

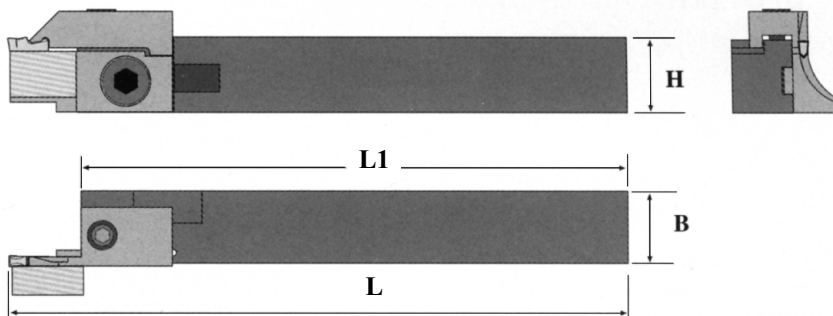
Premier

Manufacturers of Precision Ground Cutting Tools



Face Grooving
MiniSYSTEM
e - Catalogue

Type MER/L Toolholder



NOTE: Toolholders are supplied with screws for support blade and clamp only.

Clamps, support blades and inserts must be ordered separately.

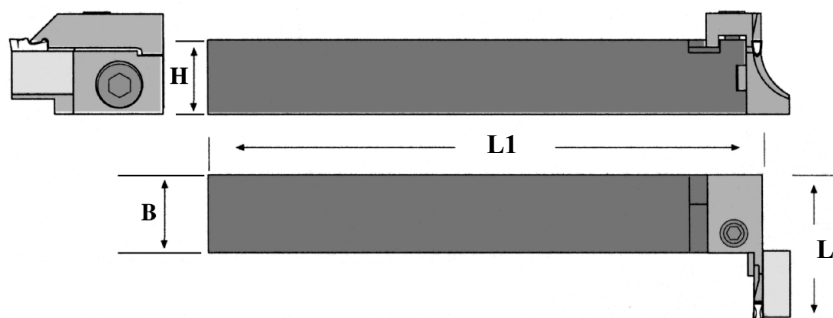
Inserts
Type 150
Page: ED4

Mini basic toolholder

Part No.	Insert type	CW max	CD max	H	B	L	L1	Clamp Screw	Clamp Screw Key	Support Blade screw	Support Blade Key
MER/L 1212	150	2.5	12	12	12	136	120	M4x8MC	Hex M3	M5x12MK	Hex M3
MER/L 1616	150	2.5	12	12	12	136	120	M4x8MC	Hex M3	M5x12MK	Hex M3
MER/L 2020	150	2.5	12	12	12	156	140	M4x8MC	Hex M3	M5x12MK	Hex M3

State R or L version

Type MHER/L Toolholder



NOTE: Toolholders are supplied with screws for support blade and clamp only.

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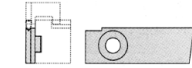
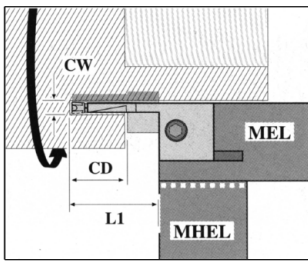
Inserts
Type 150
Page: ED4

Mini cranked holder

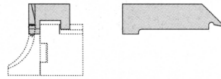
Part No.	Insert type	CW max	CD max	H	B	L	L1	Clamp Screw	Clamp Screw Key	Support Blade screw	Support Blade Key
MHER/L 2020	150	2.5	12	20	20	36	145	M4x8MC	Hex M3	M5x12MK	Hex M3
MHER/L 2525	150	2.5	12	25	25	36	145	M4x8MC	Hex M3	M5x12MK	Hex M3

State R or L version

LH Tools RH Turning



Support Blade

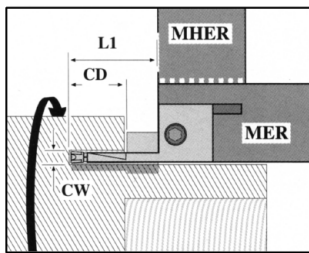


Clamp

Mini system support blades and clamps

CW	Face Groove Outer Diameter	CD	L1	Insert Type	Support Blade Part No.	Clamp Part No.
2	20 - 22	8	16	150	308-155202-2022	408-155202-2022
2	22 - 25	8	16	150	308-155202-2225	408-155202-2248
2	25 - 29	10	16	150	308-155202-2529	
2	29 - 34	10	16	150	308-155202-2934	
2	34 - 40	12	16	150	308-155202-3440	
2	40 - 48	12	16	150	308-155202-4048	
2.5	20 - 22	8	16	150	308-155252-2022	408-155202-2022
2.5	22 - 25	8	16	150	308-155252-2225	408-155202-2248
2.5	25 - 29	10	16	150	308-155252-2529	
2.5	29 - 34	10	16	150	308-155252-2934	
2.5	34 - 40	12	16	150	308-155252-3440	
2.5	40 - 48	12	16	150	308-155252-4048	

RH Tools LH Turning



Support Blade



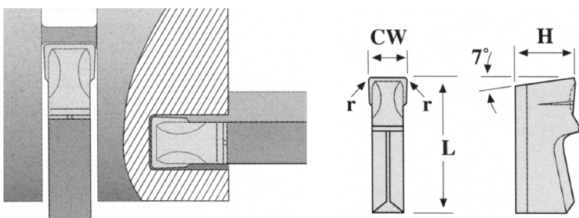
Clamp

Mini system support blades and clamps

CW	Face Groove Outer Diameter	CD	L1	Insert Type	Support Blade Part No.	Clamp Part No.
2	20 - 22	8	16	150	308-155201-2022	408-155201-2022
2	22 - 25	8	16	150	308-155201-2225	408-155201-2248
2	25 - 29	10	16	150	308-155201-2529	
2	29 - 34	10	16	150	308-155201-2934	
2	34 - 40	12	16	150	308-155201-3440	
2	40 - 48	12	16	150	308-155201-4048	
2.5	20 - 22	8	16	150	308-155251-2022	408-155201-2022
2.5	22 - 25	8	16	150	308-155251-2225	408-155201-2248
2.5	25 - 29	10	16	150	308-155251-2529	
2.5	29 - 34	10	16	150	308-155251-2934	
2.5	34 - 40	12	16	150	308-155251-3440	
2.5	40 - 48	12	16	150	308-155252-4048	

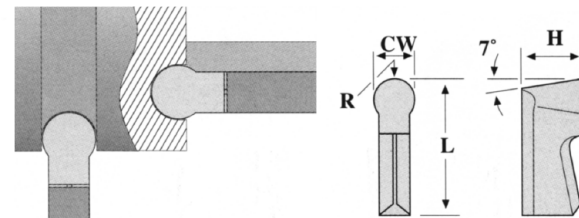
For current stock availability, refer to our latest price list

Type 150 inserts



150 standard Insert with chip control

CW + 0,1	Part No.	H	L	r	Available grades			
					P30C	K10C	P30	K10
2,0	150.2	3,6	9	0,3	●	●	●	●
2,5	150.2,5	3,6	9	0,3	●	●	●	●



150 RD radius insert

CW - 0,1	Cat. no.	H	L	R	Available grades			
					P30C	K10C	P30	K10
1,8	150.2.RD	3,6	9	0,9	●	●	●	●
2,3	150.2,5.RD	3,6	9	1,15	●	●	●	●

Grades, Speeds & Feeds

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.

Technical Information - Face Grooving

Recommendations for 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.

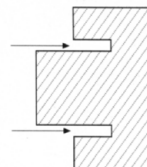
Trepanning:

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:

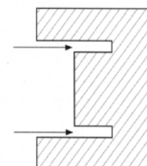
Close to a boss:

- R.H. turning / L.H. tool
 - L.H. turning / R.H. tool
- (use STANDARD support blades and clamps).



In a blind hole:

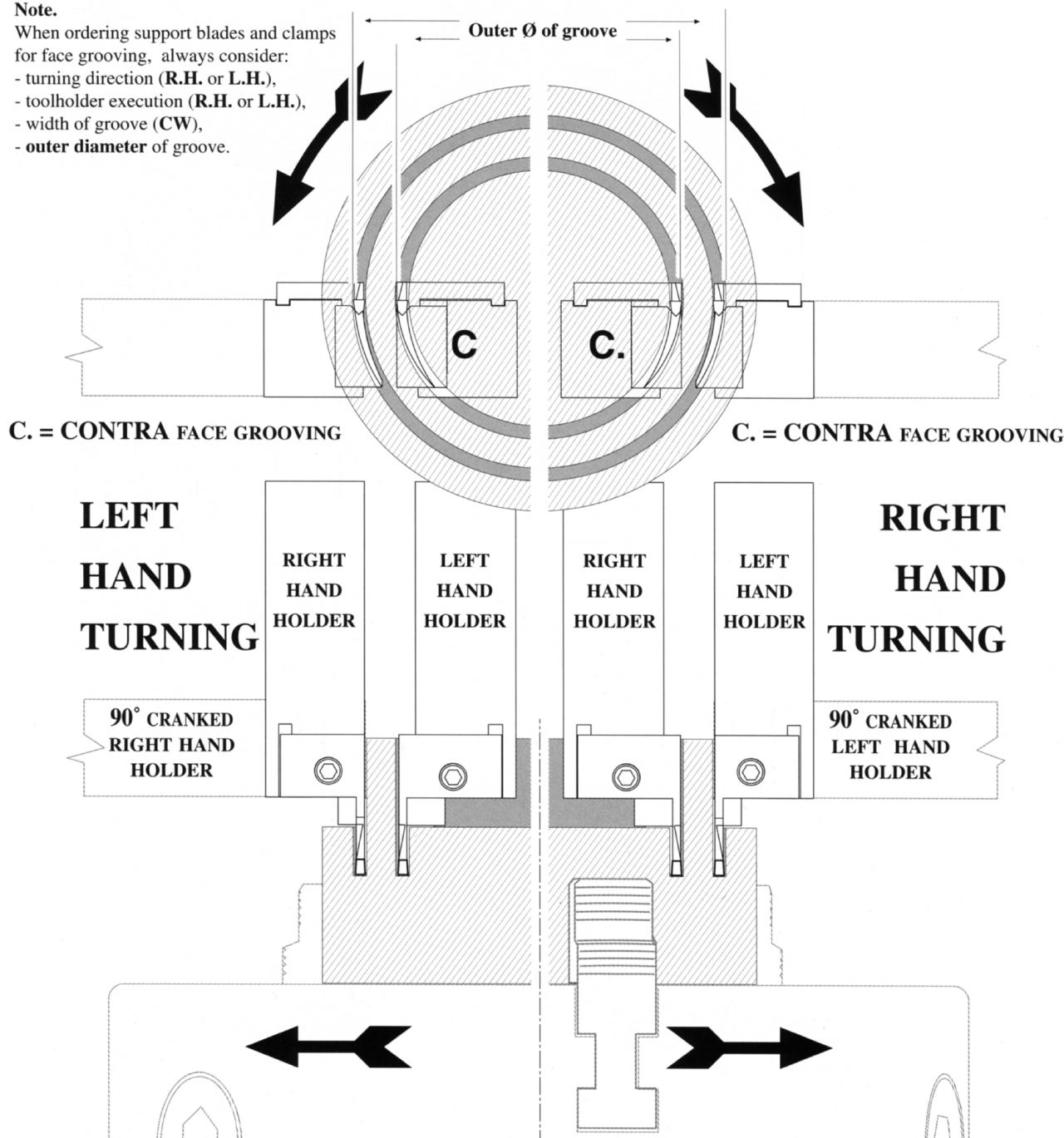
- R.H. turning / R.H. tool
 - L.H. turning / L.H. tool
- (use CONTRA support blades and clamps).



Note.

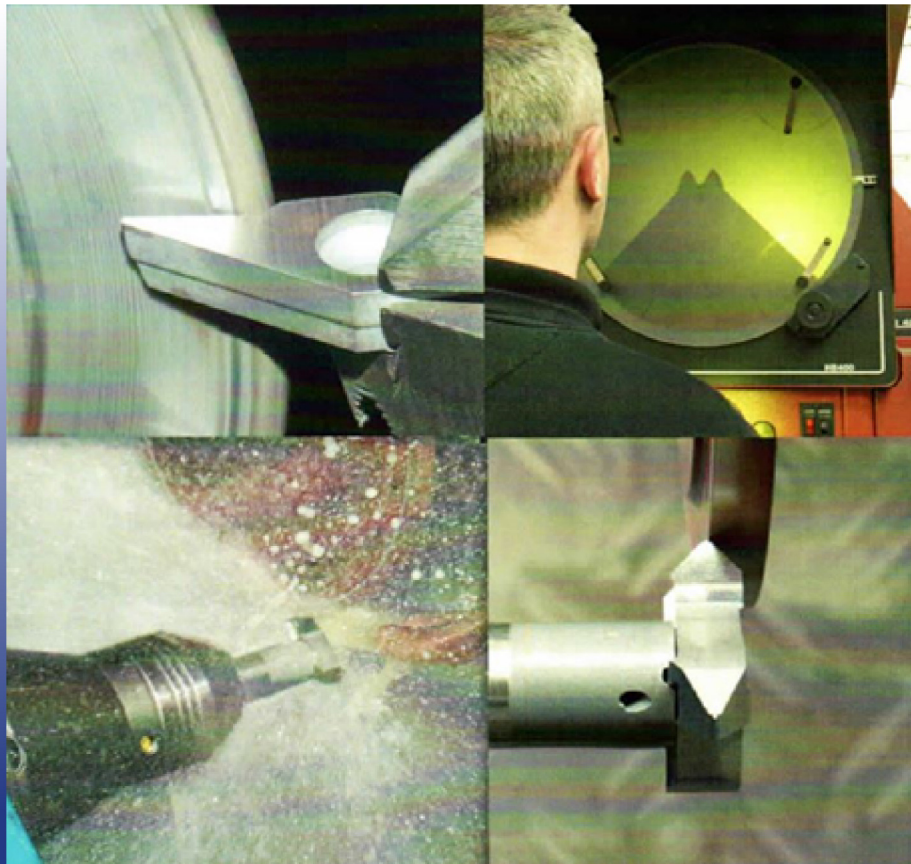
When ordering support blades and clamps for face grooving, always consider:

- turning direction (R.H. or L.H.),
- toolholder execution (R.H. or L.H.),
- width of groove (CW),
- outer diameter of groove.





Manufacturers of Precision Ground Cutting Tools



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