

Applications
Applications
Anwendungen

G02

External threading
Porte-outils pour filetage extérieur
Klemmhalter zum Gewindedrehen

G03

Internal threading
Porte-outils pour filetage intérieur
Bohrstangen zum Gewindedrehen

G06

Technical information
Information technique
Technische Auskunft

G09

External threading - Porte-outils pour filetage extérieur - Klemmhalter zum Gewindedrehen

Inserts

Turning

Automatic lathes

Ceramic tools

SXAN 90°



08 ER/L..
11 ER/L..
16 ER/L..
22 ER/L..
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STAN 90°



16 ER/L..
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27 ER/L..
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CTAN 90°



16 ER/L..
22 ER/L..
27 ER/L..
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SXGN 90°



Page G.04 R/L 166G-3..
R/L 166G-4..

STXN 90°



16 ER/L..
22 ER/L..
27 ER/L..
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CTXN 90°



16 ER/L..
22 ER/L..
27 ER/L..
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STCN 90°



TNMC 1603..
TNMC 1603..
TNMC 2204..
TNMC 2204..
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CXAP 90°



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Internal threading - Porte-outils pour filetage intérieur - Bohrstanzen zum Gewindedrehen

Parting & grooving

Threading

SXFN 90°



Page G.06 11 NR/L..
22 NR/L..
27 NR/L..

STXN 90°



Page G.07 16 NR/L..
22 NR/L..
27 NR/L..

CTXN 90°



Page G.07 16 NR/L..
22 NR/L..
27 NR/L..

STGN 90°



Page G.07 TNMC 1603..
TNMC 2204..

STGP 90°



Page G.08 TPMC 1603..
TPMC 2204..

CXFP 90°



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Drills

Cartridges

Brazed tools

Milling cutters

Solid carbide

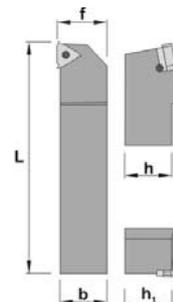
Boring heads

Arbors & adaptors

SXAN 90°



REF.	h-h1	b	L	f	ER/L					
SXAN R/L 0808 M08	8	8	150	8	08	125	507	-	-	-
SXAN R/L 1010 M08	10	10	150	10	08	125	507	-	-	-
SXAN R/L 1212 M11	12	12	150	12	11	125	507	-	-	-
SXAN R/L 1616 H16	16	16	100	16	16	133	515	436	435	203
SXAN R/L 1616 M16	16	16	150	16	16	133	515	436	435	203
SXAN R/L 2020 K16	20	20	125	20	16	133	515	436	435	203
SXAN R/L 2525 M16	25	25	150	25	16	133	515	436	435	203
SXAN R/L 3232 P16	32	32	170	32	16	133	515	436	435	203
SXAN R/L 2525 M22	25	25	150	25	22	141	515	343	346	204
SXAN R/L 3232 P22	32	32	170	32	22	141	515	343	346	204



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

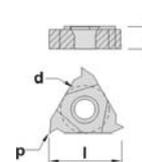
Solid carbide

Boring heads

Arbors & adaptors

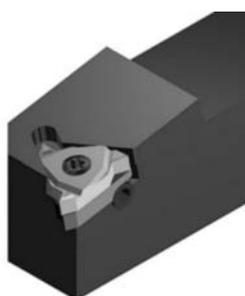


REF.	l	d
08 ER/L..	8,00	4,76
11 ER/L..	11,00	6,35
16 ER/L..	16,00	9,52
22 ER/L..	22,00	12,70

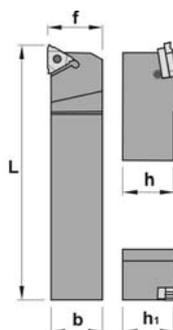


For more information see page: A.59

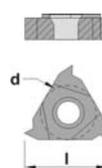
STAN 90°



REF.	h-h1	b	L	f	ER/L					
STAN R/L 1616 H16	16	16	100	16	16	SA3	530	YE3	YI3	SY3
STAN R/L 2020 K16	20	20	125	20	16	SA3	530	YE3	YI3	SY3
STAN R/L 2525 M16	25	25	150	25	16	SA3	530	YE3	YI3	SY3
STAN R/L 3232 P16	32	32	170	32	16	SA3	530	YE3	YI3	SY3
STAN R/L 2525 M22	25	25	150	25	22	SA4	520	YE4	YI4	SY4
STAN R/L 3232 P22	32	32	170	32	22	SA4	520	YE4	YI4	SY4
STAN R/L 4040 R22	40	40	200	40	22	SA4	520	YE4	YI4	SY4
STAN R/L 3232 P27	32	32	170	32	27	SA5	552	YE5	YI5	SY5
STAN R/L 4040 R27	40	40	200	40	27	SA5	552	YE5	YI5	SY5
STAN R/L 5050 S27	50	50	250	50	27	SA5	552	YE5	YI5	SY5



REF.	l	d
16 ER/L..	16,00	9,52
22 ER/L..	22,00	12,70
27 ER/L..	27,50	15,88

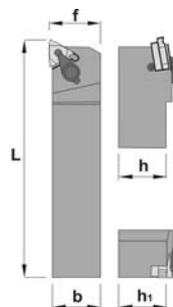


For more information see page: A.59

CTAN 90°



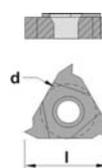
REF.	h-h1	b	L	f	ER/L						
CTAN R/L 2020 K16	20	20	128,6	20	16	216	515	YE3	YI3	SY3	SA3
CTAN R/L 2525 M16	25	25	153,6	25	16	216	515	YE3	YI3	SY3	SA3
CTAN R/L 3232 P16	32	32	173,6	32	16	216	515	YE3	YI3	SY3	SA3
CTAN R/L 2525 M22	25	25	155,7	25	22	214	515	YE4	YI4	SY4	SA4
CTAN R/L 3232 P22	32	32	175,7	32	22	214	515	YE4	YI4	SY4	SA4
CTAN R/L 4040 R22	40	40	205,7	40	22	214	515	YE4	YI4	SY4	SA4
CTAN R/L 3232 P27	32	32	176,7	32	27	217	552	YE5	YI5	SY5	SA5
CTAN R/L 4040 R27	40	40	206,6	40	27	217	552	YE5	YI5	SY5	SA5
CTAN R/L 5050 S27	50	50	256,6	50	27	217	552	YE5	YI5	SY5	SA5



Optional



REF.	l	d
16 ER/L..	16,00	9,52
22 ER/L..	22,00	12,70
27 ER/L..	27,50	15,88



For more information see page: A.59

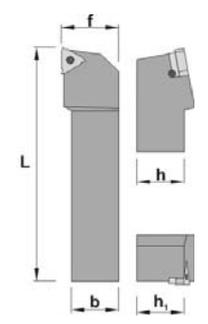


Inserts

SXGN 90°



REF.	h-h1	b	L	f	ER/L					
SXGN R/L 1212 F16	12	12	80	16	16	133	515	436	435	203
SXGN R/L 1616 H16	16	16	100	20	16	133	515	436	435	203
SXGN R/L 2020 K16	20	20	125	25	16	133	515	436	435	203
SXGN R/L 2525 M16	25	25	150	32	16	133	515	436	435	203
SXGN R/L 3232 P16	32	32	170	40	16	133	515	436	435	203
SXGN R/L 2525 M22	25	25	150	32	22	141	515	343	346	204
SXGN R/L 3232 P22	32	32	170	40	22	141	515	343	346	204



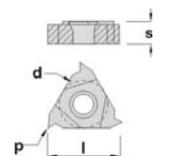
Turning

Automatic lathes

Ceramic tools



REF.	l	d
16 ER/L..	16,00	9,52
22 ER/L..	22,00	12,70



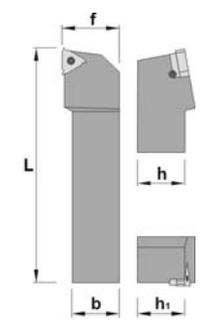
For more information see page: A.59

Parting & grooving

STXN 90°



REF.	h-h1	b	L	f	ER/L					
STXN R/L 1212 F16	12	12	80	16	16	SA3	530	YE3	YI3	SY3
STXN R/L 1616 H16	16	16	100	20	16	SA3	530	YE3	YI3	SY3
STXN R/L 2020 K16	20	20	125	25	16	SA3	530	YE3	YI3	SY3
STXN R/L 2525 M16	25	25	150	25	16	SA3	530	YE3	YI3	SY3
STXN R/L 3232 P16	32	32	170	40	16	SA3	530	YE3	YI3	SY3
STXN R/L 2525 M22	25	25	150	32	22	SA4	520	YE4	YI4	SY4
STXN R/L 3232 P22	32	32	170	40	22	SA4	520	YE4	YI4	SY4
STXN R/L 4040 R22	40	40	200	50	22	SA4	520	YE4	YI4	SY4
STXN R/L 2525 M27	25	25	150	32	27	SA5	552	YE5	YI5	SY5
STXN R/L 3232 P27	32	32	170	40	27	SA5	552	YE5	YI5	SY5
STXN R/L 4040 R27	40	40	200	50	27	SA5	552	YE5	YI5	SY5
STXN R/L 5050 S27	50	50	250	60	27	SA5	552	YE5	YI5	SY5



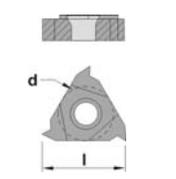
Threading

Drills

Cartridges



REF.	l	d
16 ER/L..	16,00	9,52
22 ER/L..	22,00	12,70
27 ER/L..	27,50	15,88



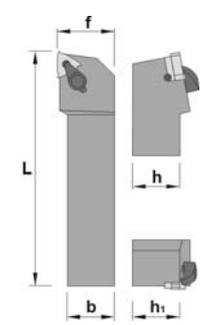
For more information see page: A.59

Brazed tools

CTXN 90°



REF.	h-h1	b	L	f	ER/L						
CTXN R/L 1212 F16	12	12	83,2	16	16	216	515	YE3	YI3	SY3	SA3
CTXN R/L 1616 H16	16	16	100,0	20	16	216	515	YE3	YI3	SY3	SA3
CTXN R/L 2020 K16	20	20	128,6	25	16	216	515	YE3	YI3	SY3	SA3
CTXN R/L 2525 M16	25	25	153,6	32	16	216	515	YE3	YI3	SY3	SA3
CTXN R/L 3232 P16	32	32	173,6	40	16	216	515	YE3	YI3	SY3	SA3
CTXN R/L 2525 M22	25	25	155,7	32	22	214	515	YE4	YI4	SY4	SA4
CTXN R/L 3232 P22	32	32	175,7	40	22	214	515	YE4	YI4	SY4	SA4
CTXN R/L 4040 R22	40	40	205,7	50	22	214	515	YE4	YI4	SY4	SA4
CTXN R/L 2525 M27	25	25	151,6	32	27	217	552	YE5	YI5	SY5	SA5
CTXN R/L 3232 P27	32	32	176,7	40	27	217	552	YE5	YI5	SY5	SA5
CTXN R/L 4040 R27	40	40	206,6	50	27	217	552	YE5	YI5	SY5	SA5
CTXN R/L 5050 S27	50	50	256,6	60	27	217	552	YE5	YI5	SY5	SA5



Optional

Milling cutters

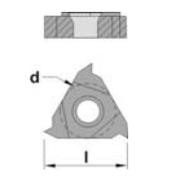
Solid carbide

Boring heads

Arbors & adaptors



REF.	l	d
16 ER/L..	16,00	9,52
22 ER/L..	22,00	12,70
27 ER/L..	27,50	15,88

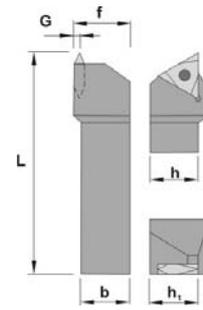


For more information see page: A.59

STCN 90°



REF.	h-h1	b	L	f	G	T..MC		
STCN R/L 1212 F16	12	12	80	16	1,59	1603..	198	502
STCN R/L 1616 H16	16	16	100	19	1,59	1603..	198	502
STCN R/L 2020 K16	20	20	125	22	1,59	1603..	198	502
STCN R/L 2525 M16	25	25	150	32	1,59	1603..	198	502
STCN R/L 3232 P16	32	32	170	38	1,59	1603..	198	502
STCN R/L 2020 K22	20	20	125	22	2,38	2204..	197	525
STCN R/L 2525 M22	25	25	150	32	2,38	2204..	197	525
STCN R/L 3225 P22	32	25	170	32	2,38	2204..	197	525
STCN R/L 3232 P22	32	32	170	38	2,38	2204..	197	525
STCN R/L 2525 M27	25	25	150	32	2,38	2704..	491	503
STCN R/L 3232 P27	32	32	170	38	2,38	2704..	491	503



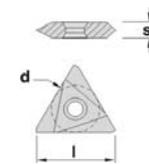
Inserts

Turning

Automatic lathes

Ceramic tools

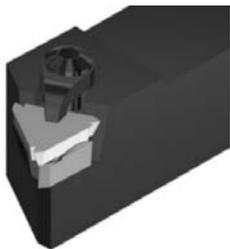
REF.	l	s	d
T..MC 1603..	16,50	3,18	9,52
T..MC 2204..	22,00	4,76	12,70
T..MC 2704..	27,00	4,76	15,80



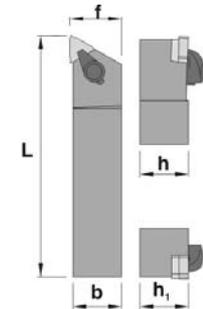
For more information see page: A.65

Parting & grooving

CXAP 90°



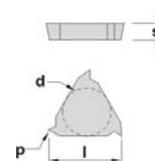
REF.	h-h1	b	L	f	R/L				
CXAP R/L 2016 K16	20	16	125	17	166-3..	229	503	318 R/L	403
CXAP R/L 2020 K16	20	20	125	21	166-3..	229	503	318 R/L	403
CXAP R/L 2525 M16	25	25	150	26	166-3..	229	503	318 R/L	403
CXAP R/L 3225 P16	32	25	170	26	166-3..	229	503	318 R/L	403
CXAP R/L 3232 P16	32	32	170	33	166-3..	229	503	318 R/L	403
CXAP R/L 2525 M22	25	25	150	26	166-4..	231	504	330 R/L	403
CXAP R/L 3225 P22	32	25	170	26	166-4..	231	504	330 R/L	403
CXAP R/L 3232 P22	32	32	170	33	166-4..	231	504	330 R/L	403



Threading

Drills

REF.	l	s	d
R/L 166G-3..	16,50	3,18	9,52
R/L 166G-4..	22,00	4,76	12,70



For more information see page: A.65,66

Cartridges

Brazed tools

Milling cutters

Solid carbide

Boring heads

Arbors & adaptors

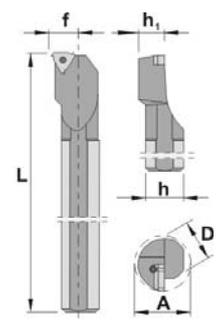


- Inserts
- Turning
- Automatic lathes
- Ceramic tools
- Parting & grooving
- Threading
- Drills
- Cartridges
- Brazed tools
- Milling cutters
- Solid carbide
- Boring heads
- Arbors & adaptors

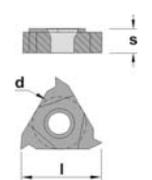
SXFN 90°



REF.	D	h	L	f	A	NR/L					
S10K SXFN R/L 11	10	9	125	7,3	13	11	125	507	-	-	-
S16M SXFN R/L 11	16	15	150	8,9	16	11	125	507	-	-	-
S16M SXFN R/L 16	16	15	150	11,5	20	16	137	530	-	-	-
S20Q SXFN R/L 16	20	18	180	13,4	24	16	447	515	435	436	203
S25S SXFN R/L 16	25	23	250	16,3	29	16	131	515	435	436	203
S32T SXFN R/L 16	32	30	300	19,6	36	16	131	515	435	436	203
S40T SXFN R/L 16	40	37	300	23,8	44	16	131	515	435	436	203
S20Q SXFN R/L 22	20	18	180	15,6	27	22	141	515	-	-	-
S25S SXFN R/L 22	25	23	250	17,2	32	22	141	515	346	343	204
S32T SXFN R/L 22	32	30	300	21,5	39	22	141	515	346	343	204
S40T SXFN R/L 22	40	37	300	25,8	47	22	141	515	346	343	204



REF.	l	d
11 NR/L..	11,00	6,35
16 NR/L..	16,00	9,52
22 NR/L..	22,00	12,70

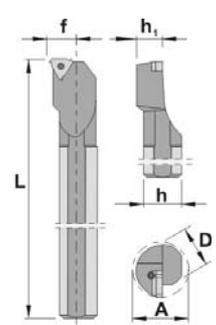


For more information see page: A.60

H-SXFN 90°



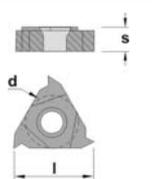
REF.	D	h	L	f	A	NR/L		
H10K SXFN R/L 11	10	4,5	125	7,3	13	11	125	507
H16M SXFN R/L 11	16	7,5	150	8,9	16	11	125	507
H16M SXFN R/L 16	16	7,5	200	11,5	20	16	137	530



Characteristics:
Boring bars with anti-vibration shank.



REF.	l	d
11 NR/L..	11,00	6,35
16 NR/L..	16,00	9,52

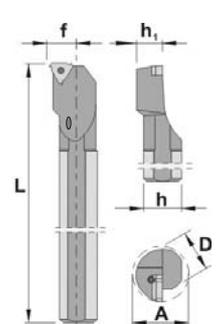


For more information see page: A.60

J-SXFN 90°



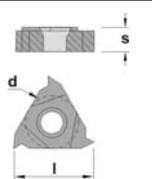
REF.	D	h	L	f	A	NR/L		
J10K SXFN R/L 11	10	4,5	125	7,3	13	11	125	507
J16M SXFN R/L 11	16	7,5	150	8,9	16	11	125	507
J16M SXFN R/L 16	16	7,5	150	11,5	20	16	137	530



Characteristics:
Boring bars with internal coolant and anti-vibration shank.



REF.	l	d
11 NR/L..	11,00	6,35
16 NR/L..	16,00	9,52

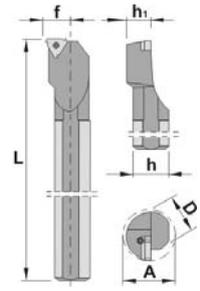


For more information see page: A.60

STXN 90°



REF.	D	h	h1	L	f	A	NR/L	
S16M STXN R/L 16	16	15	7,5	150	11,5	15,2	16	SN3 530 - - -
S20Q STXN R/L 16	20	18	9,0	180	13,4	18,0	16	SN3 530 YI3 YE3 SY3
S25R STXN R/L 16	25	23	11,5	200	16,3	22,6	16	SA3 530 YI3 YE3 SY3
S32S STXN R/L 16	32	30	15,0	250	19,6	29,0	16	SA3 530 YI3 YE3 SY3
S40T STXN R/L 16	40	37	18,5	300	23,8	36,0	16	SA3 530 YI3 YE3 SY3
S20Q STXN R/L 22	20	18	9,0	180	15,6	18,0	22	SN4 520 - - -
S25R STXN R/L 22	25	23	11,5	200	17,2	22,6	22	SA4 520 YI4 YE4 SY4
S32S STXN R/L 22	32	30	15,0	250	21,5	29,0	22	SA4 520 YI4 YE4 SY4
S40T STXN R/L 22	40	37	18,5	300	25,8	36,0	22	SA4 520 YI4 YE4 SY4
S32S STXN R/L 27	32	30	15,0	250	22,4	40,0	27	SA5 552 YI5 YE5 SY5
S40T STXN R/L 27	40	37	18,5	300	26,4	48,0	27	SA5 552 YI5 YE5 SY5
S50U STXN R/L 27	50	47	23,5	350	31,4	58,0	27	SA5 552 YI5 YE5 SY5
S60V STXN R/L 27	60	57	28,5	400	36,4	69,0	27	SA5 552 YI5 YE5 SY5



Inserts

Turning

Automatic lathes

Ceramic tools

Parting & grooving

Threading

Drills

Cartridges

Brazed tools

Milling cutters

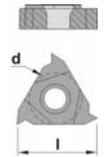
Solid carbide

Boring heads

Arbors & adaptors



REF.	l	d
16 NR/L..	16,00	9,52
22 NR/L..	22,00	12,70
27 NR/L..	27,00	15,87

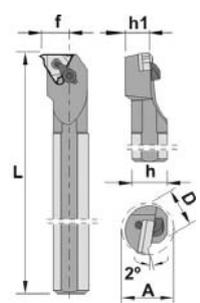


For more information see page: A.60

CTXN 90°



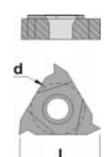
REF.	D	h	h1	L	f	A	NR/L	
S20Q CTXN R/L 16	20	18	9,0	180	13,0	18,0	16	216 515 YI3 YE3 SY3 SN3
S25R CTXN R/L 16	25	23	11,5	200	17,0	22,6	16	216 515 YI3 YE3 SY3 SA3
S32S CTXN R/L 16	32	30	15,0	250	22,0	29,0	16	216 515 YI3 YE3 SY3 SA3
S40T CTXN R/L 16	40	37	18,5	300	27,0	36,0	16	216 515 YI3 YE3 SY3 SA3
S25R CTXN R/L 22	25	23	11,5	200	17,0	22,6	22	214 515 YI4 YE4 SY4 SA4
S32S CTXN R/L 22	32	30	15,0	250	22,0	29,0	22	214 515 YI4 YE4 SY4 SA4
S40T CTXN R/L 22	40	37	18,5	300	27,0	36,0	22	214 515 YI4 YE4 SY4 SA4
S32S CTXN R/L 27	32	30	15,0	250	22,4	40,0	27	217 552 YI5 YE5 SY5 SA5
S40T CTXN R/L 27	40	37	18,5	300	26,4	48,0	27	217 552 YI5 YE5 SY5 SA5
S50U CTXN R/L 27	50	47	23,5	350	31,4	58,0	27	217 552 YI5 YE5 SY5 SA5
S60V CTXN R/L 27	60	58	29,0	400	36,4	69,0	27	217 552 YI5 YE5 SY5 SA5



Optional



REF.	l	d
16 NR/L..	16,00	9,52
22 NR/L..	22,00	12,70
27 NR/L..	27,00	15,87

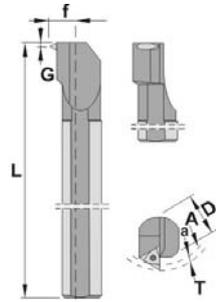


For more information see page: A.60

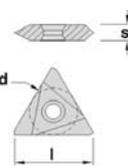
STGN 90°



REF.	D	L	f	A	α	T	G	TNMC	
S32U STGN R/L 16	32	350	21,0	50,4	45	2,7	1,59	1603..	198 502
S40V STGN R/L 16	40	400	25,0	60,4	55	2,7	1,59	1603..	193 502
S32U STGN R/L 22	32	350	21,0	78,2	70	4,1	2,38	2204..	197 525
S40V STGN R/L 22	40	400	25,0	78,2	70	4,1	2,38	2204..	197 525
S50W STGN R/L 22	50	450	36,5	78,2	70	4,1	2,38	2204..	197 525
S40V STGN R/L 27	40	400	25,0	60,4	55	6,0	3,18	2704..	491 503
S50W STGN R/L 27	50	450	36,5	78,2	70	6,0	3,18	2704..	491 503



REF.	l	s	d
TNMC 1603..	16,50	3,18	9,52
TNMC 2204..	22,00	4,76	12,70
TNMC 2704..	27,00	4,76	15,88



For more information see page: A.65

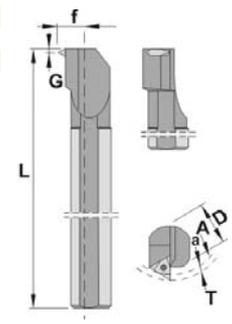


- Inserts
- Turning
- Automatic lathes
- Ceramic tools
- Parting & grooving
- Threading
- Drills
- Cartridges
- Brazed tools
- Milling cutters
- Solid carbide
- Boring heads
- Arbors & adaptors

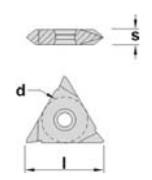
STGP 90°



REF.	D	L	f	A	α	T	G	TPMC		
S25T STGP R/L 16	25	300	17,5	50,4	45	2,7	1,59	1603..	193	502
S32U STGP R/L 16	32	350	20,5	50,4	45	2,7	1,59	1603..	193	502
S40V STGP R/L 22	40	400	25,0	78,2	70	4,1	2,38	2204..	197	525
S50W STGP R/L 22	50	450	36,5	78,2	70	4,1	2,38	2204..	197	525



REF.	l	s	d
TPMC 1603..	16,50	3,18	9,52
TPMC 2204..	22,00	4,76	12,70

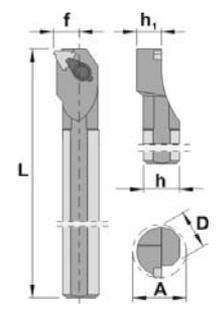


For more information see page: A.65

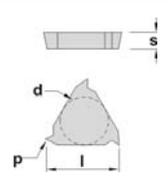
CXFP 90°



REF.	D	h-h1	L	f	A	R/L		
S16R CXFP R/L 11	16	7,5	200	11	20	166-2..	207	525
S20S CXFP R/L 11	20	9,0	250	13	24	166-2..	207	525
S20S CXFP R/L 16	20	9,0	250	13	24	166-3..	209	503
S25T CXFP R/L 16	25	11,5	300	17	31	166-3..	209	503
S32U CXFP R/L 16	32	15,0	350	22	39	166-3..	229	503
S40V CXFP R/L 22	40	18,5	400	27	38	166-4..	231	504



REF.	l	s	d
R/L 166L-2..	11,00	3,18	6,35
R/L 166L-3..	16,50	3,18	9,52
R/L 166L-4..	22,00	4,76	12,70



For more information see page: A.66

Cutting data

Material	Cutting speed m/min. (Ft/min) Tool grade		
	PM25	KM15	TIN25
Low and medium carbon steel	120-80 (390-260)		250-210 (820-690)
High carbon steel	110-70 (360-230)		210-150 (690-490)
Alloyed tool steel and heat-treatment steels	100-70 (360-230)		180-140 (590-460)
Stainless steels	100-70 (360-230)	90-70 (295-230)	140-110 (460-360)
Cast-iron HB 180-250		90-70 (295-230)	
Non-Ferrous metals		180-120 (590-390)	

N° of passes		
P mm	TPI	N° of passes
0,50	48,0	4 - 6
0,75	32,0	4 - 7
1,00	24,0	4 - 8
1,25	20,0	5 - 9
1,50	16,0	6 - 10
1,75	14,0	7 - 12
2,00	12,0	7 - 12
2,50	10,0	8 - 14
3,00	8,0	10 - 18
3,50	7,0	11 - 18
4,00	6,0	11 - 18
4,50	5,5	11 - 19
5,00	5,0	12 - 20
5,50	4,5	12 - 20
6,00	4,0	12 - 20
8,00	3,0	15 - 24

General recommendations :

- Threading speeds should normally be a minimum of 80% to 90% of turning speeds being used to machine the same component. (Assuming grades are compatible).
- Check helix angle and number of passes shown in charts before starting.
- Ensure centre height is correct.
- When there is a problem consult the following recommendations and change only one variable at time. This will help to be sure of the original problem.
- Do not use flank infeed on work hardening materials.

Component problems

	Problem	Cause and remedy
Pitch error (on CNC machines)	<ul style="list-style-type: none"> ★ Starting too close to workpiece ★ Saddle speed towards chuck is excessive 	<ul style="list-style-type: none"> ☆ Start cycle further back from workpiece. ☆ Reduce speed by 10% until correct.
Thread torn on one side only	<ul style="list-style-type: none"> ★ Incorrect helix angle in toolholder. 	<ul style="list-style-type: none"> ☆ Check helix chart. ☆ Reassemble with correct anvil. ☆ Check centre height.
Thread torn on both sides	<ul style="list-style-type: none"> ★ Running too slow. ★ Built up edge. 	<ul style="list-style-type: none"> ☆ Increase cutting speed. ☆ Check center height. ☆ Use coated grade. ☆ Compare thread speed with turning speed.
Long dangerous swarf	<ul style="list-style-type: none"> ★ Incorrect chipbreaker geometry. ★ Incorrect method of infeed. 	<ul style="list-style-type: none"> ☆ Use Canela (TD) chipbreaker. ☆ Use different infeed method.
Vibration chatter marks on both flanks	<ul style="list-style-type: none"> ★ Poor stability. ★ Excessive overhang. 	<ul style="list-style-type: none"> ☆ Renew anvil to support insert. ☆ Check tool clamping. ☆ Check rigidity of setup.
Shallow threads Problem with gauging	<ul style="list-style-type: none"> ★ Insert not cresting. ★ Incorrect effective diameter. 	<ul style="list-style-type: none"> ☆ Check machined diameters. ☆ Excessive tool wear or chipped on nose see remedies above.

Inserts

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Ceramic tools

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Threading

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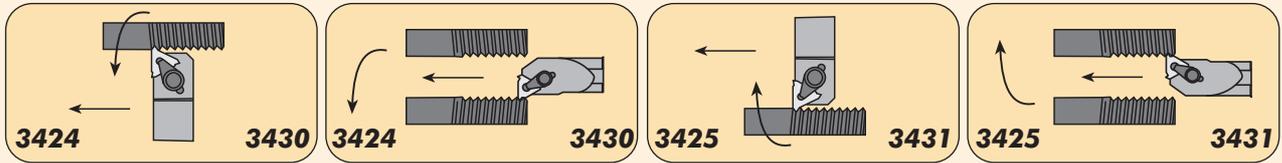
Arbors & adaptors

Helix chart

Feed direction towards the chuck

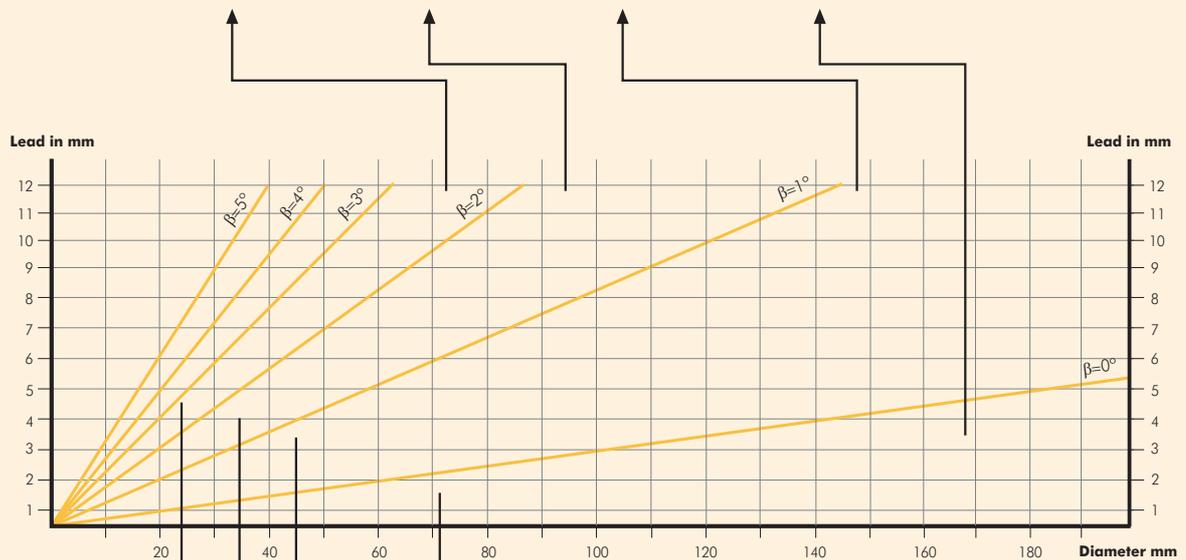
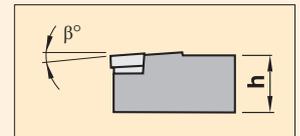
RH Thread - RH Tool

LH Thread - LH Tool



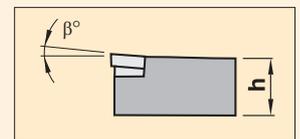
Anvil to give correct helix

Insert size	+3°	+2°	+1°	+0°
16R	3424+3	3424+2	3424+1	3424
16L	3425+3	3425+2	3425+1	3425
22R	3430+3	3430+2	3430+1	3430
22L	3431+3	3431+2	3431+1	3431



Anvil to give correct helix

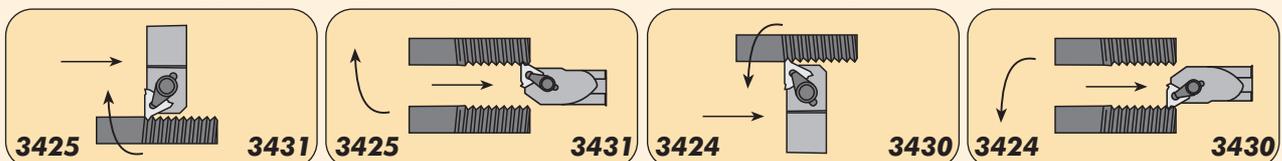
Medida da pastilha	-3°	-2°	-1°	0°
16R	3424-3	3424-2	3424-1	3424
16L	3425-3	3425-2	3425-1	3425
22R	3430-3	3430-2	3430-1	3430
22L	3431-3	3431-2	3431-1	3431



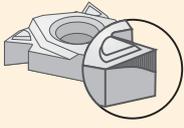
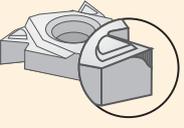
Feed direction away from the chuck

RH Thread - RH chuck

LH Thread - LH Tool



Threading insert wear and tool life

	Problem	Cause and Remedy
	<ul style="list-style-type: none"> ★ Cutting speed too high. ★ Lack of coolant. ★ Infeed per pass too small - too many passes ★ Incorrect grade. 	<ul style="list-style-type: none"> ☆ Reduce the cutting speed. ☆ Increase the coolant supply. ☆ Increase the depth of infeed for the smallest infeed depths - reduce the number of passes. ☆ Select a more wear resistant grade.
	<ul style="list-style-type: none"> ★ Instability of workholding and/or tool set-up. 	<ul style="list-style-type: none"> ☆ Check rigidity of operation. ☆ Select a tougher grade.
	<ul style="list-style-type: none"> ★ Intermittent coolant supply. 	<ul style="list-style-type: none"> ☆ Position coolant flow and/or increase coolant supply.
	<ul style="list-style-type: none"> ★ Incorrect method of infeed. ★ Incorrect angle of inclination. 	<ul style="list-style-type: none"> ☆ In case of flank infeed use modified flank infeed. Decrease infeed angle 3-5°. ☆ Correct the angle on inclination according to the diagram.
	<ul style="list-style-type: none"> ★ Infeed per pass too big - too few passes. ★ Lack of coolant. ★ Cutting speed too high. ★ Incorrect grade. ★ Excessive stock removal from crest. 	<ul style="list-style-type: none"> ☆ Decrease the depth of infeed for the biggest depths. - Increase the number of passes. ☆ Increase coolant supply. ☆ Reduce the cutting speed. ☆ Select a harder grade. ☆ Check the volume of the material above the crest.
	<ul style="list-style-type: none"> ★ Instability. ★ Lack of chip control. ★ Excessive plastic deformation. ★ Intermittent or inadequate coolant supply ★ Incorrect preparation of the operation 	<ul style="list-style-type: none"> ☆ Check rigidity of operation. ☆ Select a tougher grade. Select modified flank infeed. ☆ Machine with same infeed per pass. ☆ Direct coolant flow and/or increase coolant supply. ☆ Check dimension of blank.
	<ul style="list-style-type: none"> ★ Wrong centre height. ★ Insert not cresting. ★ Excessive tool wear. 	<ul style="list-style-type: none"> ☆ Adjust cutting edge height. ☆ Check dimension of blank. ☆ Change insert earlier.
	<ul style="list-style-type: none"> ★ Incorrect tool setting. 	<ul style="list-style-type: none"> ☆ Correct tool setting.
	<ul style="list-style-type: none"> ★ Incorrect depth of infeed per pass ★ Radial infeed. 	<ul style="list-style-type: none"> ☆ Adjust cutting edge height. ☆ Check dimension of blank. ☆ Change insert earlier.
	<ul style="list-style-type: none"> ★ Cutting speed too low. ★ Incorrect angle of inclination. ★ Flank infeed. 	<ul style="list-style-type: none"> ☆ Increase the cutting speed. ☆ Correct the angle of inclination according to diagram. ☆ Use modified flank infeed or radial infeed.

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