

T2000Z/T3000Z

Technical Information

■ Features & Benefits

- Cermet grades coated with Sumitomo's patented ZX (TiNAIN) coating technology
- An extremely intense coating process creates smooth, ZX coated cutting edges
- The smooth ZX coated cutting edges provide superb surface finish
- Perfect solution for applications where cermet is too brittle and carbide wears quickly
- Available in positive and negative geometries with Sumitomo's high quality chipbreakers

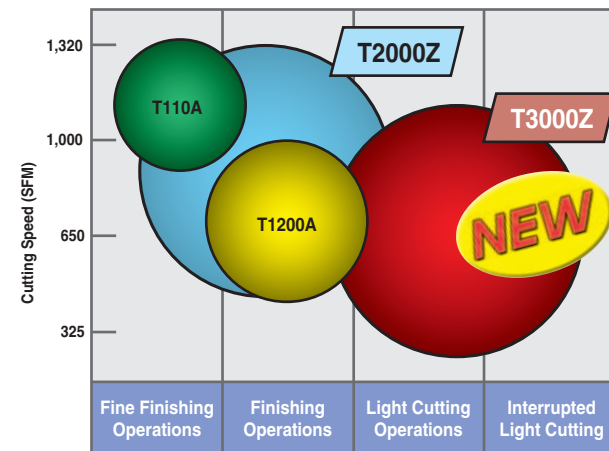


■ Grade Data

Grade	Application
T2000Z	General purpose to finishing of steels and stainless steels
T3000Z	Medium to finish interrupted turning of steels and stainless steels



■ Application Data



■ Recommended Running Conditions

Material	Hardness	Grade	Speed (SFM)			Feed Rate (IPR)
			Low	Medium	High	
Carbon Steels, Alloy Steels Stainless Steels	< 150 BHn	T2000Z	325	800	1500	0.004 - 0.010
		T3000Z	300	700	1300	0.004 - 0.012
Carbon Steels, Alloy Steels Stainless Steels	< 280 BHn	T2000Z	325	700	1200	0.004 - 0.010
		T3000Z	300	650	1000	0.004 - 0.012
Carbon Steels, Alloy Steels Stainless Steels	280 - 350 BHn	T2000Z	175	500	900	0.004 - 0.008
		T3000Z	150	400	800	0.004 - 0.010
Ductile Iron	< 220 BHn	T2000Z	400	750	1100	0.004 - 0.010
		T3000Z	350	650	900	0.004 - 0.012
Ductile Iron	> 220 BHn	T2000Z	350	650	1000	0.004 - 0.008
		T3000Z	300	550	800	0.004 - 0.010

SUMITOMO ELECTRIC

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SUMITOMO ELECTRIC

ZX Coated Cermets



**Grades T2000Z and
T3000Z cermets
for turning**



T2000Z/T3000Z

CCGT, CCMT, CNGG, CNMG, CPGM, CPGT

Insert Availability

	Catalog Number	Dimensions (Inch)			T2000Z	T3000Z
		Inscribed Circle	Thickness	Radius		
	CCGT21.50EFM	0.250	0.094	0.0039	●	●
	CCGT21.50.5EFM	0.250	0.094	0.0079	●	●
	CCGT32.50EFM	0.375	0.156	0.0039	●	●
	CCGT32.50.5EFM	0.375	0.156	0.0079	●	●
	CCGT21.50.5LFX	0.250	0.094	0.0079	★	★
	CCGT21.51LFX	0.250	0.094	0.0156	★	★
	CCMT21.51EFP	0.250	0.094	0.0156	●	●
	CCMT32.51EFP	0.375	0.156	0.0156	●	●
	CCMT32.52EFP	0.375	0.156	0.0313	●	●
	CCMT21.50.5ELU	0.250	0.094	0.0079	●	●
	CCMT21.51ELU	0.250	0.094	0.0156	●	●
	CCMT32.51ELU	0.375	0.156	0.0156	●	●
	CCMT32.52ELU	0.375	0.156	0.0313	●	●
	CCMT32.51ELUW	0.375	0.156	0.0156	●	●
	CCMT32.52ELUW	0.375	0.156	0.0313	●	●
	CCMT21.50.5ESU	0.250	0.094	0.0079	●	●
	CCMT21.51ESU	0.250	0.094	0.0156	●	●
	CCMT21.52ESU	0.250	0.094	0.0313	●	●
	CCMT32.50.5ESU	0.375	0.156	0.0079	●	●
	CCMT32.51ESU	0.375	0.156	0.0156	●	●
	CCMT32.52ESU	0.375	0.156	0.0313	●	●
	CNGG430.5ESU	0.500	0.1875	0.0079	●	★
	CNGG431ESU	0.500	0.1875	0.0156	●	★
	CNGG432ESU	0.500	0.1875	0.0313	●	★
	CNMG430.5EFA	0.500	0.1875	0.0079	●	★
	CNMG431EFA	0.500	0.1875	0.0156	●	★
	CNMG432EFA	0.500	0.1875	0.0313	●	★
	CNMG431EFL	0.500	0.1875	0.0156	★	★
	CNMG432EFL	0.500	0.1875	0.0313	★	★
	CNMG321ELU	0.375	0.125	0.0156	★	★
	CNMG322ELU	0.375	0.125	0.0313	★	★
	CNMG431ELU	0.500	0.1875	0.0156	●	●
	CNMG432ELU	0.500	0.1875	0.0313	●	●
	CNMG433ELU	0.500	0.1875	0.0469	●	●
	CNMG431ELUW	0.500	0.1875	0.0156	●	●
	CNMG432ELUW	0.500	0.1875	0.0313	●	●
	CNMG433ELUW	0.500	0.1875	0.0469	●	●
	CNMG431ESU	0.500	0.1875	0.0156	●	●
	CNMG432ESU	0.500	0.1875	0.0313	●	●
	CNMG433ESU	0.500	0.1875	0.0469	●	●
	CNMG431ESX	0.500	0.1875	0.0156	●	★
	CNMG432ESX	0.500	0.1875	0.0313	●	★
	CPGM320.5	0.375	0.125	0.0079	●	●
	CPGM321	0.375	0.125	0.0156	●	●
	CPGM322	0.375	0.125	0.0313	●	●
	CPGM431	0.500	0.1875	0.0156	●	●
	CPGT2.51.50.5	0.3125	0.094	0.0079	●	★
	CPGT2.51.51	0.3125	0.094	0.0156	●	★
	CPGT2.51.52	0.3125	0.094	0.0313	●	★
	CPGT321	0.375	0.125	0.0156	●	★
	CPGT431	0.500	0.1875	0.0156	●	★

● = USA stock standard item
★ = Worldwide stock item

T2000Z/T3000Z

CPMT, DCGT, DCMT, DNGG, DNMG, SCMT

Insert Availability

	Catalog Number	Dimensions (Inch)			T2000Z	T3000Z
		Inscribed Circle	Thickness	Radius		
	CPMT321ELU	0.375	0.125	0.0156	●	●
	CPMT322ELU	0.375	0.125	0.0313	●	●
	CPMT321ELUW	0.375	0.125	0.0156	●	●
	CPMT322ELUW	0.375	0.125	0.0313	●	●
	CPMT2.51.51ESU	0.3125	0.094	0.0156	★	★
	CPMT2.51.52ESU	0.3125	0.094	0.0313	★	★
	CPMT21.51ESU	0.250	0.094	0.0156	●	●
	CPMT21.52ESU	0.250	0.094	0.0313	●	●
	CPMT32.51ESU	0.375	0.156	0.0156	●	●
	CPMT32.52ESU	0.375	0.156	0.0313	●	●
	CPMT321ESU	0.375	0.125	0.0156	★	★
	CPMT322ESU	0.375	0.125	0.0313	★	★
	DCGT21.50EFM	0.250	0.094	0.0039	●	★
	DCGT21.50.5EFM	0.250	0.094	0.0079	●	★
	DCGT21.51EFM	0.250	0.094	0.0156	●	★
	DCGT21.52EFM	0.250	0.094	0.0313	●	★
	DCGT32.50EFM	0.375	0.156	0.0039	●	●
	DCGT32.50.5EFM	0.375	0.156	0.0079	●	●
	DCGT32.51EFM	0.375	0.156	0.0156	●	●
	DCGT32.52EFM	0.375	0.156	0.0313	●	●
	DCMT21.50.5ELU	0.250	0.094	0.0079	●	●
	DCMT21.51ELU	0.250	0.094	0.0156	●	●
	DCMT32.50.5ELU	0.375	0.156	0.0079	●	●
	DCMT32.51ELU	0.375	0.156	0.0156	●	●
	DCMT32.52ELU	0.375	0.156	0.0313	●	●
	DCMT21.50.5ESU	0.250	0.094	0.0079	●	●
	DCMT21.51ESU	0.250	0.094	0.0156	●	●
	DCMT21.52ESU	0.250	0.094	0.0313	●	●
	DCMT32.50.5ESU	0.375	0.156	0.0079	●	●
	DCMT32.51ESU	0.375	0.156	0.0156	●	●
	DCMT32.52ESU	0.375	0.156	0.0313	●	●
	DNGG430.5ESU	0.500	0.1875	0.0079	●	★
	DNGG431ESU	0.500	0.1875	0.0156	●	★
	DNGG432ESU	0.500	0.1875	0.0313	●	★
	DNMG431EFA	0.500	0.1875	0.0156	●	★
	DNMG432EFA	0.500	0.1875	0.0313	●	★
	DNMG441EFA	0.500	0.250	0.0156	★	★
	DNMG431EFL	0.500	0.1875	0.0156	★	★
	DNMG432EFL	0.500	0.1875	0.0313	★	★
	DNMG431ELU	0.500	0.1875	0.0156	●	●
	DNMG432ELU	0.500	0.1875	0.0313	●	●
	DNMG433ELU	0.500	0.1875	0.0469	●	●
	DNMG431ESU	0.500	0.1875	0.0156	●	●
	DNMG432ESU	0.500	0.1875	0.0313	●	●
	DNMG433ESU	0.500	0.1875	0.0469	●	●
	DNMG441ESU	0.500	0.250	0.0156	★	★
	DNMG442ESU	0.500	0.250	0.0313	★	★
	DNMG431ESX	0.500	0.1875	0.0156	●	★
	DNMG432ESX	0.500	0.1875	0.0313	●	★
	DNMG441ESX	0.500	0.250	0.0156	★	★
	DNMG442ESX	0.500	0.250	0.0313	★	★
	SCMT32.51ESJ	0.375	0.156	0.0156	●	●
	SCMT32.52ESJ	0.375	0.156	0.0313	●	●

● = USA stock standard item
★ = Worldwide stock item

T2000Z/T3000Z

SCMT, SNMG, SNPR, SPGG, SPMT, SPMR, SPG, TBGT, TCGT

Insert Availability

	Catalog Number	Dimensions (Inch)			T2000Z	T3000Z
		Inscribed Circle	Thickness	Radius		
	SCMT32.51ELU	0.375	0.156	0.0156	●	●
	SCMT32.51ESU	0.375	0.156	0.0156	●	●
	SNMG432EFL	0.500	0.1875	0.0313	★	★
	SNMG432ELU	0.500	0.1875	0.0313	●	★
	SNMG433ELU	0.500	0.1875	0.0469	★	★
	SNMG432ESU	0.500	0.1875	0.0313	●	★
	SNMG431ESX	0.500	0.1875	0.0156	●	★
	SNMG432ESX	0.500	0.1875	0.0313	●	★
	SNPR323T	0.375	0.125	0.0469	●	●
	SNPR431M	0.500	0.1875	0.0156	●	●
	SPGG320.5L	0.375	0.125	0.0079	★	★
	SPGG321L	0.375	0.125	0.0156	★	★
	SPGG322L	0.375	0.125	0.0313	●	★
	SPMT321ELU	0.375	0.125	0.0156	★	★
	SPMT322EFK	0.375	0.125	0.0313	●	●
	SPMR322EFK	0.375	0.125	0.0313	●	●
	SPMR422EFK	0.500	0.125	0.0313	●	●
	SPG321	0.375	0.125	0.0156	●	●
	SPG322	0.375	0.125	0.0313	●	●
	SPG422	0.500	0.125	0.0313	●	●
	SPG432	0.500	0.1875	0.0313	●	●
	TBGT520.5L	0.156	0.0625	0.0079	●	★
	TBGT520.5R	0.156	0.0625	0.0079	●	★
	TBGT521L	0.156	0.0625	0.0156	●	●
	TBGT521R	0.156	0.0625	0.0156	●	●
	TBGT520.5LFW	0.156	0.0625	0.0079	●	●
	TBGT521LFW	0.156	0.0625	0.0156	●	●
	TCGT21.50.5EFM	0.250	0.094	0.0		