



Characteristics:

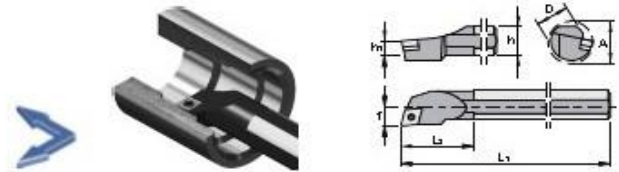
Multipurpose boring bar equipped with rhombic positive insert (angle 80°).
The center screw ensures good rigidity and chip flow.

Applications:

Internal boring bar for general applications, roughing, semi-finishing and finishing.

Negative inserts boring bars Ref. MCLN-K (Page: C.12) or PCLN (Page: C.22).

Axial: 0°
Radial: -6°



SCLC 95°		Characteristics: Boring bars with steel shank.						CCGT-CCMT-CCMW		
Ref.		D	h	h ₁	L ₁	L ₂	f	A	Insert size	Δ
S08K SCLC R/L 06		8	7	3,5	125	16	5	11	CC.. 0602..	0,040
S10M SCLC R/L 06		10	9	4,5	150	25	7	13	CC.. 0602..	0,060
S12M SCLC R/L 06		12	11	5,5	150	25	9	16	CC.. 0602..	0,150
S12M SCLC R/L 09		12	11	5,5	150	25	9	16	CC.. 09T3..	0,150
S12Q SCLC R/L 09		12	11	5,5	180	25	9	16	CC.. 09T3..	0,150
S16R SCLC R/L 09		16	15	7,5	200	30	11	20	CC.. 09T3..	0,300
S20S SCLC R/L 09		20	18	9,0	250	35	13	24	CC.. 09T3..	0,550
S25T SCLC R/L 09		25	23	11,5	300	40	17	31	CC.. 09T3..	0,550
S20S SCLC R/L 12		20	18	9,0	250	35	13	24	CC.. 1204..	0,550
S25T SCLC R/L 12		25	23	11,5	300	40	17	31	CC.. 1204..	0,700
S32U SCLC R/L 12		32	30	15,0	350	50	22	39	CC.. 1204..	2,050
S40V SCLC R/L 12		40	37	18,5	400	60	27	48	CC.. 1204..	3,750
S50W SCLC R/L 12		50	47	23,5	450	65	35	61	CC.. 1204..	6,500



Characteristics:
Boring bars with internal coolant.

CCGT-CCMT-CCMW

A-SCLC 95°		D	h	h ₁	L ₁	L ₂	f	A	Insert size	Δ
A08F SCLC R/L 06		8	7	3,5	80	16	5	11	CC.. 0602..	0,030
A10H SCLC R/L 06		10	9	4,5	100	25	7	13	CC.. 0602..	0,040
A12K SCLC R/L 06		12	11	5,5	125	25	9	16	CC.. 0602..	0,100
A16M SCLC R/L 09		16	15	7,5	150	30	11	20	CC.. 09T3..	0,200
A20Q SCLC R/L 09		20	18	9,0	180	35	13	24	CC.. 09T3..	0,400
A25R SCLC R/L 09		25	23	11,5	200	40	17	31	CC.. 09T3..	0,700
A32S SCLC R/L 12		32	30	15,0	250	50	22	39	CC.. 1204..	1,400
A40T SCLC R/L 12		40	37	18,5	300	60	27	48	CC.. 1204..	2,650



Characteristics:
Boring bars with anti-vibration shank.

CCGT-CCMT-CCMW

H-SCLC 95°		D	h	h ₁	L ₁	L ₂	f	A	Insert size	Δ
H08K SCLC R/L 06		8	7	3,5	125	16	5	11	CC.. 0602..	0,100
H10M SCLC R/L 06		10	9	4,5	150	25	7	13	CC.. 0602..	0,200
H12M SCLC R/L 06		12	11	5,5	150	25	9	16	CC.. 0602..	0,300
H16R SCLC R/L 09		16	15	7,5	200	30	11	20	CC.. 09T3..	0,650



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

CCGT-CCMT-CCMW

J-SCLC 95°		D	h	h ₁	L ₁	L ₂	f	A	Insert size	Δ
J08K SCLC R/L 06		8	7	3,5	125	16	5	11	CC.. 0602..	0,080
J10M SCLC R/L 06		10	9	4,5	150	25	7	13	CC.. 0602..	0,150
J12M SCLC R/L 06		12	11	5,5	150	25	9	16	CC.. 0602..	0,250
J16R SCLC R/L 09		16	15	7,5	200	30	11	20	CC.. 09T3..	0,600



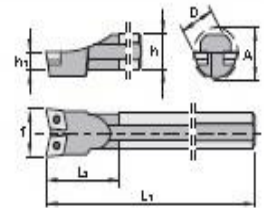
Characteristics:

Multipurpose internal and external boring bar equipped with rhombic positive insert (angle 80°).
The center screw ensures good rigidity and chip flow.

Applications:

Internal boring bar for general applications, roughing, semi-finishing and finishing.

Axial: 0°
Radial: -9°



SCLCN 95°

Characteristics:
Boring bars with steel shank.

CCGT-CCMT-CCMW

Ref.	D	h	h1	L1	L2	f	A	Insert size	Mg
\$12M SCLC N 06	12	11	5,5	150	25	18	20	CC.. 0602..	0,150
\$16R SCLC N 06	16	15	7,5	200	30	22	25	CC.. 0602..	0,300
\$20S SCLC N 06	20	18	9,0	250	35	26	30	CC.. 0602..	0,550
\$25T SCLC N 09	25	23	11,5	300	40	34	40	CC.. 09T3..	0,700
\$32U SCLC N 12	32	30	15,0	350	50	44	50	CC.. 1204..	2,050
\$40V SCLC N 12	40	37	18,5	400	60	54	60	CC.. 1204..	3,750
\$50W SCLC N 12	50	47	23,5	450	65	62	68	CC.. 1204..	6,500



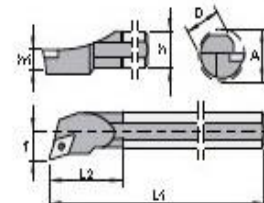
Characteristics:

Multipurpose profiling boring bar equipped with rhombic positive insert (angle 55°).
The center screw ensures good rigidity and chip flow.

Applications:

Profiling boring bar for general applications, roughing, semi-finishing and finishing.

Axial: 0°
Radial: -6°



SDQC 107°30'

Characteristics:
Boring bars with steel shank.

DCGT-DCMT-DCMW

Ref.	D	h	h1	L1	L2	f	A	Insert size	Mg
\$10M SDQC R/L 07	10	9	4,5	150	25	7	13	DC.. 0702..	0,060
\$12M SDQC R/L 07	12	11	5,5	150	25	9	16	DC.. 0702..	0,150
\$16R SDQC R/L 07	16	15	7,5	200	30	11	20	DC.. 0702..	0,300
\$20S SDQC R/L 07	20	18	9,0	250	35	13	24	DC.. 0702..	0,550
\$20S SDQC R/L 11	20	18	9,0	250	35	13	24	DC.. 11T3..	0,550
\$25T SDQC R/L 11	25	23	11,5	300	40	17	31	DC.. 11T3..	0,700
\$32U SDQC R/L 11	32	30	15,0	350	50	22	39	DC.. 11T3..	2,050
\$40V SDQC R/L 11	40	37	18,5	400	60	27	48	DC.. 11T3..	3,750

A-SDQC 107°30'



Characteristics:
Boring bars with internal coolant.

DCGT-DCMT-DCMW

Ref.	D	h	h1	L1	L2	f	A	Insert size	Mg
A12K SDQC R/L 07	12	11	5,5	125	25	9	16	DC.. 0702..	0,100
A16M SDQC R/L 07	16	15	7,5	150	30	11	20	DC.. 0702..	0,200
A20Q SDQC R/L 11	20	18	9,0	180	35	13	24	DC.. 11T3..	0,400
A25R SDQC R/L 11	25	23	11,5	200	40	17	31	DC.. 11T3..	0,700
A32S SDQC R/L 11	32	30	15,0	250	50	22	39	DC.. 11T3..	1,400
A40T SDQC R/L 11	40	37	18,5	300	60	27	48	DC.. 11T3..	2,850



Characteristics:

Multipurpose profiling boring bar equipped with rhombic positive insert (angle 55°).
The center screw ensures good rigidity and chip flow.

Applications:

Profiling boring bar for general applications, roughing, semi-finishing and finishing.

Negative inserts boring bars Ref. MDUN-K (Page: C.13) or PDUN (Page: C.23).

Axial: 0°
Radial: -6°



SDUC 93°

Characteristics:
Boring bars with steel shank.

DCGT-DCMT-DCMW

Ref.	D	h	h1	L1	L2	f	A	Insert size	ΔK_2
S10M SDUC R/L 07	10	9	4,5	150	25	7	13	DC.. 0702..	0,060
S12M SDUC R/L 07	12	11	5,5	150	25	9	16	DC.. 0702..	0,150
S12Q SDUC R/L 07	12	11	5,5	180	25	9	16	DC.. 0702..	0,150
S16R SDUC R/L 07	16	15	7,5	200	30	11	20	DC.. 0702..	0,300
S20S SDUC R/L 07	20	18	9,0	250	35	13	24	DC.. 0702..	0,550
S20S SDUC R/L 11	20	18	9,0	250	35	13	24	DC.. 11T3..	0,550
S25T SDUC R/L 11	25	23	11,5	300	40	17	31	DC.. 11T3..	0,700
S32U SDUC R/L 11	32	30	15,0	350	50	22	39	DC.. 11T3..	2,050
S40V SDUC R/L 11	40	37	18,5	400	60	27	48	DC.. 11T3..	3,750



Characteristics:
Boring bars with internal coolant.

DCGT-DCMT-DCMW

A-SDUC 93°

Ref.	D	h	h1	L1	L2	f	A	Insert size	ΔK_2
A12K SDUC R/L 07	12	11	5,5	125	25	9	16	DC.. 0702..	0,100
A16M SDUC R/L 07	16	15	7,5	150	30	11	20	DC.. 0702..	0,200
A20Q SDUC R/L 11	20	18	9,0	180	35	13	24	DC.. 11T3..	0,400
A25R SDUC R/L 11	25	23	11,5	200	40	17	31	DC.. 11T3..	0,700
A32S SDUC R/L 11	32	30	15,0	250	50	22	39	DC.. 11T3..	1,400
A40T SDUC R/L 11	40	37	18,5	300	60	27	48	DC.. 11T3..	2,650



Characteristics:
Boring bars with anti-vibration shank.

DCGT-DCMT-DCMW

H-SDUC 93°

Ref.	D	h	h1	L1	L2	f	A	Insert size	ΔK_2
H10M SDUC R/L 07	10	9	4,5	150	25	7	13	DC.. 0702..	0,200
H12M SDUC R/L 07	12	11	5,5	150	25	9	16	DC.. 0702..	0,300
H16R SDUC R/L 07	16	15	7,5	200	30	11	20	DC.. 0702..	0,650



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

DCGT-DCMT-DCMW

J-SDUC 93°

Ref.	D	h	h1	L1	L2	f	A	Insert size	ΔK_2
J10M SDUC R/L 07	10	9	4,5	150	25	7	13	DC.. 0702..	0,150
J12M SDUC R/L 07	12	11	5,5	150	25	9	16	DC.. 0702..	0,250
J16R SDUC R/L 07	16	15	7,5	200	30	11	20	DC.. 0702..	0,600



Characteristics:
 Multipurpose boring bar equipped with rhombic positive insert (angle 75°).
 The center screw ensures good rigidity and chip flow.

Applications:
 Internal boring bar for general applications, roughing, semi-finishing and finishing.

Axial: 0°
Radial: -5°



SELP 97°30'		Characteristics: Boring bars with steel shank.							EPMT-EPMW-EPMX	
Ref.	D	h	h ₁	L ₁	L ₂	f	A	Insert size		
S08K SELP R/L 04	8	7	3,5	125	16	5	11	EPM.. 0402..	0,040	
S10M SELP R/L 08	10	9	4,5	150	25	7	13	EPM.. 0803..	0,060	
S12M SELP R/L 08	12	11	5,5	150	25	9	16	EPM.. 0803..	0,150	
S16R SELP R/L 08	16	15	7,5	200	30	11	20	EPM.. 0803..	0,300	

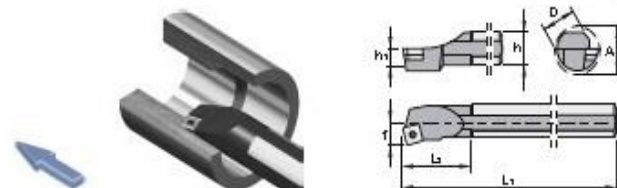


Characteristics:
 Multipurpose boring bar equipped with square positive insert.
 The center screw ensures good rigidity and chip flow.

Applications:
 Internal boring bar for general applications, roughing, semi-finishing and finishing.

Negative inserts boring bars Ref. MSKN-K (Page: C.14) or PSKN (Page: C.25).

Axial: 0°
Radial: -8°



SSKC 75°		Characteristics: Boring bars with steel shank.							SCGT-SCMT-SCMW	
Ref.	D	h	h ₁	L ₁	L ₂	f	A	Insert size		
S16R SSKC R/L 09	16	15	7,5	200	30	11	20	SC.. 09T3..	0,300	
S20S SSKC R/L 09	20	18	9,0	250	35	13	24	SC.. 09T3..	0,550	
S25T SSKC R/L 09	25	23	11,5	300	40	17	31	SC.. 09T3..	0,700	
S32U SSKC R/L 12	32	30	15,0	350	50	22	39	SC.. 1204..	2,050	
S40V SSKC R/L 12	40	37	18,5	400	60	27	48	SC.. 1204..	3,750	
S50W SSKC R/L 12	50	47	23,5	450	65	35	61	SC.. 1204..	6,500	



Characteristics:
 Multipurpose boring bar equipped with square positive insert.
 The center screw ensures good rigidity and chip flow.

Applications:
 Internal boring bar for general applications, roughing, semi-finishing and finishing.

Negative inserts boring bars Ref. PSSN (Page: C.26).

Axial: 0°
Radial: -8°



A-SSSC 45°		Characteristics: Boring bars with internal coolant.							SCGT-SCMT-SCMW	
Ref.	D	h	h ₁	L ₁	L ₂	f	A	Insert size		
A16M SSSC R/L 09	16	15	7,5	150	30	11	20	SC.. 09T3..	0,300	
A20Q SSSC R/L 09	20	18	9,0	180	35	13	24	SC.. 09T3..	0,550	
A25R SSSC R/L 09	25	23	11,5	200	40	17	31	SC.. 09T3..	0,700	



Characteristics:

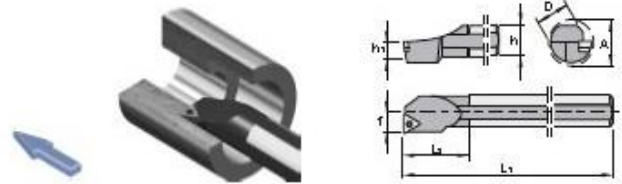
Multipurpose boring bar equipped with triangular positive insert.
The center screw ensures good rigidity and chip flow.

Applications:

Internal boring bar for general applications, roughing, semi-finishing and finishing.

Negative inserts boring bars Ref. MTFN (Page: C.15), MTFN-K (Page: C.16) or PTFN (Page: C.27).

Axial: 0°
Radial: -6°



STFC 90°		Characteristics: Boring bars with steel shank.						TCGT-TCMT-TCMW		
		D	h	h ₁	L ₁	L ₂	f	A	Insert size	M ₃
Ref.	S10M STFC R/L 09	10	9	4,5	150	25	7	13	TC.. 0902..	0,060
	S12M STFC R/L 09	12	11	5,5	150	25	9	16	TC.. 0902..	0,150
	S12M STFC R/L 11	12	11	5,5	150	25	9	16	TC.. 1102..	0,150
	S12Q STFC R/L 11	12	11	5,5	180	25	9	16	TC.. 1102..	0,050
	S16R STFC R/L 11	16	15	7,5	200	30	11	20	TC.. 1102..	0,300
	S20S STFC R/L 11	20	18	9,0	250	35	13	24	TC.. 1102..	0,550
	S20S STFC R/L 16	20	18	9,0	250	35	13	24	TC.. 16T3..	0,550
	S25T STFC R/L 16	25	23	11,5	300	40	17	31	TC.. 16T3..	0,700
	S32U STFC R/L 16	32	30	15,0	350	50	22	39	TC.. 16T3..	2,050
	S40V STFC R/L 16	40	37	18,5	400	60	27	48	TC.. 16T3..	3,750



Characteristics:
Boring bars with internal coolant.

TCGT-TCMT-TCMW

A-STFC 90°		D	h	h ₁	L ₁	L ₂	f	A	Insert size	M ₃
		Ref.	A10H STFC R/L 09	10	9	4,5	100	25	7	13
	A12K STFC R/L 11	12	11	5,5	125	25	9	16	TC.. 1102..	0,100
	A16M STFC R/L 11	16	15	7,5	150	30	11	20	TC.. 1102..	0,200
	A20Q STFC R/L 11	20	18	9,0	180	35	13	24	TC.. 1102..	0,400
	A25R STFC R/L 16	25	23	11,5	200	40	17	31	TC.. 16T3..	0,700
	A32S STFC R/L 16	32	30	15,0	250	50	22	39	TC.. 16T3..	1,400
	A40T STFC R/L 16	40	37	18,5	300	60	27	48	TC.. 16T3..	2,650



Characteristics:
Boring bars with anti-vibration shank.

TCGT-TCMT-TCMW

H-STFC 90°		D	h	h ₁	L ₁	L ₂	f	A	Insert size	M ₃
		Ref.	H10M STFC R/L 09	10	9	4,5	150	25	7	13
	H12M STFC R/L 11	12	11	5,5	150	25	9	16	TC.. 1102..	0,300
	H16R STFC R/L 11	16	15	7,5	200	30	11	20	TC.. 1102..	0,650



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

TCGT-TCMT-TCMW

J-STFC 90°		D	h	h ₁	L ₁	L ₂	f	A	Insert size	M ₃
		Ref.	J10M STFC R/L 09	10	9	4,5	150	25	7	13
	J12M STFC R/L 11	12	11	5,5	150	25	9	16	TC.. 1102..	0,250
	J16R STFC R/L 11	16	15	7,5	200	30	11	20	TC.. 1102..	0,600



Characteristics:
 Multipurpose boring bar equipped with triangular positive insert.
 The center screw ensures good rigidity and chip flow.

Applications:
 Internal boring bar for general applications, roughing, semi-finishing and finishing.

Negative inserts boring bars Ref. MTUN (Page: C.17).

Axial: 0°
Radial: -4°



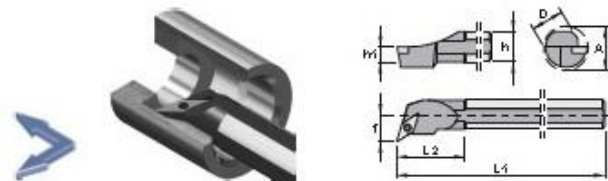
STUC 93°		Characteristics: Boring bars with steel shank.								
Ref.		D	h	h1	L1	L2	f	A	Insert size	
	\$12M STUC R/L 11	12	11	5,5	150	25	9	16	TC.. 1102..	0,150
	\$16R STUC R/L 16	16	15	7,5	200	30	11	20	TC.. 16T3..	0,300
	\$20S STUC R/L 16	20	18	9,0	250	35	13	24	TC.. 16T3..	0,550
	\$25T STUC R/L 16	25	23	11,5	300	40	17	31	TC.. 16T3..	0,700
	\$32U STUC R/L 16	32	30	15,0	350	50	22	39	TC.. 16T3..	2,050



Characteristics:
 Multipurpose profiling boring bar equipped with rhombic positive insert (angle 35°).
 The center screw ensures good rigidity and chip flow.

Applications:
 Profiling boring bar for general applications, roughing, semi-finishing and finishing.

Axial: 0°
Radial: -6°



SVQC 107°30'		Characteristics: Boring bars with steel shank.								VCVT-VCMT	
Ref.		D	h	h1	L1	L2	f	A	Insert size		
	\$16R SVQC R/L 11	16	15	7,5	200	30	11	20	VC.. 1103..	0,300	
	\$20S SVQC R/L 11	20	18	9,0	250	35	13	24	VC.. 1103..	0,550	
	\$16R SVQC R/L 13	16	15	7,5	200	30	13	22	VC.. 1303..	0,300	
	\$20S SVQC R/L 13	20	18	9,0	250	35	13	24	VC.. 1303..	0,550	
	\$25T SVQC R/L 16	25	23	11,5	300	40	17	31	VC.. 1604..	0,700	

A-SVQC 107°30'		Characteristics: Boring bars with internal coolant.								VCVT-VCMT	
Ref.		D	h	h1	L1	L2	f	A	Insert size		
	A16M SVQC R/L 11	16	15	7,5	150	30	11	20	VC.. 1103..	0,200	
	A20Q SVQC R/L 11	20	18	9,0	180	35	13	24	VC.. 1103..	0,400	
	A25R SVQC R/L 16	25	23	11,5	200	40	17	31	VC.. 1604..	0,700	
	A32S SVQC R/L 16	32	30	15,0	250	50	22	39	VC.. 1604..	1,400	
	A40T SVQC R/L 16	40	37	18,5	300	60	27	48	VC.. 1604..	2,650	

Jogo de 4 ferros SCLC 95°

Jogo de 3 ferros SDQC 107° 30'

Jogo de 3 ferros SDUC 93°

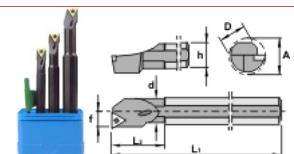
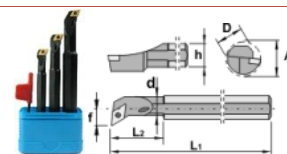
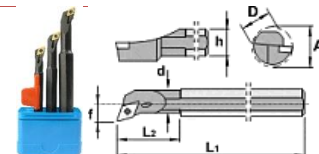
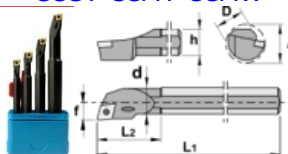
Jogo de 3 ferros STFC 90°

CCGT-CCMT-CCMW

DCGT-DCMT-DCMW

DCGT-DCMT-DCMW

TCGT-TCMT-TCMW



REFERENCIA
 A0608H SCLC R/L 06
 A0810J SCLC R/L 06
 A1012K SCLC R/L 06
 A1216M SCLC R/L 06

REFERENCIA
 A0810J SDQC R/L 07
 A1012K SDQC R/L 07
 A1216M SDQC R/L 07

REFERENCIA
 A0810J SDUC R/L 07
 A1012K SDUC R/L 07
 A1216M SDUC R/L 07

REFERENCIA
 A0810J SDUC R/L 07
 A1012K SDUC R/L 07
 A1216M SDUC R/L 07