

# Cast Iron White Band

Having damping and thermal conductivity, with high strength and resistance to wear characteristics, Cast Iron is a material that is used extensively for mass produced components which all require machining. The SOMTA white band range of taps and drills has been designed to suit this demand.

#### WHITE BAND TAP CHARACTERISTICS

- Material Types - Designed for highly abrasive materials such as Cast Iron and reinforced plastics.
- Flutes - Increased number of flutes reduces torque and increases tap life.

#### WHITE BAND DRILL CHARACTERISTICS (FOR BOTH TAP AND DRILL)

- Material Properties - Used to machine materials with hardness up to 300HB, tensile strength up to 1000N/mm<sup>2</sup>.
- Surface Finish - TiAIN coating (standard) increases surface hardness of the tool to around 87HRC with an excellent hot hardness working temperature and high oxidation temperature making it suitable for dry machining.

#### WHITE BAND DRILL CHARACTERISTICS

- FLUTE - Slow helix, parabolic flute designed with reinforced web for high rigidity under extreme conditions.
- POINT - The double angled "DX" point, 118° / 70° minimizes wear on the outer corners of the drill point in highly abrasive materials such as Cast Iron and Reinforced Plastics. The point is web thinned for easier penetration.



% Speed and Feed reduction for deep hole drilling

3 x Drill diameter	10%
4 x Drill diameter	20%
5 x Drill diameter	30%
More than 6 x Drill diameter	40%

## GENERAL MACHINING GUIDE

Material Type	Hardness HB	TAPS		DRILLS										
		Vc m/min	Vc m/min	Feed Rate for Diameters (mm/rev.)										
				1mm	2mm	3mm	4mm	5mm	6mm	8mm	10mm	12mm	15mm	
● Recommended ○ Suitable														
● Lamellar Graphite Cast Iron	< 150	45	58	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388	
● Lamellar Graphite Cast Iron	150 - 300	35	47	0.019-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388	
● Nodular Graphite, Malleable Cast Iron	< 200	25	34	0.018-0.030	0.063-0.105	0.101-0.169	0.114-0.190	0.128-0.213	0.148-0.246	0.188-0.313	0.224-0.373	0.236-0.394	0.262-0.436	
● Nodular Graphite, Malleable Cast Iron	200 - 300	20	28	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388	

SOMTA CODES: DRILLS: 1W6 TAPS: 578, 579, \*5BD, \*5BP, \*5ED, \*5EP  
\*Available on request

# Carbon Steel Green Band

The machinability of different steels is just as varied as their properties. Soft-tough construction steels place completely different demands on the tools, and the green band combination of taps and drills has been perfected for this range of steels.

#### GREEN BAND TAP CHARACTERISTICS

- HSSE - Vanadium content for toughness.
- Thread and flute configuration design for free cutting and structural steels in the general purpose range of medium tensile strengths.

#### GREEN BAND CHARACTERISTICS (FOR BOTH TAP AND DRILL)

- Material Properties - Used to machine materials with hardness up to 250HB, tensile strength up to 900N/mm<sup>2</sup>.
- Surface Finish - TiN Coating (standard) increases surface hardness of the tool to around 85HRC with excellent resistance to abrasion and cold welding.

#### GREEN BAND DRILL CHARACTERISTICS

- FLUTE - 33° helix, open profile designed with reinforced web for high rigidity under extreme conditions.
- POINT - The 130° SPLIT POINT provides self centering and easier penetration.



% Speed and Feed reduction for deep hole drilling

3 x Drill diameter	10%
4 x Drill diameter	20%
5 x Drill diameter	30%
More than 6 x Drill diameter	40%

## GENERAL MACHINING GUIDE

Material Type	Hardness HB	TAPS		DRILLS										
		Vc m/min	Vc m/min	Feed Rate for Diameters (mm/rev.)										
				1mm	2mm	3mm	4mm	5mm	6mm	8mm	10mm	12mm	15mm	
● Recommended ○ Suitable														
● Free Cutting Steel	< 120	40	60	0.018-0.030	0.063-0.105	0.101-0.169	0.114-0.190	0.128-0.213	0.148-0.246	0.188-0.313	0.224-0.373	0.236-0.394	0.262-0.436	
● Structural Steel	< 200	40	60	0.018-0.030	0.063-0.105	0.101-0.169	0.114-0.190	0.128-0.213	0.148-0.246	0.188-0.313	0.224-0.373	0.236-0.394	0.262-0.436	
● Plain Carbon Steel	< 250	32	44	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388	
● Alloy Steel	< 250	27	44	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388	
● Alloy Steel - Hardened	250 - 350	13	33	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289	
● Alloy Steel - Hardened	> 350	11	26	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289	
○ Free Machining Stainless Steel	< 250	8	22	0.013-0.021	0.032-0.054	0.047-0.078	0.053-0.089	0.060-0.100	0.069-0.115	0.086-0.144	0.105-0.175	0.113-0.188	0.130-0.216	
○ Austenitic Stainless Steel	< 320	7	11	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289	
○ Ferritic and Martensitic Stainless Steel	< 300	5	15	0.011-0.019	0.024-0.040	0.033-0.055	0.038-0.063	0.042-0.070	0.048-0.080	0.060-0.100	0.074-0.123	0.083-0.138	0.094-0.156	
○ Lamellar Graphite Cast Iron	< 150	22	35	0.015-0.025	0.050-0.083	0.077-0.128	0.087-0.145	0.098-0.163	0.113-0.188	0.143-0.238	0.171-0.285	0.182-0.304	0.203-0.339	
○ Lamellar Graphite Cast Iron	150 - 300	18	28	0.012-0.020	0.029-0.048	0.040-0.066	0.045-0.075	0.051-0.085	0.059-0.098	0.074-0.123	0.089-0.149	0.098-0.163	0.112-0.188	
○ Nodular Graphite, Malleable Cast Iron	< 200	25	22	0.013-0.021	0.032-0.054	0.047-0.078	0.053-0.089	0.060-0.100	0.069-0.115	0.086-0.144	0.105-0.175	0.113-0.188	0.130-0.216	
○ Nodular Graphite, Malleable Cast Iron	200 - 300	18	17	0.013-0.021	0.032-0.054	0.047-0.078	0.053-0.089	0.060-0.100	0.069-0.115	0.086-0.144	0.105-0.175	0.113-0.188	0.130-0.216	
○ Copper	< 100	18	38	0.015-0.025	0.050-0.083	0.077-0.128	0.087-0.145	0.098-0.163	0.113-0.188	0.143-0.238	0.171-0.285	0.182-0.304	0.203-0.339	
○ Brass, Bronze	< 200	45	40	0.014-0.023	0.038-0.063	0.053-0.091	0.063-0.105	0.071-0.119	0.082-0.136	0.104-0.173	0.124-0.206	0.134-0.223	0.152-0.253	
○ High Brass	< 200	35	27	0.015-0.025	0.050-0.083	0.077-0.128	0.087-0.145	0.098-0.163	0.113-0.188	0.143-0.238	0.171-0.285	0.182-0.304	0.203-0.339	
○ High Strength Bronze	< 470	48	48	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388	
○ Aluminium Magnesium unalloyed	< 100	48	33	0.018-0.030	0.063-0.105	0.101-0.169	0.114-0.190	0.128-0.213	0.148-0.246	0.188-0.313	0.224-0.373	0.236-0.394	0.262-0.436	
○ Aluminium Alloy < 5% Si	< 150	40	30	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388	
○ Aluminium Alloy 5 to 10% Si	< 120	30	30	0.015-0.025	0.050-0.083	0.077-0.128	0.087-0.145	0.098-0.163	0.113-0.188	0.143-0.238	0.171-0.285	0.182-0.304	0.203-0.339	
○ Aluminium Alloy > 10% Si	-	22	27	0.014-0.023	0.038-0.063	0.053-0.091	0.063-0.105	0.071-0.119	0.082-0.136	0.104-0.173	0.124-0.206	0.134-0.223	0.152-0.253	

SOMTA CODES: DRILLS: 1G7, 1GB, 1GL TAPS: 561, 562, 563, 566, 567, 568, \*5BE, \*5BJ, \*5BK, \*5BV, \*5EV, \*5EW, \*5EX  
\*Available on request



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C O L O U R B A N D R A N G E

# INTRODUCTION

SOMTA Colour Band Application range of drills and taps is specially designed to optimize your machining performances. The need for greater productivity from expensive high-performance machine tools and the demand for the cutting tools to perform at optimum efficiency to minimize machine down-time, together with the demands for improved quality of machined components can be met with this range of Colour Band cutting tools. The geometry has been specifically designed for each material group to improve quality of finish and increase the tool performance.



**Product Types:**  
The CBA family consists of five "Colour Band Application" ranges of drill and tap combinations. Each range has been designed with different cutting geometries and surface treatments to ensure optimum tool performance for each specific material category. Each range of materials group has its own drill and tap combination, and taps are available in both Spiral Point and Spiral Flute to suit the individual requirement.

## Stainless Steel Blue Band

Stainless steels are used extensively for components and products that demand corrosion resistance and long life. The machining of stainless steels is difficult due to its work hardening properties, toughness and poor thermal conductivity, which places high demands on the cutting tools. The blue band has been specifically adapted to suit these difficult machining requirements.

### BLUE BAND TAP CHARACTERISTICS

- Thread and flute configuration designed for tough materials, such as Stainless Steel, Titanium Alloys, Cast Steel, Heat Resisting Steel and Work Hardening Steel.
- HSSE - Vanadium content for toughness.
- Truncated Thread - Truncated thread after lead reduces frictional contact with the threaded hole and allows easier penetration of coolant.

### BLUE BAND CHARACTERISTICS (FOR BOTH TAP AND DRILL)

- Material Properties - Used to machine materials with hardness up to 350HB, tensile strength up to 1250N/mm<sup>2</sup>.
- Surface Finish - TiAlN coating (standard) increases surface hardness of the tool to around 87HRC with an excellent hot hardness working temperature and high oxidation temperature making it suitable for dry machining.

### BLUE BAND DRILL CHARACTERISTICS

- FLUTE - Refined flute profile with high helix for enhanced chip removal.
- POINT - Specifically developed MULTIFACET POINT for higher load carrying capacity and enhancing feed rates in the machining of difficult materials.



% Speed and Feed reduction for deep hole drilling

3 x Drill diameter	10%
4 x Drill diameter	20%
5 x Drill diameter	30%
More than 6 x Drill diameter	40%

## GENERAL MACHINING GUIDE

Material Type ● Recommended ○ Suitable	Hardness HB	TAPS		DRILLS										
		Vc m/min	Vc m/min	Feed Rate for Diameters (mm/rev)										
		1mm	2mm	3mm	4mm	5mm	6mm	8mm	10mm	12mm	15mm			
Steel	Free Cutting Steel	< 120	40	38	0.015-0.025	0.050-0.083	0.077-0.128	0.087-0.145	0.098-0.163	0.113-0.188	0.143-0.238	0.171-0.285	0.182-0.304	0.203-0.339
	Structural Steel	< 200	40	33	0.015-0.025	0.050-0.083	0.077-0.128	0.087-0.145	0.098-0.163	0.113-0.188	0.143-0.238	0.171-0.285	0.182-0.304	0.203-0.339
	Plain Carbon Steel	< 250	32	26	0.015-0.025	0.050-0.083	0.077-0.128	0.087-0.145	0.098-0.163	0.113-0.188	0.143-0.238	0.171-0.285	0.182-0.304	0.203-0.339
	Alloy Steel	< 250	27	26	0.015-0.025	0.050-0.083	0.077-0.128	0.087-0.145	0.098-0.163	0.113-0.188	0.143-0.238	0.171-0.285	0.182-0.304	0.203-0.339
Stainless Steel	Austenitic Stainless Steel	250 - 350	13	21	0.013-0.021	0.032-0.054	0.047-0.078	0.053-0.089	0.060-0.100	0.069-0.115	0.086-0.144	0.105-0.175	0.113-0.188	0.130-0.216
	Ferritic and Martensitic Stainless Steel	> 350	11	25	0.014-0.023	0.038-0.063	0.055-0.091	0.063-0.105	0.071-0.119	0.082-0.136	0.104-0.173	0.124-0.206	0.134-0.223	0.152-0.253
	Free Machining Stainless Steel	< 250	8	17	0.013-0.021	0.032-0.054	0.047-0.078	0.053-0.089	0.060-0.100	0.069-0.115	0.086-0.144	0.105-0.175	0.113-0.188	0.130-0.216
Titanium	Titanium unalloyed	< 200	15	35	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289
	Titanium alloyed	< 270	7	24	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289
	Titanium alloyed	270 - 350	-	10	0.013-0.021	0.032-0.054	0.047-0.078	0.053-0.089	0.060-0.100	0.069-0.115	0.086-0.144	0.105-0.175	0.113-0.188	0.130-0.216
Nickel	Nickel unalloyed	< 150	18	22	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388
	Nickel alloyed	< 270	8	11	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388
	Nickel alloyed	270 - 350	-	10	0.013-0.021	0.032-0.054	0.047-0.078	0.053-0.089	0.060-0.100	0.069-0.115	0.086-0.144	0.105-0.175	0.113-0.188	0.130-0.216

SOMTA CODES: **DRILLS:** 1B1, 1B2, 1B3, 1B4 **TAPS:** 539, 549, 559, 570, \*5BB, \*5BG, \*5BM, \*5BT, \*5EB, \*5EG, \*5EM, \*5ET  
\*Available on request

## Tough Treatable Steel Red Band

The mechanical properties of materials are influenced diversely by the addition of alloying elements and heat treatment processes, resulting in some high-strength, quenched and tempered steels or hardened steels. This range has its own unique set of machining requirements which are satisfied by the red band range of drills and taps.

### RED BAND TAP CHARACTERISTICS

- HSSE - Vanadium content for toughness.
- Thread and flute configuration designed for high tensile materials such as Tool Steels, Heat Treatable Steels, Spring Steel, Case Hardening Steel, Unalloyed Titanium, Nitriding Steel, Cold Drawn Constructional Steel and High Tensile Steel.

### RED BAND CHARACTERISTICS (FOR BOTH TAP AND DRILL)

- Material Properties - Used to machine materials with hardness up to 470HB, tensile strength up to 1500N/mm<sup>2</sup>.
- Surface Finish - TiAlN coating (standard) increases surface hardness of the tool to around 87HRC with an excellent hot hardness working temperature and high oxidation temperature making it suitable for dry machining.

### RED BAND DRILL CHARACTERISTICS

- FLUTE - Slow helix, parabolic flute designed with reinforced web for high rigidity under extreme conditions.
- POINT - The 130° special notched "UX" point style provides self centering, easier penetration, improved hole accuracy and improved load distribution. This special notch geometry gives a corrected rake angle of 15° which provides a strong point for harder materials, as well as preventing snatching with materials such as Aluminium, Brass, Bronze and Plastics.



% Speed and Feed reduction for deep hole drilling

3 x Drill diameter	10%
4 x Drill diameter	20%
5 x Drill diameter	30%
More than 6 x Drill diameter	40%

## GENERAL MACHINING GUIDE

Material Type ● Recommended ○ Suitable	Hardness HB	TAPS		DRILLS										
		Vc m/min	Vc m/min	Feed Rate for Diameters (mm/rev)										
		1mm	2mm	3mm	4mm	5mm	6mm	8mm	10mm	12mm	15mm			
Steel	Free Cutting Steel	< 120	40	60	0.018-0.030	0.063-0.105	0.101-0.169	0.114-0.190	0.128-0.213	0.148-0.246	0.188-0.313	0.224-0.373	0.236-0.394	0.262-0.436
	Structural Steel	< 200	40	50	0.018-0.030	0.063-0.105	0.101-0.169	0.114-0.190	0.128-0.213	0.148-0.246	0.188-0.313	0.224-0.373	0.236-0.394	0.262-0.436
	Plain Carbon Steel	< 250	32	44	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388
	Alloy Steel	< 250	27	44	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388
Stainless Steel	Austenitic Stainless Steel	250 - 350	13	33	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289
	Ferritic and Martensitic Stainless Steel	> 350	11	26	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289
	Free Machining Stainless Steel	< 250	8	17	0.013-0.021	0.032-0.054	0.047-0.078	0.053-0.089	0.060-0.100	0.069-0.115	0.086-0.144	0.105-0.175	0.113-0.188	0.130-0.216
Titanium	Titanium unalloyed	< 200	15	35	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289
	Titanium alloyed	< 270	7	24	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289
	Titanium alloyed	270 - 350	-	10	0.013-0.021	0.032-0.054	0.047-0.078	0.053-0.089	0.060-0.100	0.069-0.115	0.086-0.144	0.105-0.175	0.113-0.188	0.130-0.216
Nickel	Nickel unalloyed	< 150	18	22	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388
	Nickel alloyed	< 270	8	11	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388
	Nickel alloyed	270 - 350	-	10	0.013-0.021	0.032-0.054	0.047-0.078	0.053-0.089	0.060-0.100	0.069-0.115	0.086-0.144	0.105-0.175	0.113-0.188	0.130-0.216

SOMTA CODES: **DRILLS:** 1R5 **TAPS:** 540, 550, 564, 576, \*5BA, \*5BF, \*5BL, \*5BS, \*5EA, \*5EF, \*5EL, \*5ES  
\*Available on request

## Aluminium Yellow Band

The alloying elements which achieve varying Aluminium Alloys have an effect on the machining properties of these materials. This generally creates a difficult chip formation and material which has tendencies to stick to the tool, placing very different demands on the tool. The yellow band contends with these machining difficulties.

### YELLOW BAND TAP CHARACTERISTICS

- Flute and Thread designed for more ductile materials such as Aluminium, Magnesium Alloys, Soft Brass (MS58), Plastic, Zinc Alloys and Copper.
- Flutes - Wide flutes allow more efficient swarf removal which prevents clogging and torque build-up.
- Rake Angle - High rake angle improves shear characteristic and reduces build-up on the cutting edge, allowing tap to cut more freely for longer periods.

### YELLOW BAND CHARACTERISTICS (FOR BOTH TAP AND DRILL)

- Material Properties - Used to machine materials with hardness up to 200HB, tensile strength up to 700N/mm<sup>2</sup>.
- Surface Finish - Bright (standard) as ground condition which is the most suitable finish for this ductile range of products.

### YELLOW BAND DRILL CHARACTERISTICS

- FLUTE - 35° helix, open profile designed for efficient swarf evacuation.
- POINT - The notched point reduces end thrust and optimizes centre cutting efficiency with chisel strength.



% Speed and Feed reduction for deep hole drilling

3 x Drill diameter	10%
4 x Drill diameter	20%
5 x Drill diameter	30%
More than 6 x Drill diameter	40%

## GENERAL MACHINING GUIDE

Material Type ● Recommended ○ Suitable	Hardness HB	TAPS		DRILLS										
		Vc m/min	Vc m/min	Feed Rate for Diameters (mm/rev)										
		1mm	2mm	3mm	4mm	5mm	6mm	8mm	10mm	12mm	15mm			
Steel	Free Cutting Steel	< 120	25	60	0.018-0.030	0.063-0.105	0.101-0.169	0.114-0.190	0.128-0.213	0.148-0.246	0.188-0.313	0.224-0.373	0.236-0.394	0.262-0.436
	Structural Steel	< 200	22	50	0.018-0.030	0.063-0.105	0.101-0.169	0.114-0.190	0.128-0.213	0.148-0.246	0.188-0.313	0.224-0.373	0.236-0.394	0.262-0.436
	Plain Carbon Steel	< 250	18	44	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388
	Alloy Steel	< 250	16	44	0.016-0.026	0.057-0.095	0.089-0.149	0.101-0.168	0.113-0.188	0.130-0.216	0.165-0.275	0.199-0.331	0.210-0.350	0.233-0.388
Aluminium	Aluminium unalloyed	250 - 350	12	33	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289
	Aluminium Alloy < 5% Si	< 250	10	26	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289
	Aluminium Alloy 5 to 10% Si	> 350	10	26	0.014-0.024	0.042-0.070	0.063-0.105	0.072-0.120	0.082-0.136	0.095-0.158	0.120-0.200	0.143-0.238	0.154-0.256	0.173-0.289
Synthetic	Duroplastics (short chipping)	< 100	40	60	0.018-0.030	0.063-0.105	0.101-0.169	0.114-0.190	0.128-0.213	0.148-0.246	0.188-0.313	0.224-0.373	0.236-0.394	0.262-0.436
	Thermoplastics (long chipping)	< 150	35	45	0.024-0.040	0.089-0.149	0.146-0.244	0.164-0.273	0.182-0.303	0.210-0.350	0.266-0.444	0.315-0.525	0.341-0.569	0.361-0.601
	Thermoplastics (long chipping)	< 270	20	40	0.024-0.040	0.089-0.149	0.146-0.244	0.164-0.273	0.182-0.303	0.210-0.350	0.266-0.444	0.315-0.525	0.341-0.569	0.361-0.601

SOMTA CODES: **DRILLS:** 1AQ **TAPS:** 538, 548, 558, 569, \*5BC, \*5BH, \*5BN, \*5BU, \*5EC, \*5EH, \*5EN, \*5EU  
512 TiN Coated (standard) Fluteless Tap also available for cold forming threads in ductile materials. See catalogue for details.  
\*Available on request



OSG GROUP COMPANY