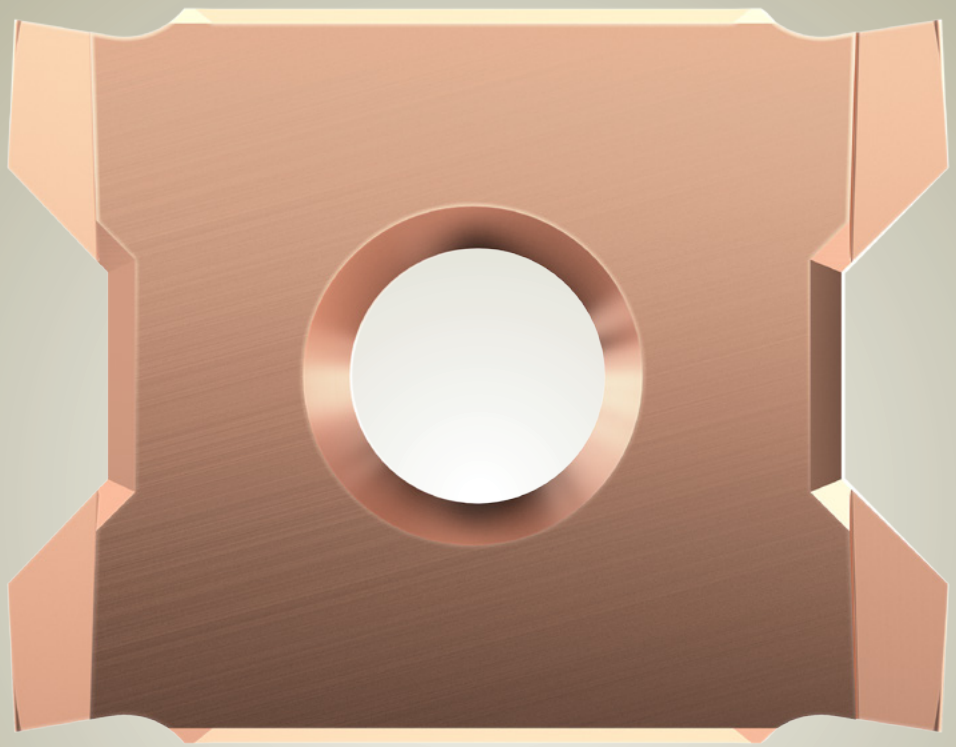
FourCut

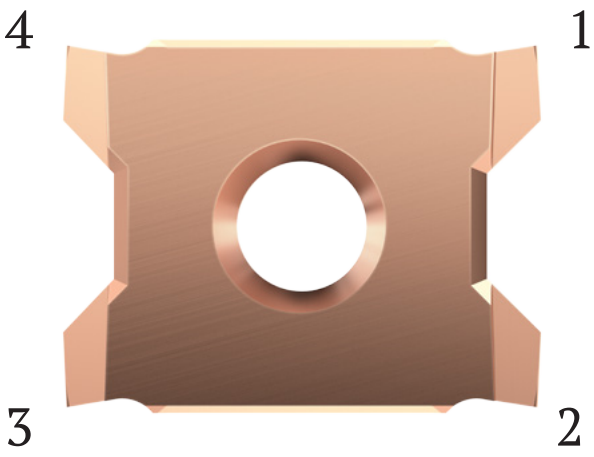
The Master of Threading



Cost-effective
Strength
Accessibility
Optimal Clearance

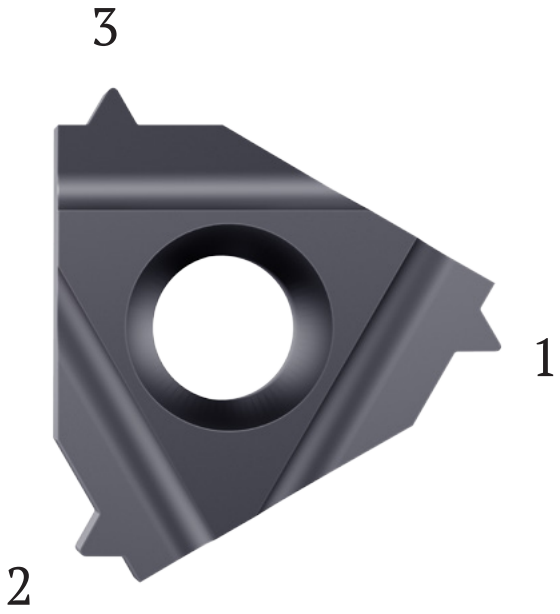
Advantages

Cost-effective

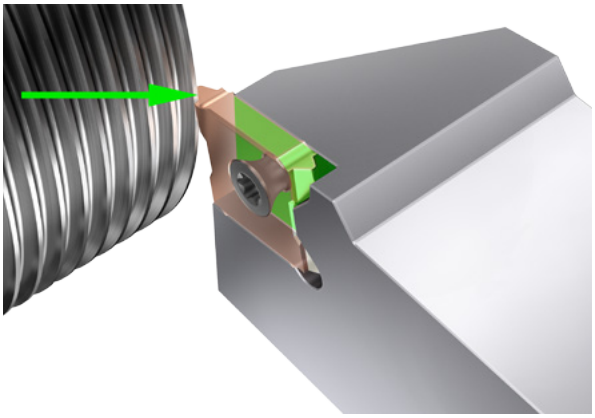


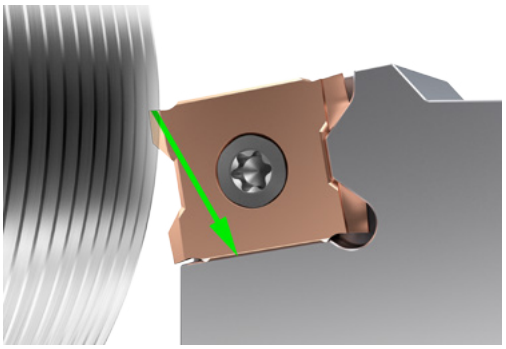
Four Cutting Edges - for the Price of Three

As the price for the inserts are the same, the FourCut threading insert is 25% cheaper as it has four cutting edges instead of three.



Strength

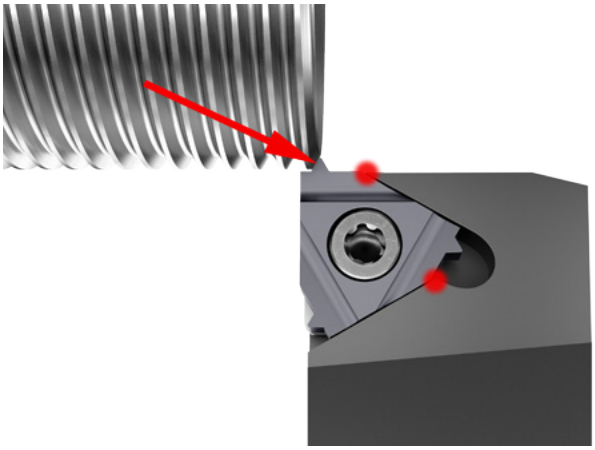


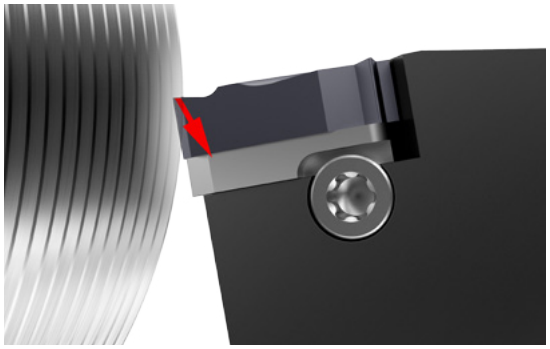


Strong and Stable Machining

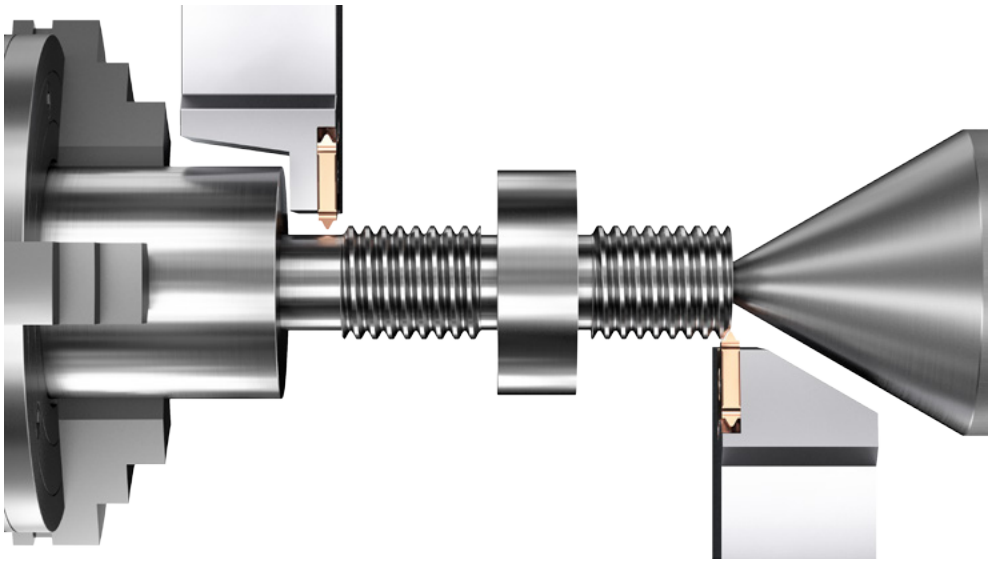
FourCut is a vertical insert. This gives a very strong insert. The cutting forces go in to the insert and you don´t need any anvil as the carbide insert take up the forces.

No problem with the side forces as the flat surface of the insert take up these forces. No weak point on the toolholder.





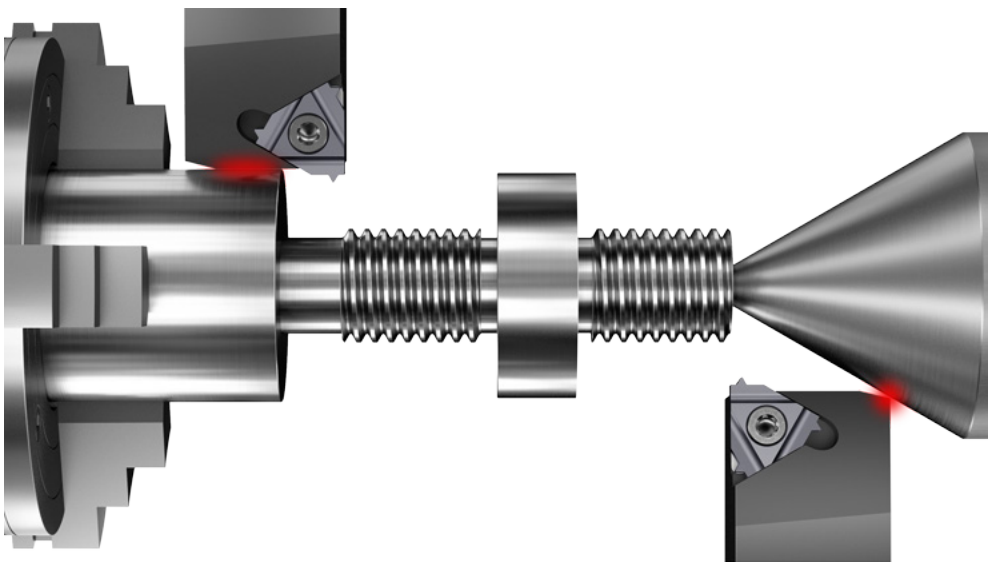
Accessibility



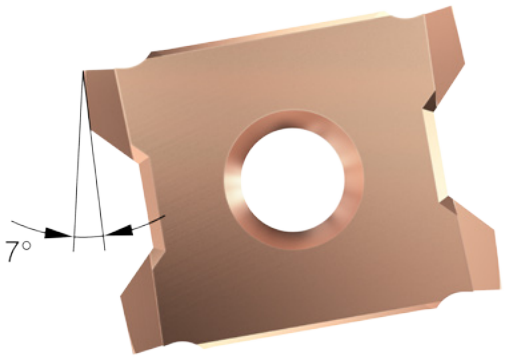
Minimum Waste of Material

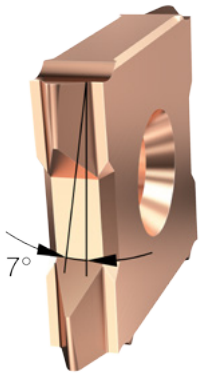
With a vertical insert the accessibility gives you two main advantages.

1) Less waste of material as you don´t need to turn away material to be able to make the thread.
2) As you have more space you can use a live center when you are turning small diameters. This will give you a stable machining and a better quality of the thread.



Optimal Clearance

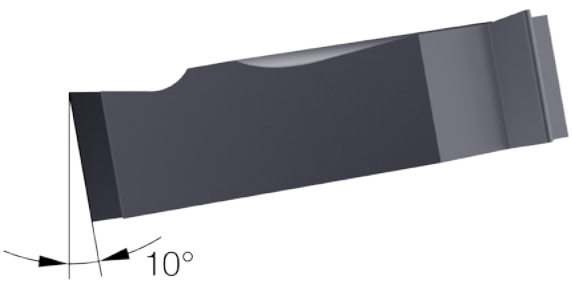


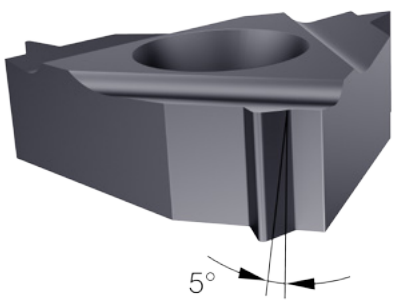


Perfect Cutting Conditions

The inserts are ground on all sides with a complex grinding technology on 6-axis grinding machines to get a 7° clearance angle all around the thread profile which gives the following advantages:

1) Extra clearance on the flanks gives better cutting conditions.
2) Same toolholder for different helix angles as the extra clearance allow you to have bigger difference in helix angle.
3) Less clearance on the radius gives stronger cutting edge and longer tool life.

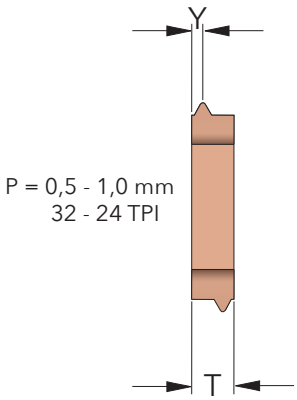


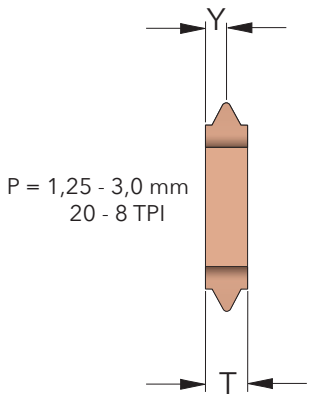


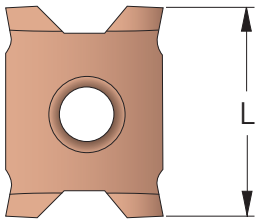
SmiCut STS

THREAD TURNING INSERTS

FourCut







M METRIC

Pitch mm	Part Number	L mm	T mm	Y mm
0,5	12E_0.5ISO_HC	12	2,4	0,4
0,6	12E_0.6ISO_HC	12	2,4	0,6
0,7	12E_0.7ISO_HC	12	2,4	0,6
0,75	12E_0.75ISO_HC	12	2,4	0,6
0,8	12E_0.8ISO_HC	12	2,4	0,6
1,0	12E_1.0ISO_HC	12	2,4	0,6
1,25	12E_1.25ISO_HC	12	2,4	1,2
1,5	12E_1.5ISO_HC	12	2,4	1,2
1,75	12E_1.75ISO_HC	12	2,4	1,2
2,0	12E_2.0ISO_HC	12	2,4	1,2
2,5	12E_2.5ISO_HC	12	3,6	1,8
3,0	12E_3.0ISO_HC	12	3,6	1,8

UN UNIFIED

Pitch TPI	Part Number	L mm	T mm	Y mm
32	12E_32UN_HC	12	2,4	0,6
28	12E_28UN_HC	12	2,4	0,6
24	12E_24UN_HC	12	2,4	0,6
20	12E_20UN_HC	12	2,4	1,2
18	12E_18UN_HC	12	2,4	1,2
16	12E_16UN_HC	12	2,4	1,2
14	12E_14UN_HC	12	2,4	1,2
13	12E_13UN_HC	12	2,4	1,2
12	12E_12UN_HC	12	2,4	1,2
11	12E_11UN_HC	12	3,6	1,8
10	12E_10UN_HC	12	3,6	1,8
9	12E_9UN_HC	12	3,6	1,8
8	12E_8UN_HC	12	3,6	1,8

G/Rp WHITWORTH PIPE THREAD

Pitch TPI	Part Number	L mm	T mm	Y mm
28	12E_28W_HC	12	2,4	0,6
19	12E_19W_HC	12	2,4	1,2
14	12E_14W_HC	12	2,4	1,2
11	12E_11W_HC	12	3,6	1,8

FourCut inserts are also available in FC grade.

THREAD TURNING INSERTS

SmiCut STS

NPT

NPT PIPE THREAD

Pitch TPI	Part Number	L mm	T mm	Y mm
27	12E_27NPT_HC	12	2,4	0,6
18	12E_18NPT_HC	12	2,4	1,2
14	12E_14NPT_HC	12	2,4	1,2
11,5	12E_11.5NPT_HC	12	3,6	1,8

60°

PARTIAL PROFILE 60°

Pitch mm	Pitch TPI	Part Number	L mm	T mm	Y mm
0,35 - 1,0	72-24	12E_AA60_HC	12	2,4	0,6
0,5 - 2,0	48-12	12E_A60_HC	12	2,4	1,2
0,5 - 3,0	48-8	12E_AG60_HC	12	2,4	1,2
1,75 - 3,0	14-8	12E_G60_HC	12	3,6	1,8

55°

PARTIAL PROFILE 55°

Pitch mm	Pitch TPI	Part Number	L mm	T mm	Y mm
0,35 - 1,0	72-24	12E_AA55_HC	12	2,4	0,6
0,5 - 2,0	48-12	12E_A55_HC	12	2,4	1,2
0,5 - 3,0	48-8	12E_AG55_HC	12	3,6	1,8
1,75 - 3,0	14-8	12E_G55_HC	12	3,6	1,8

PG

STEEL CONDUIT THREAD DIN 40430

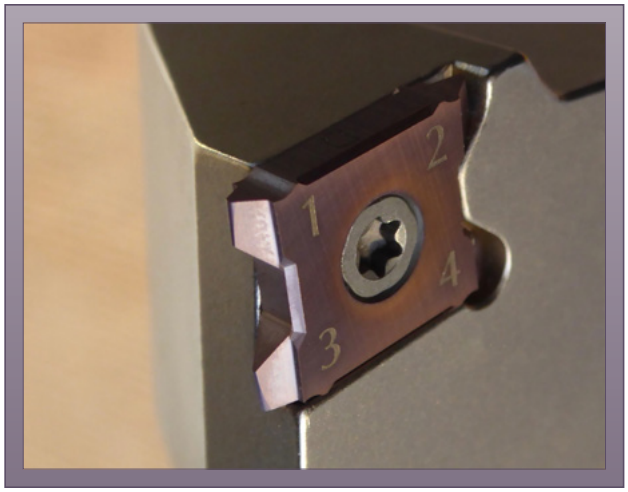
Pitch TPI	Part Number	L mm	T mm	Y mm
20	12E_20PG_HC	12	2,4	1,2
18	12E_18PG_HC	12	2,4	1,2
16	12E_16PG_HC	12	2,4	1,2

TR

TRAPEZ DIN 103

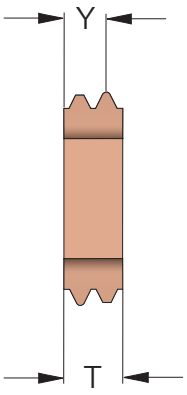
Pitch mm	Part Number	L mm	T mm	Y mm
1,5	12E_1.5TR_HC	12	2,4	1,2
2,0	12E_2.0TR_HC	12	2,4	1,2
3,0	12E_3.0TR_HC	12	3,6	1,8

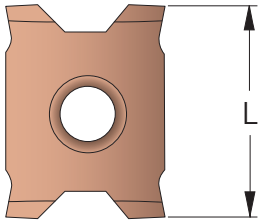
All inserts have ground profile and chipbreaker.



THREAD TURNING INSERTS

FourCut Multitooth





M

METRIC

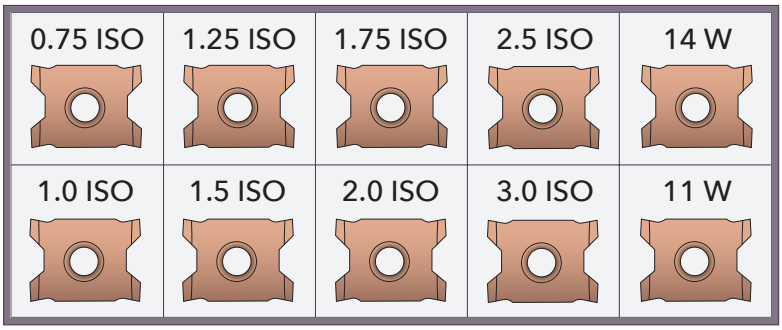
Pitch mm	Part Number	L mm	T mm	Y mm	Radial infeed per pass 1	2	3
1,0	12ER_1.0ISO2M_HC	12	2,4	1,7	0,24	0,21	0,18
1,5	12ER_1.5ISO2M_HC	12	3,6	2,55	0,43	0,30	0,21

G/Rp

WHITWORTH PIPE THREAD

Pitch TPI	Part Number	L mm	T mm	Y mm	Radial infeed per pass 1	2	3
14	12ER_14W2M_HC	12	3,6	2,7	0,55	0,38	0,25

Kit with Different Inserts

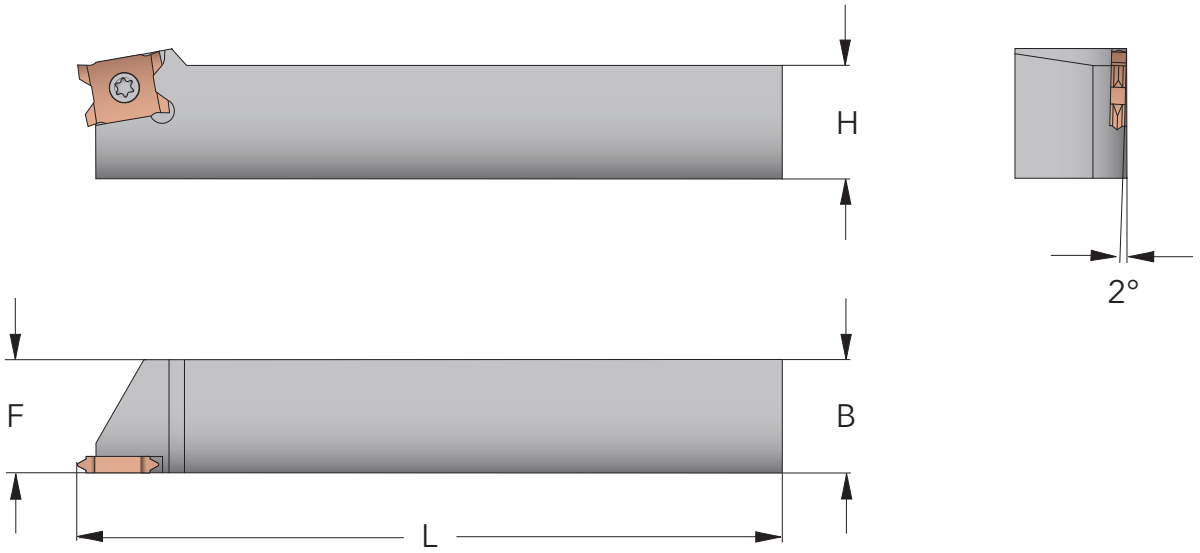


Part Number 10X12E_HC					
1 st. 12E_0.75ISO_HC	M4,5	MF6-12	1 st. 12E_2.0ISO_HC	M14-16	MF18-100
1 st. 12E_1.0ISO_HC	M6-7	MF8-30	1 st. 12E_2.5ISO_HC	M18-22	
1 st. 12E_1.25ISO_HC	M8-9	MF10-12	1 st. 12E_3.0ISO_HC	M24-27	MF30-100
1 st. 12E_1.5ISO_HC	M10-11	MF12-60	1 st. 12E_14W_HC	G 1/2-7/8	
1 st. 12E_1.75ISO_HC	M12		1 st. 12E_11W_HC	G ≥ 1	

Part Number 5X12E_HC		
1 st. 12E_1.0ISO_HC	M6-7	MF8-30
1 st. 12E_1.5ISO_HC	M10-11	MF12-60
1 st. 12E_2.0ISO_HC	M14-16	MF18-100
1 st. 12E_2.5ISO_HC	M18-22	
1 st. 12E_3.0ISO_HC	M24-27	MF30-100

THREAD TURNING TOOLHOLDERS

FourCut External



Insert mm	Part Number	B/H mm	L mm	F mm
12	SER1212H12	12	100	12
12	SER1616H12	16	100	16
12	SER2020K12	20	125	20
12	SER2525M12	25	150	25

Spare Parts

Insert mm	Screw to insert	Torx key
12	T9XM3	TORX T9

The Part Numbers are for Right Hand Toolholders. For Left Hand specify L instead of R. The Price is 10% higher for L.

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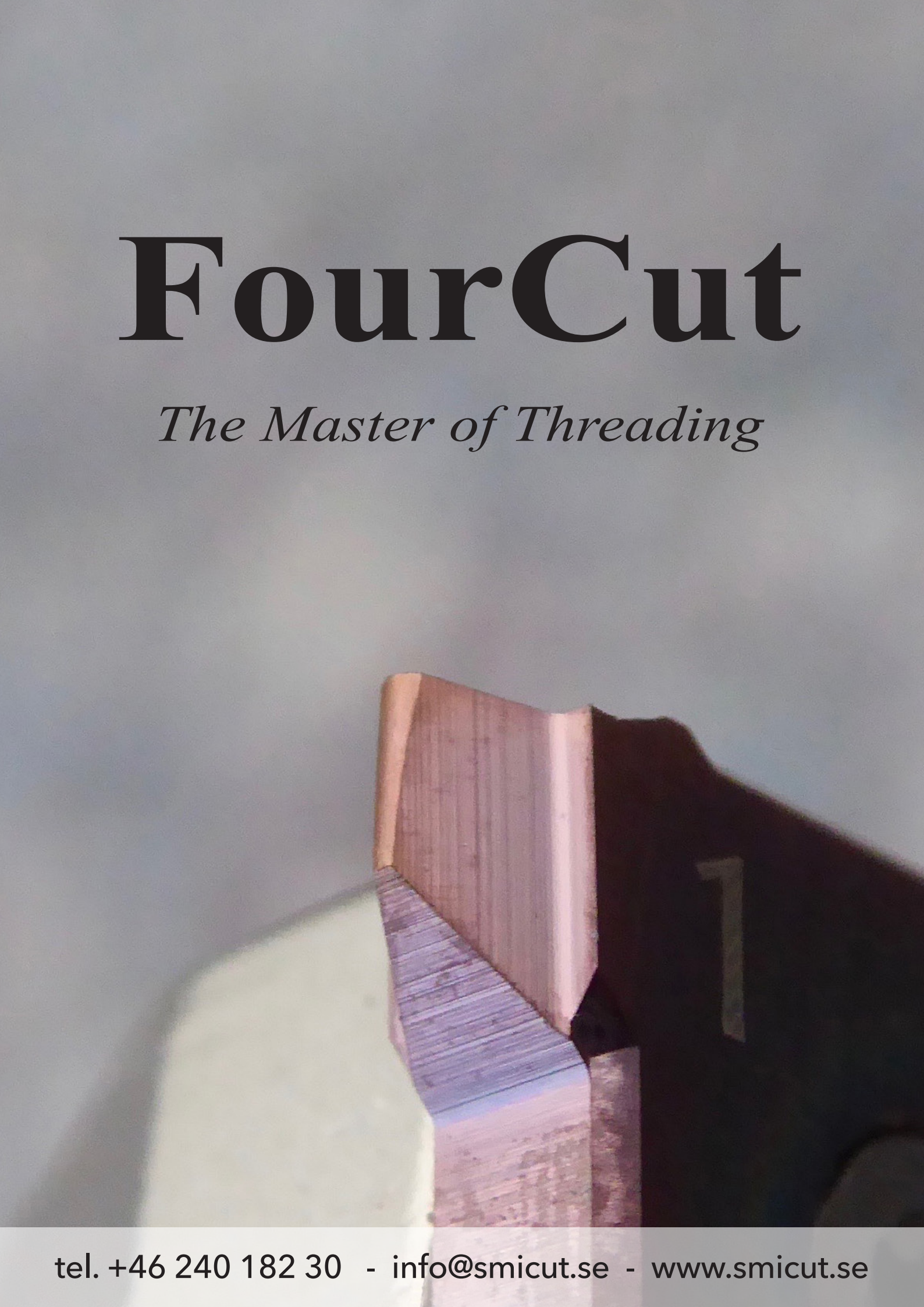

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