



DRILLING & TURNING

MULTICUT

The All-in-One Drilling and Turning solution
that maximizes your productivity!

DRILLING &
TURNING

NEW
1.50D
TOOLHOLDERS



SINCE 1916

MULTICUT

The All-in-One Drilling and Turning Solution that Maximizes Your Productivity!

Do you find yourself constantly changing tools during your machining process, causing delays and reducing efficiency? Say goodbye to those problems with Multicut! Our innovative design and high-performance coatings make Multicut the perfect solution for a broad range of materials, reducing the need for tool changeovers and leading to shorter cycle times and reduced costs.

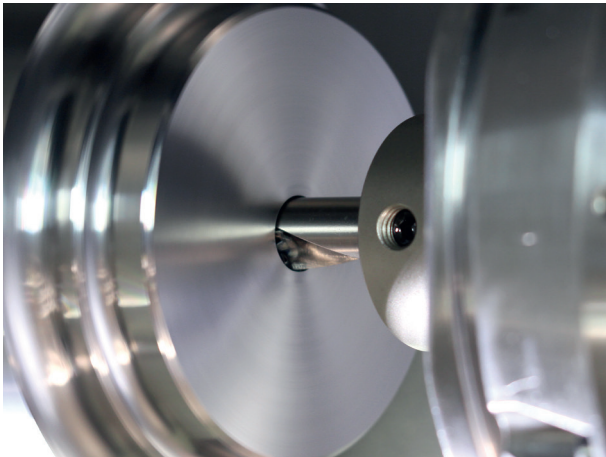
With a DC range from 8mm to 32mm and lengths of 1.50D and 2.25D, Multicut offers efficiency and high-quality machining. Our two innovative high-performance grades, PH7920 and PHS225, are coated to cover all materials in the ISO material groups P, M, and S, ensuring that the cutting edges remain stable and heat-resistant. PH7920 is ideal for universal applications and PHS225 is the first choice for Stainless Steel. Our tool holders are designed to provide better stability and the smooth surface of the tool holders also makes it easy to evacuate swarf, enhancing your machining process.

Multicut offers a unique method with a flat bottom hole, making it the perfect problem solver for insufficient tool storage. With Multicut, you can minimize the need for tool changeovers, leading to a significant reduction in cycle time. This approach is particularly advantageous when processing times are short.

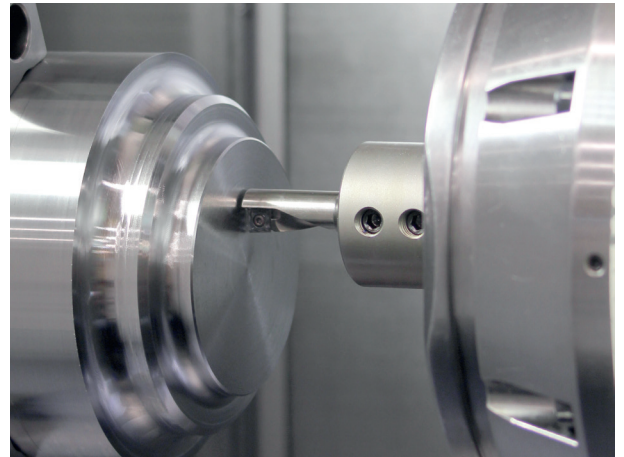
Maximize your productivity with Multicut - upgrade your machining process today!

With MultiCut, you can perform four machining operations using just one tool:

FLAT BOTTOM DRILLING (stationary or rotary)



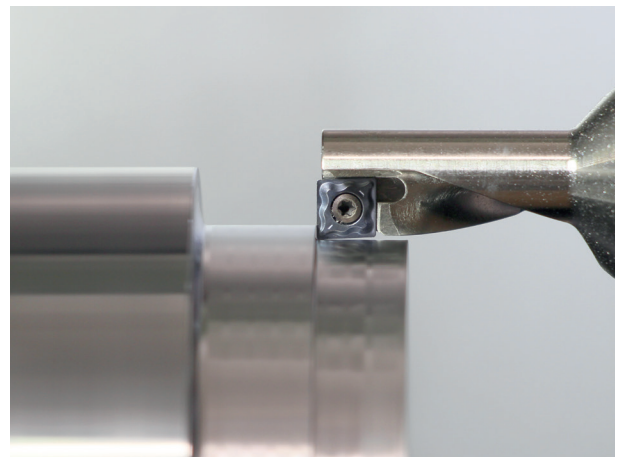
FACE TURNING



INTERNAL TURNING

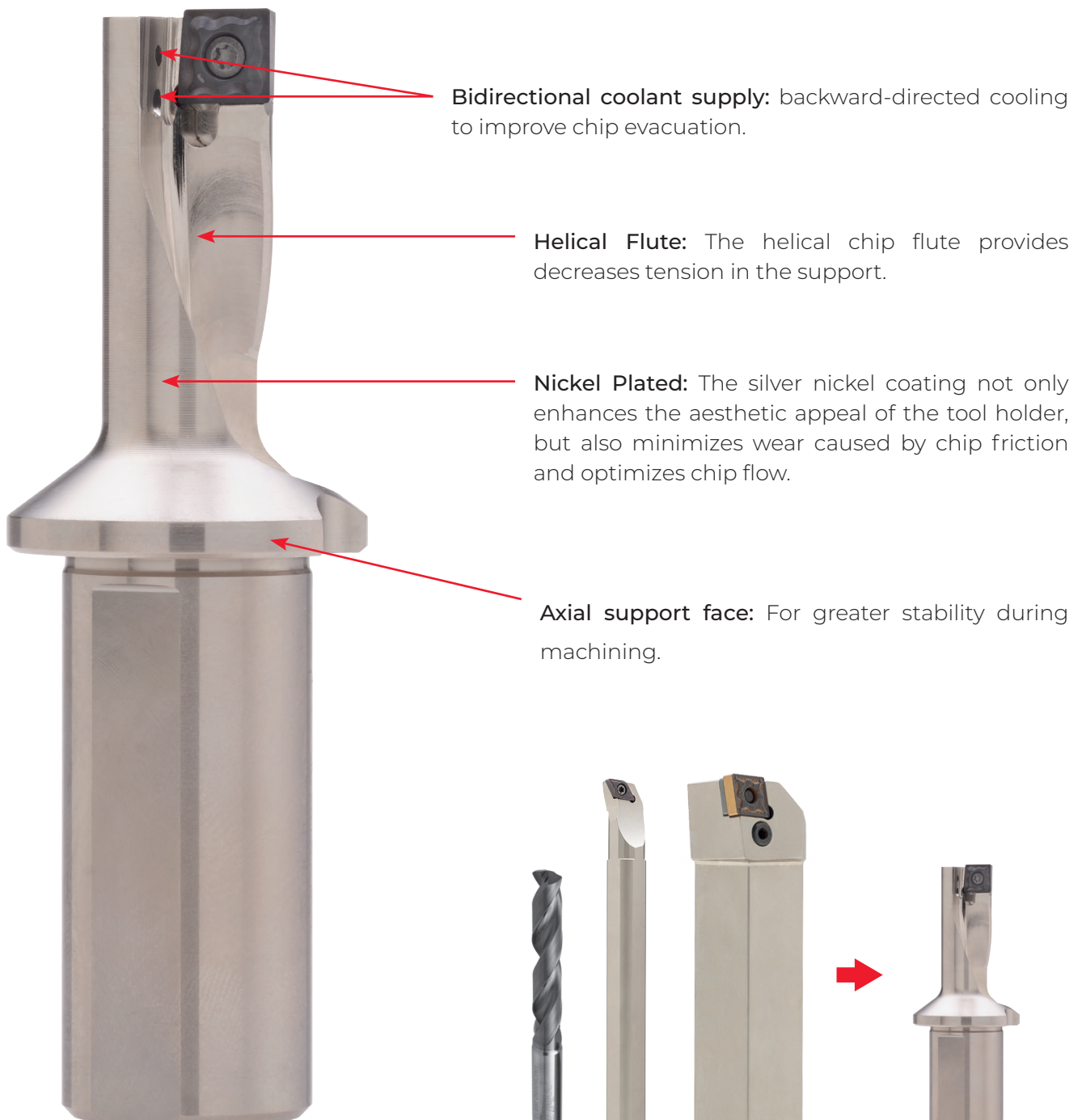


EXTERNAL TURNING



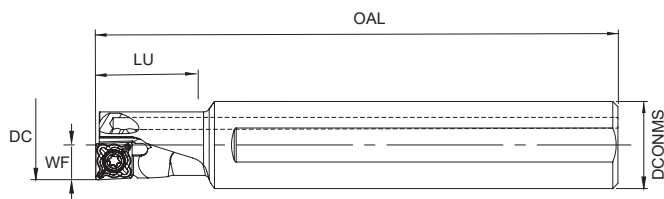
Advantages of Multicut

- Minimize your tool changeover time
- Reduce your inventory costs
- Reduce downtime
- Solve the problem of insufficient tool storage
- Save programming effort














MULTICUT


NEW XMS 1.50D



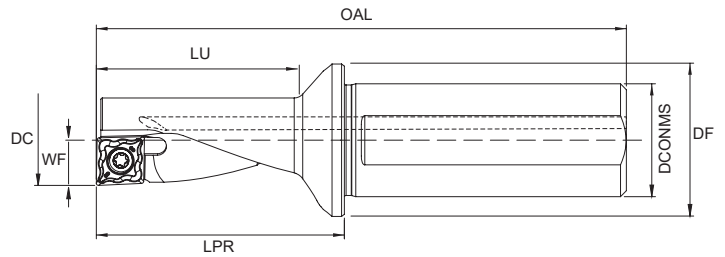
*Right hand style show

Order code Código	Reference Referência Referencia	Hand		Dimensions Dimensões Dimensiones (mm)					WT	Insert	Stock
				DC	DCONMS	WF	OAL	LU			
182024900	XMS-R 08010-1.50D	Right	1	8	10	4	80	12	0,053	XCMT 0401.. ER	
182025000	XMS-R 10012-1.50D	Right	1	10	12	5	90	15	0,062	XCMT 0502..	
182025100	XMS-R 12016-1.50D	Right	1	12	16	6	100	18	0,120	XCMT 0602..	
182025200	XMS-R 14016-1.50D	Right	1	14	16	7	110	21	0,134	XCMT 0703..	
182025300	XMS-R 16020-1.50D	Right	1	16	20	8	125	24	0,236	XCMT 0803..	
182025400	XMS-R 18025-1.50D	Right	1	18	25	9	135	27	0,400	XCMT 09T3..	
182025500	XMS-R 20025-1.50D	Right	1	20	25	10	150	30	0,451	XCMT 10T3..	
182025600	XMS-R 25032-1.50D	Right	1	25	32	12,5	180	37,5	0,880	XCMT 1304..	
182025700	XMS-R 32040-1.50D	Right	1	32	40	16	200	48	1,511	XCMT 1705..	




















 Stock item | Produto de stock | Itens de stock


 Available under request | Disponível sobre consulta | Disponible bajo consulta

XMS 2.25D



*Right hand style show

Order code Código	Reference Referência Referencia	Hand		Dimensions Dimensões Dimensiones (mm)							WT	Insert	Stock
				DC	DCONMS	DF	WF	OAL	LU	LPR			
182021200	XMS-R 08010-2.25D	Right	1	8,0	10	15	4	60,0	18,0	22,0	0,027	XCMT 0401.. ER	
182021300	XMS-R 10012-2.25D	Right	1	10,0	12	18	5	69,5	22,5	27,5	0,046	XCMT 0502..	
182021400	XMS-R 12016-2.25D	Right	1	12,0	16	22	6	78,0	27,0	33,0	0,089	XCMT 0602..	
182021500	XMS-R 14016-2.25D	Right	1	14,0	16	22	7	83,5	31,5	38,5	0,094	XCMT 0703..	
182021600	XMS-R 16020-2.25D	Right	1	16,0	20	28	8	94,0	36,0	44,0	0,154	XCMT 0803..	
182021700	XMS-R 18025-2.25D	Right	1	18,0	25	36	9	109,5	40,5	53,5	0,293	XCMT 09T3..	
182021800	XMS-R 20025-2.25D	Right	1	20,0	25	36	10	111,0	45,0	55,0	0,311	XCMT 10T3..	
182021900	XMS-R 25032-2.25D	Right	1	25,0	32	44	12,5	129,0	56,5	69,0	0,563	XCMT 1304..	
182022000	XMS-R 32040-2.25D	Right	1	32,0	40	54	16	158,0	72,0	88,0	1,117	XCMT 1705..	
182022100	XMS-L 08010-2.25D	Left	1	8,0	10	15	4	60,0	18,0	22,0	0,027	XCMT 0401.. EL	
182022200	XMS-L 10012-2.25D	Left	1	10,0	12	18	5	69,5	22,5	27,5	0,046	XCMT 0502..	
182022300	XMS-L 12016-2.25D	Left	1	12,0	16	22	6	78,0	27,0	33,0	0,089	XCMT 0602..	
182022400	XMS-L 14016-2.25D	Left	1	14,0	16	22	7	83,5	31,5	38,5	0,094	XCMT 0703..	
182022500	XMS-L 16020-2.25D	Left	1	16,0	20	28	8	94,0	36,0	44,0	0,154	XCMT 0803..	
182022600	XMS-L 18025-2.25D	Left	1	18,0	25	36	9	109,5	40,5	53,5	0,293	XCMT 09T3..	
182022700	XMS-L 20025-2.25D	Left	1	20,0	25	36	10	111,0	45,0	55,0	0,311	XCMT 10T3..	
182022800	XMS-L 25032-2.25D	Left	1	25,0	32	44	12,5	129,0	56,5	69,0	0,563	XCMT 1304..	
182022900	XMS-L 32040-2.25D	Left	1	32,0	40	54	16	158,0	72,0	88,0	1,117	XCMT 1705..	

 Stock item | Produto de stock | Itens de stock

 Available under request | Disponível sobre consulta | Disponible bajo consulta

MULTICUT

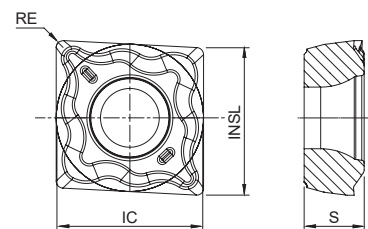
XCMT Inserts | Pastilhas | Plaquetas



XCMT-MP
(PH7 grade)



XCMT-MP
(PHS grade)



XCMT-MP

		P	M		S	Dimensions Dimensões Dimensiones (mm)				Hand
		PVD	CVD	PVD	PVD	IC	S	INSL	RE	
	⁽²⁾ Grade code	G4	U5	G4	G4					
⁽¹⁾ Geometry code	ISO Reference	PH7920	PHS225	PH7920	PH7920					
1124790	XCMT 040104-MP ER	☺	☹	☺	☺	4,40	1,89	4,00	0,40	Right
1124791	XCMT 040104-MP EL	☺	☹	☺	☺	4,40	1,89	4,00	0,40	Left
1124792	XCMT 050204-MP EN	☺	☹	☺	☺	5,65	2,14	5,00	0,40	Neutral
1123788	XCMT 060204-MP EN	☺	☹	☺	☺	6,40	2,47	6,00	0,40	Neutral
1124784	XCMT 070304-MP EN	☺	☹	☺	☺	7,50	3,25	7,00	0,40	Neutral
1124785	XCMT 080304-MP EN	☺	☹	☺	☺	8,40	3,26	8,00	0,40	Neutral
1124786	XCMT 09T304-MP EN	☺	☹	☺	☺	9,45	4,00	9,00	0,40	Neutral
1124787	XCMT 10T308-MP EN	☺	☹	☺	☺	10,40	4,00	10,00	0,80	Neutral
1124788	XCMT 130408-MP EN	☺	☹	☺	☺	13,35	4,85	12,50	0,80	Neutral
1124789	XCMT 170508-MP EN	☺	☹	☺	☺	17,30	5,58	16,00	0,80	Neutral




☺ First choice | Primeira opção | 1ª opción

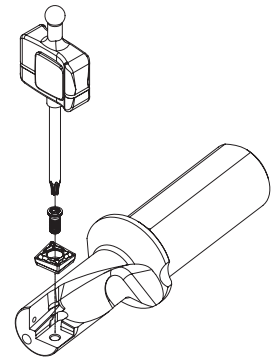
☺ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta | Disponible bajo consulta

Insert order code = (1) Geometry Code + (2) Grade Code



SPARE PARTS Acessórios | Repuestos




Cutter DC	Insert Screw	Key (Torx)	Torque Value
			
XMS-R/L 08010-1.50D/2.25D	P0180400	XT06IP	0,60
XMS-R/L 10012-1.50D/2.25D	P02004IP	XT06IP	0,60
XMS-R/L 12016-1.50D/2.25D	P02205IP	XT06IP	0,90
XMS-R/L 14016-1.50D/2.25D	P02507IP	XT08IP	1,20
XMS-R/L 16020-1.50D/2.25D	P03007IP	XT08IP	1,20
XMS-R/L 18025-1.50D/2.25D	P03007IP	XT08IP	1,20
XMS-R/L 20025-1.50D/2.25D	P03508IP	XT15IP-S35	3,00
XMS-R/L 25032-1.50D/2.25D	P05009IP	XT20IP-S40	4,00
XMS-R/L 32040-1.50D/2.25D	P05013IP	XT20IP-S40	4,00



MULTICUT

GRADES SELECTION GUIDE Guia para selecção de graus | Tabla para selección de calidades

ISO	PSM	Material	HB (Brinell)	Grades	
				← Wear Resistance	Toughness →
				PH7920 	PHS225 
P	1	Unalloyed Steel	125-170	✓	
	2	Low-Alloyed Steel	180-350	✓	
	3	High-Alloyed Steel	200-325	✓	
M	4	SS - Ferritic / Martensitic	200-330	✓	✓
	5	SS - Austenitic	180-330	✓	✓
	6	SS - Austenitic-ferritic (Duplex)	230-260	✓	✓
S	11	Heat Resistant Super Alloys	200-320	✓	

 Good Conditions
  Average Conditions
  Difficult Conditions



RECOMMENDED CUTTING CONDITIONS Condições de corte recomendadas | Condiciones de corte recomendables

ISO	PSM	Material	HB (Brinell)	Vc (m/min)	
				← Wear Resistance	Toughness →
				PH7920	PHS225
P	1	Unalloyed Steel	125-170	110-220	-
	2	Low-Alloyed Steel	180-350	100-210	-
	3	High-Alloyed Steel	200-325	85-190	-
M	4	SS - Ferritic / Martensitic	200-330	95-210	70-230
	5	SS - Austenitic	180-330	85-205	65-225
	6	SS - Austenitic-ferritic (Duplex)	230-260	80-195	55-215
S	11	Heat Resistant Super Alloys	200-320	25-210	-

Reference	FN (mm/rev)			AP (mm)	
	Face Turning	Int/Ext Turning	Holemaking	Face Turning	Int/Ext Turning
XCMT 040104-MP ER/L	0,02-0,09	0,02-0,13	0,01-0,04	0,50-1,90	0,50-2,70
XCMT 050204-MP EN	0,02-0,12	0,02-0,15	0,01-0,05	0,50-2,20	0,50-3,20
XCMT 060204-MP EN	0,02-0,14	0,02-0,16	0,01-0,06	0,70-2,70	0,70-3,70
XCMT 070304-MP EN	0,02-0,16	0,02-0,18	0,01-0,08	0,80-3,00	0,80-4,00
XCMT 080304-MP EN	0,03-0,18	0,03-0,20	0,02-0,08	0,90-3,40	0,90-4,20
XCMT 09T304-MP EN	0,03-0,20	0,03-0,22	0,03-0,09	0,90-3,80	0,90-4,70
XCMT 10T308-MP EN	0,03-0,22	0,03-0,24	0,03-0,10	1,00-4,20	1,00-5,30
XCMT 130408-MP EN	0,03-0,24	0,03-0,26	0,04-0,12	1,00-5,00	1,00-6,50
XCMT 170508-MP EN	0,03-0,27	0,03-0,30	0,04-0,15	1,00-6,00	1,00-7,00

MULTICUT

TECHNICAL DATA Dados técnicos | Datos técnicos

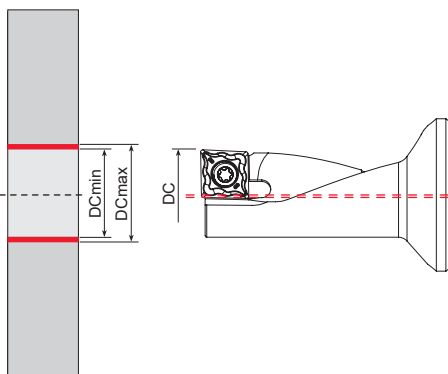
Position the insert:

The insert has two marks that indicate which are the cutting edges. For the insert to be properly mounted, one of the two marks must be pointing outward, as shown in the pictures.



Off-center drilling:

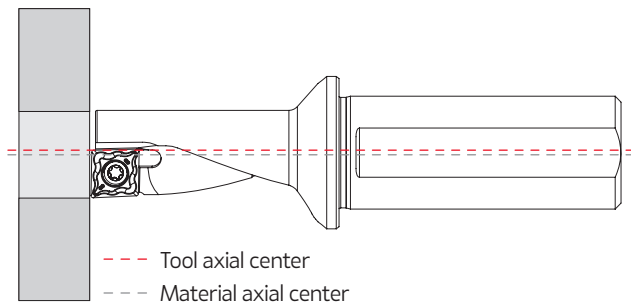
Thanks to MultiCut's unique geometry, it is possible to perform off-center drilling. Therefore, with slight deviations from the center of the workpiece, it is possible to make holes with diameters different from the nominal diameter, as shown in the table below.



Reference	Drilling (mm)		
	DC nominal	DC _{min}	DC _{max}
XMS-R/L 08010-2.25D	8	7,85	8,30
XMS-R/L 10012-2.25D	10	9,85	10,50
XMS-R/L 12016-2.25D	12	11,85	12,50
XMS-R/L 14016-2.25D	14	13,80	14,50
XMS-R/L 16020-2.25D	16	15,80	16,50
XMS-R/L 18025-2.25D	18	17,80	18,50
XMS-R/L 20025-2.25D	20	19,75	20,50
XMS-R/L 25032-2.25D	25	24,75	25,80
XMS-R/L 32040-2.25D	32	31,75	33,00

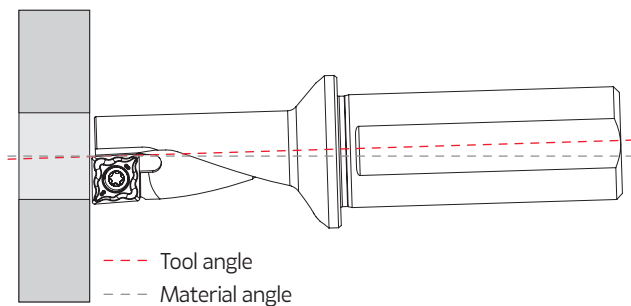
TECHNICAL DATA Dados técnicos | Datos técnicos

In order to achieve the best performance and minimize the risks you need to take some things in considerations:



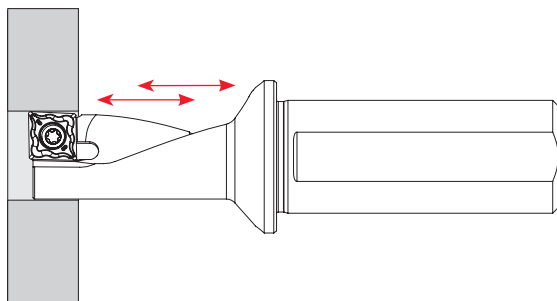
Displacement in x-direction:

This displacement must not exceed the limits presented in the table on page 8.



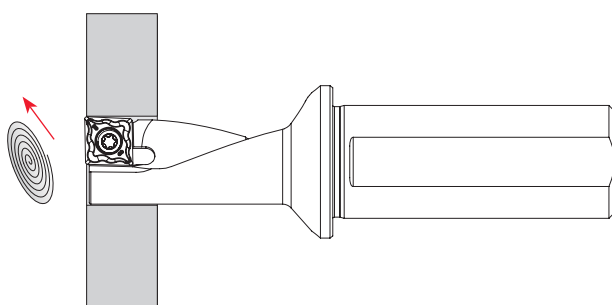
Angular error:

The tool and the machined material must be perpendicular. That means the tool should make exactly 90° to the machined material.



Coolant use:

Coolant must be applied throughout the machining process. If this is not possible, machining with an interrupted cut should be carried out in order to speed up the output of the chip.



Through hole:

It is normal to have a sharp-edged disk when the tool finishes the through hole. We recommend to apply safety measures in order to avoid damages.

Machining across center line:

Due to the limitations of the maximum movement across the centerline, left tools on right turrets cannot perform external turning, and the same is true for right tools on left turrets.

If you are uncertain or have any questions, please request technical support.

DRILLING & TURNING

MULTICUT

The All-in-One Drilling and Turning solution
that maximizes your productivity!



Check the QrCode for more information



HEADQUARTERS

PALBIT. S.A.

T (+351) 234 540 300 | F (+351) 234 540 301

palbit@palbit.pt | www.palbit.pt

Branch office

PALBIT México, S de RL de CV

T (+52) 5555 454 543 | F (+52) 5552 509 190

info@palbit.com.mx | www.palbit.pt/mx

Branch office

PALBIT Brasil

T (+55) 011 25 343 648

palbit@palbit.com.br | www.palbit.pt/br