

DURATOMIC™

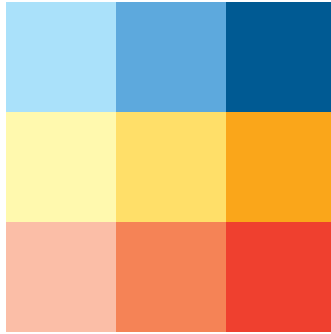
TECHNICAL GUIDE & INSERT PROGRAMME FOR STEEL TURNING



TP1500 • TP2500 • TP3500 ^{NEW}

SECO 

A FULL RANGE SUPPLIER



SECO GRADES FOR MAXIMUM PRODUCTIVITY IN ALL ISO P AND M MATERIALS

Today Seco's family of grades provides excellent capability for the widest range of steel and stainless steel. With the new TP3500 together with TP1500 and TP2500, all featured with the outstanding Duratomic coating technology, you have easy first choice steel turning grades for numerous applications.

STEEL:

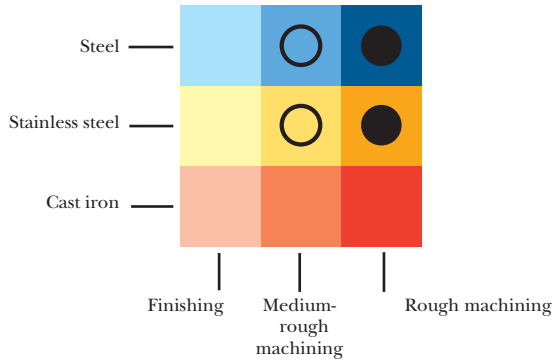
- TP1500: **DURATOMIC Wear resistance.** Specially designed to give long and reliable tool life, at high temperatures and speeds, during stable conditions. The grade for the highest productivity.
- TP2500: **DURATOMIC Versatility.** First choice for general purpose steel turning. Wide working window, capability to handle high speed as well as moderately interrupted cuts. Also performs well in ISO M and K applications.
- TP3500: **DURATOMIC Toughness.** Offers long, predictable tool life in unstable conditions where high edge toughness is needed and harder more wear resistant grades show unpredictable behaviour. Also offers the toughness required for ISO M applications

STAINLESS STEEL:

- TM2000: **DURATOMIC** First choice for the highest productivity in high temperature applications, like high speed machining.
- TM4000: **DURATOMIC** First choice for unstable conditions when high productivity and reliability is the most important requirement.

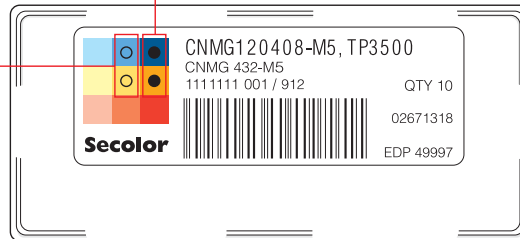
INDIVIDUAL CUTTING DATA ON THE INSERT BOX

The cutting data located on the cover of the box refers to the black dots in the Secolor matrix and the Seco material group stated. The cutting data recommendations are shown in both metric and inch values. The values in brackets represent the total recommended working range. The cutting data is adapted for the specific insert style, chipbreaker, nose radius and the most commonly used cutting edge angle.



Rough machining in steel and stainless steel

For medium-rough machining in steel and stainless steel

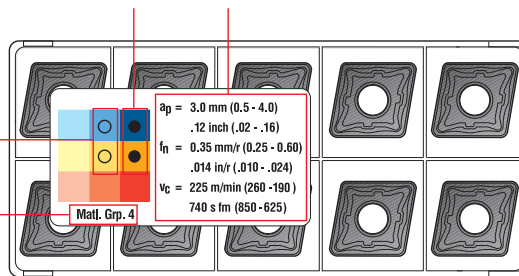


Main application areas

Recommended depth of cut, feed rate and cutting speed

Other possible application areas

The recommended cutting data is for Seco material group 4 (steel)



CUTTING DATA

CUTTING DATA EXAMPLES

The recommended cutting speeds in the tables are calculated for 15 minutes tool life, in Seco's material groups 1-6 (steel). In Seco's material groups 8-11 (stainless steel) the cutting speeds are calculated for 10 minutes tool life when coolant is applied.

Reference	CCMT09T304-F1, $a_p = 1 \text{ mm}$, $\kappa_r = 95^\circ$, $r_E = 0,4 \text{ mm}$								
Seco material group No.	TP1500			TP2500			TP3500		
	Feed rate, f_n (mm/rev)			Feed rate, f_n (mm/rev)			Feed rate, f_n (mm/rev)		
	0,08	0,12	0,20	0,08	0,12	0,20	0,08	0,12	0,20
1	1 175	1 060	900	1 070	945	780	550	550	510
2	995	900	765	905	805	660	465	465	430
3	825	745	630	750	665	545	385	385	355
4	700	635	540	640	565	465	330	330	305
5	585	530	450	530	470	390	275	275	255
6	515	465	395	465	415	340	240	240	220
8	-	-	-	330	395	395	420	415	350
9	-	-	-	260	310	310	330	325	275
10	-	-	-	210	255	255	270	265	225
11	-	-	-	155	190	190	200	200	165

General Turning, Ver. 1.0

Reference	CNMG120408-M5, $a_p = 2,5 \text{ mm}$, $\kappa_r = 95^\circ$, $r_E = 0,8 \text{ mm}$								
Seco material group No.	TP1500			TP2500			TP3500		
	Feed rate, f_n (mm/rev)			Feed rate, f_n (mm/rev)			Feed rate, f_n (mm/rev)		
	0,20	0,30	0,40	0,20	0,30	0,40	0,20	0,30	0,40
1	835	705	615	720	585	500	480	415	365
2	710	600	520	610	495	425	405	350	305
3	585	495	430	505	410	350	335	290	255
4	500	420	370	430	350	300	285	250	215
5	415	350	305	360	290	250	240	205	180
6	365	310	270	315	255	220	210	180	160
8	-	-	-	370	295	230	320	240	185
9	-	-	-	290	235	180	250	190	145
10	-	-	-	235	190	150	205	155	120
11	-	-	-	175	140	110	155	115	85

General Turning, Ver. 1.0

Reference	CNMG160616-MR7, $a_p = 5 \text{ mm}$, $\kappa_r = 95^\circ$, $r_E = 1,6 \text{ mm}$								
Seco material group No.	TP1500			TP2500			TP3500		
	Feed rate, f_n (mm/rev)			Feed rate, f_n (mm/rev)			Feed rate, f_n (mm/rev)		
	0,40	0,60	0,80	0,40	0,60	0,80	0,40	0,60	0,80
1	610	490	410	490	375	310	360	280	225
2	515	415	350	415	320	260	305	235	195
3	425	340	290	345	265	215	250	195	160
4	365	290	245	295	225	185	215	165	135
5	305	245	205	245	190	155	180	140	115
6	265	215	180	215	165	135	155	120	100
8	-	-	-	225	135	85	175	110	70
9	-	-	-	175	105	70	140	85	55
10	-	-	-	145	85	55	115	70	45
11	-	-	-	105	65	40	85	50	35

General Turning, Ver. 1.0

CUTTING DATA CALCULATOR

Calculations for other workpiece materials using alternative depths of cut, feed rates, tool life and cutting edge angles can be made using our cutting data calculator. This can be downloaded from the Seco website.

Select standard
 Metric Inch

Selection by material
Material: SMG4
Rm: [450, 1200]
620
For Rm > 1200 select SM07
Grade: TP2500
Reset

Selection by grade
Grade:
Material:
Reset

Language: English(US)
Version: 1.0.0.0 (2009-03-23)

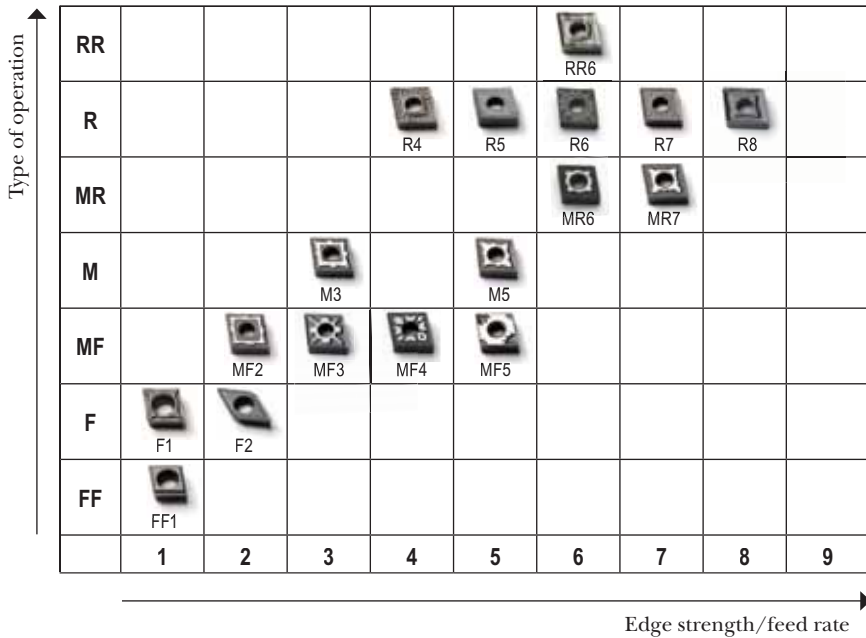
Input
Holder rake: -6 °
Depth of cut: 2.00 mm
Chip breaker: M5
Feed: 0.35 mm/r
Cutting edge angle: 95.0 °
Desired tool life: 15 min
Nose radius: 0.80 mm
Calculate
















Result
Cutting speed: 237 m/min
Chip thickness: 0.27 mm
Copy to clipboard














Read more about the Secolor Turning Calculator at:
www.secotools.com/service_support

GEOMETRIES FOR OPTIMUM PERFORMANCE AND CHIP CONTROL

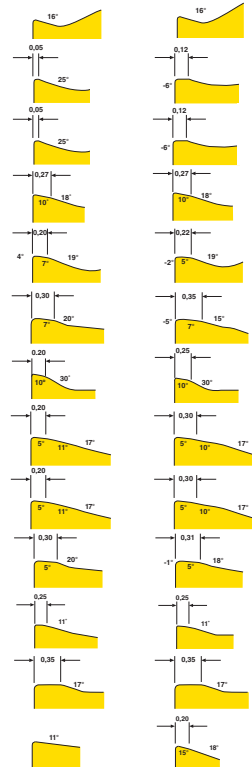
The Duratomic grades are available in many insert shapes and geometries for light, medium and rough operations.













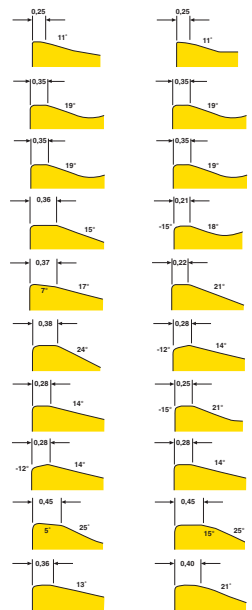
	Positive inserts	Corner	Cutting edge
	FF1 Extreme finishing	 10°	 10°
	F1 For finishing	 17°	 16°
	W-F1 Seco Wiper for high feed finishing	 17°	 18°
	F2 For general turning	 0.12 16°	 0.17 15°
	W-F2 Seco Wiper for general turning	 0.12 16°	 0.17 15°

Negative double sided inserts	
	FF1 Extreme finishing
	MF2 For finishing
	W-MF2 Seco Wiper for finishing
	MF3 For general stainless steel turning
	M3 For general turning
	W-M3 Seco Wiper for high feed general turning
	MF4 For medium finishing of stainless steel
	MF5 For general and near net shape turning
	W-MF5 Seco Wiper for general and near net shape turning
	M5 For medium to roughing
	MR6 For medium to light roughing
	MR7 Strong edge for roughing and interrupted cut.
	UX Positive cutting rake for slim components

Corner **Cutting edge**



Negative single sided inserts	
	MR6 Medium roughing
	R4 Medium roughing
	W-R4 Seco Wiper for medium roughing
	R5 Medium roughing
	R6 For medium roughing of stainless steel
	RR6 Roughing of stainless steels and steel
	R7 Strong edge for roughing and intermittent machining
	W-R7 Seco Wiper for high feed roughing
	R8 For roughing of stainless steel forgings and castings
	57 Roughing at high feed rates



SECOLOR® SELECTION GUIDE

The new and improved Secolor Selection Guide will help you to easily find the inserts that we recommend for a specific turning application. The Secolor Selection Guide presents a list of all applicable inserts and arranges them with the specialized grades for the selected workpiece material group, and then secondly by grade hardness.

NEW FEATURES:

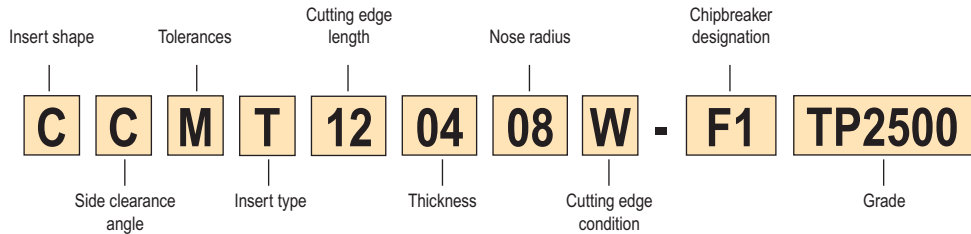
- Updated user interface
- Image of selected insert
- Separate input and output
- Secolor matrix to increase clarity
- Ability to sort search colours
- Inserts are grouped by colours rather than sections, green for first choice (solid circle) and yellow for second choice (outlined circle)
- Better international support and simplified update.

Read more or download the Secolor Selection Guide at: www.secotools.com/service_support

Description	Grade	R _a (mm)		r _n (mm)		v _c (m/min)		Mat Grp
		Req.	Range	Req.	Range	Req.	Range	
CMHG120408-H45	TP1000	3.00	0.50-4.00	0.35	0.25-0.60	305	350-260	4
CMHG120408-H45S	TP1000	0.75	0.30-2.70	0.50	0.25-0.60	325	375-275	4
CMHG120408-H45T	TP1000	0.75	0.35-2.70	0.40	0.30-0.45	300	405-300	4
CMHG120408-H43	TP1000	1.50	0.50-4.00	0.50	0.15-0.30	285	330-240	4
CMHG120408-H43	TP1000	2.00	0.50-4.00	0.27	0.15-0.60	290	405-300	4
CMHG120408-H45	TP2000	3.00	0.50-4.00	0.35	0.25-0.60	305	330-240	4
CMHG120408-H43	TP2000	1.50	0.50-4.00	0.50	0.15-0.30	265	305-225	4
CMHG120408-H43	TP2000	2.00	0.50-4.00	0.27	0.15-0.60	310	395-305	4
CMHG120408-H45S	TP2500	0.75	0.35-2.70	0.40	0.30-0.45	300	300-270	4
CMHG120408-H4F4	TP2500	1.50	0.85-3.00	0.35	0.20-0.40	295	340-250	4
CMHG120408-H43	TP2500	2.00	0.50-4.00	0.27	0.15-0.60	315	360-270	4
CMHG120408-H42	TP2500	1.50	0.50-4.00	0.50	0.15-0.30	285	330-240	4
CMHG120408-H45S	TP2500	0.75	0.30-2.70	0.50	0.25-0.60	285	340-250	4
CMHG120408-H45T	TP3000	0.75	0.35-2.70	0.40	0.30-0.45	230	265-195	4
CMHG120408-H45S	TP3000	0.75	0.30-2.70	0.50	0.25-0.60	215	240-185	4
CMHG120408-H43	TP3000	2.00	0.50-4.00	0.27	0.15-0.60	230	265-195	4
CMHG120408-H4F4	TP3000	1.50	0.80-3.00	0.35	0.20-0.40	215	245-185	4
CMHG120408-H45S	TP3000	0.75	0.35-2.70	0.40	0.30-0.45	300	370-270	4
CMHG120408-H4F3	TP3000	2.00	0.30-4.00	0.30	0.15-0.60	140	180-120	4



CODE KEY








INSERT PROGRAMME FOR STEEL – POSITIVE INSERTS

	Part No.	Grades			Cutting data	
		TP1500	TP2500	TP3500	ap	f
	CCMT060202-F1	■	■	■	0,5	0,10
	CCMT060202-F2	■	■	■	1,0	0,10
	CCMT060202-FF1	■	■	■	0,5	0,10
	CCMT060204-F1	■	■	■	0,5	0,12
	CCMT060204-F2	■	■	■	1,0	0,18
	CCMT060204-FF1	■	■	■	0,5	0,10
	CCMT060204W-F1	■	■	■	0,5	0,25
	CCMT060208-F1	■	■	■	0,8	0,20
	CCMT060208-F2	■	■	■	1,0	0,20
	CCMT090304-F2		■		1,0	0,18
	CCMT09T302-F1	■	■	■	0,8	0,10
	CCMT09T302-F2	■	■	■	1,0	0,10
	CCMT09T304-F1	■	■	■	1,0	0,12
	CCMT09T304-F2	■	■	■	1,0	0,18
	CCMT09T304-FF1		■		0,7	0,10
	CCMT09T304W-F1	■	■	■	0,5	0,25
	CCMT09T308-F1	■	■	■	1,0	0,20
	CCMT09T308-F2	■	■	■	1,0	0,25
CCMT09T308W-F1	■	■	■	1,0	0,40	
CCMT09T308W-F2	■	■	■	1,0	0,40	
CCMT09T312-F2	■	■	■	1,0	0,30	
CCMT120404-F1		■	■	1,0	0,12	
CCMT120404-F2	■	■	■	1,5	0,18	
CCMT120404W-F1		■	■	1,0	0,25	
CCMT120408-F1	■	■	■	1,5	0,25	
CCMT120408-F2	■	■	■	1,5	0,30	
CCMT120408W-F1		■	■	1,5	0,40	
CCMT120412-F1		■	■	1,5	0,35	
CCMT120412-F2	■	■	■	1,5	0,40	
CCMT160508-F2		■		3,0	0,40	



	Part No.	Grades			Cutting data	
		TP1500	TP2500	TP3500	ap	f
	DCMT070208-F2	■	■	■	1,0	0,25
	DCMT11T302-F1		■	■	0,5	0,10
	DCMT11T302-F2	■	■		1,0	0,10
	DCMT11T302-FF1		■		1,0	0,10
	DCMT11T304-F1	■	■	■	0,5	0,12
	DCMT11T304-F2	■	■	■	1,0	0,18
	DCMT11T304-FF1		■		1,0	0,18
	DCMX11T304W-F1	■	■	■	0,5	0,20
	DCMT11T308-F1	■	■	■	0,8	0,17
	DCMT11T308-F2	■	■	■	1,0	0,25
	DCMT11T308-FF1		■		1,0	0,25
	DCMX11T308W-F1	■	■	■	1,0	0,25
	DCMT11T312-F1	■	■		1,2	0,20
	DCMT150404-F2	■	■	■	1,0	0,18
	DCMT150408-F2	■	■	■	1,5	0,27
	DCMT150412-F2	■	■	■	1,5	0,35
		RCMT0602M0-F1		■		0,5
RCMT0602M0-F2		■	■		0,9	0,50
RCMT0803M0-F1			■		1,0	0,40
RCMT0803M0-F2		■	■		1,2	0,60
RCMT10T3M0-F1			■	■	1,5	0,45
RCMT10T3M0-F2		■	■	■	1,5	0,70
RCMT1204M0-F1			■	■	1,6	0,50
RCMT1204M0-F2	■	■	■	1,8	1,00	
RCMT1606M0-F1	■			2,0	0,70	
RCMT1606M0-F2	■	■	■	2,4	1,20	
	RCMX100300		■	■	2,0	0,70
	RCMX120400	■	■	■	2,5	1,00
RCMX160600	■	■		3,0	1,20	

Part No. in bold are High Feed wiper inserts

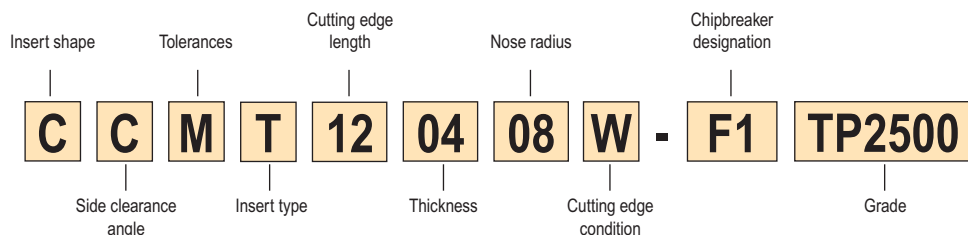
Insert programme

	Part No.	Grades			Cutting data	
		TP1500	TP2500	TP3500	ap	f
	RCMX200600	■	■	■	5,0	0,65
	RCMX250700	■	■	■	6,5	0,80
	RCMX320900	■	■	■	8,0	1,00
	SCMT060204-F2		■		0,6	0,12
	SCMT070308-F2		■	■	0,6	0,25
	SCMT09T304-F1	■	■	■	0,8	0,15
	SCMT09T304-F2		■	■	1,0	0,15
	SCMT09T308-F1	■	■	■	1,0	0,25
	SCMT09T308-F2	■	■	■	1,0	0,25
	SCMT09T312-F1			■		
	SCMT120408-F1		■	■	1,5	0,25
	SCMT120408-F2	■	■	■	1,5	0,30
	SCMT120412-F1	■			1,5	0,35
	SCMT250924T-F2			■	10,0	1,00
	SPMR090304-F1		■		1,0	0,10
	SPMR090308-F1		■		1,0	0,15
	SPMR090308-FF1		■		1,0	0,15
SPMR120304-F1		■		2,0	0,15	
SPMR120308-F1		■		2,0	0,25	
SPMR120308-F2		■		3,0	0,30	
SPMR120312-F1		■		3,0	0,30	
	TCMT110202-F1			■	0,5	0,10
	TCMT110204-F1	■	■	■	0,5	0,12
	TCMT110208-F1	■	■	■	0,8	0,20
	TCMT16T302-F1			■	0,5	0,10
	TCMT16T304-F1	■	■	■	1,0	0,12
	TCMT16T304-F2	■	■	■	2,0	0,18
	TCMT16T308-F1	■	■	■	2,0	0,20
	TCMT16T308-F2	■	■	■	2,0	0,25
	TCMX16T308W-F1	■	■		1,0	0,30
	TCMT16T312-F1			■	2,0	0,25
	TCMT220408-F2	■	■	■	2,0	0,20
		TPMR110304-F1	■	■		0,5
TPMR110308-F1			■		0,8	0,25
TPMR160304-F1		■	■		1,0	0,15
TPMR160304-F2			■		2,0	0,20
TPMR160308-F1		■	■		2,0	0,25
TPMR160308-F2		■	■		2,0	0,25
TPMR160312-F1			■		2,0	0,30
TPMR220408-F2			■		3,0	0,35
TPMR220412-F2			■		3,0	0,40
	VBMT110202-F1		■	■	0,5	0,10
	VBMT110204-F1		■	■	0,5	0,12
	VBMT110208-F1		■		0,8	0,20


Part No. in bold are High Feed wiper inserts

	Part No.	Grades			Cutting data	
		TP1500	TP2500	TP3500	ap	f
	VBMT110302-F1		■		0,5	0,10
	VBMT110304-F1		■		0,5	0,12
	VBMT110308-F1		■		0,8	0,20
	VBMT160402-F1		■	■	0,5	0,10
	VBMT160404-F1	■	■	■	0,8	0,12
	VBMT160404-F2	■	■	■	1,0	0,18
	VBMT160408-F1	■	■	■	1,0	0,20
	VBMT160408-F2	■	■	■	1,0	0,25
	VBMT160412-F1	■	■	■	1,0	0,25
	VBMT160412-F2	■	■	■	1,0	0,30
	WCMT06T308-F1		■		1,0	0,20



CODE KEY







INSERT PROGRAMME FOR STEEL – NEGATIVE INSERTS

Part No.	Grades			Cutting data	
	TP1500	TP2500	TP3500	ap	f
 CNMG090304-M3	■			1,0	0,20
CNMG090308-M3	■	■		1,5	0,20
CNMG120404-FF1	■	■		1,0	0,12
CNMG120404-M3	■	■	■	2,0	0,20
CNMG120404-M5	■	■	■	2,5	0,20
CNMG120404-MF2	■	■	■	1,5	0,15
CNMG120404-MF3			■	2,0	0,20
CNMG120404W-MF2	■	■		0,7	0,30
CNMG120408-FF1	■			1,0	0,12
CNMG120408-M3	■	■	■	2,0	0,27
CNMG120408-M5	■	■	■	3,0	0,35
CNMG120408-MF2	■	■	■	1,5	0,20
CNMG120408-MF3			■	2,0	0,30
CNMG120408-MF4		■	■	1,5	0,35
CNMG120408-MF5	■	■	■	0,7	0,40
CNMG120408-MR6	■	■	■	2,5	0,35
CNMG120408-MR7	■	■	■	3,0	0,35
CNMG120408W-M3	■	■		1,5	0,50
CNMG120408W-MF2	■	■		1,0	0,40
CNMG120408W-MF5	■	■		0,7	0,50
CNMG120412-M3	■	■	■	3,0	0,35
CNMG120412-M5	■	■	■	3,0	0,40
CNMG120412-MF2	■	■		1,5	0,25
CNMG120412-MF3			■	2,5	0,35
CNMG120412-MF4			■	2,0	0,35
CNMG120412-MF5	■	■	■	1,0	0,50
CNMG120412-MR6	■	■	■	2,5	0,45
CNMG120412-MR7	■	■	■	3,0	0,45
CNMG120412W-M3	■	■		2,0	0,50
CNMG120416-M3	■	■		3,0	0,40
CNMG120416-M5	■	■	■	4,0	0,50
CNMG120416-MF5	■	■		2,0	0,55
CNMG120416-MR6	■	■	■	2,5	0,55
CNMG120416-MR7	■	■	■	4,0	0,55
CNMG120612-MR6	■	■	■	3,0	0,45
CNMG120616-MR6	■	■	■	3,0	0,55






Part No. in bold are High Feed wiper inserts

Part No.	Grades			Cutting data	
	TP1500	TP2500	TP3500	ap	f
 CNMG160608-M3	■	■	■	3,0	0,30
CNMG160608-M5	■	■	■	4,0	0,35
CNMG160608-MR7			■	4,0	0,35
CNMG160612-M3	■	■	■	3,0	0,40
CNMG160612-M5	■	■	■	5,0	0,45
CNMG160612-MR6	■	■	■	3,5	0,45
CNMG160612-MR7	■	■	■	5,0	0,45
CNMG160616-M3	■			3,0	0,40
CNMG160616-M5	■	■	■	5,0	0,50
CNMG160616-MR6	■	■	■	3,5	0,55
CNMG160616-MR7	■	■	■	5,0	0,55
CNMG160624-MR6	■	■	■	3,5	0,70
CNMG160624-MR7	■			5,0	0,70
CNMG190608-M3	■	■	■	3,0	0,30
CNMG190608-M5	■	■	■	6,0	0,35
CNMG190608-MR7			■	6,0	0,35
CNMG190612-M3	■	■	■	3,0	0,40
CNMG190612-M5	■	■	■	6,0	0,45
CNMG190612-MR6	■	■	■	4,5	0,45
CNMG190612-MR7	■	■	■	6,0	0,45
CNMG190616-M3		■	■	6,0	0,55
CNMG190616-M5	■	■	■	6,0	0,55
CNMG190616-MR6	■	■	■	4,5	0,55
CNMG190616-MR7	■	■	■	6,0	0,55
CNMG190624-MR6	■	■	■	4,5	0,80
CNMG190624-MR7	■	■	■	6,0	0,70
CNMG250924-MR7	■	■	■	8,0	0,80
 CNMM120408-R4	■	■	■	4,0	0,35
CNMM120408-R6		■	■	4,0	0,40
CNMM120408-RR6		■	■	4,0	0,35
CNMM120408W-R4	■			4,0	0,60
CNMM120412-R4	■	■	■	4,0	0,45
CNMM120412-R6		■	■	4,0	0,45
CNMM120412-RR6		■	■	4,0	0,50



Insert programme

	Part No.	Grades			Cutting data	
		TP1600	TP2500	TP3500	ap	f
	CNMM120412W-R4	■			4,0	0,70
	CNMM120416-R4	■	■		4,0	0,60
	CNMM160612-MR6	■	■	■	4,0	0,45
	CNMM160612-R4	■	■	■	5,0	0,50
	CNMM160612-R6			■	5,0	0,50
	CNMM160612-R7	■		■	5,0	0,50
	CNMM160612-RR6		■	■	5,0	0,60
	CNMM160616-MR6	■	■	■	4,0	0,55
	CNMM160616-R4	■	■	■	5,0	0,60
	CNMM160616-R5	■	■	■	5,0	0,60
	CNMM160616-R7	■	■	■	5,0	0,60
	CNMM160616-RR6	■	■	■	5,0	0,60
	CNMM160624-MR6	■	■	■	4,0	0,70
	CNMM160624-R7	■	■	■	5,0	0,70
	CNMM190612-57	■			6,0	0,50
	CNMM190612-MR6	■	■	■	5,0	0,45
	CNMM190612-R4	■		■	6,0	0,45
	CNMM190612-R6			■	6,0	0,50
	CNMM190612-R7	■	■	■	6,0	0,50
	CNMM190612-RR6			■	6,0	0,50
	CNMM190616-57		■	■	6,0	0,60
	CNMM190616-MR6	■	■	■	5,0	0,55
	CNMM190616-R4	■	■	■	6,0	0,60
	CNMM190616-R5	■	■	■	6,0	0,60
	CNMM190616-R7	■	■	■	6,0	0,60
	CNMM190616-R8			■	6,0	0,60
	CNMM190616-RR6	■	■	■	6,0	0,60
	CNMM190616W-R7	■	■	■	6,0	0,90
	CNMM190624-57	■			6,0	0,70
	CNMM190624-MR6	■	■	■	5,0	0,80
	CNMM190624-R4	■	■	■	6,0	0,70
	CNMM190624-R5	■	■	■	6,0	0,70
	CNMM190624-R7	■	■	■	6,0	0,70
CNMM190624-RR6		■	■	6,0	0,70	
CNMM190624W-R7	■	■	■	6,0	0,90	
	DNMU110402-M3		■		1,5	0,10
	DNMU110404-M3	■	■	■	1,5	0,10
	DNMU110404-MF2	■	■	■	1,0	0,12
	DNMU110404-MF5				0,7	0,20
	DNMX110404W-MF2	■	■	■	0,8	0,25
	DNMU110408-M3	■	■	■	1,5	0,25
	DNMU110408-M5	■			2,0	0,30
	DNMU110408-MF2	■	■	■	1,0	0,20
	DNMU110408-MF5		■	■	1,0	0,40
	DNMX110408W-MF2	■	■	■	1,0	0,30
	DNMU110412-M3	■			1,5	0,30
	DNMU110412-M5	■			2,0	0,30
	DNMU110412-MF5		■	■	1,0	0,50
		DNMG150404-M3	■	■	■	2,0
DNMG150404-M5				■	2,0	0,20
DNMG150404-MF2		■	■	■	1,0	0,15
DNMG150404-MF3				■	1,0	0,20
DNMG150408-M3		■	■	■	2,0	0,27
DNMG150408-M5		■	■	■	2,5	0,35
DNMG150408-MF2		■	■	■	2,0	0,25
DNMG150408-MF3				■	2,0	0,30
DNMG150408-MF5		■	■	■	1,0	0,40
DNMG150408-MR6		■	■	■	2,5	0,35



Part No. in bold are High Feed wiper inserts

	Part No.	Grades			Cutting data	
		TP1600	TP2500	TP3500	ap	f
	DNMG150412-M3	■	■	■	2,0	0,30
	DNMG150412-M5	■	■	■	2,5	0,40
	DNMG150412-MF2	■	■		2,0	0,25
	DNMG150412-MF5	■	■		1,0	0,50
	DNMG150412-MR6	■	■		2,5	0,45
	DNMG150416-MF5	■			1,5	0,55
	DNMG150604L-UX		■		2,0	0,25
	DNMG150604R-UX		■		2,0	0,25
	DNMG150604-M3	■	■	■	2,0	0,20
	DNMG150604-M5		■	■	2,0	0,20
	DNMG150604-MF2	■	■	■	1,0	0,15
	DNMG150604-MF3			■	1,0	0,20
	DNMG150608L-UX		■		3,0	0,35
	DNMG150608R-UX		■		3,0	0,35
	DNMG150608-M3	■	■	■	2,0	0,27
	DNMG150608-M5	■	■	■	2,5	0,35
	DNMG150608-MF2	■	■	■	2,0	0,25
	DNMG150608-MF3			■	2,0	0,30
	DNMG150608-MF4		■		1,5	0,35
	DNMG150608-MF5	■	■		1,0	0,40
	DNMG150608-MR6	■	■	■	2,5	0,35
	DNMG150608-MR7	■			2,5	0,35
	DNMX150608W-M3	■			1,2	0,30
	DNMG150612-M3	■	■	■	2,0	0,35
	DNMG150612-M5	■	■	■	3,0	0,45
	DNMG150612-MF2	■	■		2,0	0,25
	DNMG150612-MF5	■	■		1,0	0,50
DNMG150612-MR6	■	■	■	2,5	0,45	
DNMG150612-MR7	■		■	3,0	0,45	
DNMX150612W-M3	■			1,5	0,40	
DNMG150616-M3	■	■		2,0	0,45	
DNMG150616-M5	■	■	■	3,0	0,55	
DNMG150616-MF5		■		1,5	0,55	
DNMG150616-MR6	■	■		2,5	0,55	
	DNMM150608-R4	■	■	■	4,0	0,35
	DNMM150612-R4	■	■	■	4,0	0,45
	DNMM150616-R4	■	■	■	4,0	0,55
	LNMX191940-MF	■	■			
	LNMX191940-MR	■	■			
	LNMX301940-MF	■	■			
	LNMX301940-MR	■	■			
	RNMG120400-M3	■	■	■	1,8	1,00
	SNMG090304-MF2		■		0,8	0,15
	SNMG090308-M5		■	■	1,0	0,30
	SNMG090308-MF2	■			1,0	0,25

Insert programme

	Part No.	Grades			Cutting data	
		TP1500	TP2500	TP3500	ap	f
	SNMG120404-M3	■	■	■	2.0	0.17
	SNMG120408-M3	■	■	■	2.0	0.27
	SNMG120408-M5	■	■	■	2.5	0.35
	SNMG120408-MF2	■	■	■	1.5	0.25
	SNMG120408-MR6	■	■	■	2.5	0.35
	SNMG120408-MR7	■	■	■	2.5	0.35
	SNMG120412-M3	■	■	■	2.0	0.40
	SNMG120412-M5	■	■	■	2.5	0.45
	SNMG120412-MF2	■	■	■	1.5	0.30
	SNMG120412-MR6	■	■	■	2.5	0.45
	SNMG120412-MR7	■	■	■	2.5	0.45
	SNMG120416-M3	■	■	■	2.0	0.40
	SNMG120416-M5	■	■	■	2.5	0.55
	SNMG120416-MR6	■	■	■	2.5	0.55
	SNMG120416-MR7	■	■	■	3.0	0.55
	SNMG120612-MR6	■	■	■	3.0	0.45
	SNMG120616-MR6	■	■	■	3.0	0.55
	SNMG150608-M5	■	■	■	3.0	0.35
	SNMG150612-M3	■	■	■	4.0	0.40
	SNMG150612-M5	■	■	■	4.0	0.45
	SNMG150612-MR6	■	■	■	3.5	0.45
	SNMG150612-MR7	■	■	■	4.0	0.50
	SNMG150616-M5	■	■	■	4.0	0.55
	SNMG150616-MR6	■	■	■	3.5	0.55
	SNMG150616-MR7	■	■	■	4.0	0.60
	SNMG150624-MR6	■	■	■	3.5	0.80
	SNMG190612-M3	■	■	■	5.0	0.40
	SNMG190612-M5	■	■	■	5.0	0.45
	SNMG190612-MR7	■	■	■	5.0	0.50
	SNMG190616-M3	■	■	■	5.0	0.40
	SNMG190616-M5	■	■	■	5.0	0.55
	SNMG190616-MR7	■	■	■	5.0	0.50
	SNMG190624-MR7	■	■	■	5.0	0.70
	SNMG250924-MR7	■	■	■	7.0	0.80
	SNMM120408-R4	■	■	■	3.0	0.35
	SNMM120412-R4	■	■	■	3.0	0.45
	SNMM150612-MR6	■	■	■	4.0	0.45
	SNMM150612-R4	■	■	■	5.0	0.45
	SNMM150616-MR6	■	■	■	4.0	0.55
	SNMM150624-MR6	■	■	■	4.0	0.80
	SNMM150624-R7	■	■	■	5.0	0.80
	SNMM190612-R4	■	■	■	4.5	0.45
	SNMM190612-R6	■	■	■	6.0	0.50
	SNMM190612-R7	■	■	■	6.0	0.50
	SNMM190612-RR6	■	■	■	6.0	0.50
	SNMM190616-56	■	■	■	6.0	0.60
	SNMM190616-57	■	■	■	6.0	0.70
	SNMM190616-R4	■	■	■	6.0	0.60
	SNMM190616-R5	■	■	■	6.0	0.70
	SNMM190616-R6	■	■	■	6.0	0.70
	SNMM190616-R7	■	■	■	6.0	0.70
	SNMM190616-R8	■	■	■	6.0	0.70
	SNMM190616-RR6	■	■	■	6.0	0.70
	SNMM190624-57	■	■	■	6.0	0.80
	SNMM190624-R4	■	■	■	6.0	0.70

Part No. in bold are High Feed wiper inserts

	Part No.	Grades			Cutting data	
		TP1500	TP2500	TP3500	ap	f
	SNMM190624-R5	■	■	■	6.0	0.80
	SNMM190624-R7	■	■	■	6.0	0.80
	SNMM190624-RR6	■	■	■	6.0	0.80
	SNMM190624W-R7	■	■	■	6.0	0.90
	SNMM190624-57	■	■	■	6.0	0.80
	SNMM250724-56	■	■	■	10.0	0.80
	SNMM250724-57	■	■	■	10.0	0.80
	SNMM250724-R7	■	■	■	10.0	0.80
	SNMM250724-RR6	■	■	■	10.0	0.90
	SNMM250724-RR9	■	■	■	10.0	0.90
	SNMM250924-R7	■	■	■	10.0	0.90
	TNMG110304-MF2	■	■	■	0.5	0.15
	TNMG160308-M5	■	■	■	3.0	0.30
	TNMG160308-MF3	■	■	■	2.0	0.30
	TNMG160404R-UX	■	■	■	2.0	0.25
	TNMG160404L-UX	■	■	■	2.0	0.25
	TNMG160404-M3	■	■	■	1.5	0.17
	TNMG160404-M5	■	■	■	1.5	0.20
	TNMG160404-MF2	■	■	■	1.0	0.15
	TNMG160404-MF3	■	■	■	1.5	0.20
	TNMG160408-FF1	■	■	■	0.7	0.12
	TNMG160408-M3	■	■	■	2.0	0.27
	TNMG160408-M5	■	■	■	3.0	0.35
	TNMG160408-MF2	■	■	■	1.0	0.25
	TNMG160408-MF3	■	■	■	2.5	0.30
	TNMG160408-MF4	■	■	■	1.5	0.35
	TNMG160408-MF5	■	■	■	0.7	0.40
	TNMG160408-MR6	■	■	■	2.5	0.35
	TNMG160408-MR7	■	■	■	3.0	0.35
	TNMG160408L-UX	■	■	■	2.5	0.30
	TNMG160408R-UX	■	■	■	2.5	0.30
	TNMX160408W-M3	■	■	■	1.2	0.30
	TNMG160412-M3	■	■	■	2.0	0.35
	TNMG160412-M5	■	■	■	3.0	0.40
	TNMG160412-MF2	■	■	■	1.0	0.25
	TNMG160412-MF5	■	■	■	1.0	0.50
	TNMG160412-MR6	■	■	■	2.5	0.45
	TNMG160412-MR7	■	■	■	3.0	0.45
	TNMX160412W-M3	■	■	■	1.5	0.40
	TNMG220404-M5	■	■	■	1.5	0.20
	TNMG220404-MF2	■	■	■	1.5	0.15
	TNMG220404-MF3	■	■	■	1.5	0.20
	TNMG220408-M3	■	■	■	3.0	0.27
	TNMG220408-M5	■	■	■	3.0	0.35
	TNMG220408-MF2	■	■	■	1.5	0.25
	TNMG220408-MF3	■	■	■	2.5	0.30
	TNMG220408-MR6	■	■	■	3.5	0.35
	TNMG220408-MR7	■	■	■	3.0	0.35
	TNMG220412-M3	■	■	■	3.0	0.35
	TNMG220412-M5	■	■	■	3.0	0.40
	TNMG220412-MR6	■	■	■	3.5	0.45
	TNMG220412-MR7	■	■	■	4.0	0.45
	TNMG220416-M5	■	■	■	4.0	0.50
	TNMG270608-M5	■	■	■	5.0	0.35
	TNMG270612-M3	■	■	■	5.0	0.40

Insert programme

	Part No.	Grades			Cutting data	
		TP1500	TP2500	TP3500	ap	f
	TNMG270612-M5	■	■	■	5,0	0,45
	TNMG270612-MR7	■	■	■	5,0	0,50
	TNMG270616-M5	■	■	■	5,0	0,55
	TNMG270616-MR7	■	■	■	5,0	0,60
	TNMG330924-MR7	■	■	■	6,0	1,00
	TNMM160404-R6			■	2,0	0,25
	TNMM160408-R4		■	■	4,0	0,35
	TNMM160412-R4	■	■		4,0	0,45
	TNMM220408-R4		■	■	4,0	0,35
	TNMM220412-R4	■	■	■	5,0	0,45
	TNMM220416-R4	■	■	■	5,0	0,60
	TNMM220416-R6			■	4,0	0,60
	VNMU130404-M3	■	■	■	1,5	0,17
	VNMU130408-M3	■	■	■	1,5	0,27
	VNMG160404-FF1	■			0,8	0,15
	VNMG160404-M3	■	■	■	2,0	0,17
	VNMG160404-MF2		■		1,0	0,15
	VNMG160404-MF3			■	1,5	0,17
	VNMG160408-M3	■	■	■	2,0	0,27
	VNMG160408-MF2	■	■		1,5	0,30
	VNMG160408-MF3			■	2,0	0,25
	VNMG160412-MF2		■		1,5	0,45
	WNMG060402-M3		■		1,0	0,08
	WNMG060404-M3	■	■	■	1,5	0,17
	WNMG060404-MF2	■	■	■	1,5	0,15
	WNMG060404-MF5		■		0,5	0,20
	WNMG060404W-MF2		■		0,7	0,30
	WNMG060408-M3	■	■	■	2,0	0,27
	WNMG060408-M5	■	■	■	2,0	0,35
	WNMG060408-MF2	■	■	■	1,5	0,20
	WNMG060408-MF3			■	1,5	0,30
	WNMG060408-MF4		■		1,5	0,30
	WNMG060408-MF5	■	■	■	0,7	0,40
	WNMG060408W-M3	■	■		1,5	0,50
	WNMG060408W-MF2	■	■		1,0	0,40
	WNMG060408W-MF5	■	■		0,5	0,50
	WNMG060412-M3	■	■	■	2,0	0,35
	WNMG060412-M5		■	■	2,0	0,40
	WNMG060412-MF2		■		1,5	0,25
	WNMG060412-MF5	■	■		1,0	0,50
	WNMG060412W-M3	■	■		1,5	0,50
	WNMG080404-M3	■	■	■	2,0	0,17
	WNMG080404-MF2	■	■		1,5	0,15
	WNMG080404W-MF2		■		0,7	0,30
	WNMG080408-M3	■	■	■	2,0	0,27
	WNMG080408-M5	■	■	■	3,0	0,35
	WNMG080408-MF2	■	■		1,5	0,25
	WNMG080408-MF3			■	2,0	0,30
	WNMG080408-MF4		■	■	1,5	0,35
	WNMG080408-MF5	■	■	■	0,7	0,40
	WNMG080408-MR6	■	■	■	2,5	0,35
	WNMG080408-MR7	■	■	■	3,0	0,35
WNMG080408W-M3	■	■		1,5	0,50	
WNMG080408W-MF2	■	■		1,0	0,40	
WNMG080408W-MF5	■	■		0,7	0,50	

Part No. in bold are High Feed wiper inserts

	Part No.	Grades			Cutting data	
		TP1500	TP2500	TP3500	ap	f
	WNMG080412-M3	■	■	■	3,0	0,35
	WNMG080412-M5	■	■	■	3,0	0,40
	WNMG080412-MF4		■		2,0	0,35
	WNMG080412-MF5	■	■	■	1,0	0,50
	WNMG080412-MR6	■	■	■	2,5	0,45
	WNMG080412-MR7	■	■	■	3,0	0,45
	WNMG080412W-M3	■	■		2,0	0,50
	WNMG080416-M3	■	■		3,0	0,40
	WNMG080416-M5	■	■	■	4,0	0,50
	WNMG080416-MF5	■	■		2,0	0,55
	WNMG080416-MR6	■	■		3,0	0,55
	WNMG080416-MR7	■	■	■	4,0	0,55
	WNMG080608-M5			■	4,0	0,40
	WNMG080612-M5		■	■	5,0	0,50
WNMG080612-MR6	■	■	■	3,0	0,45	
WNMG080616-M5	■	■	■	5,0	0,55	
WNMG080616-MR6	■	■		3,0	0,55	
	WNMM080408-R6			■	3,0	0,40

ARGENTINA Seco Tools Argentina S.A. Tel: +54 11 48 92 00 60 Fax: +54 11 47 23 86 00.
AUSTRALIA Seco Tools Australia Pty. Ltd. Tel: +61 2 96 76 22 79 (local tel: 1300 55 7326) Fax: +61 2 96 76 61 58 (local fax: 1300 65 7326). **AUSTRIA** Seco Tools Ges.m.b.H Tel: +43 2253 210 40 Fax: +43 2253 210 4011. **BELGIUM** Seco Tools Benelux N.V./S.A. Tel: +32 2 389 09 60 Fax: +32 2 389 09 89. **BOSNIA** See Slovenia. **BRAZIL** Seco Tools Ind. e Com. Ltda. Tel: +55 15 2101 86 00 Fax: +55 15 2101 8606. **BULGARIA** See Sweden. **CANADA** Seco Tools Canada Inc. Tel: +1 905 693 1780 Fax: +1 905 693 1788. **CHINA** Seco Tools (Shanghai) Co., Ltd. Tel: +86 21 54 26 55 00 Fax: +86 21 64 85 56 85. **COLOMBIA** Rexco Tools Tel: +57 1 660 6030 Fax: +57 1 311 0026. **CROATIA** See Slovenia. **CZECH REPUBLIC** Seco Tools CZ s.r.o. Tel: +420 530 500 811 Fax: +420 530 500 810. **DENMARK** Seco Tools A/S Tel: +45 43 44 7600 Fax: +45 43 44 5030. **FINLAND** Seco Tools OY Tel: +358 09 2511 7200 Fax: +358 09 2511 7201. **FRANCE** Seco Tools France S.A. Tel: +33 2 48 67 27 27 Fax: +33 2 48 67 27 05, Seco EPB Tel: +33 3 88 71 38 89 Fax: +33 3 88 70 98 98, Seco Ets. Planche S.A. Tel: +33 4 74 83 26 54 Fax: +33 4 74 83 26 59. **GERMANY** Seco Tools GmbH Tel: +49 211 240 10 Fax: +49 211 240 12 75. **GREECE** Athens Mechanica Tel: +30 210 523 1284/5 Fax: +30 210 523 1286. **HUNGARY** Seco Tools KFT. Tel: +36 1 267 6720 Fax: +36 1 267 6721. **INDIA** Seco Tools India (P) Ltd. Tel: +91 21 3766 7300 Fax: +91 21 3766 7410. **INDONESIA** Seco Tools (SEA) Pte Ltd. Tel: +62 21 7918 6441/6442 Fax: +62 21 7918 6440. **ITALY** Seco Tools Italia S.p.A. Tel: +39 031 97 81 11 Fax: +39 031 97 85 91 (local fax: 840 000938). **JAPAN** Seco Tools Japan K.K. Tel: +81 3 37 33 81 11 Fax: +81 3 37 33 81 25. **MACEDONIA** See Slovenia. **MALAYSIA** Seco Tools Malaysia SDN. BHD Tel: +60 3 9059 1833 Fax: +60 3 9059 4833. **MEXICO** Seco Tools de Mexico Tel/Fax: +52 818 350 6311. **MONTENEGRO** See Slovenia. **NETHERLANDS** Seco Tools Benelux N.V. Tel: +31 183 63 66 00 Fax: +31 183 66 06 01, Seco Jabro Tools b.v. Tel: +31 77 463 24 44 Fax: +31 77 463 14 54. **NEW ZEALAND** Seco Tools New Zealand Ltd. Tel: +64 9 415 8441 Fax: +64 9 415 8442. **NORWAY** Seco Tools A/S Tel: +47 67 92 73 00 Fax: +47 67 92 73 02. **PHILIPPINES** See Singapore. **POLAND** Seco Tools (Poland) Sp. z.o.o. Tel: +48 22 637 5383 Fax: +48 22 637 5384. **PORTUGAL** Seco Tools Portugal, Lda. Tel: +351 256 371 650 Fax: +351 256 371 659. **ROMANIA** Seco Tools Romania S.R.L. Tel: +40 268 414 723 Fax: +40 268 476 772. **RUSSIA** Seco Tools Russia Tel: +7 495 680 1322 Fax: +7 495 680 6241. **SERBIA** Seco Tools SRB d.o.o Tel: +381 21 527 087 Fax: +381 21 527 093. **SINGAPORE** Seco Tools (SEA) Pte. Ltd. Tel: +65 68 41 28 02 Fax: +65 68 41 28 01. **SLOVAKIA** Seco Tools SK s.r.o. Tel: +421 33 551 3537 Fax: +421 33 551 3538. **SLOVENIA** Seco Tools SI d.o.o. Tel: +386 2 450 2340 Fax: +386 2 450 2341. **SOUTH AFRICA** Seco Tools South Africa (Pty.) Ltd. Tel: +27 11 362 2660 Fax: +27 11 362 1893. **SOUTH KOREA** Seco Tools Korea Ltd. Tel: +82 41 622 9785 Fax: +82 41 622 0985. **SPAIN** Seco Tools España S.A. Tel: +34 93 474 5533 Fax: +34 93 474 5550. **SWEDEN** Seco Tools AB Tel: +46 223 400 00 Fax: +46 223 718 60. **SWITZERLAND** Seco Tools AG Tel: +41 32 332 78 78 Fax: +41 32 332 78 79. **TAIWAN** Seco Tools (SEA) Taiwan Tel: +886 2 26 57 79 18 Fax: +886 2 26 57 94 61. **THAILAND** Seco Tools (Thailand) Co. Ltd. Tel: +66 2 74 67 801 Fax: +66 2 74 67 802. **TURKEY** Seco Tools A.S. Tel: +90 216 569 74 00 Fax: +90 216 575 73 83. **UKRAINE** Seco Tools Ukraine Tel: +38 056 790 05 44 Fax: +38 056 790 05 43. **UNITED KINGDOM** Seco Tools (U.K.) Ltd. Tel: +44 1789 76 43 41 Fax: +44 1789 76 11 70. **USA** Seco Tools Inc. Tel: +1 248 528 5200 Fax: +1 248 528 5250. **VIETNAM** Seco Tools (SEA) Pte. Ltd. Tel: +84 8 91 44 393/91 43 164 Fax: +84 8 91 43 164.



Seco Tools AB, 737 82 Fagersta, Sweden. Tel +46 223 400 00.

www.secotools.com