP10W1-32	16	12.82	6.46	P10W1-32
XP10W1-33	16	13.32	5.61	P10W1-33



Ordering code	A	H	Insert
XP8W1B	16	12.45	P8W1-31、P8W1-32、P8W1-33
XP10W1B	16	12.45	P10W1-31、P10W1-32、P10W1-33

## Chipbreaker for external threading inserts



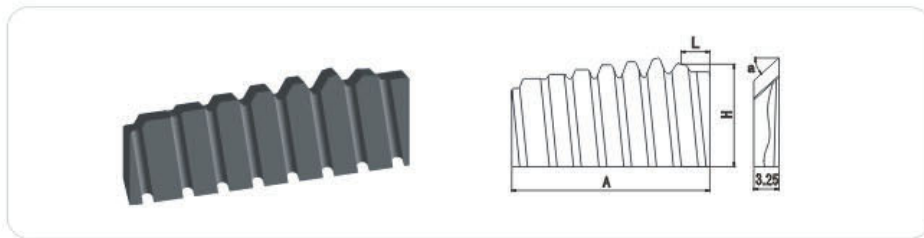
Ordering code	A	H	L	Insert
XP5BW1-31	16.9	13.6	4.8	P5BW1-31
XP5BW1-32	16.9	13.45	3.1	P5BW1-32
XP5BW1-33	16.9	14.2	1.25	P5BW1-33



Ordering code	A	H	Insert
XP5BW1-B	16.9	12.32	P5BW1-31、P5BW1-32、P5BW1-33

Chipbreaker for internal threading inserts

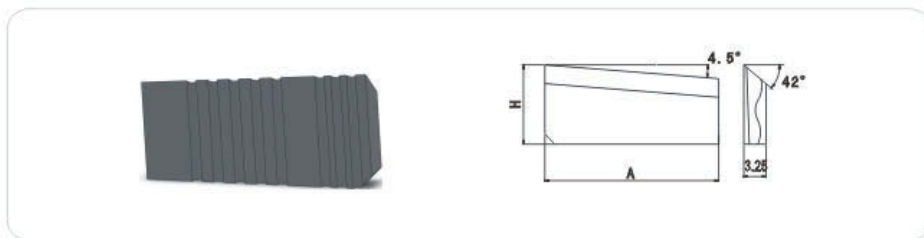
Chipbreaker for internal threading inserts



Ordering code	A	H	L	$\alpha$	Insert
XP8N1-7	25.4	14.3	3.7	42°	P8N1-7
XP8N1-7A	25.4	14.25	3.7	45°	P8N1-7



Ordering code	A	H	L	Insert
XP5BN1-5	25.4	14.55	2.17	P5BN1-5



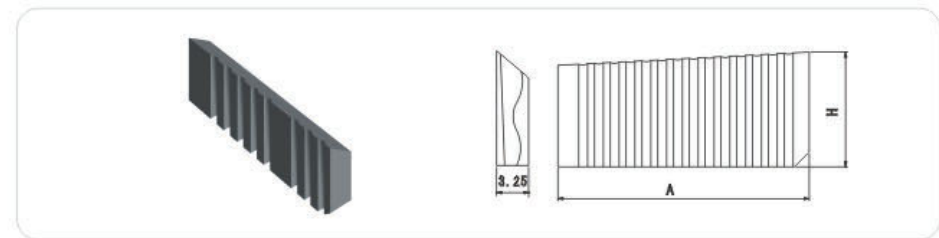
Ordering code	A	H	Insert
XP8N1-7B	25.4	12.93	P8N1-7



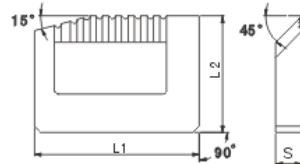
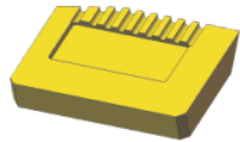
Ordering code	A	H	L	Insert
XP5BN1-5A	25.4	14.3	2.5	P5BN1-5



Ordering code	A	H	L	Insert
XP10N1-8	25.4	14.34	4.49	P10N1-8



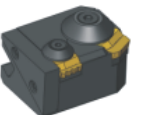
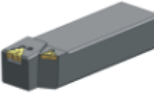
Ordering code	A	H	Insert
BXPQN1C	25.4	11.6	BP5BN1-5, BP10N1-8, BP8N-17



Ordering code	L1	L2	s	Insert
C/26419	25.5	18	4.05	C/26417

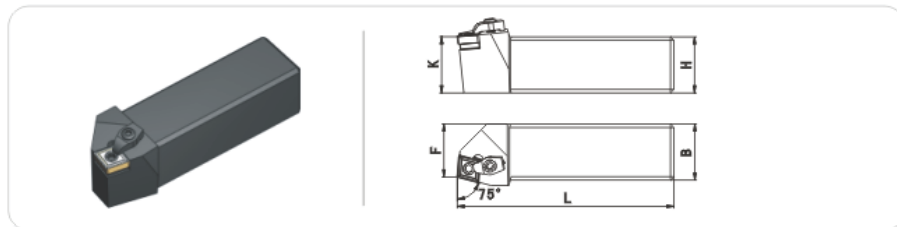
## C Tool shank of carbide threading inserts for oil pipe

- The code introduction of carbide threading tool shank for oil pipe
- (1) Tool shank for external circle turning inserts C-049
  - (2) Tool shank for boring inserts c-051
  - (3) Tool shank for papilionaceous threading inserts C-055
  - Tool shank for papilionaceous round external threading inserts C-061
  - Square tool shank for papilionaceous round internal threading inserts C-062
  - Round tool shank for papilionaceous round internal threading inserts C-063
  - Multiduty tool shank for papilionaceous round internal threading inserts C-064
  - Square multiduty tool shank for papilionaceous round internal threading inserts C-065
  - Round multiduty tool shank for papilionaceous round internal threading inserts C-067
  - Tool shank for papilionaceous buttress external threading inserts C-068
  - Square tool shank for papilionaceous buttress internal threading inserts C-069
  - Round tool shank for papilionaceous buttress internal threading inserts C-070
  - Multiduty tool shank for papilionaceous buttress external threading inserts C-071
  - Square multiduty tool shank for papilionaceous buttress external threading inserts C-072
  - Round multiduty tool shank for papilionaceous buttress external threading inserts C-073
  - (4) Tool shank for double-hole series threading inserts C-074
  - Tool shank for double-hole series external threading inserts C-075
  - Tool shank for double-hole series internal threading inserts C-076
  - (5) Tool shank for diamond series threading inserts C-077
  - Tool shank for diamond series external threading inserts C-077
  - Square tool shank for diamond series internal threading inserts C-078
  - Round tool shank for diamond series internal threading inserts C-079
  - (6) Tool shank for vertical series threading inserts C-080
  - Tool shank for vertical buttress threading inserts C-080
  - Square tool shank for vertical buttress threading inserts C-081
  - Round tool shank for vertical buttress threading inserts C-082
  - (7) Tool shank for triangle threading inserts C-083
  - Tool shank for triangle external threading inserts C-083
  - Square tool shank for triangle internal threading inserts C-084
  - Round tool shank for triangle internal threading inserts C-085
  - (8) Tool shank for strip threading inserts C-086
  - Tool shank for strip double-tooth external threading inserts C-086
  - (9) Tool shank for quadrilateral threading inserts C-087
  - Square tool shank for quadrilateral internal threading inserts C-087
  - (10) Tool shank for 406 machine tool C-089
  - Tool shank for 406 boring tool C-089
  - Tool shank for 406 round chasing tool C-090
  - Tool shank for 406 horizontal buttress chasing tool C-091
  - 406 multiduty tool shank C-092
  - (11) Specific multiduty cutterblock C-096
  - (12) BM series cutterblock C-111
  - (13) BP series cutterblock C-112
  - (14) Complete tool shank for chamfering, deburring and edging face inserts C-115
  - (15) Tool shank for drill rod threading C-118
  - Tool shank for I type external threading inserts C-118
  - Square tool shank for I type internal threading inserts C-119
  - Round tool shank for I type internal threading inserts C-120
  - Tool shank for II type external threading inserts C-121
  - Square tool shank for II type internal threading inserts C-122
  - Round tool shank for II type internal threading inserts C-123
  - Tool shank for III type external threading inserts C-124
  - Square tool shank for III type internal threading inserts C-125
  - Round tool shank for III type internal threading inserts C-126

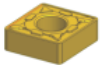






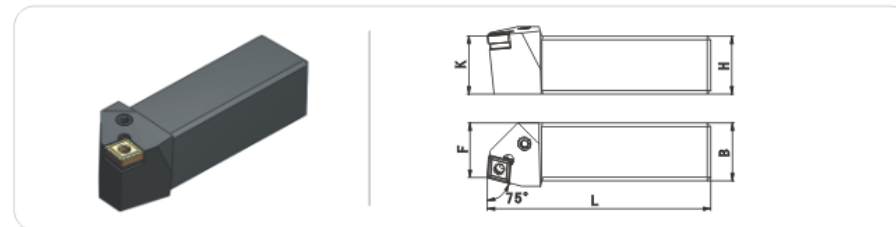
## Tool shank for external circle turning inserts

## Tool shank for external circle turning inserts









Ordering code	Dimension				
	K	B	F	H	L
MCBNR/L 2525 M16	25	25	22	25	150
MCBNR/L 3225 P16	32	25	22	32	170
MCBNR/L 3232 P16	32	32	28	32	170
MCBNR/L 4040 S16	40	40	35	40	250

Accessory	Insert	Shim	Clamp	Screw pin	Wrench
Plc.					
Code	CNMQ160608	C16B-7.8	YMA-15	SLX-6	S3/S4

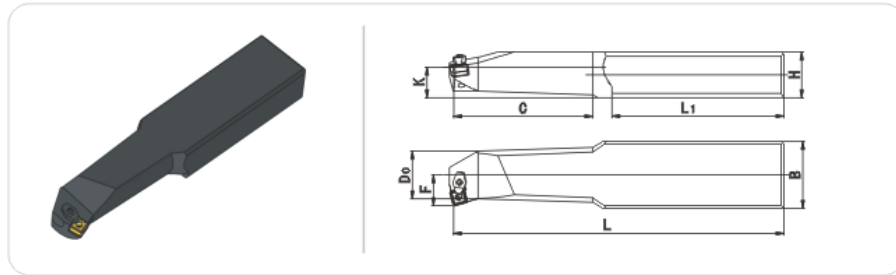


Ordering code	Dimension				
	K	B	F	H	L
PCBNR/L 2525 M16	25	25	22	25	150
PCBNR/L 3225 P16	32	25	22	32	170
PCBNR/L 3232 P16	32	32	28	32	170
PCBNR/L 4040 S16	40	40	35	40	250

Accessory	Insert	Shim	Lever	Spring pin	Clamp bolt	Wrench
Plc.						
Code	CNMQ160608	C16A-8.1	G0516	HT0606	YLB8-20	S3



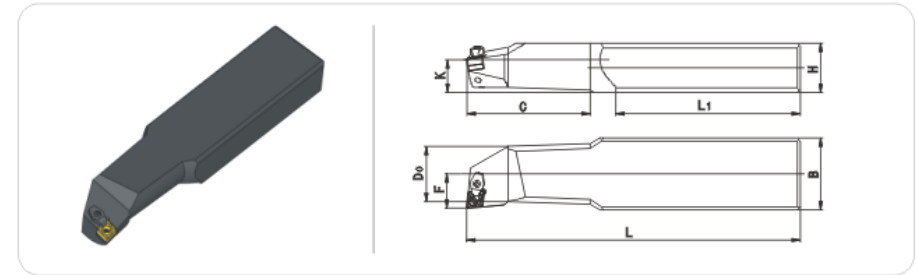
## (2) Tool shank for boring inserts



Type	Ordering code	Working range	Dimension								Machine tool
			L	L <sub>1</sub>	H	C	K	D <sub>0</sub>	F	B	
A	MSKNR15-AS40×25	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	275	150	40	100	25	42	26	65.8	0620改 QK1312 Q1319
	MSKNR15-AS48×32		305	180	48	100	32	42	26	74.3	
B	MSKNR15-BS48×32	4"~5 $\frac{1}{2}$ "	335	180	48	130	32	50	32	74.3	S1-262 QK1312
	MSKNR15-BS55×36		355	200	55	130	36	50	32	75	
C	MSKNR15-CS48×32	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	358	180	48	158	32	56	36	74.3	S1-262 S1-245
	MSKNR15-AS55×36		378	200	55	158	36	56	36	77.2	
D	MSKNR15-DS55×36	9 $\frac{5}{8}$ "~13 $\frac{3}{8}$ "	395	200	55	175	36	60	43	81.5	

Accessory	Insert	Shim	Clamp	Screw pin	Wrench
Pic.					
Code	SNM9150616	S15B-7.8	YMA-15	SLX-6	S3/S4

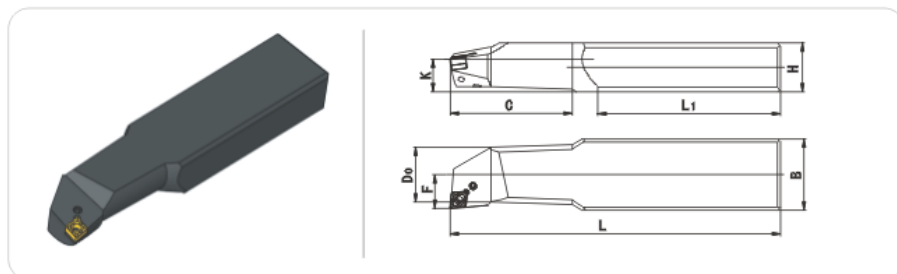
## (2) Tool shank for boring inserts



Type	Ordering code	Working range	Dimension								Machine tool
			L	L <sub>1</sub>	H	C	K	D <sub>0</sub>	F	B	
A	MCLNR16-AS40×25	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	275	150	40	100	25	42	26	65.8	0620改 QK1312 Q1319
	MCLNR16-AS48×32		305	180	48	100	32	42	26	74.3	
B	MCLNR16-BS48×32	4"~5 $\frac{1}{2}$ "	335	180	48	130	32	50	32	74.3	S1-262 QK1312
	MCLNR16-BS55×36		355	200	55	130	36	50	32	75	
C	MCLNR16-CS48×32	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	358	180	48	158	32	56	36	74.3	S1-262 S1-245
	MCLNR16-AS55×36		378	200	55	158	36	56	36	77.2	
D	MCLNR16-DS55×36	9 $\frac{5}{8}$ "~13 $\frac{3}{8}$ "	395	200	55	175	36	60	43	81.5	

Accessory	Insert	Shim	Clamp	Screw pin	Wrench
Pic.					
Code	CNM9160608	C16B-7.8	YMA-15	SLX-6	S3/S4

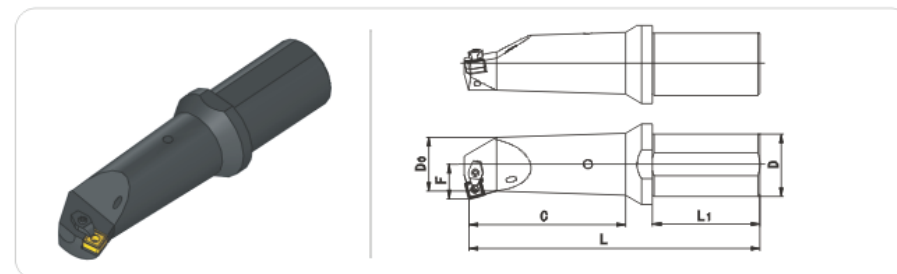
## (2) Tool shank for boring inserts



Type	Ordering code	Working range	Dimension								Machine tool
			L	L <sub>1</sub>	H	G	K	D <sub>0</sub>	F	B	
A	PCLNR16-AS40×25	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	275	150	40	100	25	42	26	65.8	C620改 QK1312 Q1319
	PCLNR16-AS48×32		305	180	48	100	32	42	26	74.3	
B	PCLNR16-BS48×32	4"~5 $\frac{1}{2}$ "	335	180	48	130	32	50	32	74.3	S1-262 QK1312
	PCLNR16-BS55×36		355	200	55	130	36	50	32	75	
C	PCLNR16-CS48×32	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	358	180	48	158	32	56	36	74.3	S1-262 S1-245
	PCLNR16-AS55×36		378	200	55	158	36	56	36	77.2	
D	PCLNR16-DS55×36	9 $\frac{5}{8}$ "~13 $\frac{3}{8}$ "	395	200	55	175	36	60	43	81.5	

Accessory	Insert	Shim	Lever	Spring pin	Clamp bolt	Wrench
Pic.						
Code	CNMG160608	C16A-8.1	G0516	HT0606	YL8-20	S3

## (2) Tool shank for boring inserts

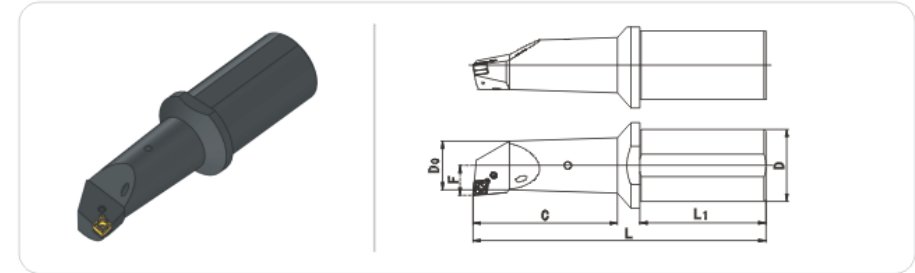
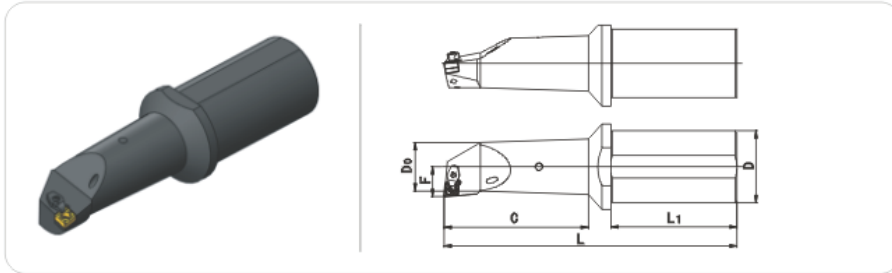


Type	Ordering code	Working range	Dimension						Machine tool
			L	L <sub>1</sub>	D	D <sub>0</sub>	C	F	
A	MSKNR15-AR40×80	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	205	80	40	26	100	26	GK7815 GK7620 GK7832 GK3263A GK7840 CK3263B
	MSKNR15-AR50×90		215	90	50	26	100	26	
	MSKNR15-AR60×100		225	100	60	26	100	26	
	MSKNR15-AR80×140		265	140	80	26	100	26	
B	MSKNR15-BR40×80	4"~5 $\frac{1}{2}$ "	235	80	40	31	130	32	GK7815 GK7620 GK7832 GK3263A GK7840 CK3263B
	MSKNR15-BR50×90		245	90	50	31	130	32	
	MSKNR15-BR60×100		255	100	60	31	130	32	
	MSKNR15-BR80×140		295	140	80	31	130	32	
C	MSKNR15-CR60×100	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	278	100	60	36	158	36	GK7840 CK3263B
	MSKNR15-CR80×140		318	140	80	36	158	36	
D	MSKNR15-DR60×100	9 $\frac{5}{8}$ "~13 $\frac{3}{8}$ "	295	100	60	43	175	43	GK7840 CK3263B
	MSKNR15-DR80×140		335	140	80	43	175	43	

Accessory	Insert	Shim	Clamp	Screw pin	Wrench
Pic.					
Code	SNMG150608	S15B-7.8	YMA-15	SLX-6	S3/S4

### (3) Tool shank for papilionaceous threading inserts

### (3) Tool shank for papilionaceous threading inserts



Type	Ordering code	Working range	Dimension						Machine tool
			L	L <sub>1</sub>	D	D <sub>0</sub>	C	F	
A	MCLNR16-AR40×80	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	205	80	40	26	100	26	CK7815 CK7620
	MCLNR16-AR50×90		215	90	50	26	100	26	CK7832 CK3263A
	MCLNR16-AR60×100		225	100	60	26	100	26	CK7840
	MCLNR16-AR80×140		265	140	80	26	100	26	CK3263B
B	MCLNR16-BR40×80	4"~5 $\frac{1}{2}$ "	235	80	40	31	130	32	CK7815 CK7620
	MCLNR16-BR50×90		245	90	50	31	130	32	CK7832 CK3263A
	MCLNR16-BR60×100		255	100	60	31	130	32	CK7840
	MCLNR16-BR80×140		295	140	80	31	130	32	CK3263B
C	MCLNR16-CR60×100	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	278	100	60	36	158	36	CK7840
	MCLNR16-CR80×140		318	140	80	36	158	36	CK3263B
D	MCLNR16-DR60×100	9 $\frac{5}{8}$ "~13 $\frac{3}{8}$ "	295	100	60	43	175	43	CK7840
	MCLNR16-DR80×140		335	140	80	43	175	43	CK3263B

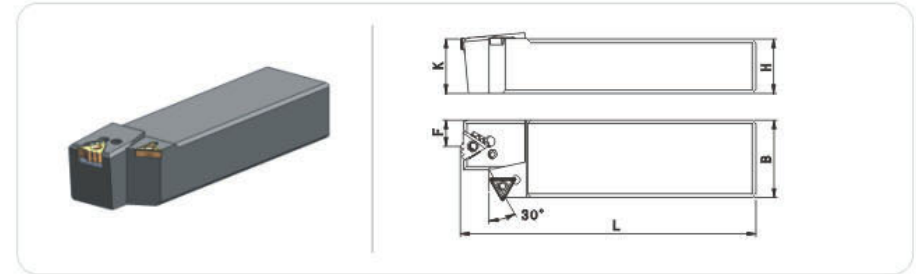
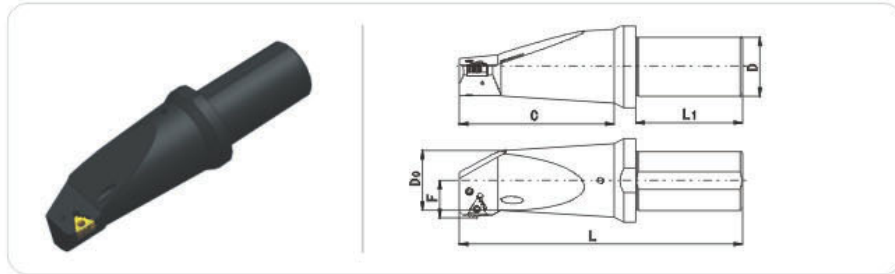
Type	Ordering code	Working range	Dimension						Machine tool
			L	L <sub>1</sub>	D	D <sub>0</sub>	C	F	
A	PCLNR16-AR40×80	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	205	80	40	26	100	26	CK7815 CK7620
	PCLNR16-AR50×90		215	90	50	26	100	26	CK7832 CK3263A
	PCLNR16-AR60×100		225	100	60	26	100	26	CK7840
	PCLNR16-AR80×140		265	140	80	26	100	26	CK3263B
B	PCLNR16-BR40×80	4"~5 $\frac{1}{2}$ "	235	80	40	31	130	32	CK7815 CK7620
	PCLNR16-BR50×90		245	90	50	31	130	32	CK7832 CK3263A
	PCLNR16-BR60×100		255	100	60	31	130	32	CK7840
	PCLNR16-BR80×140		295	140	80	31	130	32	CK3263B
C	PCLNR16-CR60×100	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	278	100	60	36	158	36	CK7840
	PCLNR16-CR80×140		318	140	80	36	158	36	CK3263B
D	PCLNR16-DR60×100	9 $\frac{5}{8}$ "~13 $\frac{3}{8}$ "	295	100	60	43	175	43	CK7840
	PCLNR16-DR80×140		335	140	80	43	175	43	CK3263B

Accessory	Insert	Shim	Clamp	Screw pin	Wrench
Pic.					
Code	CNMG160608	C16B-7.8	YMA-15	SLX-6	S3/S4

Accessory	Insert	Shim	Lever	Spring pin	Clamp bolt	Wrench
Pic.						
Code	CNMG160608	C16A-8.1	60516	HT0606	YLB8-20	S3

Round tool shank for papillonaceous round internal threading inserts

Multiduty tool shank for papillonaceous round internal threading inserts



Type	Ordering code	Working range	Dimension							Machine tool
			L	L <sub>1</sub>	D	C	D <sub>0</sub>	F	λ	
A	P10 (8) N2-AR40×80	2 <sup>3</sup> / <sub>8</sub> "~3 <sup>1</sup> / <sub>2</sub> "	205	80	40	100	42	26	70'	CK7815 CK7820
	P10 (8) N2-AR50×90		215	90	50	100	42	26	70'	CK7832 CK3263A
	P10 (8) N2-AR60×100		225	100	60	100	42	26	70'	CK7840
	P10 (8) N2-AR80×140		265	140	80	100	42	26	70'	CK3263B
B	P10 (8) N2-BR40×80	4"~5 <sup>1</sup> / <sub>2</sub> "	235	80	40	130	50	31	50'	CK7815 CK7820
	P10 (8) N2-BR50×90		245	90	50	130	50	31	50'	CK7832 CK3263A
	P10 (8) N2-BR60×100		255	100	60	130	50	31	50'	CK7840
	P10 (8) N2-BR80×140		295	140	80	130	50	31	50'	CK3263B
C	P10 (8) N2-CR50×90	6 <sup>5</sup> / <sub>8</sub> "~8 <sup>5</sup> / <sub>8</sub> "	268	90	50	158	56	36	30'	CK7840
	P10 (8) N2-CR60×100		278	100	60	158	56	36	30'	CK3263B
	P10 (8) N2-CR80×140		318	140	80	158	56	36	30'	CK7832 CK3263A
D	P10 (8) N2-DR60×100	9 <sup>5</sup> / <sub>8</sub> "~13 <sup>3</sup> / <sub>8</sub> "	295	100	60	175	60	43	15'	CK7840
	P10 (8) N2-DR80×140		335	140	80	175	60	43	15'	CK3263B

Type	Ordering code	Working range	Dimension					
			L	H	K	F	B	λ
A	P10 (8) W2-A32X-TCMX	2 <sup>3</sup> / <sub>8</sub> "~3 <sup>1</sup> / <sub>2</sub> "	170	31.5	32	15	45	70'
B	P10 (8) W2-B32X-TCMX	4"~5 <sup>1</sup> / <sub>2</sub> "	170	31.5	32	15	45	50'
C	P10 (8) W2-C32X-TCMX	6 <sup>5</sup> / <sub>8</sub> "~8 <sup>5</sup> / <sub>8</sub> "	170	31.5	32	15	45	30'
D	P10 (8) W2-D32X-TCMX	9 <sup>5</sup> / <sub>8</sub> "~13 <sup>3</sup> / <sub>8</sub> "	170	31.5	32	15	45	15'

Accessory	Insert	Shim	Oblique rod	Lock screw	Wrench
Pic.					
Code	B8N2-3H B10N2-4H	169.523	φ4	M6	S3

Accessory	insert	Shim	oblique rod
Pic.			
Code	B8W2-3H/B10W2-4H	TCMT16T308	169.798 φ4

Accessory	Lock screw	Screw	Wrench	Wrench
Pic.				
Code	M6	M4×12	T15	S3

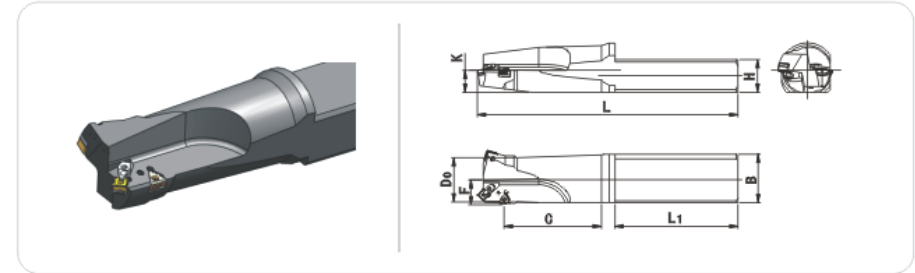
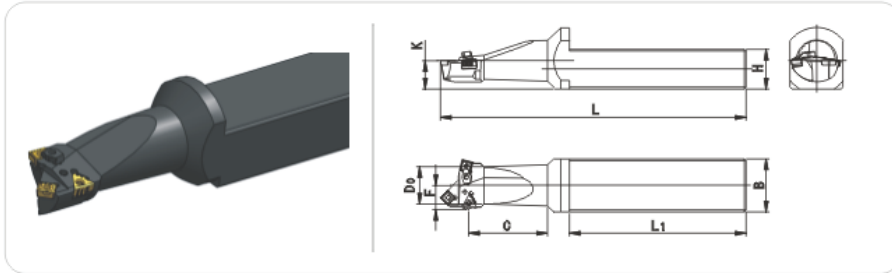


### (3) Tool shank for papilionaceous threading inserts

### (3) Tool shank for papilionaceous threading inserts

#### Square multiduty tool shank for papilionaceous round internal threading inserts

#### Square multiduty tool shank for papilionaceous round internal threading inserts



Type	Ordering code	Working range	Dimension								
			L	L <sub>1</sub>	D <sub>0</sub>	H	K	B	C	F	λ
A	P10 (8) N2-MSKNR12/12-AS45×32	2 <sup>3</sup> / <sub>8</sub> "~3 <sup>1</sup> / <sub>2</sub> "	347	200	48	45	32	60	89	27	70'

Type	Ordering code	Working range	Dimension									Machine tool
			L	L <sub>1</sub>	D <sub>0</sub>	H	K	B	C	F	λ	
B	P10 (8) N2-MSKNR15/12-BS48×32	4"~5 <sup>1</sup> / <sub>2</sub> "	365	180	54	48	32	69	130	33	50'	OK1312 Q1319
	P10 (8) N2-MSKNR15/12-BS55×36		385	200	54	55	36	73	130	33	50'	S1-245 S1-282
C	P10 (8) N2-MSKNR15/12-CS48×32	6 <sup>5</sup> / <sub>8</sub> "~8 <sup>5</sup> / <sub>8</sub> "	382	180	64	48	32	71	143	39	30'	OK1312 Q1319
	P10 (8) N2-MSKNR15/12-CS55×36		402	200	64	55	36	75	143	39	30'	S1-245 S1-282
D	P10 (8) N2-MSKNR15/12-DS55×36	9 <sup>5</sup> / <sub>8</sub> "~13 <sup>3</sup> / <sub>8</sub> "	410	200	72	55	36	80	160	45	15'	

Accessory	Insert			Shim		Clamp
Pic.						
Code	B8N2-3H B10N2-4H	SNMG120408	SCMT120408	169.523	S12B-6.8	YMA-10

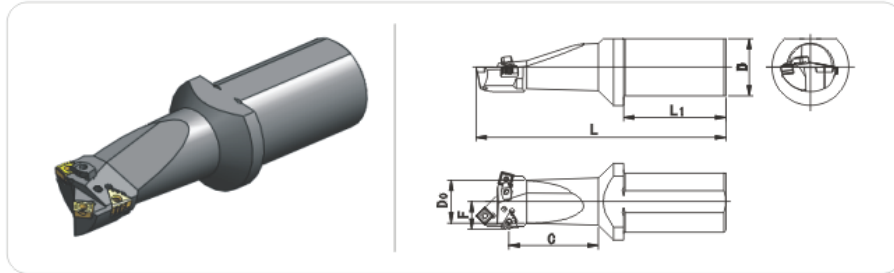
Accessory	Insert			Shim		
Pic.						
Code	B8N2-3H B10N2-4H	SNMG120408	SNMG150616	169.523	S12B-6.8	S15B-7.8

Accessory	Oblique rod	Lock screw	Screw pin	Screw	Wrench	Wrench
Pic.						
Code	φ4	M6	SLX-5	M5×14	T20	S3

Accessory	Oblique rod	Lock screw	Screw pin	Clamp	Wrench
Pic.					
Code	φ4	M6	SLX-5/SLX-6	YMA-10/YMA-15	S3

### (3) Tool shank for papilionaceous threading inserts

#### Round multiduty tool shank for papilionaceous round internal threading inserts



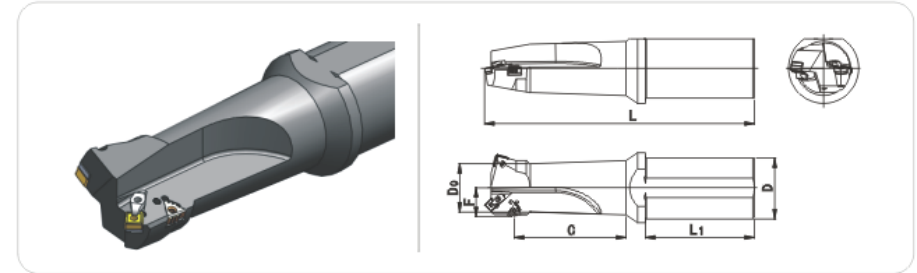
Type	Ordering code	Working range	Dimension						
			L	L <sub>1</sub>	D <sub>0</sub>	D	C	F	λ
A	P10 (8) N2-MSKNR12/12-AR50×90	2 3/8" ~ 3 1/2"	233	90	48	50	87	29	70'
	P10 (8) N2-MSKNR12/12-AR80×100		243	100	48	60	87	29	70'
	P10 (8) N2-MSKNR12/12-AR80×140		283	140	48	80	87	29	70'

Accessory	Insert			Shim		Clamp
Pic.						
Code	B8N2-3H B10N2-4H	SNMG120408	SCMT120408	169.523	S12B-6.8	YMA-10

Accessory	Oblique rod	Lock screw	Screw pin	Screw	Wrench	Wrench
Pic.						
Code	φ4	M6	SLX-5	M5×15	T20	S3

### (3) Tool shank for papilionaceous threading inserts

#### Round multiduty tool shank for papilionaceous round internal threading inserts



Type	Ordering code	Working range	Dimension							Machine Tool
			L	L <sub>1</sub>	D <sub>0</sub>	D	C	F	λ	
B	P10 (8) N2-MSKNR15/12-BR80×100	4" ~ 5 1/2"	290	100	54	60	130	33	50'	CK7840
	P10 (8) N2-MSKNR15/12-BR80×140		330	140	54	80	130	33	50'	CK3263B
C	P10 (8) N2-MSKNR15/12-OR80×100	6 5/8" ~ 8 5/8"	307	100	64	80	143	39	30'	CK7840
	P10 (8) N2-MSKNR15/12-OR80×140		347	140	64	80	143	39	30'	CK3263B
D	P10 (8) N2-MSKNR15/12-DR80×100	9 5/8" ~ 13 3/8"	315	100	72	60	155	45	15'	CK7840
	P10 (8) N2-MSKNR15/12-DR80×140		355	140	72	80	155	45	15'	CK3263B

Accessory	Insert			Shim		
Pic.						
Code	B8N2-3H B10N2-4H	SNMG120408	SNMG150616	169.523	S12B-6.8	S15B-7.8

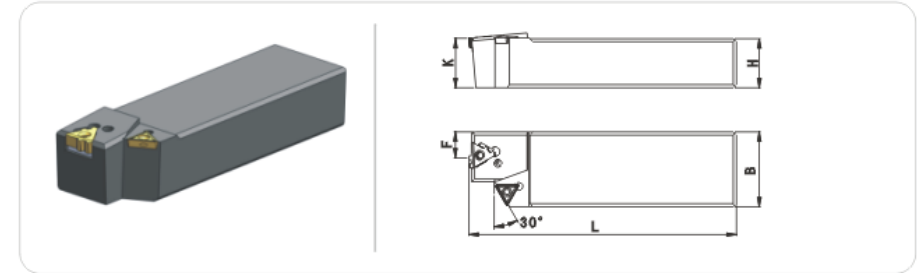
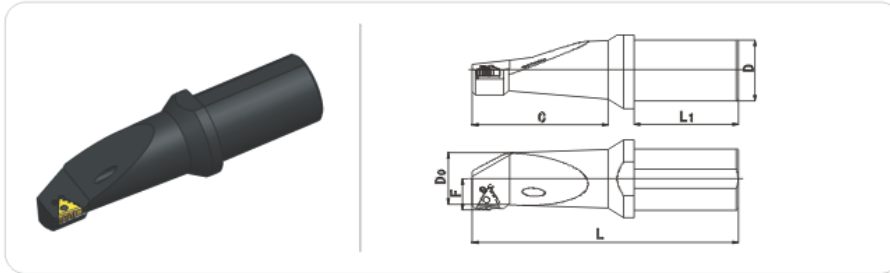
Accessory	Oblique rod	Lock screw	Screw pin	Clamp	Wrench
Pic.					
Code	φ4	M6	SLX-5/SLX-6	YMA-10/YMA-15	S3/S4

### (3) Tool shank for papilionaceous threading inserts

### (3) Tool shank for papilionaceous threading inserts

#### Round tool shank for papilionaceous buttress internal threading inserts

#### Multiduty tool shank for papilionaceous buttress external threading inserts



Type	Ordering code	Working range	Dimension							Machine Tool
			L	L <sub>1</sub>	D	G	D <sub>0</sub>	F	λ	
B	P5BN2-BR50×90	4 1/2" ~ 6 5/8"	245	90	50	130	50	31	60'	CK7820 CK7832
	P5BN2-BR60×100		255	100	60	130	50	31	60'	CK7840 S1-181
	P5BN2-BR80×140		295	140	80	130	50	31	60'	CK3263
C	P5BN2-CR60×100	7" ~ 11 3/4"	283	100	60	158	56	36	40'	CK7820 CK7832
	P5BN2-CR80×140		323	140	80	158	56	36	40'	CK3263
D	P5BN2-DR60×100	13 3/8" ~ 20"	300	100	60	175	60	43	20'	CK7840 S1-181
	P5BN2-DR80×140		340	140	80	175	60	43	20'	CK3263

Type	Ordering code	Working range	Dimension					
			L	H	K	F	B	λ
B	P5BW2-B32X-TCMX	4 1/2" ~ 6 5/8"	170	31.5	32	15	45	60'
C	P5BW2-C32X-TCMX	7" ~ 11 3/4"	170	31.5	32	15	45	40'
D	P5BW2-D32X-TCMX	13 3/8" ~ 20"	170	31.5	32	15	45	20'

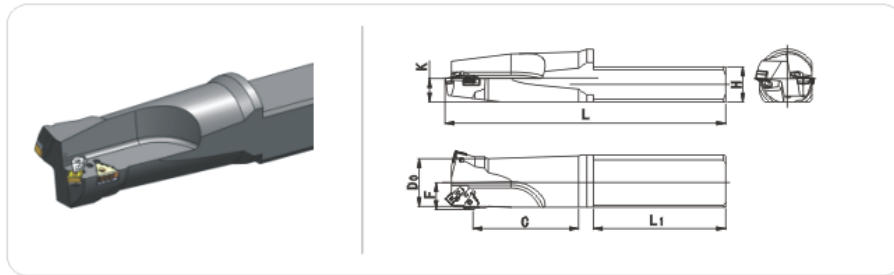
Accessory	Insert	Shim	Oblique rod	Lock screw	Wrench
Plc.					
Code	B5BN2-3	169.973	φ4	M6	S3

Accessory	Insert	Shim	Oblique rod
Plc.			
Code	B5BW2-2	TCMT16T308	φ4

Accessory	Lock screw	Screw	Wrench	Wrench
Plc.				
Code	M6	M4×12	T15	S3

### (3) Tool shank for papilionaceous threading inserts

#### Square multiduty tool shank for papilionaceous buttress external threading inserts



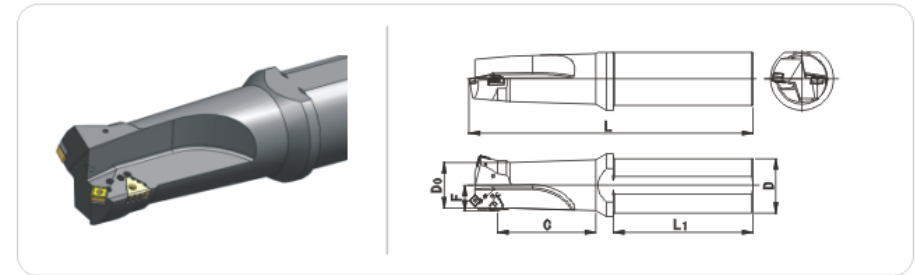
Type	Ordering code	Working range	Dimension								Machine Tool
			L	L <sub>1</sub>	D <sub>0</sub>	H	K	C	F	λ	
B	P5BN2-MSKNR15/12-BS48×32	4 $\frac{1}{2}$ "~6 $\frac{5}{8}$ "	385	180	54	48	32	130	33	50'	S1-127 S1-334
	P5BN2-MSKNR15/12-BS55×36		385	200	54	55	36	130	33	50'	S1-245 S1-262
C	P5BN2-MSKNR15/12-CS48×32	7"~11 $\frac{3}{4}$ "	382	180	64	48	32	140	39	30'	S1-127 S1-334
	P5BN2-MSKNR15/12-CS55×36		402	200	64	55	36	140	39	30'	S1-245 S1-262
D	P5BN2-MSKNR15/12-DS55×36	13 $\frac{3}{8}$ "~20"	410	200	72	55	36	155	45	15'	S1-245 S1-262

Accessory	Insert			Shim		
Pic.						
Code	B5BN2-3	SNMG120408	SNMG150616	169.973	S12B-6.8	S15B-7.8

Accessory	Oblique rod	Lock screw	Screw pin	Clamp	Wrench
Pic.					
Code	φ4	M6	SLX-5/SLX-6	YMA-10/YMA-15	S3/S4

### (3) Tool shank for papilionaceous threading inserts

#### Round multiduty tool shank for papilionaceous buttress external threading inserts



Type	Ordering code	Working range	Dimension							Machine Tool
			L	L <sub>1</sub>	D <sub>0</sub>	D	C	F	λ	
B	P5BN2-MSKNR15/12-BR60×100	4 $\frac{1}{2}$ "~6 $\frac{5}{8}$ "	290	100	54	60	130	33	50'	CK7840 CK7832
	P5BN2-MSKNR15/12-BR80×140		330	140	54	80	130	33	50'	CK3263
C	P5BN2-MSKNR15/12-CR60×100	7"~11 $\frac{3}{4}$ "	307	100	64	60	140	39	30'	CK7840 CK7832
	P5BN2-MSKNR15/12-CR80×140		347	140	64	80	140	39	30'	CK3263
D	P5BN2-MSKNR15/12-DR60×100	13 $\frac{3}{8}$ "~20"	315	100	72	60	155	45	15'	CK7840 CK7832
	P5BN2-MSKNR15/12-DR80×140		355	140	72	80	155	45	15'	CK3263

Accessory	Insert			Shim		
Pic.						
Code	B5BN2-3	SNMG120408	SNMG150616	169.973	S12B-6.8	S15B-7.8

Accessory	Oblique rod	Lock screw	Screw pin	Clamp	Wrench
Pic.					
Code	φ4	M6	SLX-5/SLX-6	YMA-10/YMA-15	S3/S4

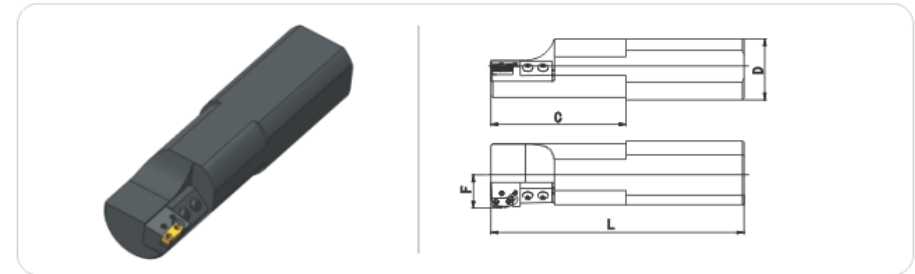
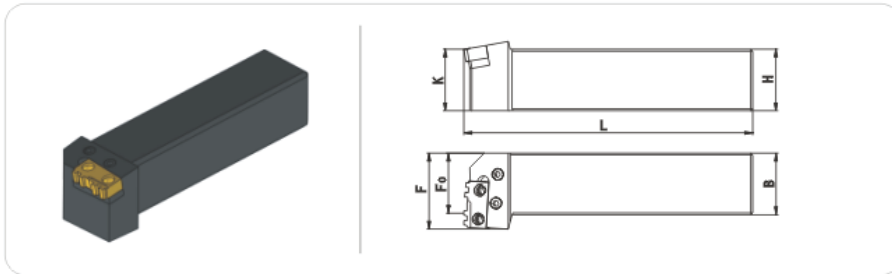


### (4) Tool shank for double-hole series threading inserts

### (4) Tool shank for double-hole series threading inserts

#### Tool shank for double-hole series external threading inserts

#### Tool shank for double-hole series internal threading inserts



Type	Ordering code	Working range	Dimension							Machine Tool
			L	H	B	K	F	F <sub>0</sub>	λ	
A	DP8 (5B) W2-A32×32	2 <sup>3</sup> / <sub>8</sub> "~3 <sup>1</sup> / <sub>2</sub> "	175	32	32	32	39	31	70'	ØK1312 S1-944B S1-245 S1-262 S1-127
	DP8 (5B) W2-A40×40		175	40	40	40	47	39	70'	
B	DP8 (5B) W2-B32×32	4"~5 <sup>1</sup> / <sub>2</sub> "	175	32	32	32	39	31	50'	
	DP8 (5B) W2-B40×40		175	40	40	40	47	39	50'	
C	DP8 (5B) W2-C32×32	6 <sup>5</sup> / <sub>8</sub> "~8 <sup>5</sup> / <sub>8</sub> "	175	32	32	32	39	31	30'	
	DP8 (5B) W2-C40×40		175	40	40	40	47	39	30'	
D	DP8 (5B) W2-D32×32	9 <sup>5</sup> / <sub>8</sub> "~13 <sup>3</sup> / <sub>8</sub> "	175	32	32	32	39	31	15'	
	DP8 (5B) W2-D40×40		175	40	40	40	47	39	15'	

Ordering code	Working range	Dimension				
		L	C	D	F	λ
DP8 (5B) N2-BR80×300	4"~5 <sup>1</sup> / <sub>2</sub> "	300	180	80	40	50'

Accessory	Insert block	Adjustment screw	Screw
Pic.			
Code	DP8 (5B) N2-0A17	M6	Sm8

Accessory	Insert	Shim	Lever	Spring pin	Clamp bolt	Wrench
Pic.						
Code	S5BW2-2 S8BW2-3	DP8 (5B) W2-DD	G0620	Ht0808	YLB8-20	S3

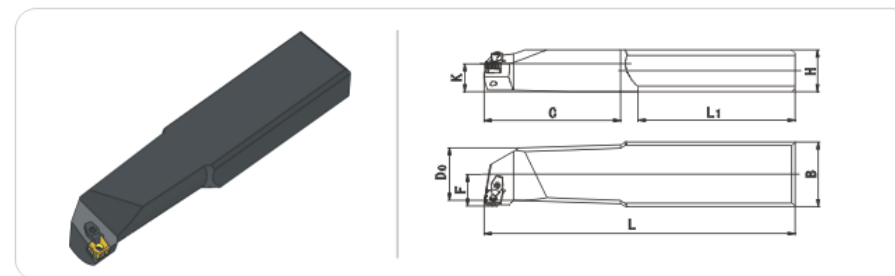
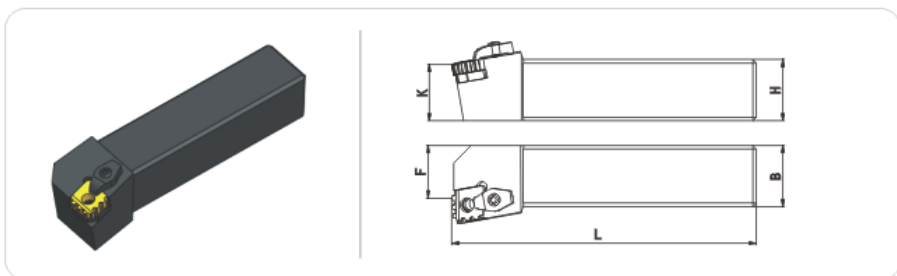
Accessory	Insert	Shim	Lever	Spring pin	Clamp bolt	Wrench
Pic.						
Code	S8N2-4 S5BN2-2	DP8 (5B) N2-DD	G0620	Ht0808	YLB8-20	S3/S5

## (5) Tool shank for diamond series threading inserts

## (5) Tool shank for diamond series threading inserts

### Tool shank for diamond series external threading inserts

### Square tool shank for diamond series internal threading inserts



Type	Ordering code	Working range	Dimension						Machine Tool
			L	H	K	B	F	λ	
B	M5BW2-B35×32	4 1/2" ~ 6 5/8"	175	35	32	35	31	60'	QK1312
C	M5BW2-C35×32	7" ~ 11 3/4"	175	35	32	35	31	40'	S1-245
D	M5BW2-D35×32	11 3/8" ~ 20"	175	35	32	35	31	20'	S1-127

Type	Ordering code	Working range	Dimension									Machine Tool
			L	L1	H	G	K	D <sub>0</sub>	B	F	λ	
B	M5BN2-B348×32	4 1/2" ~ 6 5/8"	335	180	48	130	32	50	74	31	60'	S1-127
	M5BN2-B355×36		355	200	55	130	36	50	77	31	60'	S1-245
C	M5BN2-C348×32	7" ~ 11 3/4"	358	180	48	158	32	56	74	36	40'	S1-127
	M5BN2-C355×36		378	200	55	158	36	56	77	36	40'	S1-245
D	M5BN2-D355×36	11 3/8" ~ 20"	395	200	55	175	36	60	81	43	20'	S1-262

Accessory	Insert	Shim	Clamp	Screw pin	Wrench
Pic.					
Code	K5BW2-3	K5BW2-DD	YMA-15	SLX-7	S4

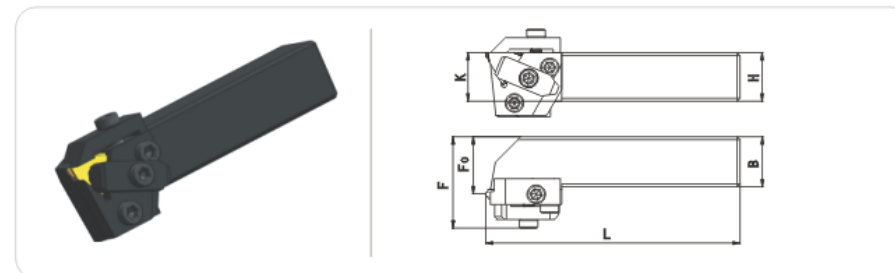
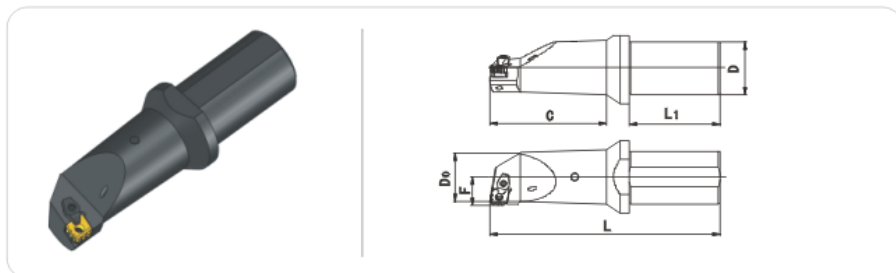
Accessory	Insert	Shim	Clamp	Screw pin	Wrench
Pic.					
Code	K5BN2-3	K5BN2-DD	YMA-15	SLX-7	S4

## (5) Tool shank for diamond series threading inserts

## (6) Tool shank for vertical series threading inserts

### Round tool shank for diamond series internal threading inserts

### Tool shank for vertical buttress threading inserts



Type	Ordering code	Working range	Dimension							Machine Tool
			L	L <sub>1</sub>	D	C	D <sub>0</sub>	F	λ	
B	M5BN2-BR50×90	4 $\frac{1}{2}$ "~6 $\frac{5}{8}$ "	245	90	50	130	50	31	60'	CK7820 CK7832
	M5BN2-BR60×100		255	100	60	130	50	31	60'	CK7840 S1-181
	M5BN2-BR80×140		295	140	80	130	50	31	60'	CK3263
C	M5BN2-CR60×100	7"~11 $\frac{3}{4}$ "	283	100	60	158	56	36	40'	CK7840 S1-181
	M5BN2-CR80×140		323	140	80	158	56	36	40'	CK3263
D	M5BN2-DR60×100	13 $\frac{3}{8}$ "~20"	300	100	60	175	60	43	20'	CK7840 S1-181
	M5BN2-DR80×140		340	140	80	175	60	43	20'	CK3263

Type	Ordering code	Working range	Dimension							Machine Tool
			L	H	K	B	F	F <sub>0</sub>	λ	
B	G5BWL3-B35×32	4 $\frac{1}{2}$ "~6 $\frac{5}{8}$ "	175	35	32	35	56	40	60'	QK1312 S1-344B
	G5BWL3-B43×40		175	43	40	43	64	48	60'	
C	G5BWL3-C35×32	7"~11 $\frac{3}{4}$ "	175	35	32	35	56	40	40'	S1-245 S1-262
	G5BWL3-C43×40		175	43	40	43	64	48	40'	
D	G5BWL3-D35×32	13 $\frac{3}{8}$ "~20"	175	35	32	35	56	40	20'	S1-127
	G5BWL3-D43×40		175	43	40	43	64	48	20'	

Accessory	Insert	Shim	Clamp	Screw pin	Wrench
Plc.					
Code	K5BN2-3	K5BN2-DD	YMA-15	SLX-7	S4

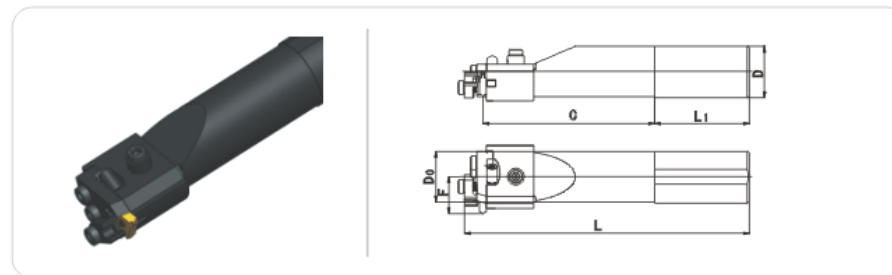
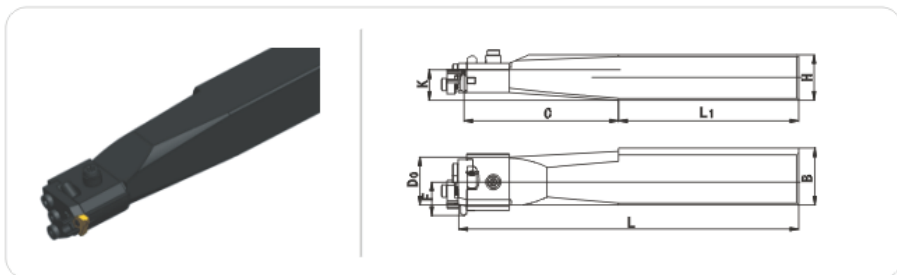
Accessory	Insert	Glutting	Clamp	Chipbreaker	Screw	Wrench
Plc.						
Code	5BWL3	G5BWL3-XK	G5BWL3-YB	G5BWL3-DXQ	M8×25 M8×35	S5

## (6) Tool shank for vertical series threading inserts

## (6) Tool shank for vertical series threading inserts

### square tool shank for vertical buttress threading inserts

### round tool shank for vertical buttress threading inserts



Type	Ordering code	Working range	Dimension									Machine Tool
			L	L1	H	C	K	F	D <sub>0</sub>	B	λ	
B	G5BNL3-BS48×32	4 1/2" ~ 6 5/8"	340	180	48	135	32	31	50	74	60'	S1-127 S1-344
	G5BNL3-BS55×36		360	200	55	135	36	31	50	77	60'	S1-245 S1-262
C	G5BNL3-CS48×32	7" ~ 11 3/4"	363	180	48	163	32	36	56	74	40'	S1-127 S1-344
	G5BNL3-CS55×36		383	200	55	163	36	36	56	77	40'	S1-245 S1-262
D	G5BNL3-DS55×36	13 3/8" ~ 20"	400	200	55	180	36	43	60	81	20'	S1-127 S1-344

Type	Ordering code	Working range	Dimension							Machine Tool
			L	L1	D	C	D <sub>0</sub>	F	λ	
B	G5BNL3-BR50×90	4 1/2" ~ 6 5/8"	250	90	50	135	50	31	60'	CK7820 CK7832
	G5BNL3-BR60×100		260	100	60	135	50	31	60'	CK7840 S1-181
	G5BNL3-BR80×140		300	140	80	135	50	31	60'	CK3263
C	G5BNL3-CR50×90	7" ~ 11 3/4"	273	90	50	163	56	36	40'	CK7820 CK7832
	G5BNL3-CR60×100		283	100	60	163	56	36	40'	CK7840 S1-181
	G5BNL3-CR80×140		323	140	80	163	56	36	40'	CK3263
D	G5BNL3-DR50×90	13 3/8" ~ 20"	290	90	50	180	60	43	20'	CK7820 CK7832
	G5BNL3-DR60×100		300	100	60	180	60	43	20'	CK7840 S1-181
	G5BNL3-DR80×140		340	140	80	180	60	43	20'	CK3263

Accessory	Insert	Glutting	T screw	Nut
Pic.				
Code	5BNL3	G5BNL3-XK	G5BNL3-TXLD	G5BNL3-LM

Accessory	Insert	Glutting	T screw	Nut
Pic.				
Code	5BNL3	G5BNL3-XK	G5BNL3-TXLD	G5BNL3-LM

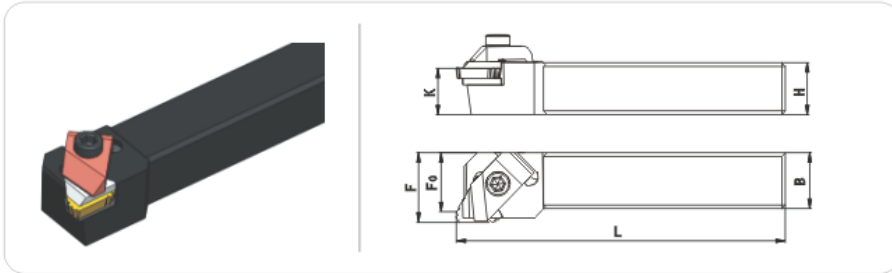
Casing	Clamp	Screw	Wrench
G5BNL3-XT	G5BNL3-YB	M8×25 M8×35	S5

Casing	Clamp	Screw	Wrench
G5BNL3-XT	G5BNL3-YB	M8×25 M8×35	S5



## (7) Tool shank for triangle threading inserts

### Tool shank for triangle external threading inserts

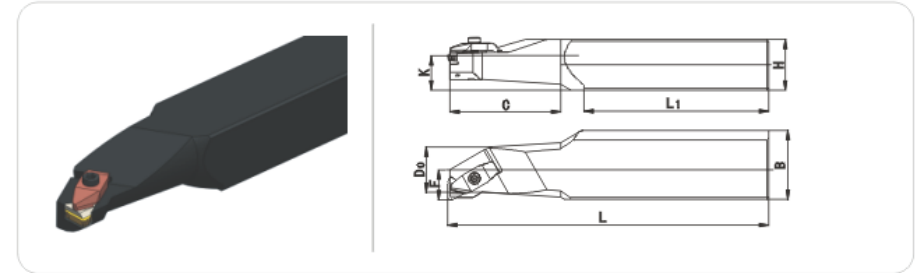


Type	Ordering code	Working range	Dimension							Machine Tool
			L	H	K	B	F	F <sub>0</sub>	λ	
A	J10 (8) W3-A28×25	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	175	28	25	30	35	30	70'	QK1312
	J10 (8) W3-A35×32		175	35	32	35	40	35	70'	
	J10 (8) W3-A40×40		175	40	40	40	45	40	70'	
B	J10 (8) W3-B35×32	4"~5 $\frac{1}{2}$ "	175	35	32	35	40	35	50'	S1-344B
	J10 (8) W3-B40×40		175	40	40	40	45	40	50'	
C	J10 (8) W3-C35×32	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	175	35	32	35	40	35	30'	S1-262
	J10 (8) W3-C40×40		175	40	40	40	45	40	30'	
D	J10 (8) W3-D35×32	9 $\frac{5}{8}$ "~13 $\frac{3}{8}$ "	175	35	32	35	40	35	15'	S1-127
	J10 (8) W3-D40×40		175	40	40	40	45	40	15'	

Accessory	Insert	Shim	Screw	Chipbreaker	Drilling with The platen	Clamp screw	Wrench
Plc.							
Code	8W3-2 10W3-2	J10 (8) W3-DD	M4×8	J10 (8) W3-DXQ	J4 (5) W3-YB	M8×25	S5

## (7) Tool shank for triangle threading inserts

### Square tool shank for triangle internal threading inserts



Type	Ordering code	Working range	Dimension								Machine Tool	
			L	L <sub>1</sub>	H	G	K	F	Do	B		λ
A	J10 (8) N3-AS40×25	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	265	150	40	90	25	26	42	65	70'	QK1312
	J10 (8) N3-AS48×32		295	180	48	90	32	26	42	74	70'	
B	J10 (8) N3-BS48×32	4"~5 $\frac{1}{2}$ "	325	180	48	120	32	31	50	74	50'	S1-262
	J10 (8) N3-BS55×36		345	200	55	120	36	31	50	77	50'	
C	J10 (8) N3-CS48×32	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	348	180	48	148	32	36	56	74	30'	QK1312
	J10 (8) N3-CS55×36		368	200	55	148	36	36	56	77	30'	
D	J10 (8) N3-DS55×36	9 $\frac{5}{8}$ "~13 $\frac{3}{8}$ "	385	200	55	165	36	43	60	81	15'	S1-262

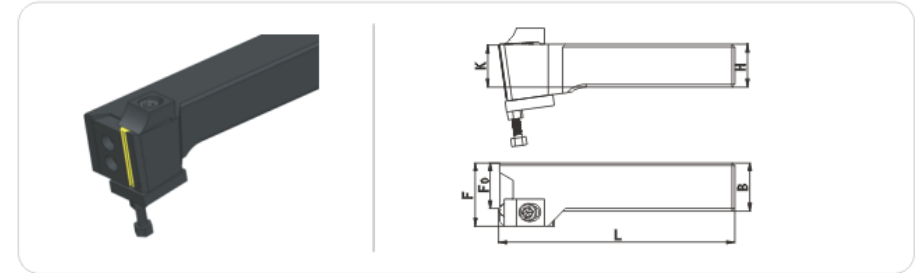
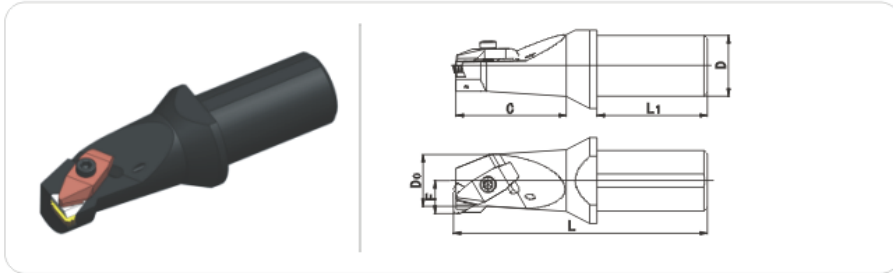
Accessory	Insert	Shim	Screw	Chipbreaker	Drilling with The platen	Clamp screw	Wrench
Plc.							
Code	8N3-2 10N3-2	J10 (8) N3-DD	M4×8	J10 (8) N3-DXQ	J4 (5) N3-YB	M8×25	S5

## (7) Tool shank for triangle threading inserts

## (8) Tool shank for strip threading inserts

### Round tool shank for triangle internal threading inserts

### Tool shank for strip double-tooth external threading inserts



Type	Ordering code	Working range	Dimension							Machine Tool
			L	L <sub>1</sub>	D	C	D <sub>0</sub>	F	λ	
A	J10 (8) N3-AR40×80	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	195	80	40	90	42	26	70'	CK7815
	J10 (8) N3-AR50×90		205	90	50	90	42	26	70'	CK7832
	J10 (8) N3-AR60×100		215	100	60	90	42	26	70'	CK7840
	J10 (8) N3-AR80×140		250	140	80	90	42	26	70'	CK3236
B	J10 (8) N3-BR50×90	4"~5 $\frac{1}{2}$ "	235	90	50	120	50	31	50'	CK7820
	J10 (8) N3-BR60×100		245	100	60	120	50	31	50'	CK7840
	J10 (8) N3-BR80×140		285	140	80	120	50	31	50'	CK3263
C	J10 (8) N3-CR60×100	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	268	100	60	148	56	36	30'	CK7840
	J10 (8) N3-CR80×140		308	140	80	148	56	36	30'	CK3263
D	J10 (8) N3-DR60×100	9 $\frac{5}{8}$ "~13 $\frac{3}{8}$ "	285	100	60	165	60	43	15'	CK7840
	J10 (8) N3-DR80×140		325	140	80	165	60	43	15'	CK3263

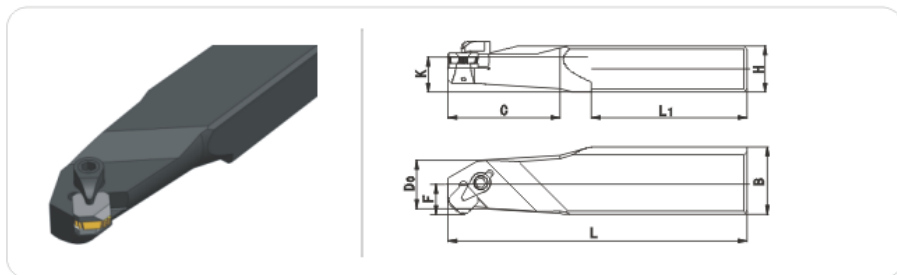
Type	Ordering code	Working range	Dimension							Machine Tool
			L	H	K	B	F	F <sub>0</sub>	λ	
A	F10 (8) W1-2A32×32	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	175	32	32	36	43	30	70'	CK1312
B	F10 (8) W1-2BC32×32	4"~8 $\frac{5}{8}$ "	175	32	32	36	43	30	30'	Q1319
D	F10 (8) W1-2D32×32	9 $\frac{5}{8}$ "~13 $\frac{3}{8}$ "	175	32	32	36	43	30	15'	S1-127 S1-344B

Accessory	Insert	Clamp	Adjustment Screw	Retaining Plate	Wedge	screw	Wrench
Pic.							
Code	10W1-2 8W1-2	F10 (8) W1-DXB	M6×35	F10 (8) W1-ZCB	F10 (8) W1-XK	M8×25	S5

Accessory	Insert	Shim	Screw	Chipbreaker	Drilling with The platen	Clamp screw	Wrench
Pic.							
Code	8N3-2 10N3-2	J10 (8) N3-DD	M4×8	J10 (8) N3-DXQ	J4 (5) N3-YB	M8×25	S5

## (9) Tool shank for quadrilateral threading inserts

### square tool shank for quadrilateral internal threading inserts

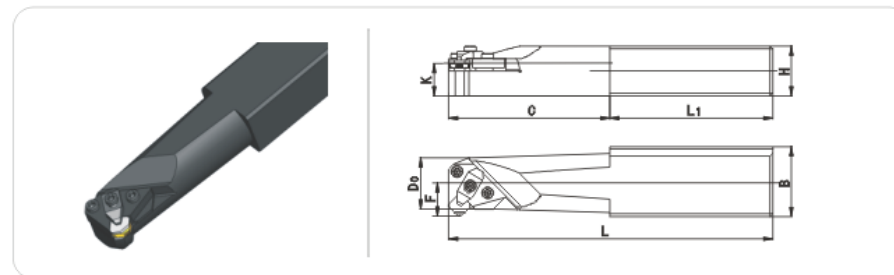


Type	Ordering code	Working range	Dimension									Machine Tool
			L	L <sub>1</sub>	H	C	K	F	D <sub>0</sub>	B	λ	
A	M10 (8) N4-AS40×25	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	275	150	40	100	25	28	42	66	70'	0620改
	M10 (8) N4-AS48×32		305	180	48	100	32	28	42	74	70'	OK1312 Q1319

Accessory	Insert	Shim	Screw	Chpbreaker	Clamp	Screw	Wrench
Plc.							
Code	10N4-2	M10 (8) N4-DD	M4×8	M10 (8) N4-DXQ	YMB13-20	2YLD-M10	S5

## (9) Tool shank for quadrilateral threading inserts

### square tool shank for quadrilateral internal threading inserts



Type	Ordering code	Working range	Dimension									Machine Tool
			L	L <sub>1</sub>	H	C	K	F	D <sub>0</sub>	B	λ	
B	C10 (8) N4-BS48×32	4"~5 $\frac{1}{2}$ "	335	180	48	130	32	31	50	74	50'	OK1312 Q1319
	C10 (8) N4-BS55×36		335	180	55	130	36	31	50	77	50'	
C	C10 (8) N4-CS48×32	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	358	180	48	158	32	35	56	74	30'	S1-262 S1-246
	C10 (8) N4-CS55×36		358	180	55	158	36	35	56	77	30'	
D	C10 (8) N4-DS55×36	9 $\frac{5}{8}$ "~13 $\frac{3}{8}$ "	375	180	55	175	36	37	60	81	15'	

Accessory	Insert	Chpbreaker	Shim	Screw
Plc.				
Code	8N4-2/10N4-2	M10 (8) N4-DXQ	M10 (8) N4-DD	M4×8

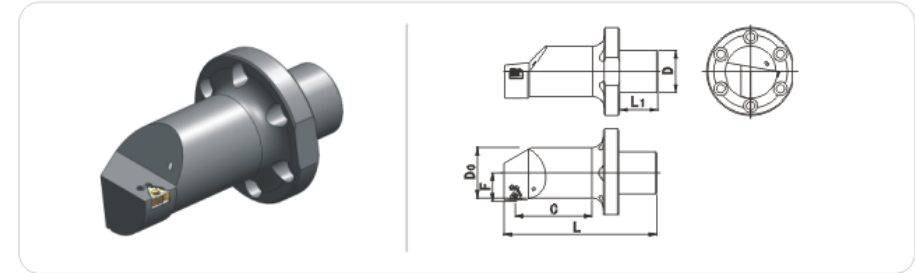
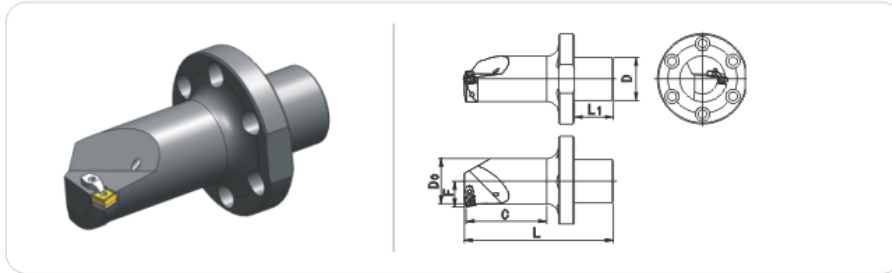
Clamp	Glutting	Screw	Washer	Wrench
C10 (8) N4-YB	C10 (8) N4-XK	M8×25/M8×35	GB848-85-8-140HV	S5

## (10) Tool shank for 406 machine tool

## (10) Tool shank for 406 machine tool






### Tool shank for 406 boring tool






### Tool shank for 406 round chasing tool



Ordering code	Working range	Dimension					
		L	L <sub>1</sub>	D <sub>0</sub>	D	C	F
406-A1101L	2 <sup>3</sup> / <sub>8</sub> "	159	50	44	55	71	26
406-A1111L	2 <sup>7</sup> / <sub>8</sub> "	170	50	52	55	82	30
406-A1121L	3 <sup>1</sup> / <sub>2</sub> "	176	50	50	55	88	29
406-A1121L-15		176	50	50	55	88	32
406-A4105L	4"	205	50	66	55	117	34
406-A1141L	4 <sup>1</sup> / <sub>2</sub> "	176	50	50	55	88	29
406-A8111L		180	50	70	55	92	38
406-A8121L	5"	190	50	58	55	102	32
406-A1131L	5 <sup>1</sup> / <sub>2</sub> "	205	50	60	55	117	33
406-A1131L-15		205	50	70	55	117	40

Ordering code	Working range	Dimension						
		L	L <sub>1</sub>	D <sub>0</sub>	D	C	F	λ
406-A1108L	2 <sup>3</sup> / <sub>8</sub> "	183	50	48	55	83	28.5	70'
406-A1112L	2 <sup>7</sup> / <sub>8</sub> "	195	50	55	55	95	32	70'
406-A1122L	3 <sup>1</sup> / <sub>2</sub> "	200	50	58	55	100	32.2	50'
406-A4106L	4"	220	50	70	55	120	40.5	50'
406-A1142L	4 <sup>1</sup> / <sub>2</sub> "	200	50	58	55	100	32.2	50'
406-A8112L		190	50	66	55	90	36	50'
406-A8122L	5"	200	50	66	55	100	37.9	50'
406-A1132L	5 <sup>1</sup> / <sub>2</sub> "	215	50	70	55	115	40.5	50'

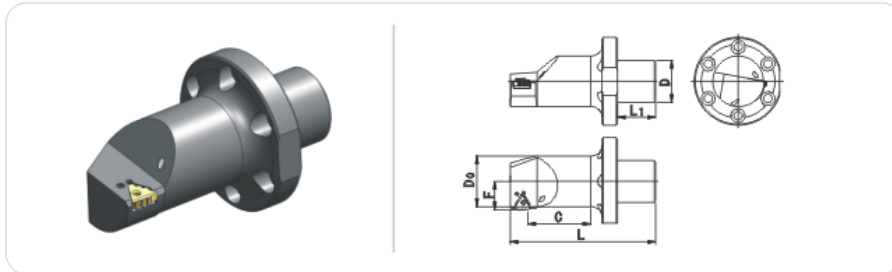
Accessory	Insert	Shim	Clamp	Screw pin	Wrench
Plc.					
Code	SNMG120408 SNMG150608	S12B-6.8 S15B-7.8	YMA-10/YMA-15	SLX-5/SLX-6	S3/S4

Accessory	Insert	Shim	Oblique rod	Lock screw	Wrench
Plc.					
Code	B8N2-3H/B10N2-4H	169.523	φ4	M6	S3



## (10) Tool shank for 406 machine tool

### Tool shank for 406 horizontal buttress chasing tool

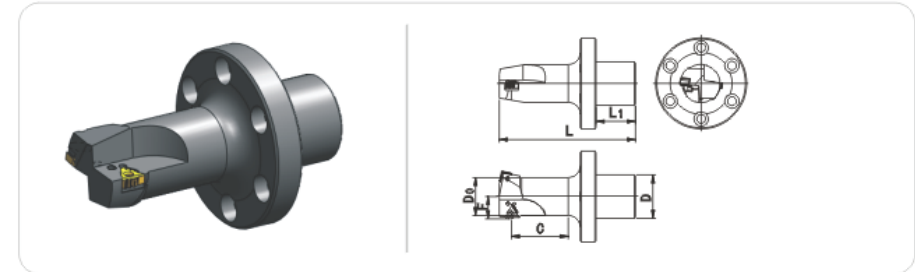


Ordering code	Working range	Dimension						
		L	L <sub>1</sub>	D <sub>0</sub>	D	C	F	λ
406-A1142L-P5BN2	4 $\frac{1}{2}$ "	200	50	58	55	100	32.2	50'
406-A8122L-P5BN2	5"	200	50	66	55	100	37.9	50'
406-A1132L-P5BN2	5 $\frac{1}{2}$ "	215	50	70	55	115	40.5	50'

Accessory	Insert	Shim	Oblique rod	Lock screw	Wrench
Pic.					
Code	B5BN2-3	169.973	φ4	M6	S3

## (10) Tool shank for 406 machine tool

### 406 multiduty tool shank



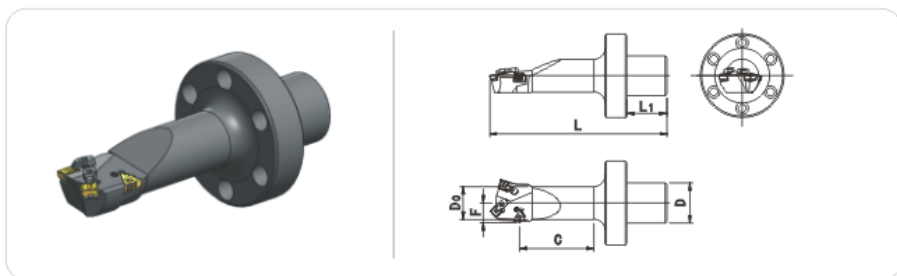
Ordering code	Working range	Dimension						
		L	L <sub>1</sub>	D <sub>0</sub>	D	C	F	λ
406-A1112L-MSKNR15	2 $\frac{7}{8}$ "	195	50	48	55	95	30	70'
406-A1132L-MSKNR19	5 $\frac{1}{2}$ "	215	50	64	55	115	37	50'

Accessory	Insert		Shim		
Pic.					
Code	B8N2-3H B10N2-4H	SNMG190620	SNMG150616	169.523	S15B-7.8 S19B-8.8

Accessory	Oblique rod	Lock screw	Screw pin	Clamp	Wrench
Pic.					
Code	φ4	M6	SLX-6/SLX-7	YMA-15/YMA-19	S3/S4/S5

## (10) Tool shank for 406 machine tool

### 406 multiduty tool shank



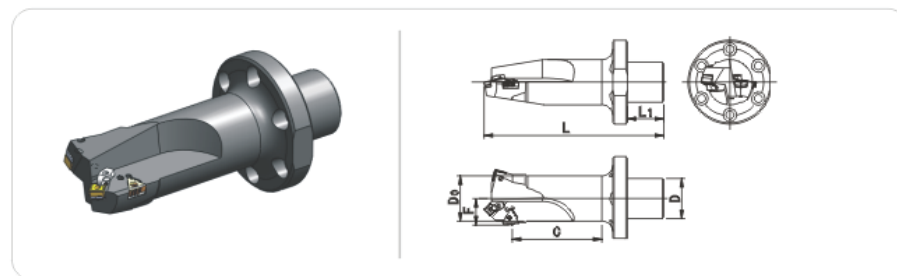
Type	Ordering code	Working range	Dimension						
			L	L <sub>1</sub>	D <sub>0</sub>	D	C	F	λ
A	406-A1112L-MSKNR12/12	2 $\frac{7}{8}$ "	243	55	48	55	102	30	70'

Accessory	Insert		Shim	
Pic.				
Code	B8W2-3H/B10W2-4H	SNMG120408	169.523	S12B-6.8

Accessory	Oblique rod	Lock screw	Clamp	Wrench
Pic.				
Code	φ4	M6	YMA-10	S3

## (10) Tool shank for 406 machine tool

### 406 multiduty tool shank



Type	Ordering code	Working range	Dimension						
			L	L <sub>1</sub>	D <sub>0</sub>	D	C	F	λ
B	406-A1132L-MSKNR15/12	5 $\frac{1}{2}$ "	247	55	64	55	160	37	50'

Accessory	Insert			Shim		
Pic.						
Code	B8N2-3H B10N2-4H	SNMG120408	SNMG150616	169.523	S12B-6.8	S15B-7.8

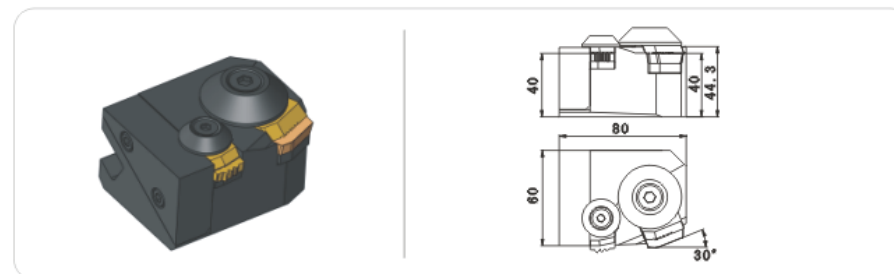
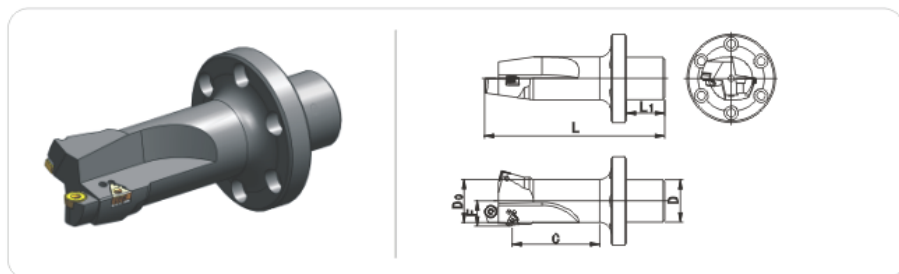
Accessory	Oblique rod	Lock screw	Screw pin	Clamp	Wrench
Pic.					
Code	φ4	M6	SLX-5/SLX-6	YMA-10/YMA-15	S3/S4

# (10) Tool shank for 406 machine tool

# (11) Specific multiduty cutterblock

## 406 multiduty tool shank

## Specific multiduty cutterblock



Ordering code	Working range	Dimension						
		L	L <sub>1</sub>	D <sub>0</sub>	D	C	F	λ
406-P10 (8) N2-MSKNR12/R18	4 1/2"	235	50	62	55	114	32.7	50°

Ordering code	Insert Thyead	Shim	Chipbreaker	External face Turning	Shim	Chipbreaker
04040X						
	08W1-31 (15°) 08W1-32 (15°)	TG2-6	BXCQW1B1	C/26417	C/26418	C/26419

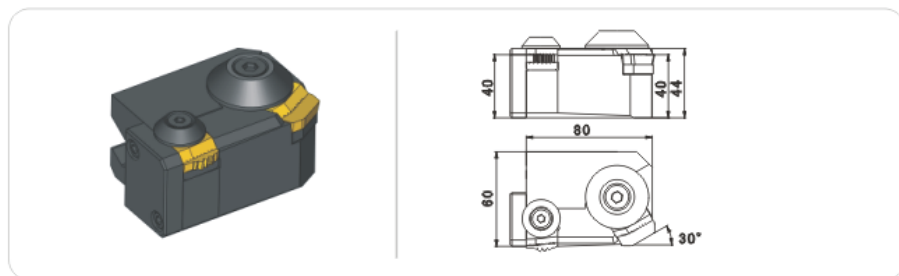
Accessory	Insert			Shim		Clamp
Pic.						
Code	B8N2-3H B10N2-4H	SNMG120408	RCMX1606M0	169.523	S12B-6.8	YMA-10



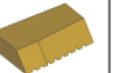



Clamp	Plate	Shim screw	Clamp screw	Plate screw	Wrench
φ40/φ24 Circle Clamp	04040 Locating Plate	M5×0.5/M6×0.75	M8/M6	M5×12	S3/S4/S5







Accessory	Oblique rod	Lock screw	Screw pin	Screw	Wrench	Wrench
Pic.						
Code	φ4	M6	SLX-5	M6	T20	S3

# (1 1) Specific multiduty cutterblock

## Specific multiduty cutterblock

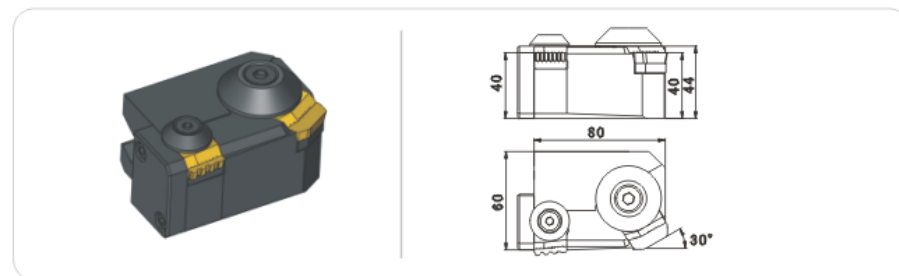




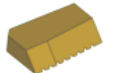
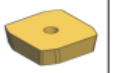
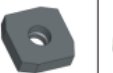
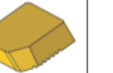
Ordering code	Insert Thyead	Shim	Chipbreaker	Enternal face Turning	Shim	Chipbreaker
04057						
	C8W1-31 (12°) C8W1-32 (12°)	C/28681	BXCQW1BII	C/26417	C/26418	C/26419

Clamp	Plate	Shim screw	Clamp screw	Plate screw	Wrench
					
Φ40/Φ24 Circle Clamp	04022DWB-1	M5×0.5/M6×0.75	M8/M6	M5×12	S3/S4/S5

# (1 1) Specific multiduty cutterblock

## Specific multiduty cutterblock



Ordering code	Insert Thyead	Shim	Chipbreaker	Enternal face Turning	Shim	Chipbreaker
04057 (PTK-B) 04057 (PTK-C) 04057 (PTK-D)						
	C5BW1-31 C5BW1-32	C/28681	BXCQW1BII	C/26417	C/26418	C/26419

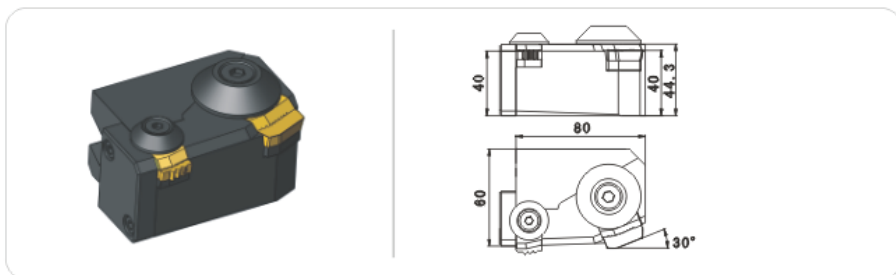
Clamp	Plate	Shim screw	Clamp screw	Plate screw	Wrench
					
Φ40/Φ24 Circle Clamp	04022DWB-1	M5×0.5/M6×0.75	M8/M6	M5×12	S3/S4/S5

Ordering code	Working range	λ
04057 (PTK-B)	4 1/2" ~ 6 5/8"	60'
04057 (PTK-C)	7" ~ 11 3/4"	40'
04057 (PTK-D)	13 3/8" ~ 20"	20'



# (1 1) Specific multiduty cutterblock

## Specific multiduty cutterblock

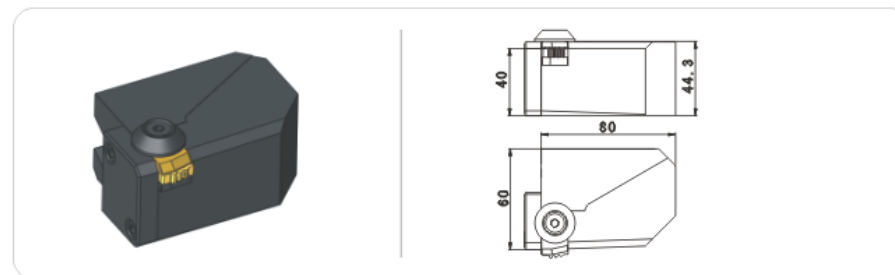


Ordering code	Insert Thyead	Shim	Chipbreaker	External face Turning	Shim	Chipbreaker
04022-1-1						
	P8W1-31 (12°)	TG2-6T	BXCQW1B1	C/26417	C/26418	C/26419

Clamp	Plate	Shim screw	Clamp screw	Plate screw	Wrench
Φ40/Φ24 Circle Clamp	04022DWB-1	M5×0.5/M6×0.75	M6/M6	M5×12	S3/S4/S5

# (1 1) Specific multiduty cutterblock

## Specific multiduty cutterblock



Ordering code	Insert Thyead	Shim	Chipbreaker	Clamp
04022-1-2				
	P8W1-33 (12°)	TG2-6T	BXCQW1B1	Φ24环形压板

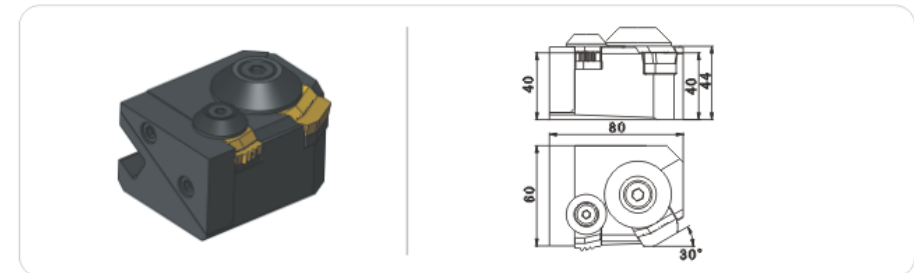
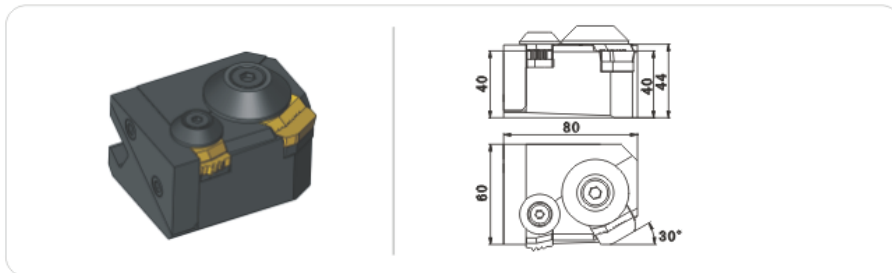
Plate	Shim screw	Clamp screw	Plate screw	Wrench
04022DWB-1	M5×0.5	M6	M5×12	S3/S4/S5

# (1 1) Specific multiduty cutterblock

# (1 1) Specific multiduty cutterblock

## Specific multiduty cutterblock

## Specific multiduty cutterblock



Ordering code	Insert	Thyeed	Shim	Chipbreaker	External face Turning	Shim	Chipbreaker
040W-26417/C8-1							
	C8W1-32 (15°)		TG2-6	BXCQW1BI	C/26417	C/26418	C/26419

Ordering code	Insert	Thyeed	Shim	Chipbreaker	External face Turning	Shim	Chipbreaker
040W-26417/C8-2							
	C8W1-32 (15°)		TG2-6	BXCQW1BI	C/26417	C/26418	C/26419

Clamp	Plate	Shim screw	Clamp screw	Plate screw	Wrench
Φ40/Φ24 Circline Clamp	04040 Locating Plate	M5×0.5/M6×0.75	M8/M6	M5×12	S3/S4/S5

Clamp	Plate	Shim screw	Clamp screw	Plate screw	Wrench
Φ40/Φ24 Circline Clamp	04040 Locating Plate	M5×0.5/M6×0.75	M8/M6	M5×12	S3/S4/S5

P.S:040w-26417/c8-1used for 8 tooth/inch round threading ,thread finishing cut,exfernal circle roughing cut.

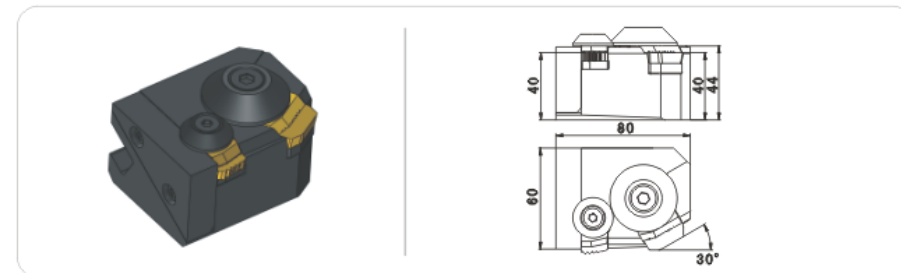
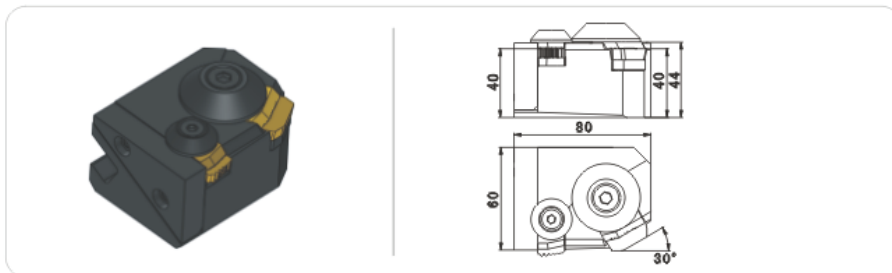
040w-26417/c8-2used for 8 tooth/inch round threading ,thread roughingcut,exfernal circle finishing cut.

# (1 1) Specific multiduty cutterblock

# (1 1) Specific multiduty cutterblock

## Specific multiduty cutterblock

## Specific multiduty cutterblock



Ordering code	Insert Thyead	Shim	Chipbreaker	External face Turning	Shim	Chipbreaker
040W-26417/ C10-1						
	C10W1-32	TG2-6	BX00W1B1	C/26417	C/26418	C/26419

Ordering code	Insert Thyead	Shim	Chipbreaker	External face Turning	Shim	Chipbreaker
040W-26417/ C10-2						
	C10W1-32	TG2-6	BX00W1B1	C/26417	C/26418	C/26419

Clamp	Plate	Shim screw	Clamp screw	Plate screw	Wrench
Φ40/Φ24 环形压板	04040 定位板	M5×0.5/M6×0.75	M8/M6	M5×12	S3/S4/S5

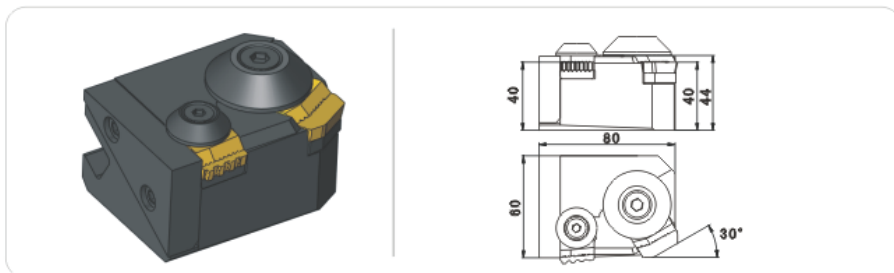
Clamp	Plate	Shim screw	Clamp screw	Plate screw	Wrench
Φ40/Φ24 环形压板	04040 定位板	M5×0.5/M6×0.75	M8/M6	M5×12	S3/S4/S5

P.S:040w-26417/c10-1 used for 10 tooth/inch round threading ,thread finishing cut,external circle roughing cut.

040w-26417/c10-2 used for 10 tooth/inch round threading ,thread roughingcut,external circle finishing cut.

# (1 1) Specific multiduty cutterblock

## Specific multiduty cutterblock

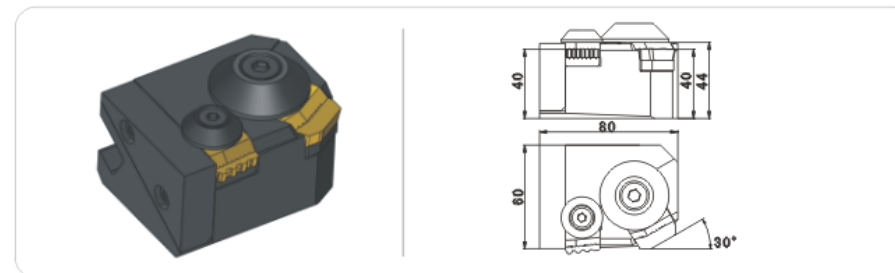


Ordering code	Insert	Thyead	Shim	Chipbreaker	External face Turning	Shim	Chipbreaker
040W-26417/ C5-1							
	C5BW1-32	C/28681	BX00W1BII	C/26417	C/26418	C/26419	

Clamp	Plate	Shim screw	Clamp screw	Plate screw	Wrench
Φ40/Φ24 Circle Clamp	04040 Locating Plate	M5×0,5/M6×0,75	M6/M6	M5×12	S3/S4/S5

# (1 1) Specific multiduty cutterblock

## Specific multiduty cutterblock



Ordering code	Insert	Thyead	Shim	Chipbreaker	External face Turning	Shim	Chipbreaker
040W-26417/ C5-2							
	C5BW1-32	C/28681	BX00W1BII	C/26417	C/26418	C/26419	

Clamp	Plate	Shim screw	Clamp screw	Plate screw	Wrench
Φ40/Φ24 Circle Clamp	04040 Locating Plate	M5×0,5/M6×0,75	M6/M6	M5×12	S3/S4/S5

P.S:040w-26417/c5-1used for 5 tooth/inch round threading ,thread finishing cut,exfernal circle roughing cut.  
040w-26417/c5-2used for 5 tooth/inch round threading ,thread roughingcut,exfernal circle finishing cut.

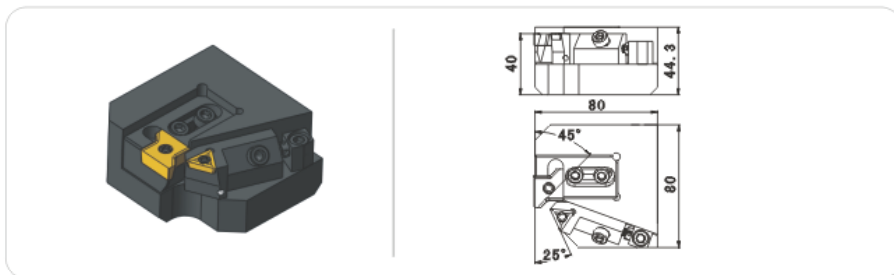


# (1 1) Specific multiduty cutterblock

# (1 1) Specific multiduty cutterblock

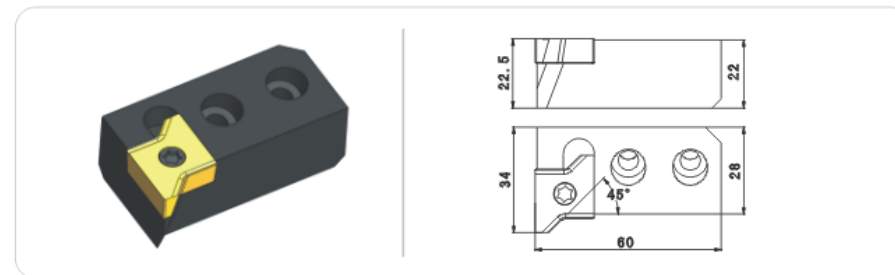
## Specific multiduty cutterblock

## Cartridges

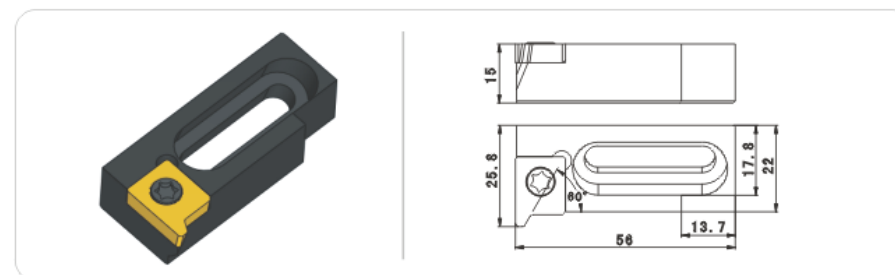


Ordering code	Cartridges	Insert	Cartridges	Insert	Cartridges
04026					
	04029-1	C/20943	04029-2	C/32246-B	ST3CR12CA-16T

Insert	Adjustment screw	Screw	Screw	Wrench	Wrench
TGMX16T308	M5	M4/M5	M6	T20/T15	S5



Ordering code	Insert	Screw	Wrench
C/33297			
	C/32246-B	M5x12	T20



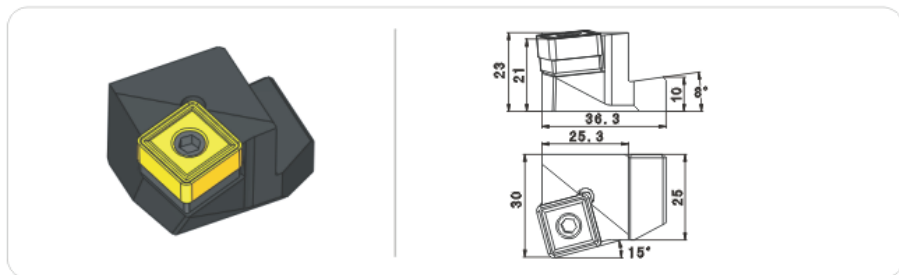
Ordering code	Insert	Screw	Wrench
NCT7			
	C/20943	M5x12	T20

## (1 1) Specific multiduty cutterblock

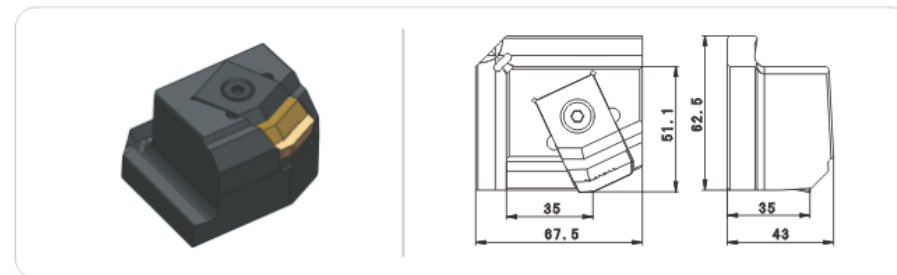
## (1 2) Bm series cutterblock

### Catridges

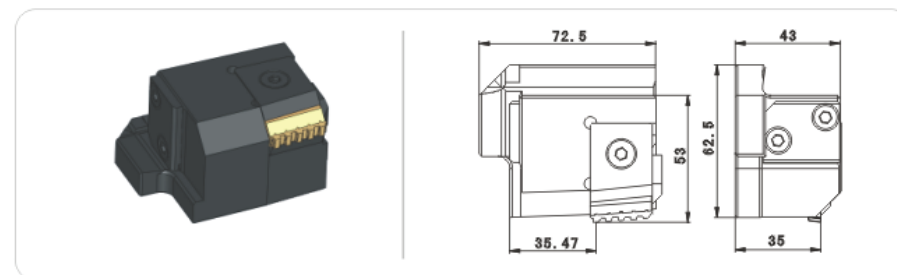
### BM series cutterblock

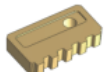
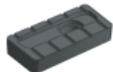

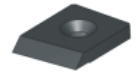


Ordering code	Insert	Shim	Screw pln	Wrench
C/34952				
	SNN6150616	S15B-7.8	SLX-6	S3



Ordering code	Insert	Shim	Chipbreaker	Clamp	Shim screw	Clamp screw	Wrench
BM-0004							
	C/26417	C/26418	C/26419	BM-0004-YB	M6×0.75	M6	S4



Ordering code	Insert	Shim	Chipbreaker	Clamp
BM-0007				
	C5BW1-5	T62-4	BXQQW1BIII	BM-0007-YB

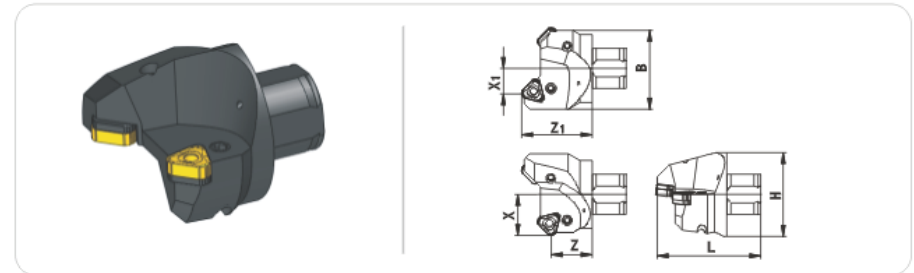
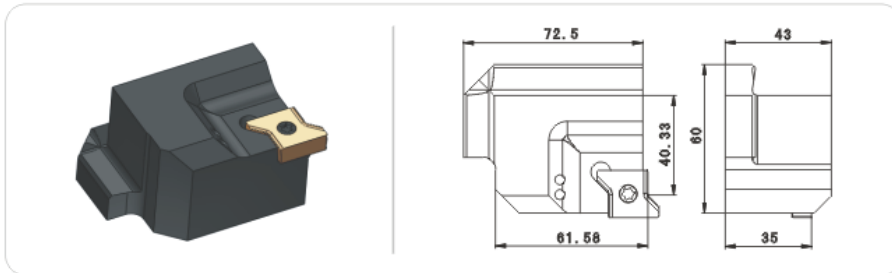
Side guide	Side locating plate	Shim screw	Clamp screw	Wrench
				
BM-0007-CYB	BM-0007-CDWB	M5×0.5	M4/M6	S2/S4




(1 2) Bm series cutterblock

(1 3) Bp series cutterblock







**BM series cutterblock**

**BM series cutterblock**



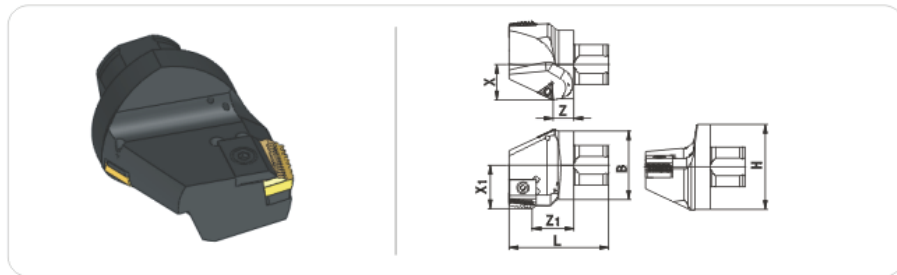
Ordering code	Insert	Screw	Wrench
BM-0012	 C/32246-B	 M5	 T20

Ordering code	Dimension						
	L	B	H	X	Z	X <sub>1</sub>	Z <sub>1</sub>
BP-0006	61	40	49	23	25.16	10.29	42
BP-0007	75	50	61	30	31.7	16.51	52
BP-0008	94	63	78	40	40.4	20.58	64

Ordering code	Insert	Shim	Lever	Spring pin	Lever screw	Wrench
BP-0006 BP-0007 BP-0008						
	TNMG1604X TNMG2204X TNMG2706X	BP-0006-DD BP-0007-DD BP-0008-DD	90620	Ht0808	YLB8-20	S3

# (1 3) Bp series cutterblock

## BP series cutterblock



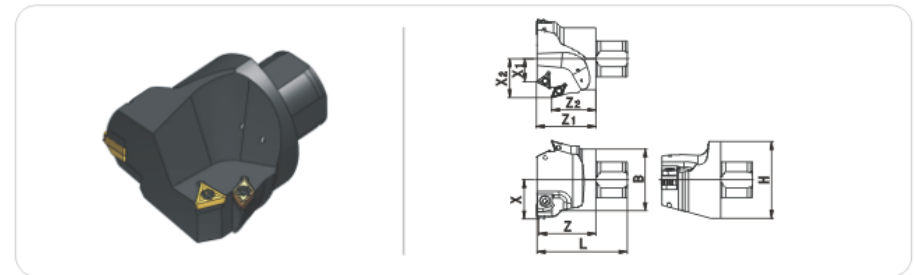
Ordering code	Dimension						
	L	B	H	X	Z	X <sub>1</sub>	Z <sub>1</sub>
BP-0012	91.5	63	78	33.33	18.29	40	37.6

Ordering code	Insert Thyead	Shim	Chipbreaker	Clamp	Shim screw
BP-0012					
	C8N1-7	TQ2-3	0/41107	BP-0012-YB	M5x0.5

Clamp screw	Deburring Insert	Shim	Screw	Wrench	Wrench
M6	TCMT16T304	TQ2-2	M5	T20	S3/S4

# (1 3) Bp series cutterblock

## BP series cutterblock



Ordering code	Dimension								
	L	B	H	X	Z	X <sub>1</sub>	Z <sub>1</sub>	X <sub>2</sub>	Z <sub>2</sub>
BP-0017	92	63	78	40	58.05	30.25	45.89	40	45

Ordering code	Insert Thyead	Shim	Chipbreaker	Clamp	Shim screw	Clamp screw
BP-0017						
	C5BN1-2	TQ2-6	TQ3-2	BP-0017-YB	M5x0.5	M6

Deburring Insert	Shim	Deburring Insert	Shim	Screw	Wrench	Wrench
TCMT16T304	TQ2-2	DCMT11T304	D11B(2.8)	M5	T20	S3/S4

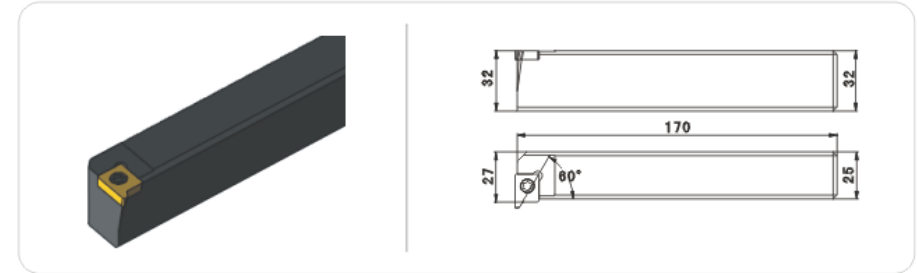
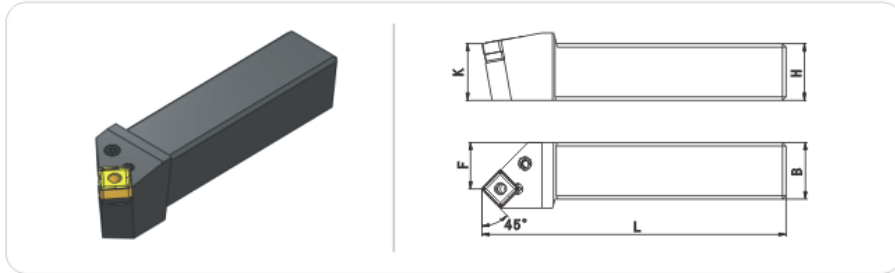


(14) Complete tool shank for chamfering ,  
Deburring and edging face inserts

(14) Complete tool shank for chamfering ,  
Deburring and edging face inserts

Tool shank of 45 angle chamfering insert

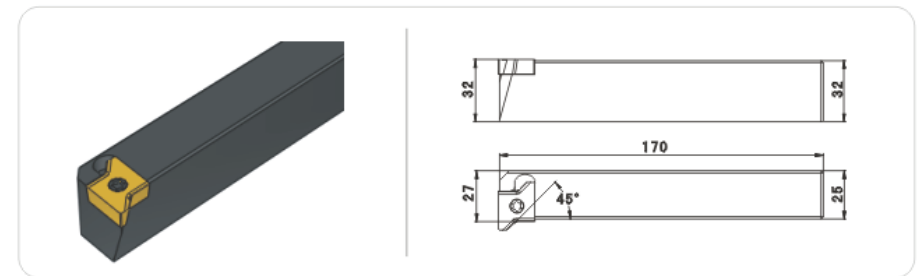
Tool shank of chamfering and edging face insert



Ordering code	Dimension				
	K	B	F	H	L
PSSNR/L 3225 P15	32	25	18	32	170
PSSNR/L 3232 P15	32	32	26	32	170
PSSNR/L 4040 S15	40	40	35	40	250

Ordering code	Insert	Screw	Wrench
C/20943-32×25×170			
	C/20943	M5×12	T20

Accessory	Insert	Shim	Lever	Spring pin	Clamp bolt	Wrench
Pic.						
Code	SNMG150616	S15A-8.1	Q0516	HT0505	YLB8-20	S3



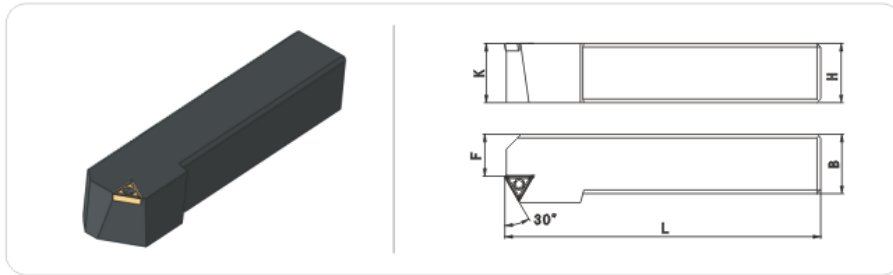
Ordering code	Insert	Screw	Wrench
C/32246-32×25×170			
	C/32246-B	M5×12	T20

## (14) Complete tool shank for chamfering, Deburring and edging face inserts




## (15) Tool shank for drillrod threading

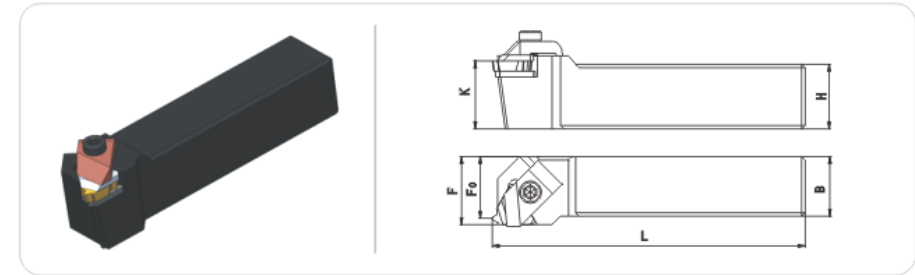
### Tool shank of deburring insert

### Tool shank for I type external threading inserts



Ordering code	Dimension				
	K	B	F	H	L
STWCR3232P16	32	32	22	32	170
STWCR4040S16	40	40	30	40	250

Accessory	Insert	Screw	Wrench
Pic.			
Code	TCMT16T308	M4×12	T15



Type	Ordering code	Working range	Dimension							Machine Tool
			L	H	K	B	F	F <sub>0</sub>	λ	
A	J4 (5) W3-A35×32 I	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	175	35	32	35	40	36	110'	OK3263
B	J4 (5) W3-B35×32 I	4"~5 $\frac{1}{5}$ "	175	35	32	35	40	36	80'	OK7840 S1-245
C	J4 (5) W3-C35×32 I	5 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	175	35	32	35	40	36	45'	S1-262

Accessory	Insert	Chipbreaker	Shim	Screw	Within the Drill plate	Clamp screw	Wrench
Pic.							
Code	4Y1W3-1	J4 (5) W3-DXQ	J4 (5) W3-DD	M4×8	J4 (5) W3-YB	M8×25	S5

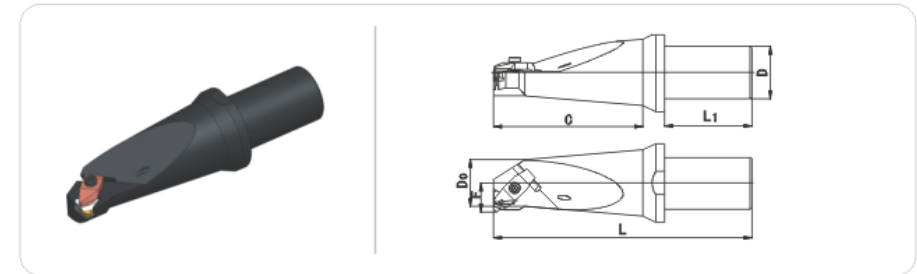
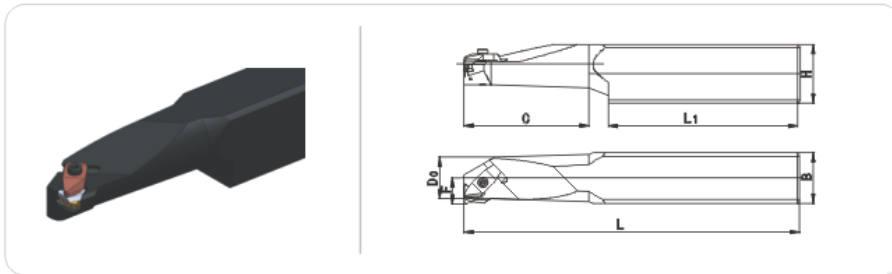
P.S: this tool shank also can be used by matching with the inserts of 4y2w3-1、4y4w3-1、4y5w3-1、4y7w3-1、5y3w3-1.

## (15) Tool shank for drillrod threading

## (15) Tool shank for drillrod threading

### Square tool shank for I type internal threading inserts

### Round tool shank for I type internal threading inserts



Type	Ordering code	Working range	Dimension										Machine Tool
			L	L1	H	C	K	F	D <sub>0</sub>	B	λ		
B	J4 (5) N3-BS48×32 I	4"~5 1/2"	330	180	48	150	32	30.8	48	74	80'	\$1-127	
	J4 (5) N3-BS55×36 I		350	200	55	150	36	30.8	48	77	80'	\$1-262	
C	J4 (5) N3-CS55×36 I	5 5/8"~8 5/8"	362	200	55	182	36	33.5	53	81	45'	\$1-245	

Type	Ordering code	Working range	Dimension							Machine Tool
			L	L1	D	C	D <sub>0</sub>	F	λ	
B	J4 (5) N3-BR60×100 I	4"~5 1/5"	265	100	60	140	48	30.8	80'	\$1-190 CK7840 CK3263
	J4 (5) N3-BR80×140 I		310	140	80	140	48	30.8	80'	
C	J4 (5) N3-CR60×100 I	5 5/8"~8 5/8"	295	100	60	170	53	33.5	45'	CK7840 \$1-190 CK3263
	J4 (5) N3-CR80×140 I		340	100	80	170	53	33.5	45'	

Accessory	Insert	Chipbreaker	Shim	Screw	Within the Drill plate	Clamp screw	Wrench
Plc.							
Code	4Y1N3-1	J4 (5) N3-DX0	J4 (5) N3-DD	M4×8	J4 (5) N3-YB	M8×25	S5

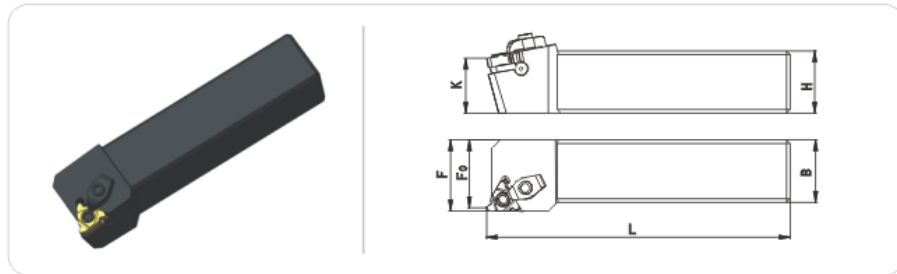
P.S: this tool shank also can be used by matching with the inserts of 4y2w3-1, 4y4w3-1, 4y5w3-1, 4y7w3-1, 5y3w3-1.

Accessory	Insert	Chipbreaker	Shim	Screw	Within the Drill plate	Clamp screw	Wrench
Plc.							
Code	4Y1N3-1	J4 (5) N3-DX0	J4 (5) N3-DD	M4×8	J4 (5) N3-YB	M8×25	S5

P.S: this tool shank also can be used by matching with the inserts of 4y2w3-1, 4y4w3-1, 4y5w3-1, 4y7w3-1, 5y3w3-1.

## (15) Tool shank for drillrod threading

### Tool shank for II type external threading inserts

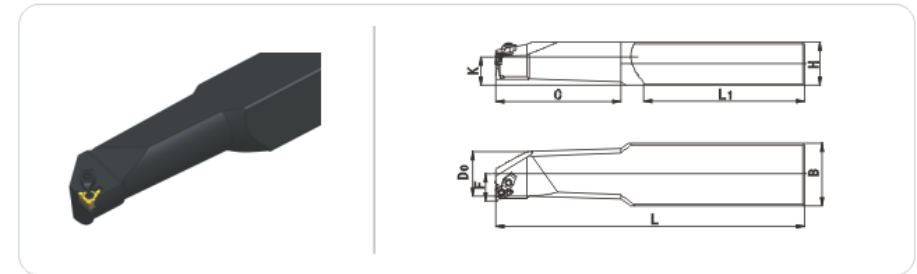


Type	Ordering code	Working range	Dimension							Machine Tool
			L	H	K	B	F	F <sub>0</sub>	λ	
A	M4 (5) W3-A35×32	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	175	35	32	35	40	37	110'	CK3263 CK7840
B	M4 (5) W3-B35×32	4"~5 $\frac{1}{2}$ "	175	35	32	35	40	37	80'	S1-181 S1-190
C	M4 (5) W3-C35×32	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	175	35	32	35	40	37	45'	S1-245 S1-262

Accessory	Insert	Shim	Clamp	Screw	Screw	Wrench	Wrench
Plc.							
Code	22ER4Y1SV	M4 (5) W3-DD	YMA-15	M5×15	SM4×12	T20	S4/S2.5

## (15) Tool shank for drillrod threading

### Square Tool shank for II type internal threading inserts

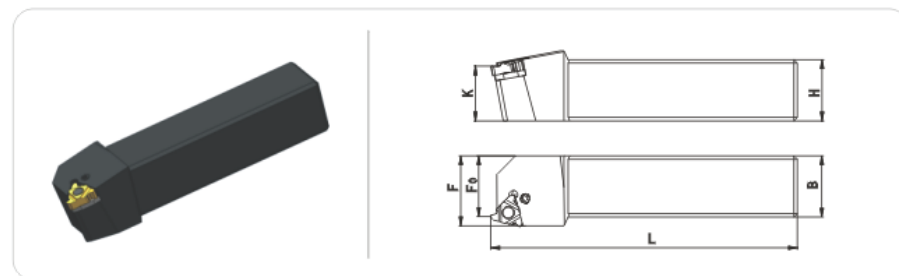
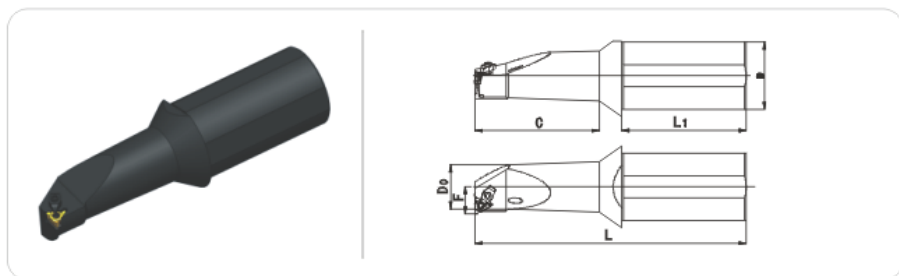


Type	Ordering code	Working range	Dimension									Machine Tool
			L	L <sub>1</sub>	H	C	K	F	D <sub>0</sub>	B	λ	
B	M4 (5) N3-BS48×32	4"~5 $\frac{1}{2}$ "	330	180	48	150	32	30.8	48	74	80'	S1-127 S1-344
	M4 (5) N3-BS55×36		350	200	55	150	36	30.8	48	77	80'	S1-262
C	M4 (5) N3-CS55×36	6 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	382	200	55	182	36	33.5	53	81	45'	S1-245

Accessory	Insert	Shim	Clamp	Screw	Screw	Wrench	Wrench
Plc.							
Code	22NR4Y1SV	M4 (5) N3-DD	YMA-15	M5×15	SM4×12	T20	S4/S2.5

Round tool shank for II type internal threading inserts

Tool shank for III type external threading inserts



Type	Ordering code	Working range	Dimension							Machine Tool
			L	L <sub>1</sub>	D	C	D <sub>0</sub>	F	λ	
B	M4 (5) N3-BR60×100	4"~5 1/2"	275	100	60	150	48	30	80'	S1-490 CK7840 CK3263
	M4 (5) N3-BR80×140		315	140	80	150	48	30	80'	
C	M4 (5) N3-CR60×100	6 5/8"~8 5/8"	312	100	60	182	53	33	45'	CK7840 S1-190 CK3263
	M4 (5) N3-CR80×140		352	140	80	182	53	33	45'	

Type	Ordering code	Working range	Dimension							Machine Tool
			L	H	K	B	F	F <sub>0</sub>	λ	
A	P4 (5) W3-A35×32III	2 3/8"~3 1/2"	175	35	32	35	40	32	110'	CK3263 CK7840
B	P4 (5) W3-B35×32III	4"~5 1/5"	175	35	32	35	40	32	80'	S1-181 S1-190
C	P4 (5) W3-C35×32III	5 5/8"~8 5/8"	175	35	32	35	40	32	45'	S1-245 S1-262

Accessory	Insert	Shim	Clamp	Screw	Screw	Wrench	Wrench
Pic.							
Code	22NR4Y1SV	M4 (5) N3-DD	YMA-15	M5×15	SM4×12	T20	S4/S2.5

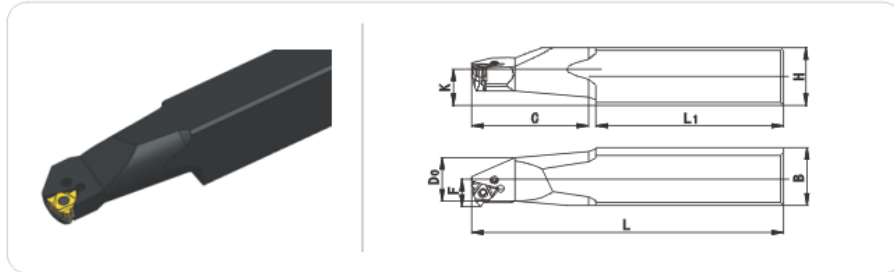
Accessory	Insert	Shim	Oblique rod	Lock screw	Wrench
Pic.					
Code	B4Y1W3-1	169.537	φ4	M6	S3

P.S: this tool shank also can be used by matching with the inserts of 4y2w3-1, 4y4w3-1, 4y5w3-1, 4y7w3-1, 5y3w3-1.



## (15) Tool shank for drillrod threading

### Square tool shank for III type internal threading inserts



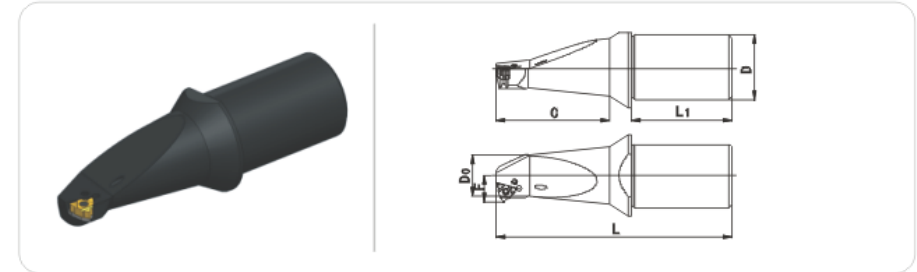
Type	Ordering code	Working range	Dimension									Machine Tool
			L	L1	H	C	K	F	D <sub>0</sub>	B	λ	
A	P4 (5) N3-AS48×32III	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	330	180	48	125	32	26	40	74	110'	S1-127 S1-344
	P4 (5) N3-AS55×36III		350	200	55	125	36	26	40	77	110'	S1-262 S1-245
B	P4 (5) N3-BS48×32III	4"~5 $\frac{1}{5}$ "	345	180	48	140	32	30.8	48	74	80'	S1-127 S1-344
	P4 (5) N3-BS55×36III		365	200	55	140	36	30.8	48	77	80'	S1-262 S1-245
C	P4 (5) N3-CS55×36III	5 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	420	220	55	170	36	34	55	81	45'	S1-262 S1-245

Accessory	Insert	Shim	Oblique rod	Lock screw	Wrench
Plc.					
Code	B4Y1N3-1	169.737	φ4	M6	S3

P.S: this tool shank also can be used by matching with the inserts of 4y2w3-1, 4y4w3-1, 4y5w3-1, 4y7w3-1, 5y3w3-1.

## (15) Tool shank for drillrod threading

### Round tool shank for III type internal threading inserts



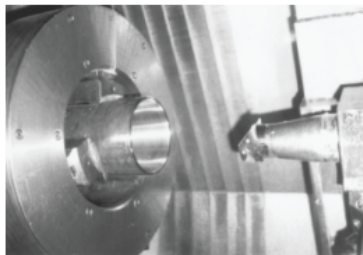
Type	Ordering code	Working range	Dimension							Machine Tool
			L	L1	D	C	D <sub>0</sub>	F	λ	
A	P4 (5) N3-AR60×100III	2 $\frac{3}{8}$ "~3 $\frac{1}{2}$ "	250	100	60	125	40	26	110'	GK7840 GK3263A
	P4 (5) N3-AR80×140III		290	140	80	125	40	26	110'	GK3263B
B	P4 (5) N3-BR60×100III	4"~5 $\frac{1}{5}$ "	265	100	60	140	48	30	80'	GK7840 GK3263A
	P4 (5) N3-BR80×140III		310	140	80	140	48	30	80'	GK3263B
C	P4 (5) N3-CR60×100III	5 $\frac{5}{8}$ "~8 $\frac{5}{8}$ "	295	100	60	170	53	33	45'	GK7840 GK3263A
	P4 (5) N3-CR80×140III		340	140	80	170	53	33	45'	GK3263B

Accessory	Insert	Shim	Oblique rod	Lock screw	Wrench
Plc.					
Code	B4Y1N3-1	169.737	φ4	M6	S3

P.S: this tool shank also can be used by matching with the inserts of 4y2w3-1, 4y4w3-1, 4y5w3-1, 4y7w3-1, 5y3w3-1.

## D The Use of Carbide Threading Tools for Oil Pipes

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### (1) Three factors of affecting the machining quality of carbide threading tools for oil pipes and tool machinability

- (a) External factors of the tools, including
  - ① Rationality of the design of the tool structure;
  - ② Blade face, the profile accuracy, degree of finish and the condition of surface structure;
  - ③ Enforcing quality of cutting edge;
  - ④ Manufacturing accuracy of the rod and the quality of the accessories, such as break chips.
- (b) Internal factors of the inserts, including
  - ① Quality and performance of the base material of inserts
  - ② Quality and performance of the top coating of inserts
  - ③ Materials, performance of the heat treatment of tool rods
- (c) Use factors of tools, including
  - ① Correct choice and use of tools
  - ② The statue of thread processing equipment
  - ③ Mode and effect of cutting cooling
  - ④ Workability and homogeneity of the machined materials
  - ⑤ Correct choice for cutting specification of thread processing

### (2) Two processing mode of carbide threading tools for oil pipes

- ① Mode of threading (used to process thread oil pipes, casing pipes and boring rod )  
The features of the cutting movement  
rotational movement of the workpieces (pipes or connectors). The principle cutting movement is occurred.  
.Movements and intermittent bites while the tools (threading and roughing tools ) move along the generatrix of taper thread  
.threading is used as the most widely way of processing the thread of oil pipes. According to the production conditions and threading machine, there are two ways: single insert threading and packaged inserts (two blades in general) threading with tools units. All the drill rod connectors are threaded by single insert threading.
- ② Mode of processing threading head(only used to process thread oil pipes, casing pipes)  
The features of the cutting movement  
.workpieces (pipes or connectors) are positioned and clamped firmly and still  
.movements and intermittent bites while the tools (threading and roughing tools ) rotate around the workpiece axis and move along the generatrix of taper thread  
.The ways for processing are internal cropping and external cropping. They are fit for producing oil pipes, tubings and processing connectors efficiently in large number. External cropping contains packaged threading inserts (three blades in general) and roughing tools units; internal cropping contains single insert threading insert and packaged blades in roughing tools units.

### (3) Suggestions for selecting carbide threading inserts for oil pipe

(1) Threading inserts for tubing and casing:

(A) Condition for mass production

(a) insert for threading machine of threaded head

external threading inserts (completed inserts):

P8W1-31/ P8W1-32/ P8W1-33; P10W1-31/2/3; P5BW1-31/2/3.

internal threading inserts:

P8N1-7; P10N1-8; P5BN1-5;

(b) insert for threading machine of threaded turning

external threading inserts

completed inserts:

O8W1-31/O8W1-32; C10W1-31/C10W1-32; O5BW1-31/O5BW1-32

BC8W2-31/BC8W2-32; BC10W2-31/BC10W2-32

C8W1-3; C10W1-4;

single insert:

B8W2-3; B10W2-4; B5BW2-2

S8W2-3; S5BW2-2

BM8W2-3; BM10W2-4;

K8W2-4; K5BW2-3

5BW1-3; O5BW1-5

internal threading inserts:

C8N1-7; C10N1-8; C5BN1-5; C5BN1-2

B8N2-3; B8N2-5; B10N2-4; B5BN2-3

S8N2-4; S5BN2-2

K8N2-4; K5BN2-3

SK8N1-3; SK8N1-5

(B) Insert for pilot production (processing in threaded turning)

external threading:

10W1-2; 8W1-2;

8W3-2; 10W3-2;

5BWL3;

internal threading:

10N4-2; 8N4-2;

10N3-2; 8N3-2;

5BNL3-1;

(2) Threading insert of drill rod (processing in threaded turning):

Type I: ordinary

Type II: ordinary

Type III: mainly used on external and internal thread for tool joint below 3 1/2"

### (4) Cutting figures of carbide threading inserts for oil pipe

The right design of teeth structure and load will progress the quality and efficiency of carbide threading inserts, also will increase the service life of inserts. The different feed ways will decide the cutting figures of single teeth insert (e.g. drillrod connector insert), but not decided by the teeth structure.

(1) Thread cutting condition of one time feeding

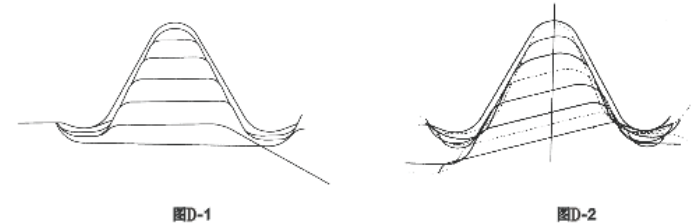
If the power and stiffness of threading machine is enough large, finish the thread cutting by the one time feeding will be the most favorable alternatives. Which will increase the efficiency and design the cutting figures more reasonable, increasing the service life of inserts.

Notes: no matter the threading insert finish thread cutting by one time feed or repeatedly feed, the last fine teeth must wholly cover the threading teeth and ensure the chipping allowance is reasonable. (the side tooth is 0.07-0.12mm, tooth top and tooth bottom is 0.10-0.20mm)

e.g 1: The cutting figures of internal round threading of P8N1-7 casing connector (D-1)

2: The cutting figures of external round threading of casing pipe body formed by

P8W1-31/P8W1-32/P8W1-33. (D-2)



### (2) Thread cutting condition of repeatedly feeding

If the power and stiffness of threading machine is not enough large to complete the one time feed, have to use the repeatedly feeding. In this case, the first process should cut down the most chipping allowance, (specially for the 3 tooth or more), so the allocation of the first process will decide the design of inserts cutting figures. The next process for roughing tooth, the chipping allowance will be small.

e.g 1: The cutting figures of internal round threading of B8N2-5 casing connector. (D-3)

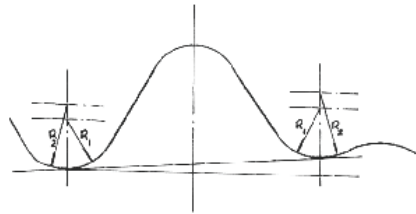


2: The cutting figures of internal buttress threading of P5BN1-5 casing connector. (K-4)



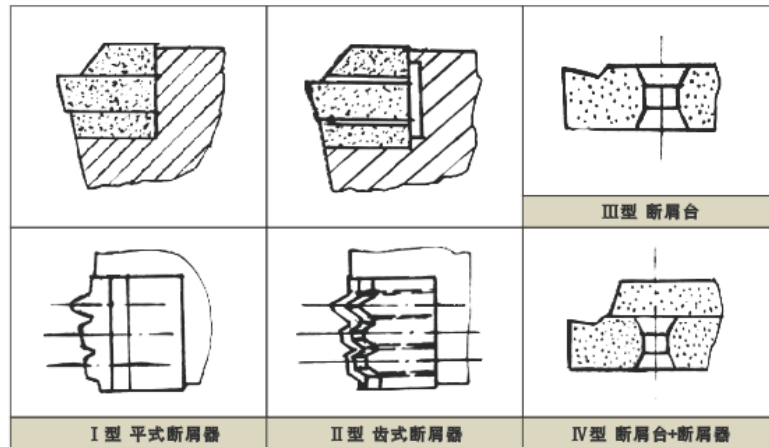
(5) “Double circular-arc” structure of refined bottom tooth of carbide threading inserts for oil pipe

As the table D-5, the round threading inserts of tubing, casing and the connector, with the “double circular-arc” structure on the refined bottom tooth, i.e.  $R1 \approx R1 + (0.2 - 0.3)$ , ( $R1 = 0.508\text{mm}$  or  $0.432\text{mm}$ ) will help to avoid the flaws of “plat teeth” and “Crash” on the tooth of the thread.



图D-5 finishing tooth of insert

(6) Several types of flute and chipbreaker of carbide threading inserts for oil pipe



图D-6

(7) The several forms of oil pipe thread blade clamping structure and cutter arbor structure

The cutter arbor is a connecting part between the blade and the cutter holder (or tool apron), which must have sufficient strength, rigidity and precision.

The head of cutter arbor is part that is clamping the blade; the stem is part that is installed into the cutter holder (or tool apron)

The structure of the head of arbor, namely, part of clamping the blade, is mainly determined according to the blade shape. It requests not only sufficient strength and rigidity, but also requests that the rigidity of clamping blade, the position's accuracy and reliability, the ease of use and the chip removal and the chip-breaking are ensured.

The different structures and shapes of the blades have corresponding clamping structures: it can be found in the type-labeling instructions for the oil pipe thread cutter shank of cemented carbide.

The up-packing type (the structure of M and C) is the clamping structure of no hole square-shaped blade (or fan-shaped blade), which is used mostly for processing the joint internal threads of oil pipes and casings. The screw of hook-shaped nut with the left thread and right thread at the both ends play the role of pressuring plate that is clamping the blade and the guide chip plate tightly.

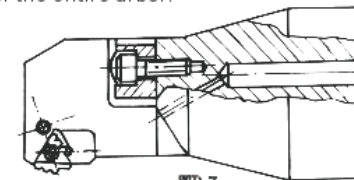
The draw-in type of inclined pulling rod (the P structure) is a draw-in type clamping structure with a double-tapered-hole blade, which has a two-way clamping effect. The precision needed of the tapered hole of blade should be guaranteed. It is characterized by compact structure, reliable positioning and higher blade material utilization rate. The blades (double tapered-hole blades) of oil pipes, casings and drilling stems and others are all suitable for use.

The two-way clamping structure with core rod pressuring plate slope (the J structure) is mainly used for the clamping between the drilling stem joint thread blade and the triangle straight hole cutter of oil pipe thread of sucker rod assembly.

The wedge slope lateral clamping (the F structure) is used for the clamping structure of long prismoid strip, non-coated, regrinding-type blades, which is used in processing the external threads of oil pipe, casing body, with features of clamping firm and multiple usage by re-grinding along the cutter edge surface after the cutter edge abrasion, the blade center height can be adjusted as required when using. The lateral clamping of standing mounted blade (the G structure) is mainly used for the clamping structure of the standing mounted triangular indexable buttress casing thread single-tooth blade. It is good at its blade strength and rigidity, with features of clamping firm. This structure has clamping in the two directions of upward pressure and lateral pressure respectively.

The arbor's shank is mounted into the cutter holder (tool apron), the average arbor shank section is square or rectangular. In some CNC threading lathe for processing the internal thread, the shank section is round shape. The arbor shank size should ensure the arbor shank of sufficient strength and rigidity requirements, and ensure that the ending length of arbor head should be short as much as possible to prevent the generation of cutting vibration and thread surface ripple.

In most cases, the arbor shank and head is an integral structure, but there is also a modular assembly structure that the head and shank is separated from each other, which is mainly used the internal thread arbor, as shown in diagram D-7. When the head is damaged, we just have to replace for the head, without need to replace for the entire arbor.



图D-7



In order to maintain that the two blade edges on both sides have roughly the same normal relief angle of side cutting edge when processing the thread, the blade installed in the arbor is on the need to tilt at an angle; its value should be equal to or near to the thread helix angle.

Therefore,

It is associated with the thread pitch and the thread diameter. The tilt angle has been processed out of the arbor, between about  $0^\circ \sim 1^\circ 20'$ , which are divided into the four sub-grades.

Therefore, when the arbors are chose and used, users should choose the appropriate arbor sized after the pipe thread sizes (the diameter and the thread pitch) have been determined. The pipe thread arbor size (diameter and pitch) is determined, to select the appropriate arbor size. The A, B, C, D in the cutter arbor labeling instruction ⑥ on page C-050 of this sample book indicate the arbor sizes applicable to different diameter pipes.

The cutter arbor and the arbor Parts are required to be manufactured from the high-quality steel. And they should be heat-treated to maintain and achieve the required hardness and strength; the chip breaker should be made of the cemented carbide. The arbor basal face and positioning surface etc. shall be grinded so as to achieve the required accuracy.



## (四) The use of carbide threading tools for oil pipes

### (8) Suggestions for selecting cutting parameters of carbide threading inserts for oil pipe

(1) Recommended cutting speed (Table D-1)

Type	Steel grade		
	Plain	Secondaryhigh	High
	J55 H40 K55 M65	N80 C75 L80	P110 C90 T98 Q125
Cutting speed(m/m)			
Uncoated insert	90~120	80~100	---
Coated insert	140~200	120~180	100~160

注：表列数据为带冷却液充分冷却时的选择；如为干切削则速度应低20%

(2) Recommended feeding frequency and depth (table D-2)

Type	Feed sequence																						
	1	2	3	4	5	6	7	8	9	10	11	12											
	Penetration of a tool (mm)																						
Round threading (Stooth/inch)	Internal threading	2 tooth insert	0.60	0.40	0.35	0.30	0.20	0.20															
		3 tooth insert	0.80	0.60	0.40	0.20																	
		5 tooth insert	1.75	0.25																			
		7 tooth insert	1.80	0.20																			
		7 tooth insert	2.00																				
		External threading	2 tooth insert	0.70	0.45	0.40	0.30	0.20															
		3 tooth insert	0.85	0.60	0.35	0.20																	
Round threading (10tooth/inch)	Internal threading	3 tooth insert	2.00																				
		2 tooth insert	0.55	0.40	0.35	0.20	0.15																
		3 tooth insert	0.80	0.55	0.20																		
	External threading	4 tooth insert	1.00	0.50	0.15																		
		8 tooth insert	1.60																				
		2 tooth insert	0.55	0.50	0.35	0.20																	
		3 tooth insert	0.90	0.55	0.15																		
External threading	4 tooth insert	1.05	0.50	0.15																			
	3 tooth insert	1.60																					

(2) Recommended feeding frequency and depth (table D-2)

Type	Feed sequence																						
	1	2	3	4	5	6	7	8	9	10	11	12											
	Penetration of a tool (mm)																						
Round buttress threading (5 tooth/inch)	Internal threading	1 tooth insert	0.35	0.30	0.25	0.25	0.20	0.20	0.20														
		3 tooth insert	0.50	0.40	0.35	0.30	0.20																
		5 tooth insert	1.30	0.45																			
	External threading	1 tooth insert	0.45	0.35	0.30	0.25	0.25	0.20															
		2 tooth insert	0.45	0.40	0.35	0.35	0.20																
		3 tooth insert	0.55	0.50	0.40	0.30																	
Drillrod connector threading	Internal threading	4y1, 4y2, 5y3 single tooth insert	0.50	0.45	0.40	0.40	0.35	0.30	0.25	0.20	0.15	0.15	0.10										
		4y4, 4y5 single tooth insert	0.50	0.45	0.45	0.40	0.35	0.35	0.35	0.30	0.30	0.25	0.15	0.10									
		4y6 single tooth insert	0.45	0.45	0.40	0.40	0.30	0.30	0.25	0.20	0.20	0.10											
	External threading	4y1, 4y2, 5y3 single tooth insert	0.50	0.45	0.45	0.40	0.35	0.30	0.30	0.25	0.20	0.10											
		4y4, 4y5 single tooth insert	0.55	0.50	0.45	0.40	0.40	0.35	0.35	0.35	0.30	0.20	0.10										
		4y6 single tooth insert	0.50	0.45	0.40	0.40	0.35	0.35	0.25	0.20	0.10												

P.S: The feeding frequency in the table should be decreased if the thread for drillrod connectors be roughing turned by plain tool then refined by form tool.

## (四) The use of carbide threading tools for oil pipes

- (9) A number of issues that should be noticed in using oil pipe thread cutting tool
- (1) Before using it, the user should be aware of the tool structure, processing requests and operating requirements
  - (2) The arbor must be correctly and securely clamped onto the cutter holder (or tool apron). Before installation, the tool holder and arbor base surface should be wiped clean. The arbor shank base surface of general threading machine should be aligned by using a dial indicator to make it parallel or perpendicular to the screw axis. The alignment error should be within the 0.015mm/100mm. Otherwise the error of thread form will be caused and even beyond the tolerance.
  - (3) The thread blade should be installed correctly onto the blade slot of arbor. The side positioning faces of the blade are pushed by hand firmly, and then tightening the clamp screw. The positioning of blade should be accurate and reliable, clamping firm. The clamping screw or other clamping components and chip breaker etc should be replaced in time if any damage to avoid damage in the thread blades when cutting. Each time when the blade being changed, the blade slot of arbor and all the basal surfaces of the blade should be wiped clean, not allowing any chips being clamped in side, otherwise it will affect the positioning accuracy or make the blade broken.
  - (4) The lathe tapered plate must be accurately adjusted to minimize the processing thread taper error.
  - (5) According to the different thread diameters and the thread pitch sizes, the bottom surfaces of the blade slot on the thread arbor have different blade edge tilt angles to accommodate the change requirements of helix angle, improving the situation in the lateral rear angle of the blade, the user should pay attention to it in the selection of cutter arbors.
  - (6) In the process, we should always pay attention to the thread surface condition, the blade edge status and the threading machine operating state, in order to adjust operations at any time to maintain the normal process. The most common thread surface defects are corrugated and scuffing, the factors that result in their occurrences are many, some in the thread blades aspect, and another in the lathe aspect and so on. The scuffing occurrence may be due to the causes that: either the finish degree of blade, or tiny edge chippings and notches in the blade, or the chip buildup stuck with the blade or the scratch wound caused by the chip. It is the most vulnerable to a "docking" scuffing occurrence (refer to oil pipe, busing round thread) that the circular arc of finish turning teeth bottom at one side is a whole circular arc. In processing the thread, the depth of cut is not enough so that it fails to process the complete allowance of rough machining, therefore the clear scuffing would occur on the top of thread. If the rigidity of machine tool system is poor, it is easy that the scuffing occurs on the top of several teeth at the ending of pipe (when the blade is cutting). The ripple on the thread surface was due to the vibration of the system. And it is likely to cause ripples that: either the poorer stiffness of system, the machine power is not enough, or because the blade is too sharp (such as the situation that the edge of non-coated blades is not intensified), or the excessive wear and tear of blade, or because the system self-oscillation frequency is closer to the frequency of forced vibration in cutting. If the above scuffing and ripple defects occur, we should treat them according to the concrete circumstances and causes.
  - (7) When processing the oil pipe thread, the thread must be inspected for its precision using a single parameter measurement instrument and the thread gauge. If it is found that the tooth height and the tooth profile angle is out of tolerance during the thread parameters examination, it is associated commonly with a tooth profile precision of the blade. The blade must be checked for the tooth profile accuracy or replaced with a new blade. If the finish tooth tip has a "collapse point" phenomenon, which can easily lead to that the tooth height is increased and out of tolerance. The tooth tip wear is easily leading to that the tooth height is decreased and out of tolerance. Accordingly, it will affect the change of tooth profile angle. The errors caused by other parameters such as thread pitch, taper degree, thread standoff and others are often related to the poor adjustment of machine tool, as a result, it is required to re-adjust the machine.

- (8) The right blade cutting edge is essential to strengthen the process of thread processing. The coated thread blades themselves as finished products have been conducted with a reasonable cutting edge strengthening process in the manufacturer. It is more appropriate that the cutting edge rounding radius should be chosen as  $R = 0.04 \sim 0.06\text{mm}$ . The rounding radiuses on the top and bottom of blade teeth should be uniform; their difference is not allowed to be too large. The non-coated regrinding blades tend to be not strengthened on their cutting edges in the manufacturer. If the abnormal conditions (such as corrugated, etc.) occur in processing, the operator can use a small triangle whetstone (silicon carbide or diamond whetstone) to make a careful grinding on the blade edge along the direction of the edge to achieve the strengthening requirements of cutting edges. The re-grinded blade edge should be treated as such.
  - (9) Under the current situation, oil pipe thread must be fully cooled in processing, still with the coolant supply as the main way. This is the important factor to improve the quality of the thread processing and the tool life. The coolant should be just sprayed to the cutting part of the cutter exactly. If possible, high-pressure coolant injection can be used. And through the front edge surface or bottom of the blade and the chip breaker or the small slots of pads, the coolant will be jetted directly to the blade cutting area, the effect is very obvious. Also it helps increase the chip removal effect.
  - (10) The regrinding of blades: generally the coated blade is not suitable for regrinding. And generally the non-coated blades should be re-grinded. The regrinding is only conducted on the front edge surface of the blade in the direction of the front edge surface of the original blade. The regrinding should not be implemented on the grinding wheel machine by holding the blade or the arbor in the hands, but should be carried out in the tool grinding machine by adopting a special fixture. The grinding wheel size recommended is as below:  
JR1, particle size 120#-180 #, density 75%: sBW100 × 20 × 35
- the common Problems, the causes and the recommended solutions: (as shown in table D-3)

**Table D-3 Frequently Asked Questions and the causes and the recommend solutions**

Frequently Asked Questions	The causes and the recommend solutions
<b>(1) The vibration and the ripple caused in cutting</b>	(1) Checking that if the rigidity of system is enough, if the exerted length of workpiece or cutting arbor is too long, if the main shaft bearing is adjusted properly, if the blade is clamped firm and so on. (2) The spindle speed is reduced or increased by one or two gears for trial processing to choose the revolution that can avoid ripples. (3) For the non-coated blade, if the cutting edge of blade has never been strengthened originally, now we can use a fine whetstone to lap gently the cutting edge in the field (along the edge direction). Or we process several workpieces on the new cutting edge, then the ripples can be alleviated or eliminated.

Table D-3 Frequently Asked Questions and the causes and the recommend solutions

Frequently Asked Questions	The causes and the recommend solutions
<p><b>(2) The blades wear quickly, the durability is short</b></p>	<p>(1) Checking that if the cutting data selected is too high, especially, if the cutting speed and cutting depth is too large. If so, the adjustment must be implemented.                      (2) Whether it fails to supply sufficient coolant.                      (3) The chips jam the blades that lead to tiny crack tipping which increases the cutting-tool wear.                      (4) The blade champing is strong or loosing during cutting.                      (5) The blade itself has quality problems.</p>
<p><b>(3) The large chippings come off from the blade or the blade is cracked</b></p>	<p>(1) If some scraps or rigid grains have been clamped inside, that leads to cracks or stress during clamping.                      (2) The cutting chips wind and break the blade.                      (3) The cutting blade comes under accidental collision during blade moving.                      (4) The cutter fight of the preorder cutters such as roughing cutters etc. leads to subsequent crack of thread blades.                      (5) For the machine tool that retracts its cutters by hand, when retracting for many times, the cutter fights would be caused by the suddenly increasing load on the cutting edge due to the slow motion of fast retracts.                      (6) The material quality of workpieces is not uniform or their machinability is very poor.                      (7) The blade itself has quality problems.</p>
<p><b>(4) The errors of pipe thread teeth profile are out of tolerance</b></p>	<p>(1) The finish turning teeth cutting edge of blade has been worn, and it is needed to be replaced by new one.                      (2) The finish turning teeth of blade have a "collapse tip" phenomenon; we should appropriately reduce the cutting speed and the cutting depth.                      (3) The blade or the arbor is installed improperly such as the basal surface fails to be aligned during installing; the basal surface of blade fails to be leaned against firmly.                      (4) The cutting edge has tiny crack tipping, the cutter must be replaces in time.                      (5) The blade has some chip buildup, to avoid it, we should increase appropriately the cutting speed, or use fine whetstone to gently lap and remove the buildup, or replace for the blade.</p>