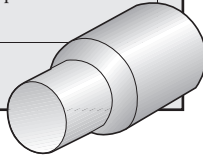


APPLICATION EXAMPLES

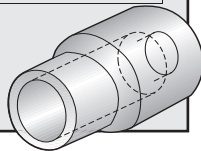
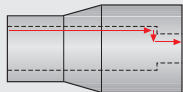
EXTERNAL COPYING OF SOCKET

Objective	Stabilise tool life maintaining a $R_a=1.0\mu\text{m}$ criterion	
Material	25CrMo4 (Seco material group 4)	
Insert	VBMT160408-F1 TP1030 vs TP2500	
Cutting data	v_c	300 m/min
	f	0.06 mm/rev
	a_p	0.2 mm
Coolant	Yes	
Result	Tool life 10x better than the present solution (400 parts)	



INNER DIAMETER TURNING

Objective	Enhance tool life vs present solution	
Material	11SMn30. (Seco material group 2)	
Insert	DCMT070202-MF2 TP1020 vs Earlier generation product	
Cutting data	v_c	150 m/min
	f	0.07-0.1 mm/rev
	a_p	varying = 0.1-0.5 mm
Coolant	Yes	
Result	TP1020 provides tripled tool life (+200%), (1200 parts)	



CONTACT & INFORMATION

SECO MACHINING NAVIGATOR:

Update Catalogue 2011

ONLINE INFORMATION:

More TP1020 & TP1030 information:
http://www.secotools.com/tp1020_1030

Seco Tools international website:
<http://www.secotools.com>

GRADES

TURNING

TP1020 & TP1030



**NEW CERMET CONCEPT FOR
SURFACE FINISH AND TOLERANCE APPLICATIONS**

SECO

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

02767553 ST20106281 GB SECO TOOLS AB, PA Group Karlstad 2010

SECO

TWO CERMET GRADES FOR SURFACE CRITICAL APPLICATIONS

Ease of use has been a key requirement during the development of the new uncoated TP1020 and the PVD-coated TP1030 cermets. The Ti(C,N)-Cobalt based materials have been totally re-designed and optimised to be both versatile and forgiving when it comes to surface finish demanding steel and stainless steel applications.

TP1020 FOR SURFACE FINISH FOCUS

The TP1020 cermet grade is ideal if you want reliability and control in surface finish critical applications with limited cuts and cutting data.

TP1030 FOR MORE PRODUCTIVITY DEMAND

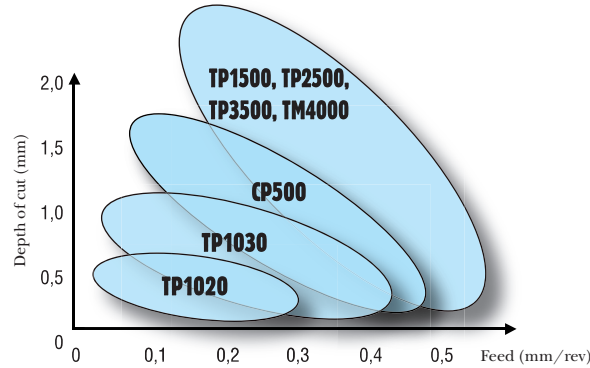
The nanolaminate PVD-coated TP1030 cermet grade adds a new dimension to versatility and predictability. It also stands considerably higher feeds and speeds, achieving higher productivity demands while retaining high tolerance and surface finish requirements.

Grade description	TP1020: Ultra fine grained Ti(C,N) hard particle adjusted low cobalt content cermet TP1030: Ultra fine grained Ti(C,N) hard particle optimised low cobalt content cermet with nanolaminate TiAlN/TiSiN PVD coating.
ISO Classification	TP1020/TP1030: P01-P20, M01-M10
Application area	TP1020/TP1030: Inner diameter finish turning, boring, outer diameter finishing, semi-finishing, facings and chamfering mainly within steel and stainless steel machining.
Components	TP1020/TP1030: Hubs, pinions, joints, shafts, fittings, housings, rods, discs, gears, bearings, levers, flanges.

MAIN BENEFITS

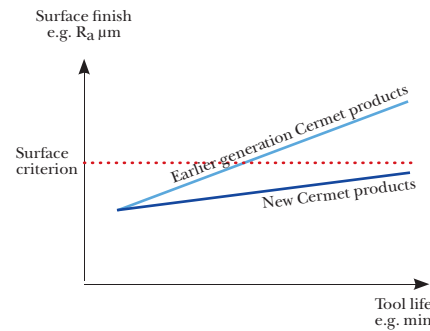
- Spectacular ability to generate desired surface finish
- Easy to apply in steel and stainless steels
- Trouble-free surface requirement control

TO CHOOSE GRADES



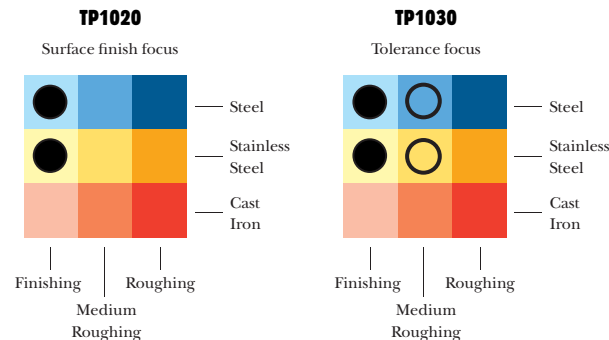
Recommended grades typically used for finishing and semi-finishing in steel and stainless steels.

SURFACE FINISH PREDICTABILITY



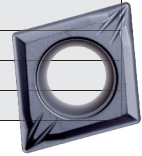
Surface finish predictability benefits from the design of the new cermet products as indicated above. This is especially prominent when combining the new positive insert chipbreaker MF2 with TP1020 and TP1030 respectively.

WORKPIECE MATERIALS



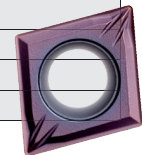
TP1020 RANGE:

INSERT TYPES:	AVAILABLE CHIPBREAKERS:
CCGT06../09..	F1
CCMT06../09..	F1,MF2,W-F1
CNMG12..	MF2,W-MF2
DCGT11..	F1
DCMT07../11..	F1,MF2
DCMX11..	W-F1
DNMG15..	MF2
TNMG16..	MF2
VBMT11../16..	F1,MF2
WNMG06..	MF2



TP1030 RANGE:

INSERT TYPES:	AVAILABLE CHIPBREAKERS:
CCMT06../09..	F1,MF2,W-F1
CNMG12..	MF2
DCMT07../11..	F1,MF2
DCMX11..	W-F1
DNMG15..	FF1,MF2
DNMU11..	MF2
DNMX11..	W-MF2
SCMT09..	F1,MF2
SNMG12..	MF2
TCMT16..	F1
TNMG16..	FF1,MF2
VBMT11../16..	F1,MF2
WNMG06..	MF2,W-MF2



CUTTING DATA

Recommended cutting data using coolant. (CCMT09T304 MF2)	TP1020: at 0.1 mm/rev feed (f), 0.25mm depth of cut (a _p), 300m/min (v _c) is recommended in Seco Mtrl. Grp. 4 type of steel and 270m/min (v _c) in Seco Mtrl. Grp. 9 type of stainless steel
	TP1030: at 0.2 mm/rev feed(f), 0.7mm depth of cut (a _p) 340m/min (v _c) is recommended in Seco Mtrl. Grp. 4 type of steel and 270m/min (v _c) in Seco Mtrl. Grp. 9 type of stainless steel.