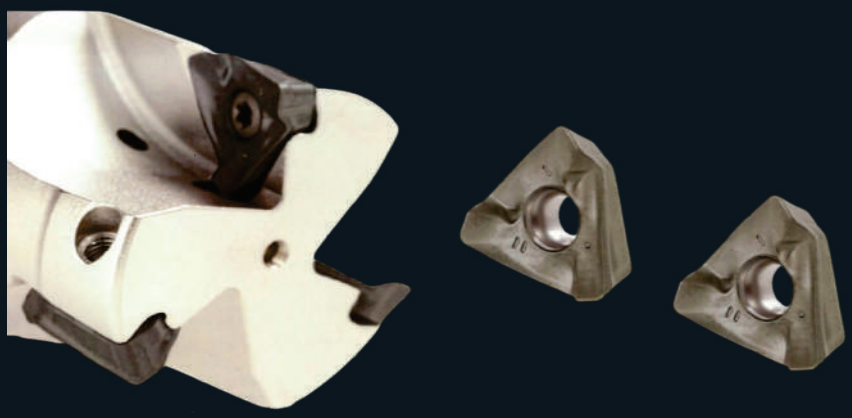
INSERTO TOKK 0703
SPALLAMENTO A 3 LATI



INSERTO A SPALLAMENTO 90°
4 LATI LNKU/LOKU 120608



INSERTO ALTO AVANZAMENTO
XOLT 130410





-HCM



-SCM



-HCM



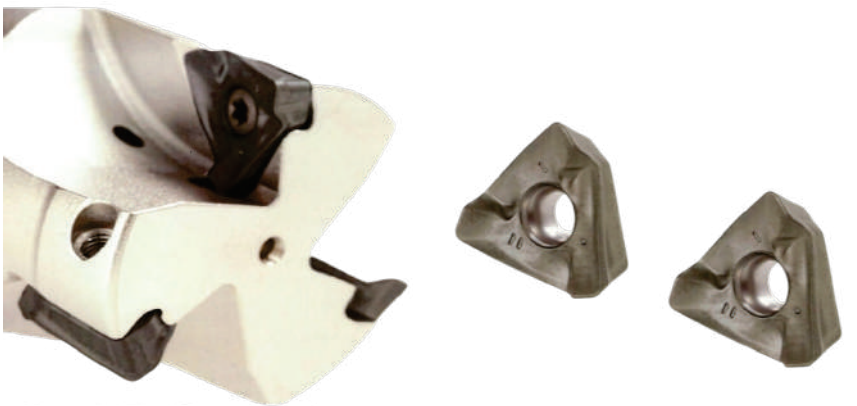
-SCM

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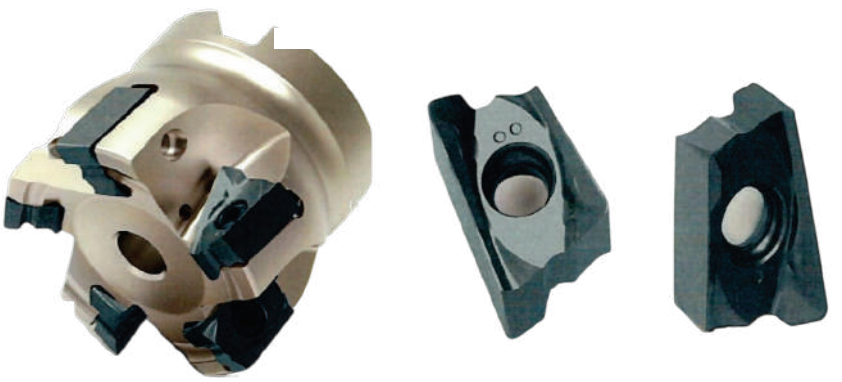
BF SERVICE
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INDICE

_ Da pag 1 a pag 5 **INSERTO TOKK 0703 - SPALLAMENTO A 3 LATI**



_ Da pag 7 a pag 9 **INSERTO A SPALLAMENTO 90° - 4 LATI LNKU/LOKU 120608**

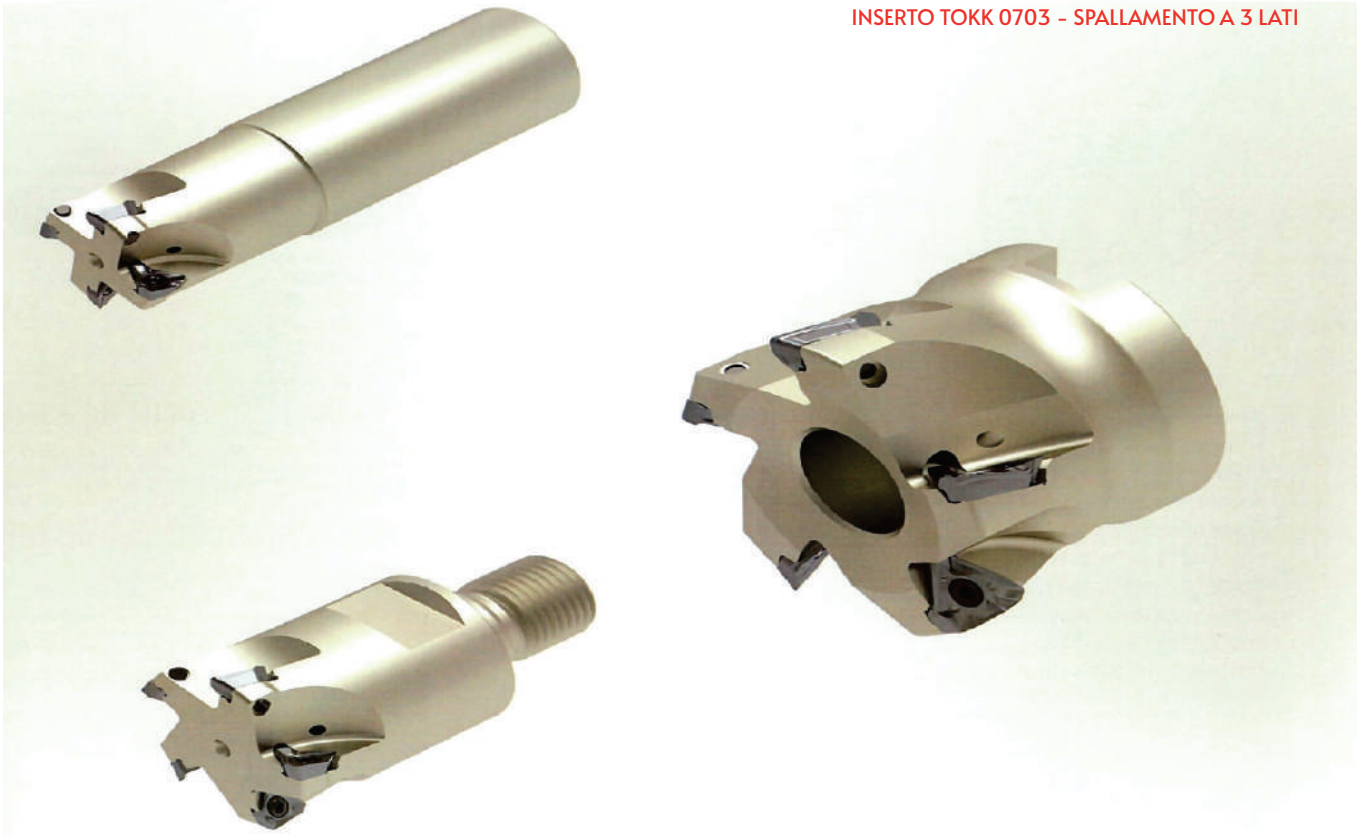


_ Da pag 10 a pag 12 **INSERTO ALTO AVANZAMENTO - XOLT 130410**



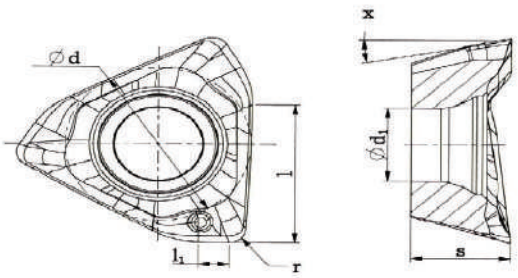
BF-SERVICE
Via Mariuccia Rocco, 26 25030 Lograto (BS) - Tel: +39 338 5648477 - Fax: +39 030 9787316
Email: amministrazione@bf-service.it
WWW.BF-SERVICE.IT

INSERTO TOKK 0703 - SPALLAMENTO A 3 LATI



SSM-T / shouldering 3 x 90°

Insert (TOKX)





-HCM



-SCM

Description	d [mm]	l [mm]	s [mm]	l_1 [mm]	r [mm]	d_1 [mm]
TOKX 070305PDER-HCM	5.9	5.5	3.15	1	0.5	2.8
TOKX 070305PDER-SCM	5.9	5.5	3.15	1	0.5	2.8
TOKX 070308PDER-HCM	5.9	5.5	3.15	1	0.8	2.8
TOKX 070308PDER-SCM	5.9	5.5	3.15	1	0.8	2.8

Available range TOKX07

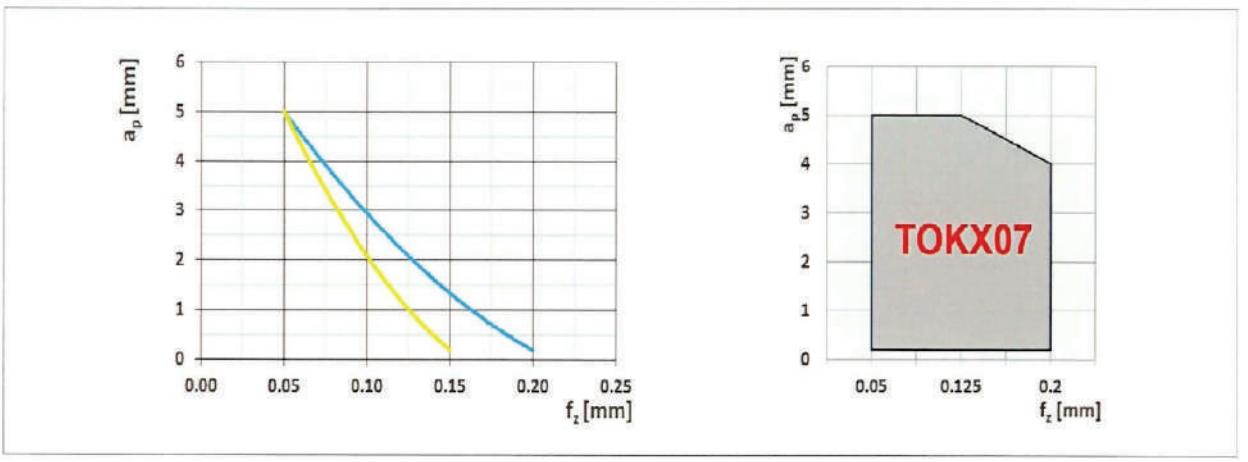
Insert	Designation	Chipbreaker	Material number	Available
	TOKX 070305PDER-HCM **BFC23**	**...-HCM**	12193325	•
	TOKX 070305PDER-HCM **BFP035**	**...-HCM**	12069063	•
	TOKX 070305PDER-SCM **BPM24**	**...-SCM**	12120017	•
	TOKX 070305PDER-SCM **BFC523**	**...-SCM**	12069061	•
	TOKX 070308PDER-HCM **BFC23**	**...-HCM**	12307051	•
	TOKX 070308PDER-HCM **BFP035**	**...-HCM**	12143629	•
	TOKX 070308PDER-SCM **BPM24**	**...-SCM**	12143626	•
	TOKX 070308PDER-SCM **BFC523**	**...-SCM**	12143628	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-T07-20.R.03-B-25-77	20	3	12074285	•
	C-SSM-T07-25.R.04-B-34-90	25	4	11998760	•
	C-SSM-T07-32.R.05-B-40-102	32	5	12074282	•
	G-SSM-T07-20.R.03	20	3	12152218	•
	G-SSM-T07-25.R.04	25	4	12152220	•
	G-SSM-T07-32.R.05	32	5	12152223	•
	A-SSM-T07-40.R.05	40	5	12152214	•
	A-SSM-T07-50.R.06	50	6	12152215	○

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M2.5x6.0 – T08	1.2	**3008-M2.5x6 Y.08.00.37**	•

Cutting data TOKX07

Starting parameters:



Grades and materials

Cutting Data

Material group		Chipbreaker	Grade	V_c[m/min]	f_z[mm]	a_p[mm]
P	Steel	HCM	BFC23 BFP035	220-60	0.05-0.2	5-0.2
M	Stainless Steel	SCM	BPM24 BFC523	220-60	0.05-0.2	5-0.2

BFC523 = DRY

Overview TOKX

Application

1) Face milling



2) Angled milling



3) Helical plunging



4) Shoulder milling



5) Slot milling



6) Pocket milling



Chipbreaker

HCM: Steel – Cast iron*
SCM: Stainless Steel – Exotic* – Titanium*

3 effective cutting edges



*secondary application

inserto spallamento 3 lati

Customer benefits

- High precision 90° milling
- Low power consumption, maximum chip removal rate
- Chipbreaker optimised by FEM
- Soft cutting providing quiet machining and maximum spindle protection



Result: Workpieces with clean surface, close tolerances and reduced formation of burrs, maximum service life of tool and insert.

Which chipbreaker to use?

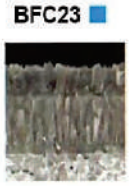


HCM
Strong cutting edge for general steel applications and hard conditions milling.



SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.

Grades

BFC23 

BFP035 

BPM24 

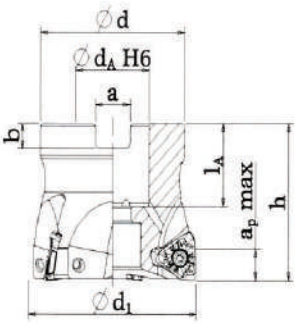
BFC523 

SSM-T / Shouldering 3 x 90°

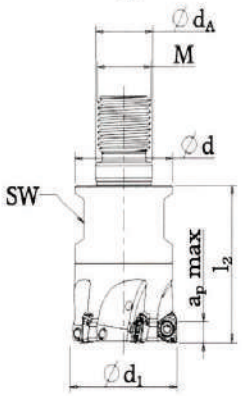
Milling body (TOKX07)

- Face milling
- Angled milling
- Helical plunging
- Shoulder milling
- Slot milling
- Pocket milling

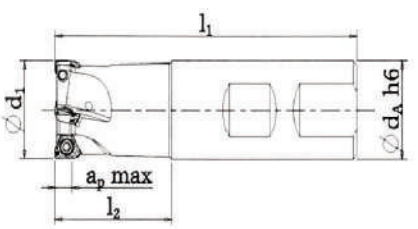
A-



G-



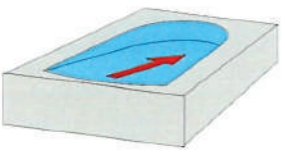
C-

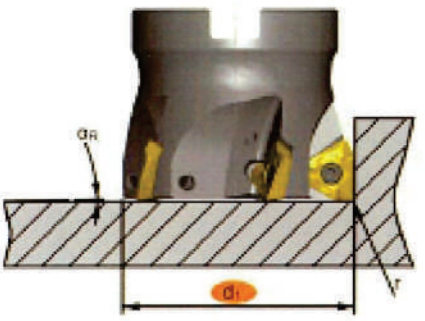


Description	Ød$_1$ [mm]	l$_1$ [mm]	l$_2$ [mm]	h [mm]	Ø d$_A$ H6/h6 [mm]	a$_p$ max [mm]	n$_{max}$ [min^{-1}]	z	Ø d [mm]	SW	M	l$_A$ [mm]	a [mm]	b [mm]
C-SSM-T07-20.R.03-B-25-77	20	77	25	-	20	5	22000	3	-	-	-	-	-	-
C-SSM-T07-25.R.04-B-34-90	25	90	34	-	25	5	20000	4	-	-	-	-	-	-
C-SSM-T07-32.R.05-B-40-102	32	102	40	-	32	5	19700	5	-	-	-	-	-	-
G-SSM-T07-20.R.03	20	-	30	-	10.5	5	36900	3	18	SW15	M10	-	-	-
G-SSM-T07-25.R.04	25	-	35	-	12.5	5	33200	4	21	SW17	M12	-	-	-
G-SSM-T07-32.R.05	32	-	40	-	17	5	30200	5	29	SW24	M16	-	-	-
A-SSM-T07-40.R.05	40	-	-	40	16	5	17000	5	38	-	-	20	8.4	5.6
A-SSM-T07-50.R.06	50	-	-	40	22	5	14800	6	43	-	-	21	10.4	6.3

SSM-T / Shouldering 3 x 90°

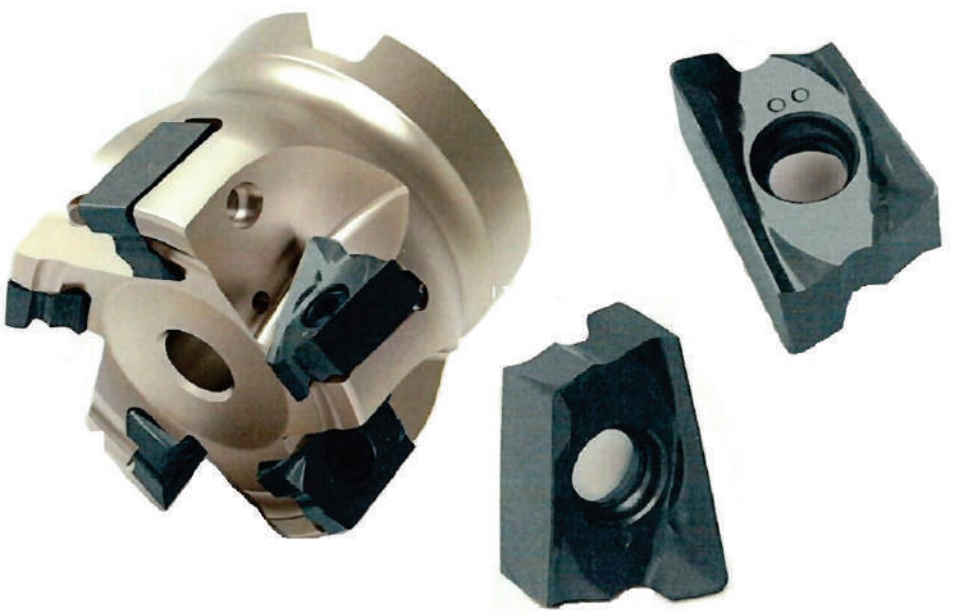
Application data (angled ramping TOKX07)





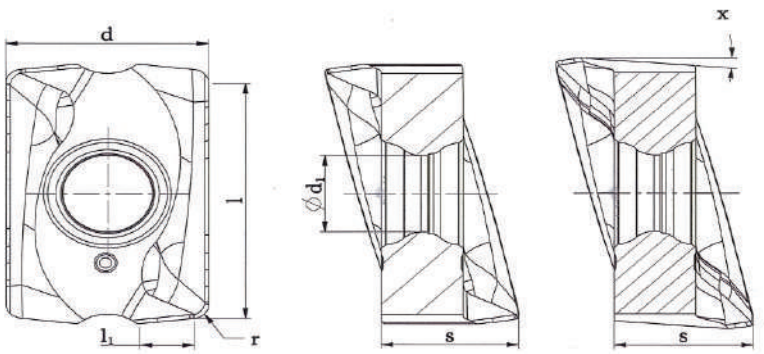
Description	d_1 [mm]	α_R [°]
C-SSM-T07-20.R.03-B-25-77		
C-SSM-T07-25.R.04-B-34-90		
C-SSM-T07-32.R.05-B-40-102		
G-SSM-T07-20.R.03		
G-SSM-T07-25.R.04		
G-SSM-T07-32.R.05		
A-SSM-T07-40.R.05		
A-SSM-T07-50.R.06		

INSERTO A SPALLAMENTO 90° - 4 LATI LNKU/LOKU120608



INSERTO A 4 TAGLIENTI 90°

Insert (LNKU12 / LOKU12)



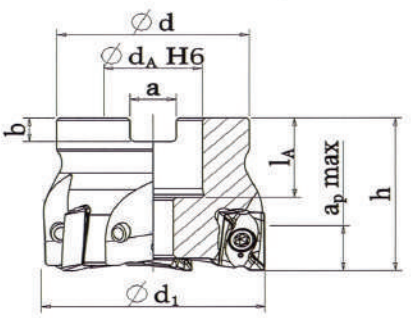
LNKU12 LOKU12

Description	d [mm]	l [mm]	s [mm]	l_1 [mm]	r [mm]	d_1 [mm]	x [°]
LNKU 120608ER-HCM	10	13.4	6.78	2.7	0.8	4.4	0
LNKU 120608ER-SCM	10	13.4	6.78	2.7	0.8	4.4	0
LNKU 120608ER-CCM	10	13.4	6.78	2.7	0.8	4.4	0
LOKU 120608ER-SCM	10	13.4	6.87	2.7	0.8	4.4	5
LOKU 120608ER-XCM	10	13.4	6.87	2.7	0.8	4.4	5

Milling body (LNKU12 / LOKU12)

A-

- Face milling
- Angled milling
- Helical plunging
- Shoulder milling
- Slot milling
- Pocket milling

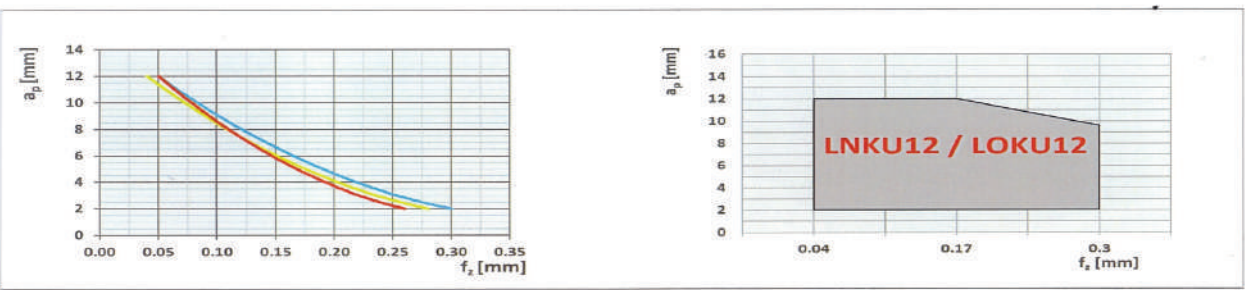


Description	Ød_1 [mm]	h [mm]	Ø d_A H6/h6 [mm]	a_p max [mm]	n_{max} [min^{-1}]	z	Ø d [mm]	l_A [mm]	a [mm]	b [mm]
A-DSM-LO/LN12-40.R.04	40	40 / 40.44*	16	12	17000	4	38	20	8.4	5.6
A-DSM-LO/LN12-50.R.05	50	40 / 40.44*	22	12	14800	5	43	20	10.4	6.3
A-DSM-LO/LN12-63.R.06	63	40 / 40.44*	22	12	12850	6	48	21	10.4	6.3
A-DSM-LO/LN12-80.R.07	80	50 / 50.44*	27	12	11250	7	58	22	12.4	7

*with LOKU insert

Cutting data LNKU 12

Starting parameters:



Grades and materials: INS.XOLT 130410

Material group		Chipbreaker	Grade	V_c [m/min]	f_z [mm]	a_p [mm]
P	Steel	HCM	BFC23 BFP035	220-60	0.05-0.30	12-2.0
M	Stainless Steel	SCM	BPM24 BFC524 BFC523	200-60	0.04-0.28	12-2.0
K	Cast Iron	CCM	BFCK15N BFC524	320-100	0.05-0.26	12-2.0

BFC523= DRY
BFC524= WET

DSM-L / SHOULDERING 4 X 90°

Available range LNKU12 / LOKU 12

Insert	Designation	Chipbreaker	Material number	Available
	LNKU 120608ER-HCM **BFC23**	...-HCM	12434604	•
	LNKU 120608ER-HCM **BFP035**	...-HCM	12158008	•
	LNKU 120608ER-SCM **BPM24**	...-SCM	12373789	•
	LNKU 120608ER-CCM **BFCK15N**	...-CCM	14659156	•
	LOKU 120608ER-SCM **BPM24**	...-SCM	12373779	•
	LOKU 120608ER-XCM **BFC523**	...-XCM		○
	LOKU 120608ER-XCM **BFC524**	...-XCM		○

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-DSM-LO/LN12-40.R.04	40	4	14549248	•
	A-DSM-LO/LN12-50.R.05	50	5	12367555	•
	A-DSM-LO/LN12-63.R.06	63	6	12645968	•
	A-DSM-LO/LN12-80.R.07	80	7	12645971	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 11 – T15	5	11042274	•
	Power screw M10.0 x 31.0	20	11040298	•

INSERTO ALTO AVANZAMENTO - XOLT 130410

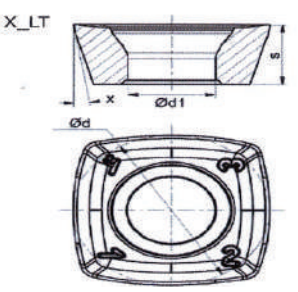
HIGHT FEED MILLING CUTTER
INSERTI PER ALTI AVANZAMENTI



Which chipbreaker to use?	P	M	K	S
 **HCM** Strong cutting edge for general steel applications and hard conditions milling.				
 **SCM** Sharp cutting edge for general stainless steel applications and for finishing in steels.				
XDLT 10T308ER HCM d=10 s=3,97 r=0,8 d1=4,4 x°=9	BFC315N		BFC315N	
XDLT 10T308SR HCM d=10 s=3,97 r=0,8 d1=4,4 x°=9	BFP123 BFP223 BFP035	BFP035		
XOLT 130410ER HCM d=13 s=4,76 r=1,0 d1=5,5 x°=9	BFP123 BFP223 BFP035			
XOLT 130410SR HCM d=13 s=4,76 r=1,0 d1=5,5 x°=9	BFC315N	BFP035	BFC315N	
XDLT 10T308ER SCM d=10 s=3,97 r=0,8 d1=4,4 x°=9		BFC523		BFC524
XOLT 130410ER SCM d=13 s=4,76 r=1,0 d1=5,5 x°=9		BFC523		BFC524

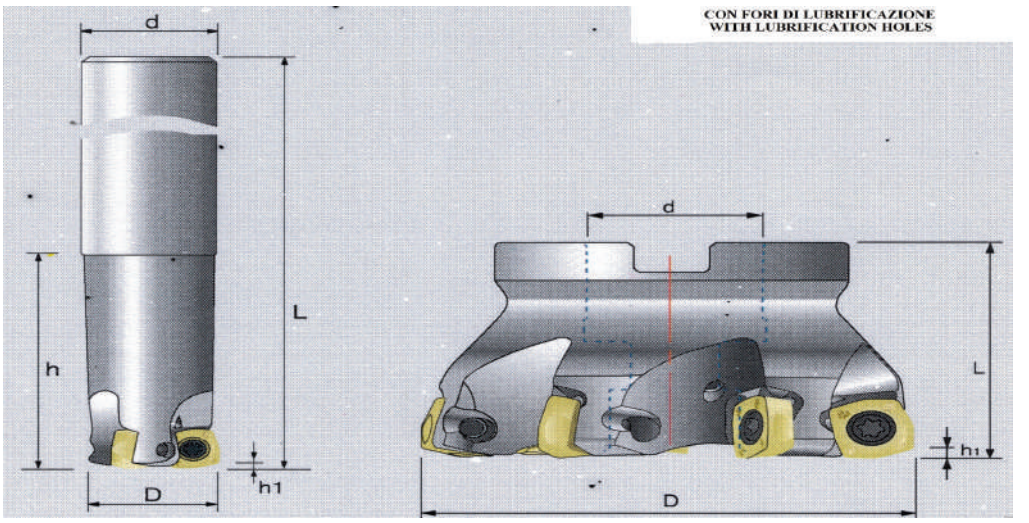
ESEMPI DI LAVIRAZIONE PROCESSING EXAMPLES :

INSERTO XOLT 130410ER SCM BFC523
--AISI 316 - FRESA DIAM. 63 Z5- Vc 175- N rpm 884 – F 4420- Ap 1,0mm- Ae 50mm
INSERTO XOLT 130410ER SCM BFC523
--AISI F51 - FRESA DIAM. 80 Z6- Vc 100- N rpm 400 – F 1000- Ap 1,5mm- Ae 80mm

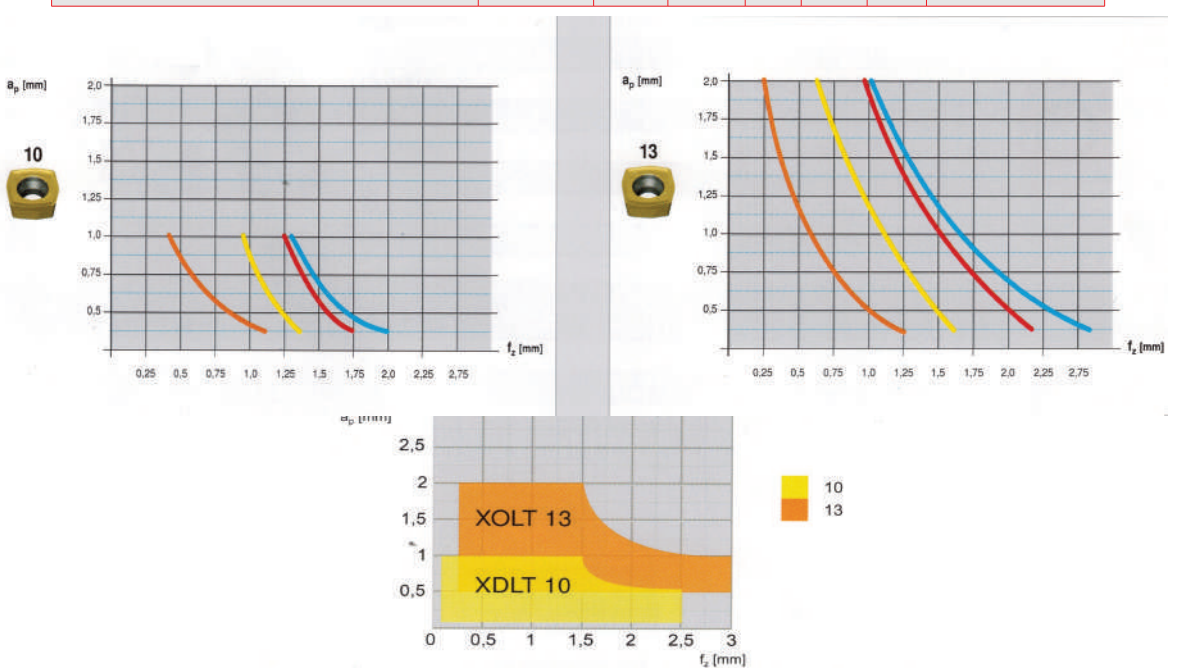



-HCM


-SCM

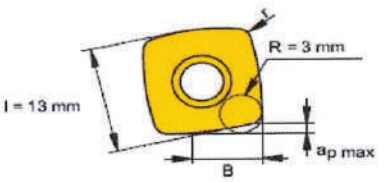


CODICE CODE	NUMBER OF INSERTS	D	L	h1	d	h	
C-SSM-HFC10-25.R.03-A-50-225	3	25	225	1,0	25	50	XDLT 10T308
C-SSM-HFC10-32-R.03-A-60-250	3	32	250	1,0	32	60	XDLT 10T308
A-SSM-HFC10-40.R.04	4	40	40	1,0	16	-	XDLT 10T308
A-SSM-HFC10-50.R.05	5	50	40	1,0	22	-	XDLT 10T308
A-SSM-HFC10-63.R.06	6	63	40	1,0	22	-	XDLT 10T308
A-SSM-HFC13-50.R04	4	50	40	2,0	22	-	XOLT 130410
A-SSM-HFC13-63.R05	6	63	40	2,0	22	-	XOLT 130410
A-SSM-HFC13-80.R07	7	80	50	2,0	27	-	XOLT 130410
A-SSM-HFC13-100.R08	8	100	50	2,0	27	-	XOLT 130410



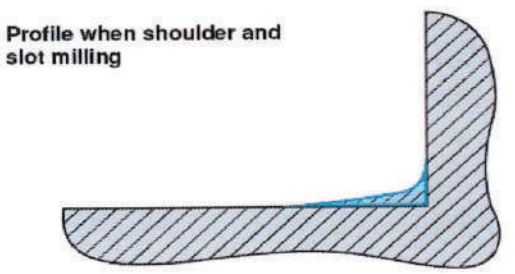
DEPTH OF CUT AND REMAINING MATERIAL

INS. XDLT 10..
INS. XOLT 13..



R = programmed radius

Recommended $f_z \geq 0.5$ / tooth



Insert	l[mm]	R[mm]	B[mm]	r[mm]	$a_{p\,max}$ [mm]
XDLT 10	10	2.0	5.9	0.8	1.0
XDLX 10	10	2.0	5.9	0.8	1.0
XOLT 13	13	3.0	8.5	1.0	2.0

Grades and materials: INS.XDLT 10T308

Material group		Chipbreaker	Grade	V_c [m/min]	f_z [mm]	a_p [mm]
	CAST IRON					
P	Steel	HCM	BFC315N BFP223 BFP123 BFP035	220-60	0.15-2.5	1-0.1
M	Stainless Steel	HCM SCM	BFP035 BFC523 BFC524	200-60 200-60 180-50	0.1-2.4	1-0.1

Grades and materials: INS.XOLT 130410

Material group		Chipbreaker	Grade	V_c [m/min]	f_z [mm]	a_p [mm]
	CAST IRON					
P	Steel	HCM	BFC315N BFP223 BFP123 BFP035	220-60	0.15-2.5	1-0.1
M	Stainless Steel	HCM SCM	BFP035 BFC523 BFC524	200-60 200-60 180-50	0.1-2.4	1-0.1

Note:

Rivenditore autorizzato:

BF SERVICE
UTENSILERIA MECCANICA

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