

*Premier*

Manufacturers of Precision Ground Cutting Tools



Face Grooving  
**NC Modular System**  
e - Catalogue

**Recommendations for Comato face grooving and trepanning operations:**

- Cutting speed 80% of cutting speed for parting-off
- Feed 50% of feed for parting-off
- Apply sufficient cooling directly on cutting edge

**Profile and contour turning:**

The initial face groove must be made within the diameter range of assembly. From this first groove it is possible to turn toward larger or smaller diameters.

**Trepanning:**

When trepanning it is recommendable to stop cutting just before the tool penetrates through, then the slug can be knocked out with a hammer.

**Special face grooving circumstances:**

**A: Close to a boss:**

-Turning R.H. / Holder L.H.

or

-Turning L.H. / Holder R.H.

(STANDARD support blade & clamp).

**B: In a blind hole:**

-Turning R.H. / Holder L.H.

or

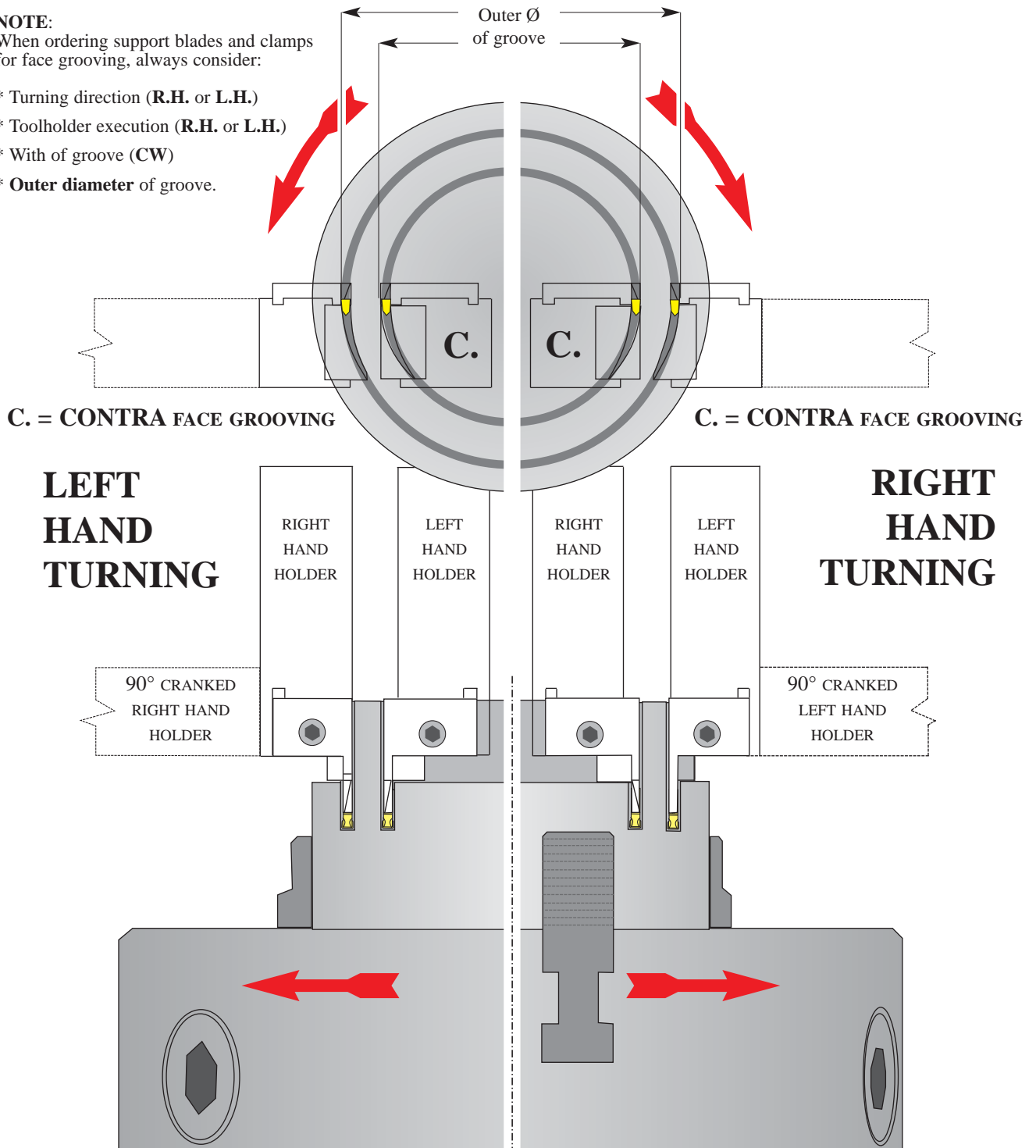
-Turning L.H. / Holder R.H.

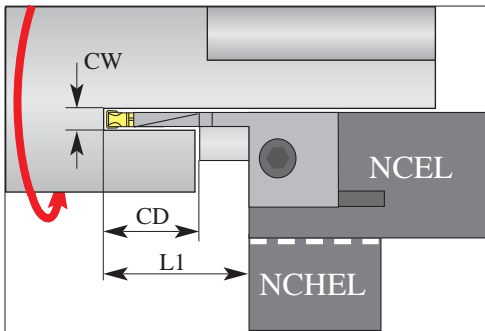
(CONTRA support blade & clamp)

**NOTE:**

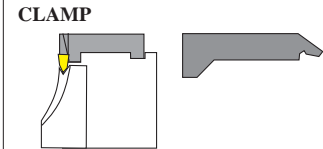
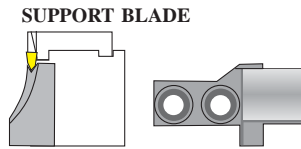
When ordering support blades and clamps for face grooving, always consider:

- \* Turning direction (R.H. or L.H.)
- \* Toolholder execution (R.H. or L.H.)
- \* With of groove (CW)
- \* Outer diameter of groove.

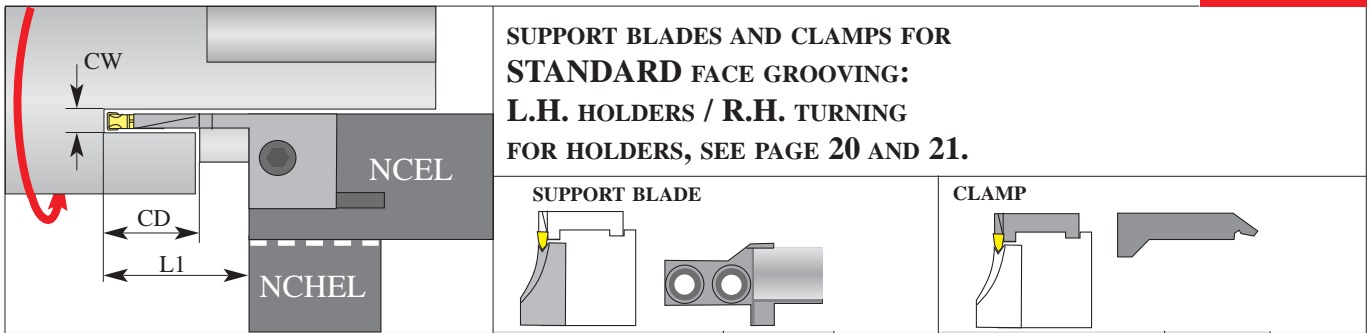




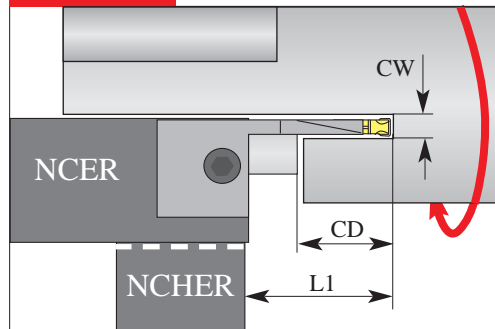
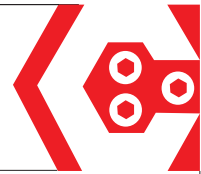
SUPPORT BLADES AND CLAMPS FOR  
**STANDARD** FACE GROOVING:  
**L.H. HOLDERS / R.H. TURNING**  
 FOR HOLDERS, SEE PAGE 20 AND 21.



CW mm.	Outer Ø mm.	CD mm.	L1 mm.	Ordering code	Stock standard	Ordering code	Stock standard
3	40 - 45	10	25	310 15032 040	<input type="checkbox"/>	412 15032 040	<input type="checkbox"/>
	45 - 50	10		310 15032 045	<input type="checkbox"/>		
	50 - 60	12		312 15032 050	<input type="checkbox"/>		
	60 - 75	12		312 15032 060	<input type="checkbox"/>		
	75 - 100	16		316 15032 075	<input type="checkbox"/>	416 15032 075	<input type="checkbox"/>
	100 - 150	16		316 15032 100	<input type="checkbox"/>		
	150 - 250	20		320 15032 150	<input type="checkbox"/>	420 15032 150	<input type="checkbox"/>
	250 - 450	20		320 15032 250	<input type="checkbox"/>		
450 - ~	20	320 15032 450	<input type="checkbox"/>				
4	40 - 45	10	25	310 15042 040	<input type="checkbox"/>	412 15042 040	<input type="checkbox"/>
	45 - 50	10		310 15042 045	<input type="checkbox"/>		
	50 - 60	12		312 15042 050	<input type="checkbox"/>		
	60 - 75	12		312 15042 060	<input type="checkbox"/>		
	75 - 100	16		316 15042 075	<input type="checkbox"/>	416 15042 075	<input type="checkbox"/>
	100 - 150	16		316 15042 100	<input type="checkbox"/>		
	150 - 250	20		320 15042 150	<input type="checkbox"/>	420 15042 150	<input type="checkbox"/>
	250 - 450	20		320 15042 250	<input type="checkbox"/>		
450 - ~	20	320 15042 450	<input type="checkbox"/>				
5	40 - 45	10	25	310 15052 040	<input type="checkbox"/>	412 15052 040	<input type="checkbox"/>
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	50 - 60	12		312 15052 050	<input type="checkbox"/>		
	60 - 75	12		312 15052 060	<input type="checkbox"/>		
	75 - 100	16		316 15052 075	<input type="checkbox"/>	416 15052 075	<input type="checkbox"/>
	100 - 150	16		316 15052 100	<input type="checkbox"/>		
	150 - 250	20		320 15052 150	<input type="checkbox"/>	420 15052 150	<input type="checkbox"/>
	250 - 450	20		320 15052 250	<input type="checkbox"/>		
450 - ~	20	320 15052 450	<input type="checkbox"/>				
6	40 - 50	10	25	310 15062 040	<input type="checkbox"/>	412 15062 040	<input type="checkbox"/>
	50 - 75	12		312 15062 050	<input type="checkbox"/>		
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	150 - 300	20		320 15062 150	<input type="checkbox"/>		
300 - ~	20	320 15062 300	<input type="checkbox"/>				
8	40 - 50	10	25	310 15082 040	<input type="checkbox"/>	412 15082 040	<input type="checkbox"/>
	50 - 75	12		312 15082 050	<input type="checkbox"/>		
	75 - 150	16		316 15082 075	<input type="checkbox"/>	420 15082 075	<input type="checkbox"/>
	150 - 300	20		320 15082 150	<input type="checkbox"/>		
300 - ~	20	320 15082 300	<input type="checkbox"/>				
10	70 - 150	40	45	340 15102 070		440 15102 070	
	150 - 300	40		340 15102 150			
	300 - ~	40		340 15102 300			

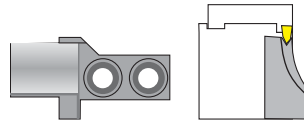


CW mm.	Outer Ø mm.	CD mm.	L1 mm.	SUPPORT BLADE		CLAMP		
				Ordering code	Stock standard	Ordering code	Stock standard	
3	40 - 45	12	32	312 15032 040	■	416 15032 040	■	
	45 - 50	12		312 15032 045	■			
	50 - 60	16		316 15032 050	■			
	60 - 75	16		316 15032 060	■			
	75 - 100	20		320 15032 075	■		420 15032 075	■
	100 - 150	20		320 15032 100	■			
	150 - 250	25		325 15032 150	■			
	250 - 450	25		325 15032 250	■		425 15032 150	■
450 - ~	25	325 15032 450	■					
4	40 - 45	12	32	312 15042 040	■	416 15042 040	■	
	50 - 60	16		316 15042 050	■			
	60 - 75	16		316 15042 060	■			
	75 - 100	20		320 15042 075	■		420 15042 075	■
	100 - 150	20		320 15042 100	■			
	150 - 250	25		325 15042 150	■			
	250 - 450	25		325 15042 250	■		425 15042 150	■
	450 - ~	25		325 15042 450	■			
5	40 - 45	12	32	312 15052 040	■	416 15052 040	■	
	50 - 60	16		316 15052 050	■			
	60 - 75	16		316 15052 060	■			
	75 - 100	20		320 15052 075	■		420 15052 075	■
	100 - 150	20		320 15052 100	■			
	150 - 250	25		325 15052 150	■			
	250 - 450	25	325 15052 250	■	425 15052 150	■		
	450 - ~	25	325 15052 450	■				
	70 - 100	30	40	330 15052 070	■	430 15052 070	■	
	100 - 150	30		330 15052 100	■			
150 - 250	30	330 15052 150		■				
250 - 450	30	330 15052 250		■	430 15052 150	■		
450 - ~	30	330 15052 450	■					
6	40 - 50	12	25	312 15062 040	■	416 15062 040	■	
	50 - 75	16		316 15062 050	■			
	75 - 150	20		320 15062 075	■		425 15062 075	■
	150 - 300	25	40	325 15062 150	■	435 15062 070	■	
	300 - ~	25		325 15062 300	■			
	70 - 150	35		335 15062 070	■			
	150 - 300	35		335 15062 150	■			
300 - ~	35	335 15062 300	■					
8	40 - 50	12	32	312 15082 040	□	416 15082 040	□	
	50 - 75	16		316 15082 050	□			
	75 - 150	20		320 15082 075	□		425 15082 075	□
	150 - 300	25	40	325 15082 150	□	435 15082 070	□	
	300 - ~	25		325 15082 300	□			
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	150 - 300	35		335 15082 150	□			
300 - ~	35	335 15082 300	□					

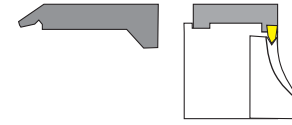


**SUPPORT BLADES AND CLAMPS FOR  
STANDARD FACE GROOVING:  
R.H. HOLDERS / L.H. TURNING  
FOR HOLDERS, SEE PAGE 20 AND 21.**

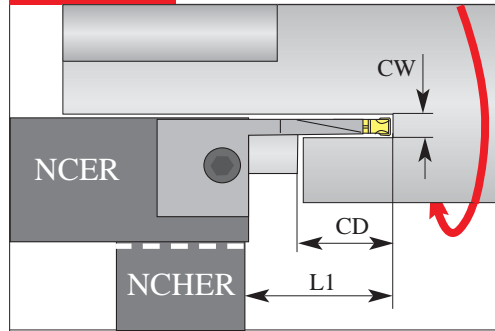
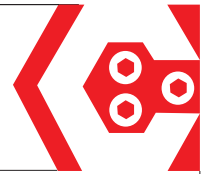
**SUPPORT BLADE**



**CLAMP**

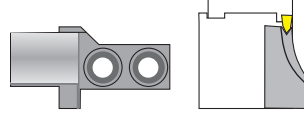


CW mm.	Outer Ø mm.	CD mm.	L1 mm.	Ordering code	Stock standard	Ordering code	Stock standard	
3	40 - 45	10	25	310 15031 040	<input type="checkbox"/>	412 15031 040	<input type="checkbox"/>	
	45 - 50	10		310 15031 045	<input type="checkbox"/>			
	50 - 60	12		312 15031 050	<input type="checkbox"/>			
	60 - 75	12		312 15031 060	<input type="checkbox"/>			
	75 - 100	16		316 15031 075	<input type="checkbox"/>		416 15031 075	<input type="checkbox"/>
	100 - 150	16		316 15031 100	<input type="checkbox"/>			
	150 - 250	20		320 15031 150	<input type="checkbox"/>		420 15031 150	<input type="checkbox"/>
	250 - 450	20		320 15031 250	<input type="checkbox"/>			
450 - ~	20	320 15031 450	<input type="checkbox"/>					
4	40 - 45	10	25	310 15041 040	<input type="checkbox"/>	412 15041 040	<input type="checkbox"/>	
	45 - 50	10		310 15041 045	<input type="checkbox"/>			
	50 - 60	12		312 15041 050	<input type="checkbox"/>			
	60 - 75	12		312 15041 060	<input type="checkbox"/>			
	75 - 100	16		316 15041 075	<input type="checkbox"/>		416 15041 075	<input type="checkbox"/>
	100 - 150	16		316 15041 100	<input type="checkbox"/>			
	150 - 250	20		320 15041 150	<input type="checkbox"/>		420 15041 150	<input type="checkbox"/>
	250 - 450	20		320 15041 250	<input type="checkbox"/>			
450 - ~	20	320 15041 450	<input type="checkbox"/>					
5	40 - 45	10	25	310 15051 040	<input type="checkbox"/>	412 15051 040	<input type="checkbox"/>	
	45 - 50	10		310 15051 045	<input type="checkbox"/>			
	50 - 60	12		312 15051 050	<input type="checkbox"/>			
	60 - 75	12		312 15051 060	<input type="checkbox"/>			
	75 - 100	16		316 15051 075	<input type="checkbox"/>		416 15051 075	<input type="checkbox"/>
	100 - 150	16		316 15051 100	<input type="checkbox"/>			
	150 - 250	20		320 15051 150	<input type="checkbox"/>		420 15051 150	<input type="checkbox"/>
	250 - 450	20		320 15051 250	<input type="checkbox"/>			
450 - ~	20	320 15051 450	<input type="checkbox"/>					
6	40 - 50	10	25	310 15061 040	<input type="checkbox"/>	412 15061 040	<input type="checkbox"/>	
	50 - 75	12		312 15061 050	<input type="checkbox"/>			
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	150 - 300	20		320 15061 150	<input type="checkbox"/>		420 15061 075	<input type="checkbox"/>
300 - ~	20	320 15061 300	<input type="checkbox"/>					
8	40 - 50	10	25	310 15081 040	<input type="checkbox"/>	412 15081 040	<input type="checkbox"/>	
	50 - 75	12		312 15081 050	<input type="checkbox"/>			
	75 - 150	16		316 15081 075	<input type="checkbox"/>			
	150 - 300	20		320 15081 150	<input type="checkbox"/>		420 15081 075	<input type="checkbox"/>
300 - ~	20	320 15081 300	<input type="checkbox"/>					
10	70 - 150	40	45	340 15101 070		440 15101 070		
	150 - 300	40		340 15101 150				
	300 - ~	40		340 15101 300				



**SUPPORT BLADES AND CLAMPS FOR STANDARD FACE GROOVING:  
R.H. HOLDERS / L.H. TURNING  
FOR HOLDERS, SEE PAGE 20 AND 21.**

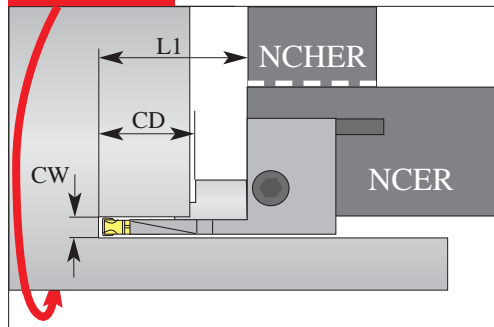
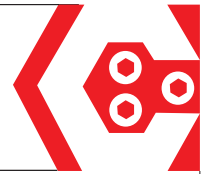
SUPPORT BLADE



CLAMP

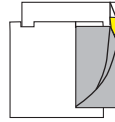
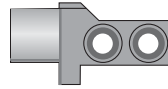


CW mm.	Outer Ø mm.	CD mm.	L1 mm.	Ordering code	Stock standard	Ordering code	Stock standard		
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	45 - 50	12		312 15031 045	■				
	50 - 60	16		316 15031 050	■				
	60 - 75	16		316 15031 060	■				
	75 - 100	20		320 15031 075	■		420 15031 075	■	
	100 - 150	20		320 15031 100	■				
	150 - 250	25		325 15031 150	■		425 15031 150	■	
	250 - 450	25		325 15031 250	■				
450 - ~	25	325 15031 450	■						
4	40 - 45	12	32	312 15041 040	■	416 15041 040	■		
	50 - 60	16		316 15041 050	■				
	60 - 75	16		316 15041 060	■				
	75 - 100	20		320 15041 075	■		420 15041 075	■	
	100 - 150	20		320 15041 100	■				
	150 - 250	25		325 15041 150	■		425 15041 150	■	
	250 - 450	25		325 15041 250	■				
	450 - ~	25		325 15041 450	■				
5	40 - 45	12	32	312 15051 040	■	416 15051 040	■		
	50 - 60	16		316 15051 050	■				
	60 - 75	16		316 15051 060	■				
	75 - 100	20		320 15051 075	■		420 15051 075	■	
	100 - 150	20		320 15051 100	■				
	150 - 250	25		325 15051 150	■		425 15051 150	■	
	250 - 450	25		325 15051 250	■				
	450 - ~	25		325 15051 450	■				
	70 - 100	30		40	330 15051 070		■	430 15051 070	■
	100 - 150	30			330 15051 100		■		
	150 - 250	30			330 15051 150		■		
	250 - 450	30			330 15051 250		■		
450 - ~	30	330 15051 450	■						
6	40 - 50	12	25	312 15061 040	■	416 15061 040	■		
	50 - 75	16		316 15061 050	■				
	75 - 150	20		320 15061 075	■		425 15061 075	■	
	150 - 300	25		325 15061 150	■				
	300 - ~	25		325 15061 300	■				
	70 - 150	35		40	335 15061 070		■	435 15061 070	■
	150 - 300	35			335 15061 150		■		
	300 - ~	35			335 15061 300		■		
8	40 - 50	12	32	312 15081 040	□	416 15081 040	□		
	50 - 75	16		316 15081 050	□				
	75 - 150	20		320 15081 075	□		425 15081 075	□	
	150 - 300	25		325 15081 150	□				
	300 - ~	25		325 15081 300	□				
	70 - 150	35		40	335 15081 070		□	435 15081 070	□
	150 - 300	35			335 15081 150		□		
	300 - ~	35			335 15081 300		□		

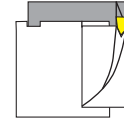


SUPPORT BLADES AND CLAMPS FOR  
CONTRA FACE GROOVING:  
R.H. HOLDERS / R.H. TURNING  
FOR HOLDERS, SEE PAGE 20 AND 21.

SUPPORT BLADE

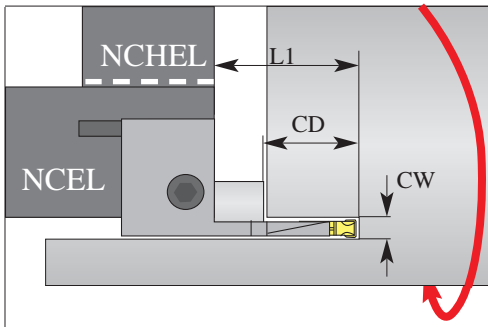


CLAMP



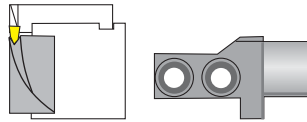
CW mm.	Outer Ø mm.	CD mm.	L1 mm.	Ordering code	Stock standard	ordering code	Stock standard
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	45 - 50	12		312 15031 045C	■		
	50 - 60	16		316 15031 050C	■		
	60 - 75	16		316 15031 060C	■		
	75 - 100	20		320 15031 075C	■	420 15031 075C	■
	100 - 150	20		320 15031 100C	■	425 15031 150C	■
	150 - 250	25		325 15031 150C	■		
	250 - 450	25		325 15031 250C	■		
450 - ~	25	325 15031 450C	■				
4	40 - 45	12	32	312 15041 040C	■	416 15041 040C	■
	50 - 60	16		316 15041 050C	■		
	60 - 75	16		316 15041 060C	■		
	75 - 100	20		320 15041 075C	■		
	100 - 150	20		320 15041 100C	■	420 15041 075C	■
	150 - 250	25		325 15041 150C	■	425 15041 150C	■
	250 - 450	25		325 15041 250C	■		
	450 - ~	25		325 15041 450C	■		
5	40 - 45	12	32	312 15051 040C	■		
	50 - 60	16		316 15051 050C	■		
	60 - 75	16		316 15051 060C	■		
	75 - 100	20		320 15051 075C	■		
	100 - 150	20		320 15051 100C	■	420 15051 075C	■
	150 - 250	25		325 15051 150C	■	425 15051 150C	■
	250 - 450	25		325 15051 250C	■		
	450 - ~	25		325 15051 450C	■		
	70 - 100	30		330 15051 070C	■		
	100 - 150	30		330 15051 100C	■		
150 - 250	30	330 15051 150C	■				
250 - 450	30	330 15051 250C	■				
450 - ~	30	330 15051 450C	■				
6	40 - 50	12	32	312 15061 040C	■	416 15061 040C	■
	50 - 75	16		316 15061 050C	■		
	75 - 150	20		320 15061 075C	■		
	150 - 300	25		325 15061 150C	■		
	300 - ~	25		325 15061 300C	■	425 15061 075C	■
	70 - 150	35		335 15061 070C	■	435 15061 070C	■
	150 - 300	35		335 15061 150C	■		
	300 - ~	35		335 15061 300C	■		
8	40 - 50	12	32	312 15081 040C	■		
	50 - 75	16		316 15081 050C	■		
	75 - 150	20		320 15081 075C	■		
	150 - 300	25		325 15081 150C	■		
	300 - ~	25		325 15081 300C	■	425 15081 075C	■
	70 - 150	35		335 15081 070C	■	435 15081 070C	■
	150 - 300	35		335 15081 150C	■		
	300 - ~	35		335 15081 300C	■		
10	70 - 150	40	45	340 15101 070C	■		
	150 - 300	40		340 15101 150C	■		
	300 - ~	40		340 15101 300C	■		



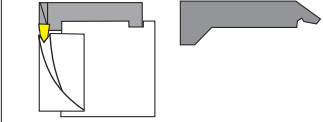


**SUPPORT BLADES AND CLAMPS FOR  
CONTRA FACE GROOVING:  
L.H. HOLDERS / L.H. TURNING  
FOR HOLDERS, SEE PAGE 20 AND 21.**

SUPPORT BLADE



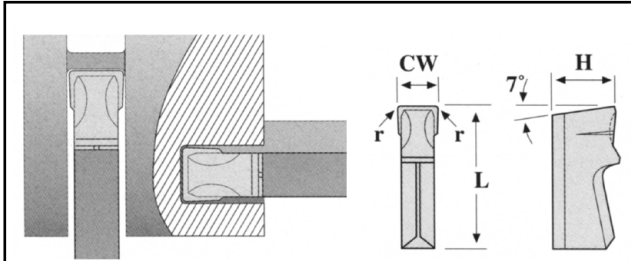
CLAMP



CW mm.	Outer Ø mm.	CD mm.	L1 mm.	Ordering code	Stock standard	Ordering code	Stock standard			
3	40 - 45	12	32	312 15032 040C	■	416 15032 040C	■			
	45 - 50	12		312 15032 045C	■					
	50 - 60	16		316 15032 050C	■					
	60 - 75	16		316 15032 060C	■					
	75 - 100	20		320 15032 075C	■					
	100 - 150	20		320 15032 100C	■					
	150 - 250	25		325 15032 150C	■					
	250 - 450	25		325 15032 250C	■					
450 - ~	25	325 15032 450C	■							
4	40 - 45	12	32	312 15042 040C	■	416 15042 040C	■			
	50 - 60	16		316 15042 050C	■					
	60 - 75	16		316 15042 060C	■					
	75 - 100	20		320 15042 075C	■					
	100 - 150	20		320 15042 100C	■					
	150 - 250	25		325 15042 150C	■					
	250 - 450	25		325 15042 250C	■					
	450 - ~	25		325 15042 450C	■					
5	40 - 45	12	32	312 15052 040C	■	416 15052 040C	■			
	50 - 60	16		316 15052 050C	■					
	60 - 75	16		316 15052 060C	■					
	75 - 100	20		320 15052 075C	■					
	100 - 150	20		320 15052 100C	■					
	150 - 250	25		325 15052 150C	■					
	250 - 450	25		325 15052 250C	■					
	450 - ~	25		325 15052 450C	■					
	70 - 100	30		40	330 15052 070C			■	430 15052 070C	■
	100 - 150	30			330 15052 100C			■		
150 - 250	30	330 15052 150C	■							
6	40 - 50	12	32	312 15062 040C	■	416 15062 040C	■			
	50 - 75	16		316 15062 050C	■					
	75 - 150	20		320 15062 075C	■					
	150 - 300	25		325 15062 150C	■					
	300 - ~	25		325 15062 300C	■					
	70 - 150	35		40	335 15062 070C			■	435 15062 070C	■
	150 - 300	35			335 15062 150C			■		
	300 - ~	35			335 15062 300C			■		
8	40 - 50	12	32	312 15082 040C	■	416 15082 040C	■			
	50 - 75	16		316 15082 050C	■					
	75 - 150	20		320 15082 075C	■					
	150 - 300	25		325 15082 150C	■					
	300 - ~	25		325 15082 300C	■					
	70 - 150	35		40	335 15082 070C			■	435 15082 070C	■
	150 - 300	35			335 15082 150C			■		
	300 - ~	35			335 15082 300C			■		
10	70 - 150	40	45	340 15102 070C	■	440 15102 070C	■			
	150 - 300	40		340 15102 150C	■					
	300 - ~	40		340 15102 300C	■					

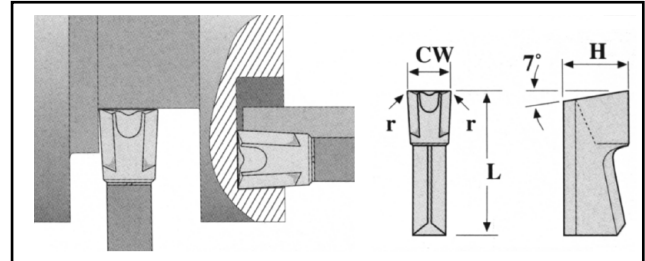


### Type 150 Inserts



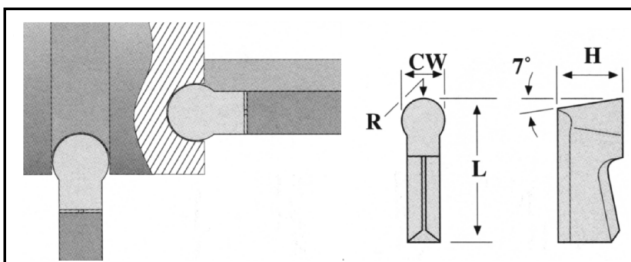
150 standard insert with chip-control

CW + 0,1	Part No.	H - 0,1	L	r	Available grades			
					P30C	K10C	P30	K10
3,0	<b>150.3</b>	6,0	14	0,3	●	●	●	●
4,0	<b>150.4</b>	6,0	14	0,3	●	●	●	●
5,0	<b>150.5</b>	6,0	14	0,3	●	●	●	●
6,0	<b>150.6</b>	6,0	14	0,3	●	●	●	●
8,0	<b>150.8</b>	6,0	14	0,3	●	●	●	●
10,0	<b>150.10</b>	7,5	16	0,3	●	●	●	●



150 GT grooving and side turning insert

CW + 0,1	Part No.	H - 0,1	L	r	Available grades			
					P30C	K10C	P30	K10
3,0	<b>150.3.GT</b>	6,0	14	0,3	●		●	
4,0	<b>150.4.GT</b>	6,0	14	0,3	●		●	
5,0	<b>150.5.GT</b>	6,0	14	0,3	●		●	
6,0	<b>150.6.GT</b>	6,0	14	0,3	●		●	
8,0	<b>150.8.GT</b>	8,0	14	0,3	●		●	
10	<b>150.10.GT</b>	10	14	0,3	●	●	●	●



150 standard radius insert

CW - 0,1	Part No.	H - 0,1	L	R - 0,05	Available grades			
					P30C	K10C	P30	K10
2,7	<b>150.3.RD</b>	6,0	14	1,35	●	●	●	●
3,7	<b>150.4.RD</b>	6,0	14	1,85	●	●	●	●
4,6	<b>150.5.RD</b>	6,0	14	2,3	●	●	●	●
5,6	<b>150.6.RD</b>	6,0	14	2,8	●	●	●	●
7,6	<b>150.8.RD</b>	6,0	14	3,8	●	●	●	●
9,5	<b>150.10.RD</b>	7,5	16	4,75	●	●	●	●

## Recommendations for Face grooving

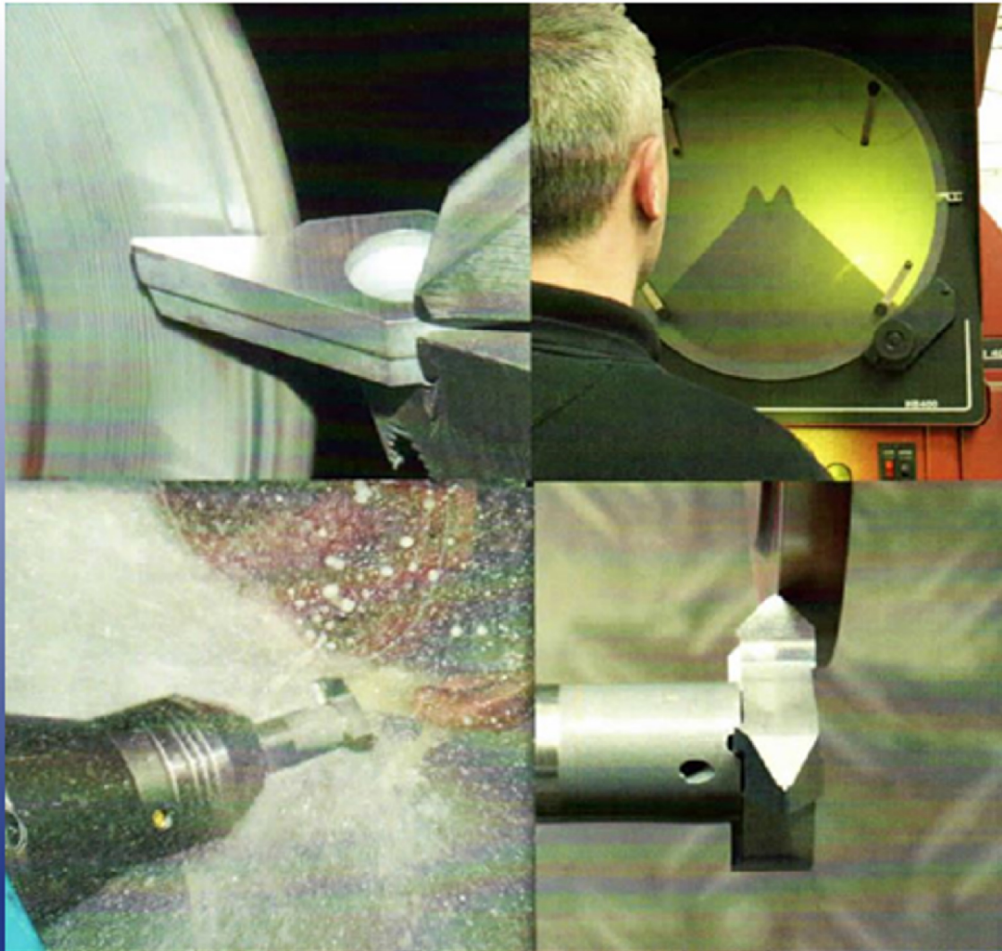
MATERIAL	RECOMMENDED CARBIDE GRADE	FEED MM REV			
		0,025	0,05	0,1	0,2
		CUTTING SPEED M/MIN			
Low carbon steel	P30C	130	100	90	90
Carbon steel	P30C	160	140	110	
Alloyed steel	P30C		110	80	75
Stainless steel	P30C		100	90	70
Cast steel	P30C		80	65	50
Heat resistant Iron-based alloys	K10C	100	65	60	40
Hard steel (Manganese steel)	K10		20	15	
Malleable Iron	K10C	130	130	110	
Cast Iron	K10C	110	110	95	
Aluminium alloys	K10		240	200	
Heat resistant Nickel-based alloys	K10	30	20	12	
Heat resistant Cobalt-based alloys	K10	30	20	12	
Non-Ferrous materials	K10	240	160	120	

**NOTE**

The above data are for guidance only.  
 Actual performance depends on various factors,  
 such as mounting stability, workpiece shape  
 and specific material characteristics.

# Premier

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