



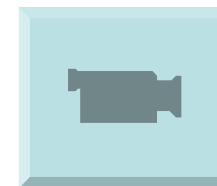
刀片编号规则

C N M G

1 2 3 4

1 2 0 4 0 8

5 6 7



1 刀片形状

80° C 	55° D
55° K 	R
S 	T
35° V 	80° W



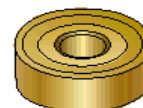
CNMG



DNMG



SNMG



RNMG



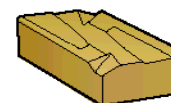
TNMG



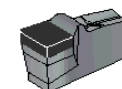
WNMG



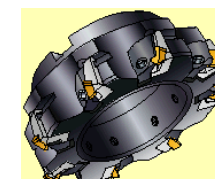
VNMG



KNMX



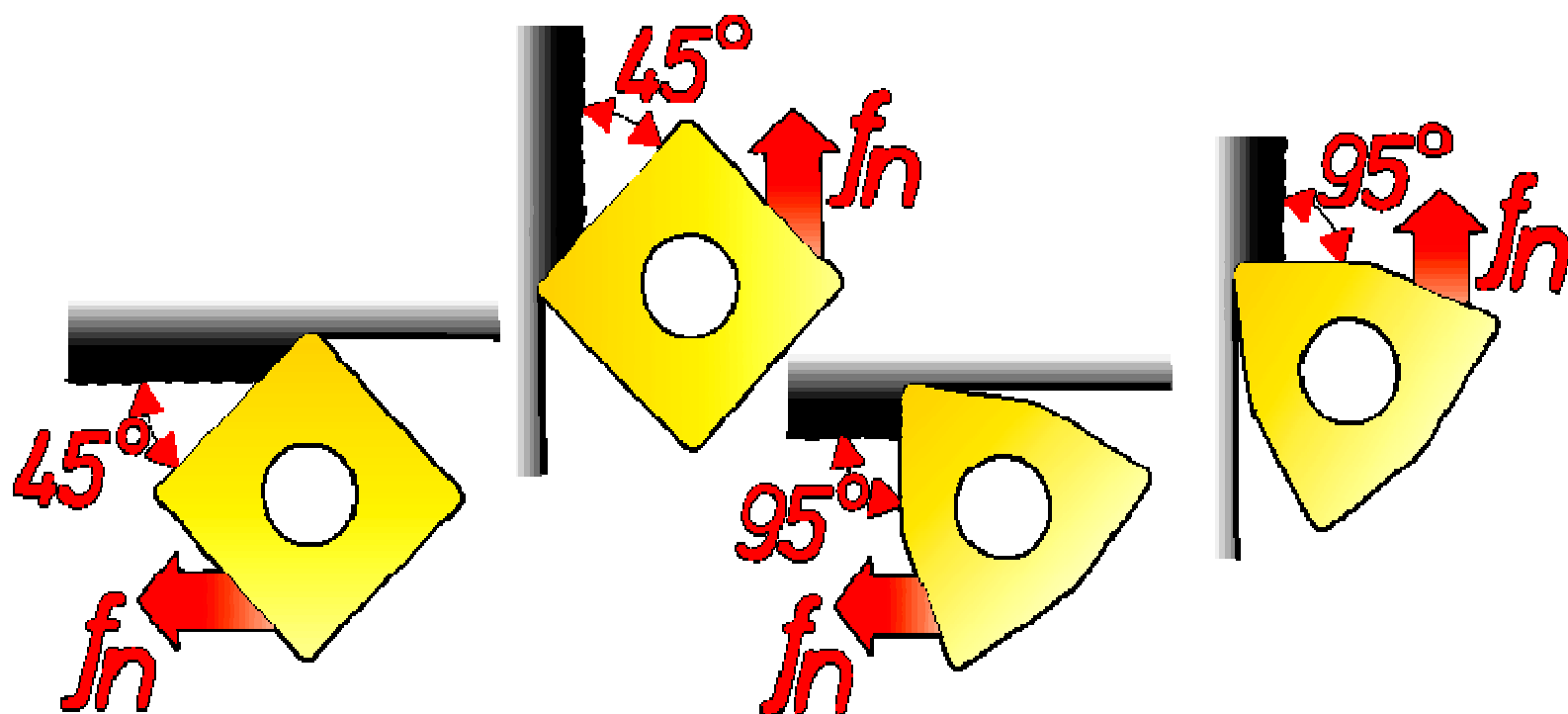
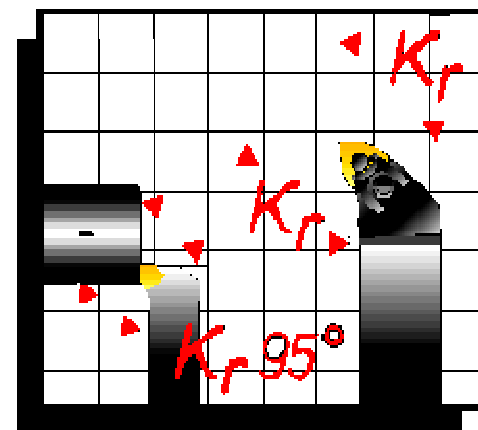
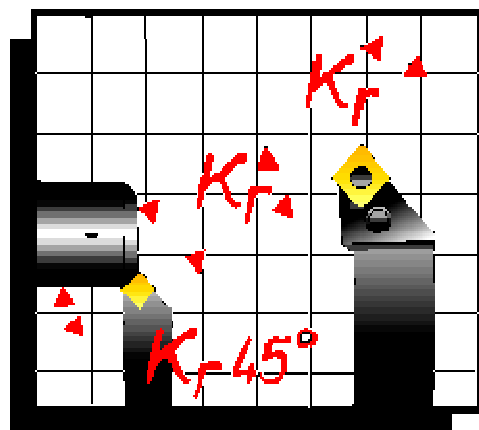
N151.2 E-G



H:正六边形 O:正八边形 P:正五边形

E:75度菱形 M:86度菱形 A:85度平行四边形

B:85度平行四边形





刀片编号规则

C N M G

1

2

3

4

1 2 0 4 0 8

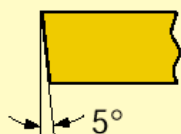
5

6

7

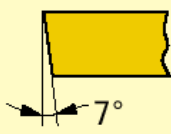
2 刀片后角

B



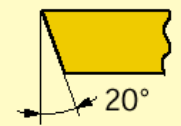
5°

C



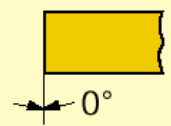
7°

E



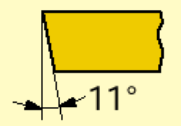
20°

N



0°

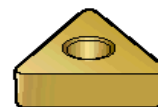
P



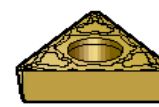
11°

O

特殊形状
刀片代号



TNMA



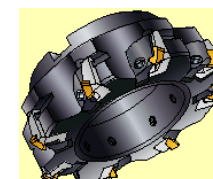
TCGT/TCMT



TPUN/TPGN



VBGT/VBMT



A: 3度后角 D: 15度后角 F: 25度后角

G: 30度后角



刀片编号规则

C	N	M	G
1	2	3	4

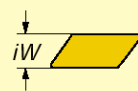
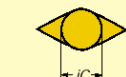
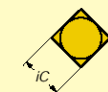
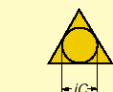
120408					
5		6		7	

3 公差（包括刀片的厚度、宽度和内切圆公差）

等级	s	iC / iW
G		±0,025
M	±0,13	±0,05 – ±0,15 ¹⁾
U		±0,08 – ±0,25 ¹⁾

1) 不同内切圆ic公差等级如下:

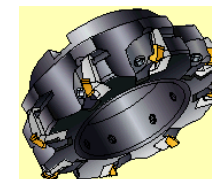
内切圆	公差等级	
iC mm	M	U
3,97 5,0 5,56 6,0 6,35 8,0 9,525 10,0	±0,05	±0,08
12,0 12,7	±0,08	±0,13
15,875 16,0 19,05 20,0	±0,10	±0,18
25,0 25,4	±0,13	±0,25
31,75 32,0	±0,15	±0,25



TCGT/TCMT



TPUN/TPGN



铣刀片的公差等级比较多, 从精到粗依此排列有: A, F, C, H, E, G, J, K, L, M, N, U, 而且公差定义的方法也与车镗ISO刀片不同



SEER
SEKR



SEKN
SEMN



SEHN

对正前角刀片, iC对锋利的刀尖角是有效的, 见切削刃状况F. (图8).



刀片编号规则

C N M <u>G</u>				1 2 0 4 0 8		
1	2	3	4	5	6	7

4 刀片型式

A 

Q 

G 

R 

M 

T 

N 

W 

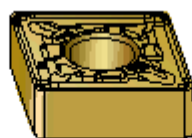
X 特殊设计



CNMG



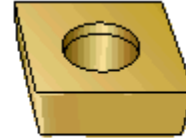
CNMA



CNMM



CCGT/CCMT



CCMW



SPMR



SPGN/SPUN

CNMG

G = 有断屑槽的双面刀片

M = 有断屑槽的单面刀片

A = 有孔的平面刀片

N = 无孔的平面刀片

W = 有孔且以螺钉夹紧的平面刀片



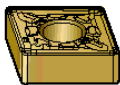
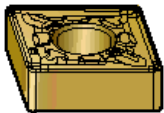
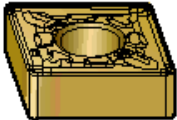
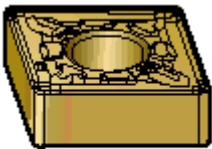
刀片编号规则

C N M G

1	2	3	4
---	---	---	---

1 2 0 4 0 8

5	6	7
---	---	---

	CNMG	12	04	08-PR
PR		12	04	12-PR
		12	04	16-PR
	CNMG	16	06	08-PR
PR		16	06	12-PR
		16	06	16-PR
		16	06	24-PR
	CNMG	19	06	08-PR
PR		19	06	12-PR
		19	06	16-PR
		19	06	24-PR
	CNMG	25	09	24-PR
PR				

5 刀片尺寸=切削刃长度, lmm

		C	D	R	S	T	V	W	K
iC mm	iC inch								
3,97	5,32"			05		06			
5,0						09			
5,56	7/32"								
6,0				06		11	11		
6,35	1/4"	06	07						
8,0				08		16	16	06	16 ^{*)}
9,525	3/8"	09	11	09	09				
10,0				10					
12,0				12					
12,7	1/2"	12	15	12	12	22	22	08	
15,875	5/8"	16		15	15	27			
16,0				16					
19,05	3/4"	19		19	19	33			
20,0				20					
25,0				25					
25,4	1"	25		25	25				
31,75				31					
32				32					

^{*)}对于K型刀片(包括KNMX, KNUX)
这里仅注出理论上的切削刃长度。



刀片编号规则

C N M G

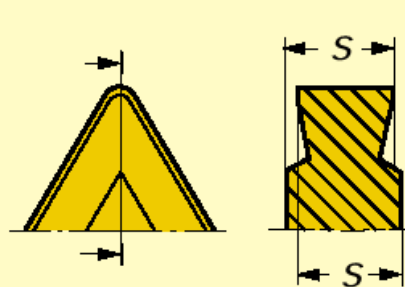
1	2	3	4
---	---	---	---

1 2 0 4 0 8

5	6	7
---	---	---

	DNMG	11	04	04-MF
		11	04	08-MF
	DNMG	15	04	04-MF
		15	04	08-MF
	DNMG	15	06	04-MF
		15	06	08-MF

6 刀片厚度, s mm



01	s = 1,59
T1	s = 1,98
02	s = 2,38
03	s = 3,18
T3	s = 3,97
04	s = 4,76
05	s = 5,56
06	s = 6,35
07	s = 7,94
09	s = 9,52
10	s = 10,00
12	s = 12,00



刀片编号规则

C N M G

1	2	3	4
---	---	---	---

1 2 0 4 0 8

5	6	7
---	---	---

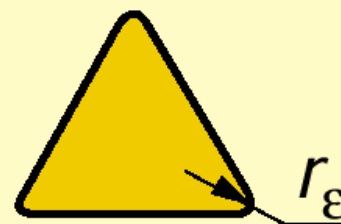


TNMG 16 04 04-PF
16 04 08-PF
16 04 12-PF

刀尖半径	f_n mm/r	v_c (m)
r_ϵ 12	0,50	170
	0,45	180
r_ϵ 08	0,40	190
	0,35	200
r_ϵ 04	0,30	215
	0,25	235
	0,20	255
	0,15	280
	0,10	320
	0,07	350

a_p
0,4 (0,3-1,5)
0,4 (0,3-1,5)
0,8 (0,4-1,5)

7 刀尖圆弧半径, r_ϵ mm



M0, 00 r_ϵ = 圆刀片
04 r_ϵ = 0,4
08 r_ϵ = 0,8
12 r_ϵ = 1,2
16 r_ϵ = 1,6
24 r_ϵ = 2,4

刀尖角越大

刀尖角越小

安全性

减震性

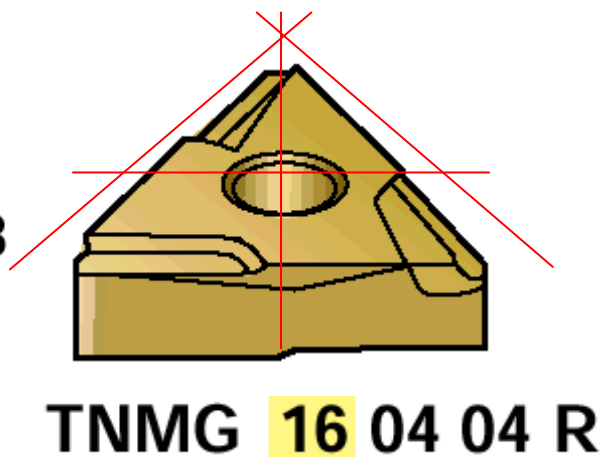
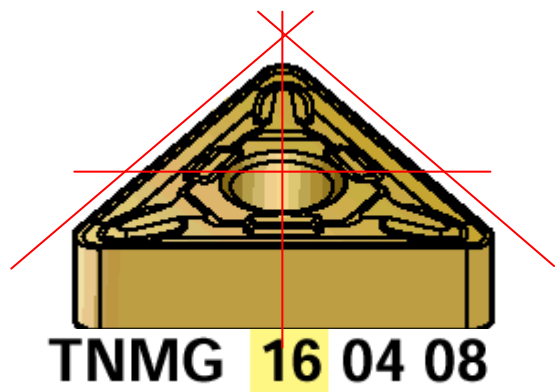
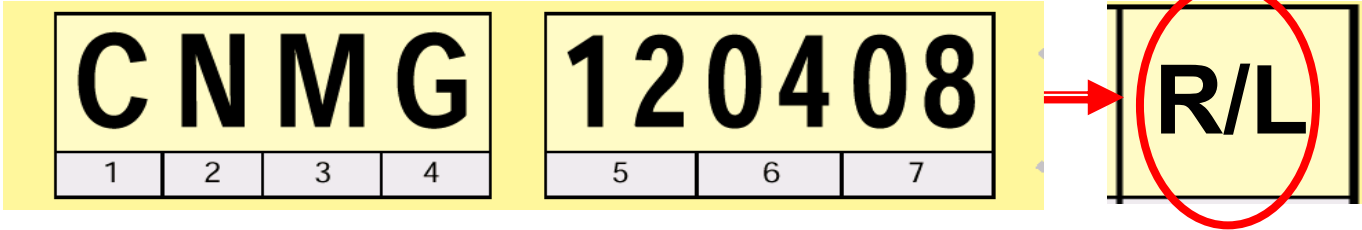
光洁度

最小切深

切削力

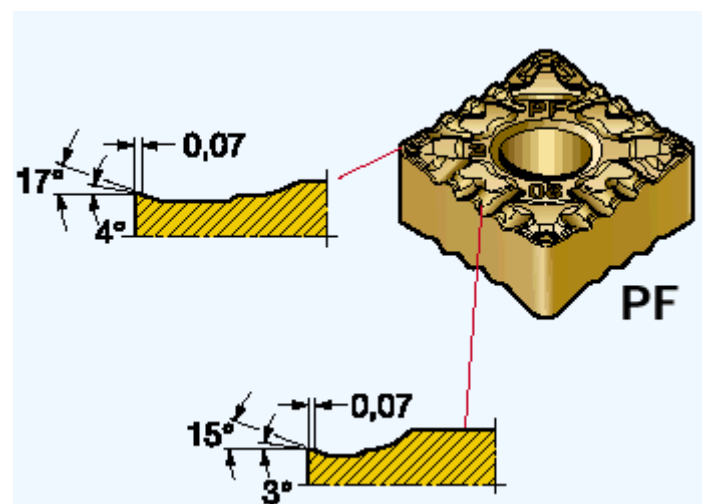
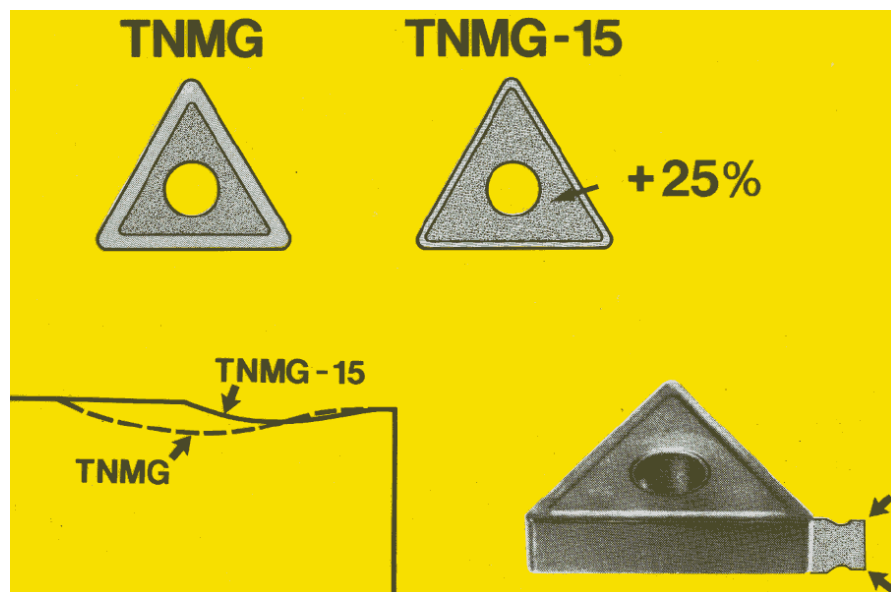
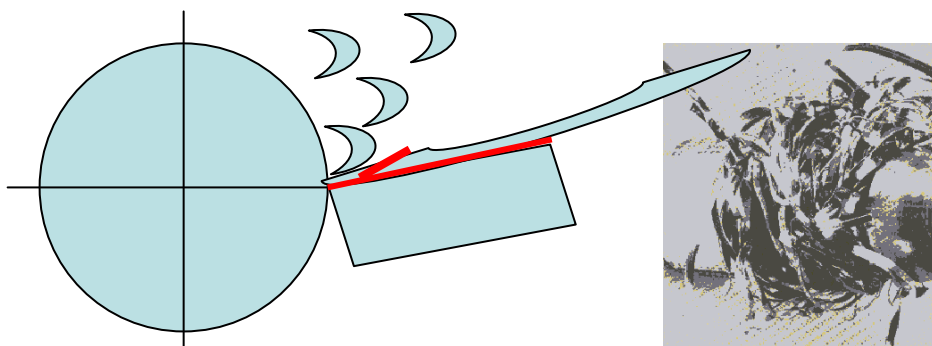
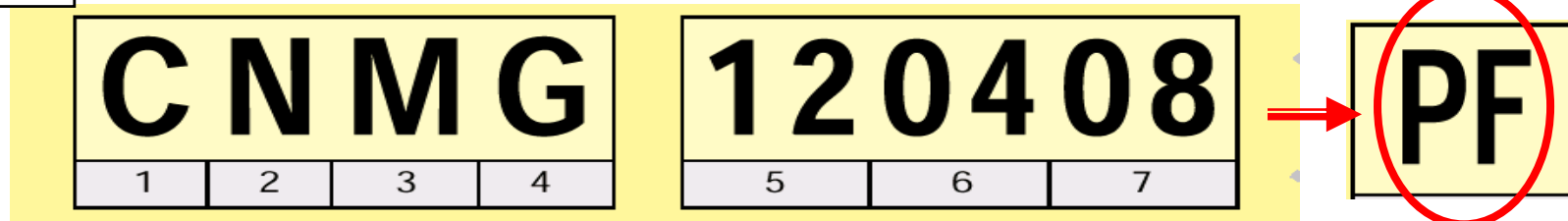


刀片编号规则





刀片编号规则



钢的精加工

无论在轴向，径向车削，还是仿形，倒角和背镗加工中，切屑流畅，
切削力低，切削平稳。表面粗糙度小，可保证紧公差。



刀片编号规则

C N M G

1	2	3	4
---	---	---	---

1 2 0 4 0 8

5	6	7
---	---	---

T 0 1 0 2 0

P F

8 切削刃形状代号	10 倒棱宽度, mm
-----------	-------------

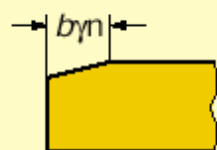
F  尖刃

E  钝化处理刀片

T  负倒棱

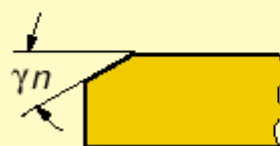
K  刀刃钝化且负倒棱处理

S  倒圆且倒棱刃

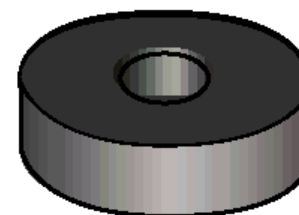


010 $b\gamma n = 0,10$
025 $b\gamma n = 0,25$
070 $b\gamma n = 0,70$
150 $b\gamma n = 1,50$
200 $b\gamma n = 2,00$

11 倒棱角度



15 $\gamma n = 15^\circ$
20 $\gamma n = 20^\circ$





刀片编号规则

C N M G				1 2 0 4 0 8			P F	4015
1	2	3	4	5	6	7		

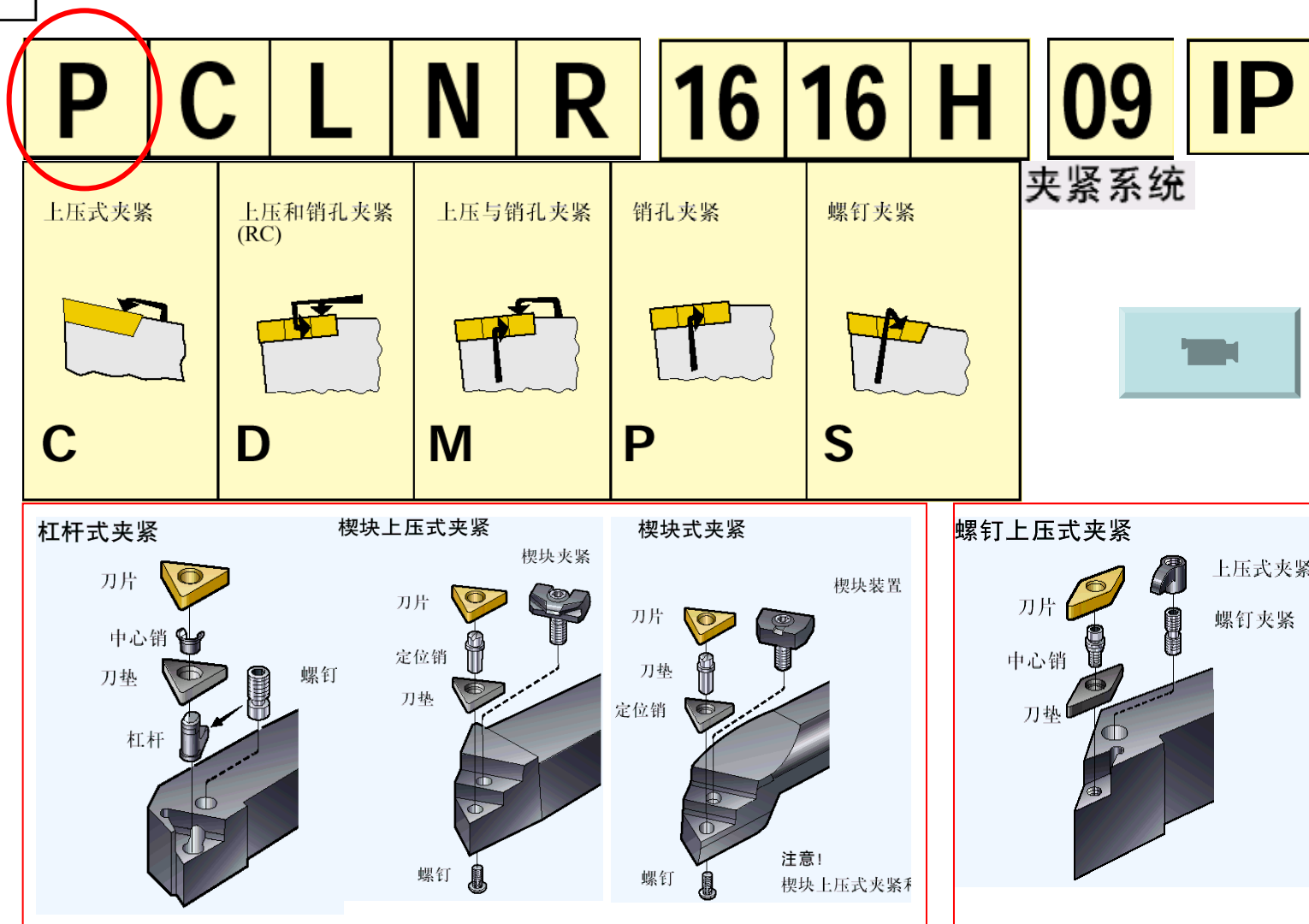
可乐满牌号													
P					M					K			
HT	HC	HC	HC	HC	HC	HC	HC	HC		HC	HC	HC	
5015	1525	4015	4025	4035	1025	2015	2025	2035		3005	3015	3025	
☆	★				☆	★				★			
☆	★				☆	★				★			
☆	★				☆	★				★			

WF

CCMT	06	02	04-WF
	09	T3	04-WF
	09	T3	08-WF



常规外圆车刀杆的编号





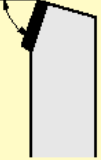
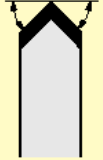
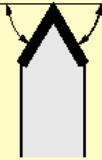
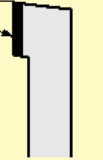
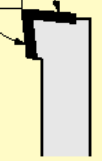
常规外圆车刀杆的编号

P C L N R					16	16	H	09
刀片形状	80° C 	55° D 	CNMG DNMG SNMG 					
	55° K 	R 	RNMG TNMG WNMG 					
	S 	T 						
	35° V 	80° W 	VNMG KNMX 			N151.2 E-G 		



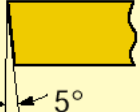
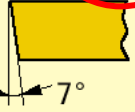
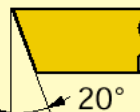
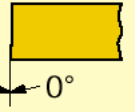
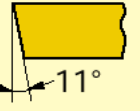
常规外圆车刀杆的编号

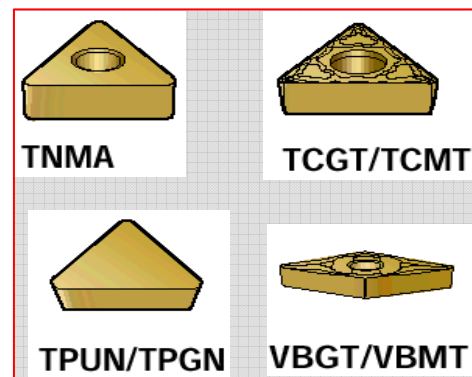
P C **L** N R 16 16 H 09

75° B 	45° D 	60° E 	90° F 	90° G 	107°30' H 
93° J 	75° K 	95° L 	63° N 	117°30' Q 	75° R 
45° S 	60° T 	93° U 	72°30'~85° V 	85° Y(X) 	 Y(Z) 



常规外圆车刀杆的编号

P	C	L	N	R	16	16	H	09
B  5°	C  7°							
E  20°	N  0°							
P  11°	O 特殊形状刀片 代号							

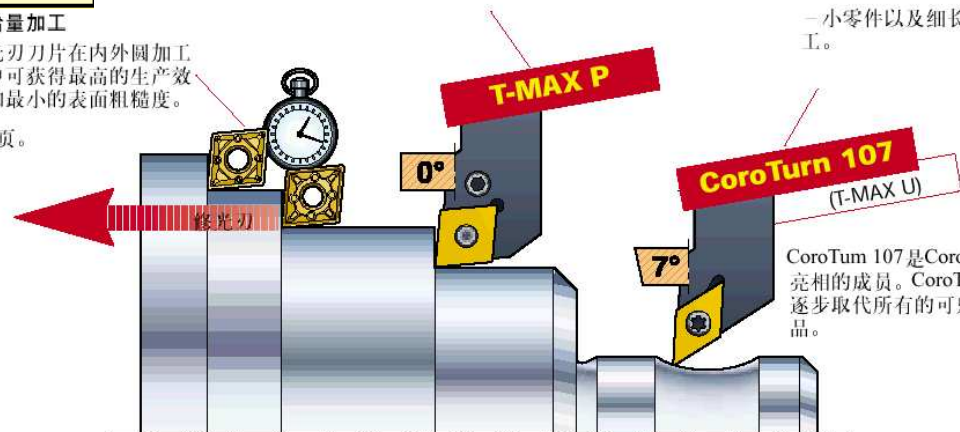


— 外圆加工，从粗车到精车。

大进给量加工

— 修光刃刀片在内外圆加工工序中可获得最高的生产效率 and 最小的表面粗糙度。

见A 8 页。



— 小零件以及细长轴零件的外圆加工。

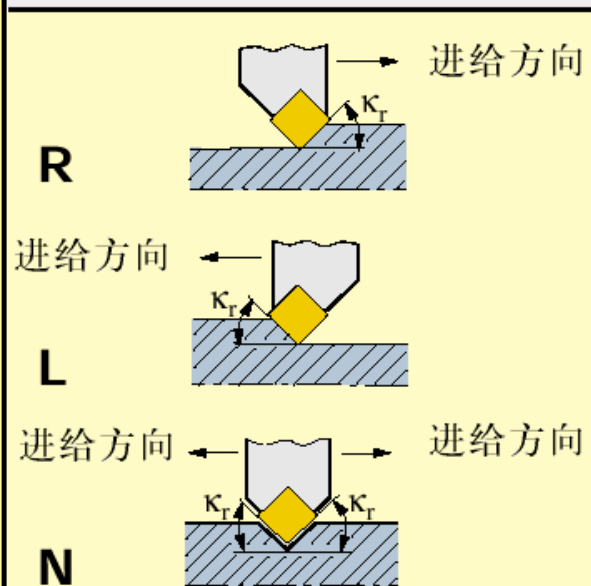
CoroTurn 107 是 CoroTurn 家族中最先亮相的成员。CoroTurn 家族产品将会逐步取代所有的可乐满普通车削产品。



常规外圆车刀杆的编号

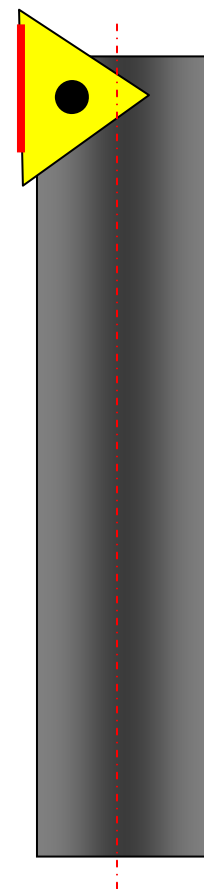
P	C	L	N	R	16	16	H	09
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6 左右手方向



右手刀片

右手刀杆

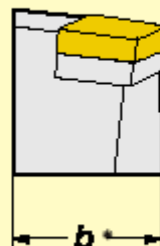




常规外圆车刀杆的编号



* 加0取整，如：08表示 $b = 8$



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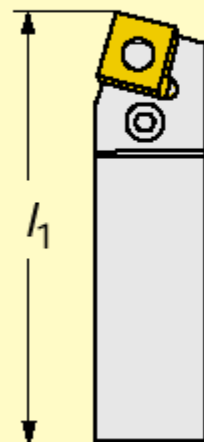


常规外圆车刀杆的编号

P C L N R 16 16 H 09

刀具长度 l_1 mm

常规刀柄



A = 32

B = 40

C = 50

D = 60

E = 70

F = 80

G = 90

H = 100

J = 110

K = 125

L = 140

M = 150

N = 160

P = 170

Q = 180

R = 200

S = 250

T = 300

U = 350

V = 400

W = 450

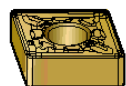
Y = 500

X = 特殊形状

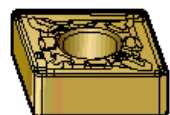


常规外圆车刀杆的编号

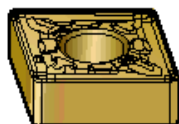
P	C	L	N	R	16	16	H	09
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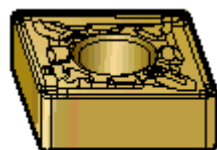
PR



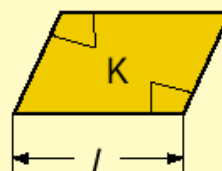
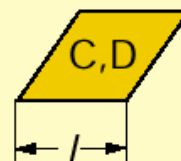
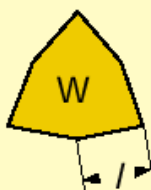
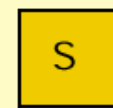
PR



PR

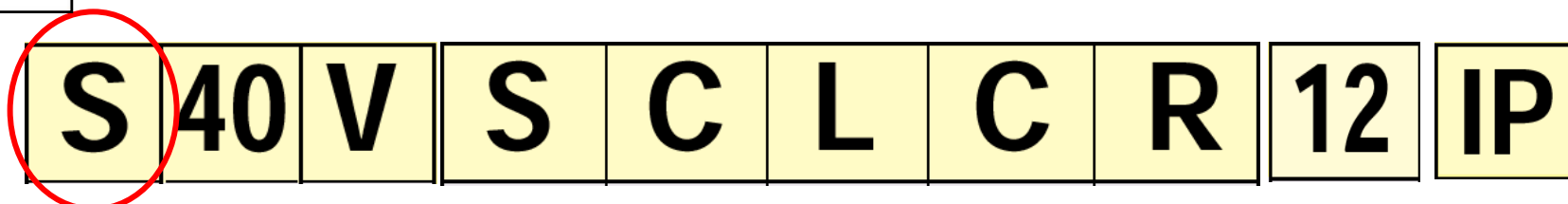


PR





常规内孔车刀杆的编号



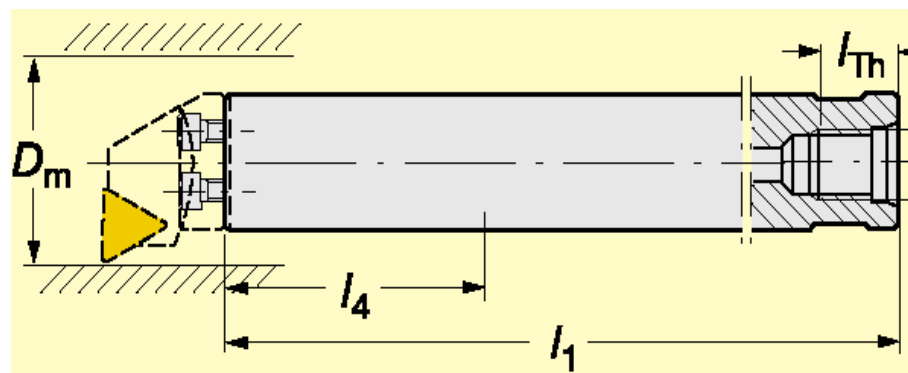
刀杆类型

A 内冷却液钢制刀杆

E 硬质合金常规刀杆

F 防振刀杆

S 整体钢制刀杆



$L4/D < 4$ 可以用整体钢刀杆进行普通内孔车削;

$4 < L4/D < 6 \sim 7$ 应使用重金属刀杆进行普通内孔车削

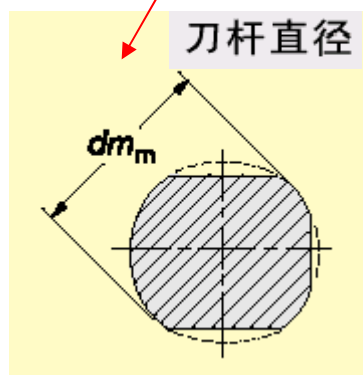
$6 < L4/D < 10 \sim 12$ 使用标准阻尼消振刀杆进行普通内孔车削

$12 < L4/D < 15$ 使用特殊阻尼消振刀杆进行普通内孔车削



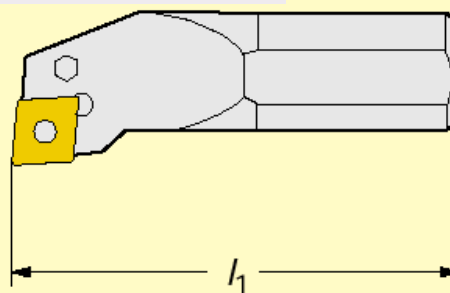
常规内孔车刀杆的编号

S 40 V S C L C R 12



常规刀杆

刀具长度, l_1 mm



F = 80
H = 100
K = 125
M = 150
P = 170
Q = 180
R = 200

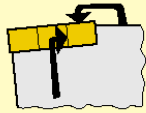
S = 250
T = 300
U = 350
V = 400
W = 450
Y = 500
X = 特殊设计



常规内孔车刀杆的编号

S 40 V S C L C R 12

夹紧系统

上压式夹紧	上压和销孔夹紧	销孔夹紧	螺钉夹紧
			
C	M	P	S

6 刀片形状	
80° C 	55° D 
55° K 	R 
S 	T 
35° V 	80° W 

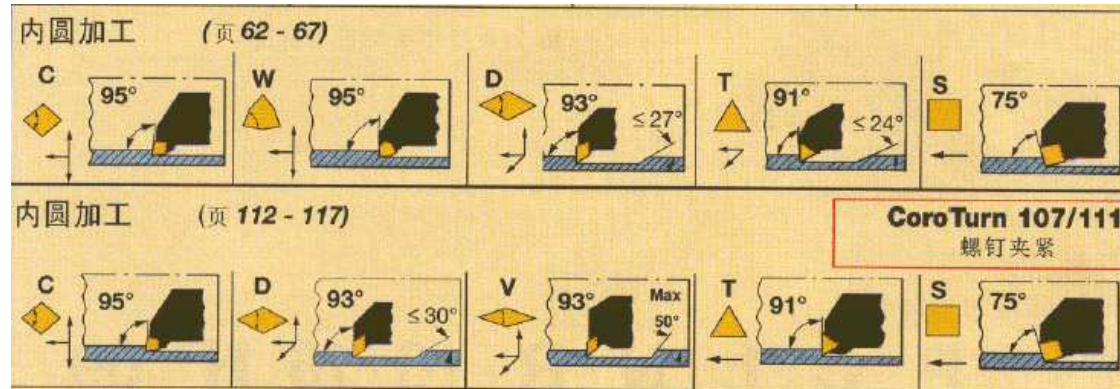


常规内孔车刀杆的编号

S 40 V S C **L** C R 12

刀杆类型

90° F	95° L
93° J	107°30' Q
75° K	93° U

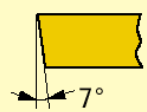
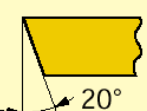
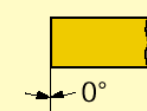
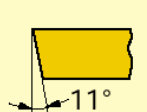


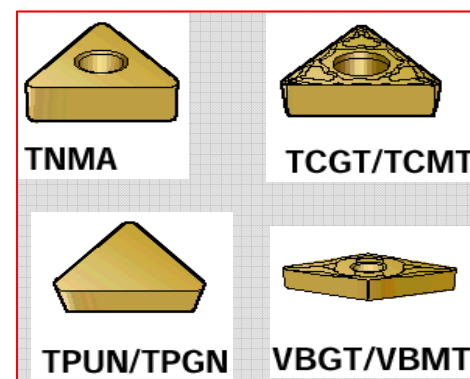


常规内孔车刀杆的编号

S 40 V S C L C R 12

主后角

B  5°	C  7°
E  20°	N  0°
P  11°	O 特殊形式刀片代号



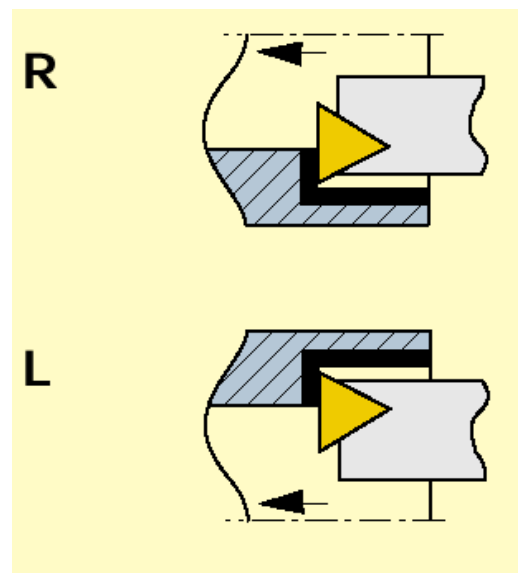
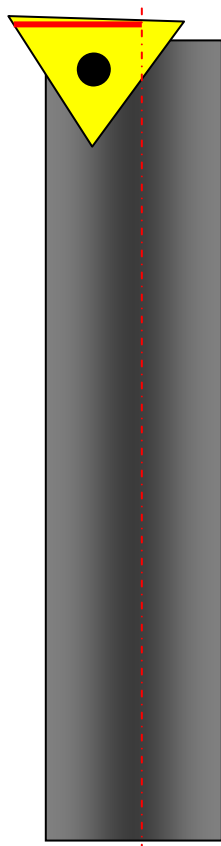


常规内孔车刀杆的编号

S	40	V	S	C	L	C	R	12
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左手刀片

右手刀杆

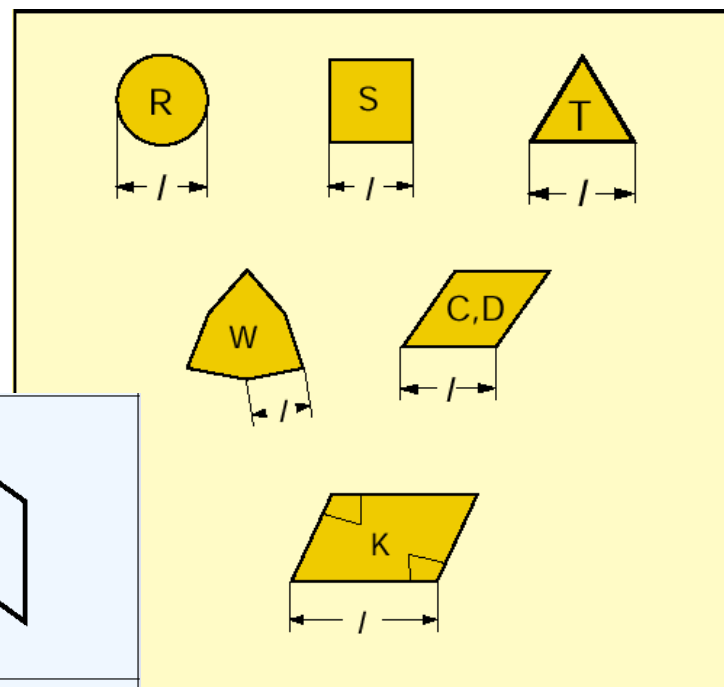
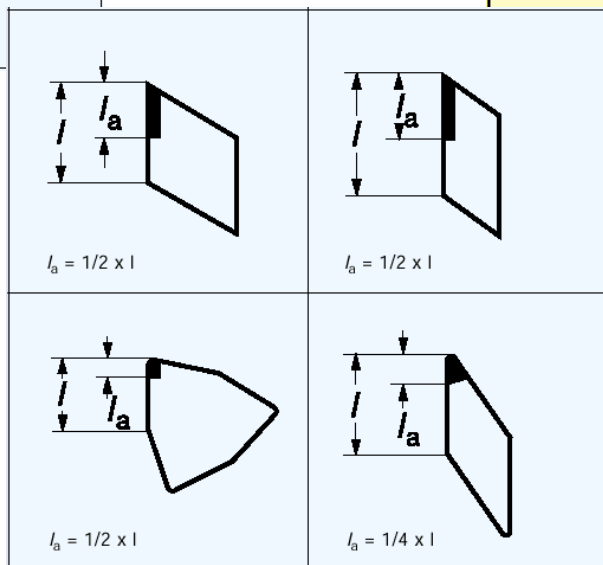
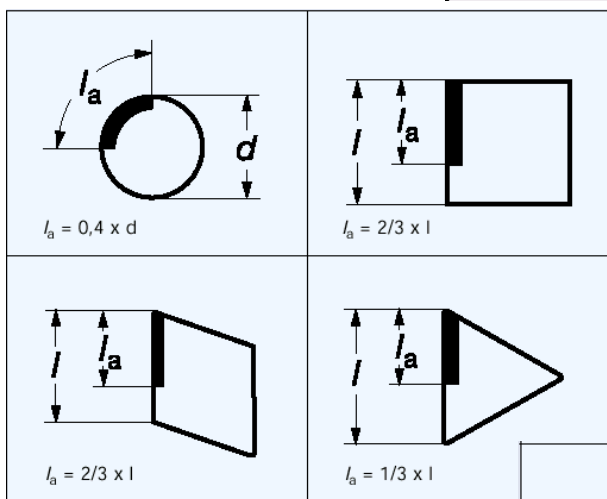


刀具左右手代号



常规内孔车刀杆的编号

S 40 V S C L C R 12



切削刃长度, mm