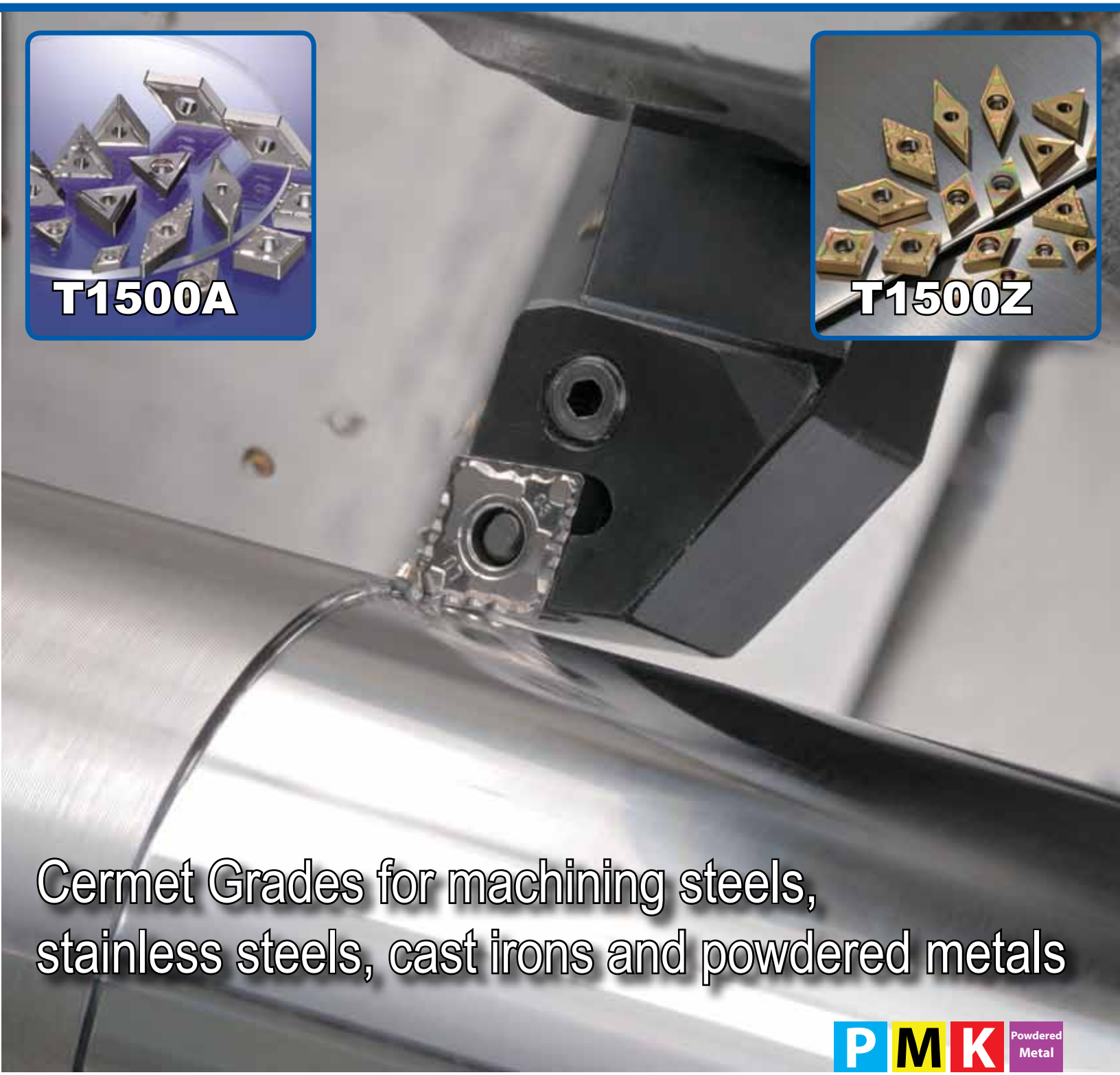
SUMITOMO
CARBIDE - CBN - DIAMOND

CAT.T1500A/T1500Z.11/14

Cermet Grades for Turning

T1500A / T1500Z



Cermet Grades for machining steels, stainless steels, cast irons and powdered metals

P M K Powdered Metal

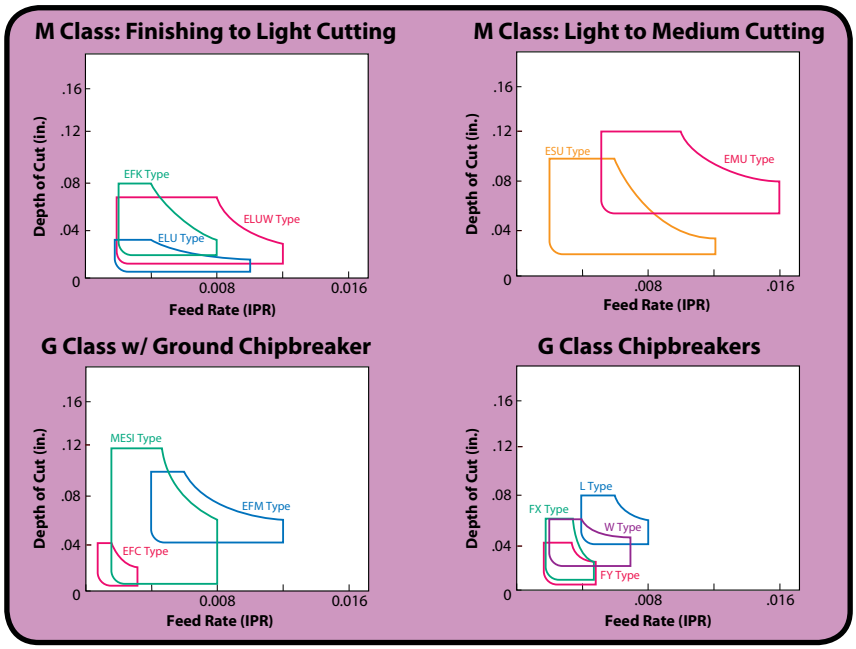
Ingenious Dynamics

SUMITOMO ELECTRIC

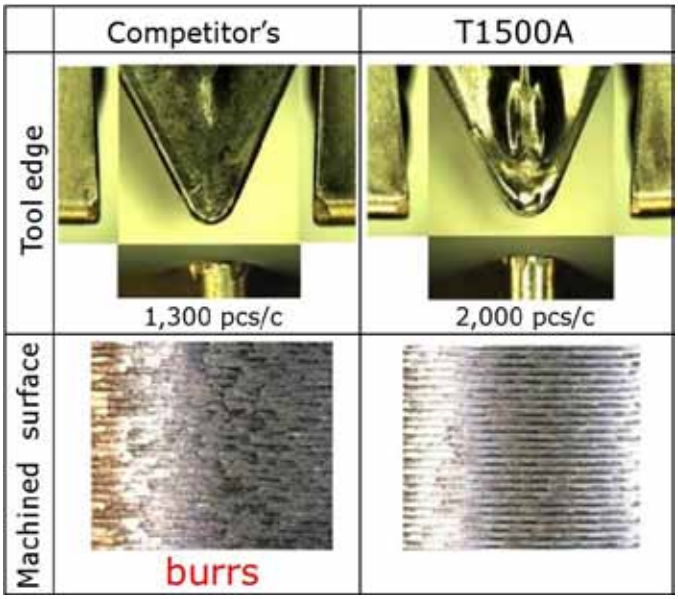
T1500A Features & Benefits

- General purpose cermet grade that provides both wear and fracture resistance, and better quality finished surfaces
- Economical alternative to carbide in finishing applications
- A tough, high strength cermet grade produced from an optimized balance of tough / hard and ultra-hard grains
- Improved oxidation resistance coupled with a smooth edge treatment generates excellent mirror-like surface finishes

Chipbreaker Application Range

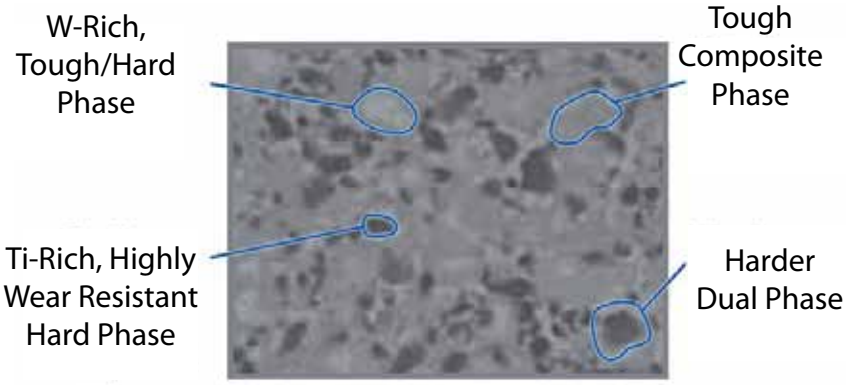


Application Example

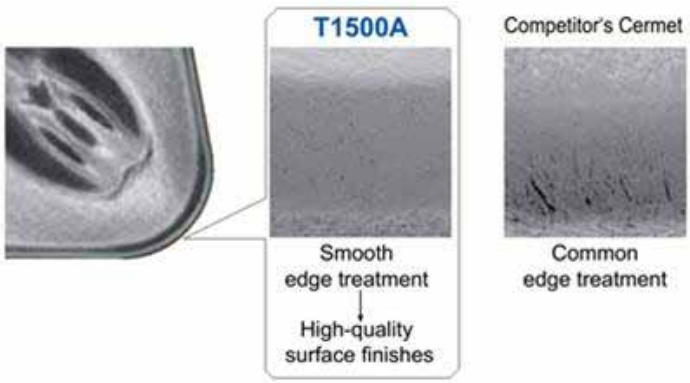


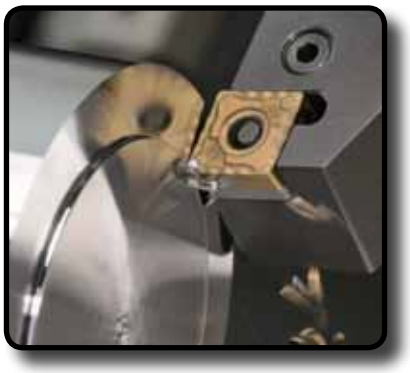
Application Example Cutting Conditions:
Work Material: 4115 (15CrMo) Machine Parts
Insert: DNMG431ESU
Cutting Condition: V_c: 500 - 1350 sfm ***f:*** 0.005 ipr
a_p: 0.008" - 0.010", Wet

T1500A Alloy Structure



T1500A Edge Treatment

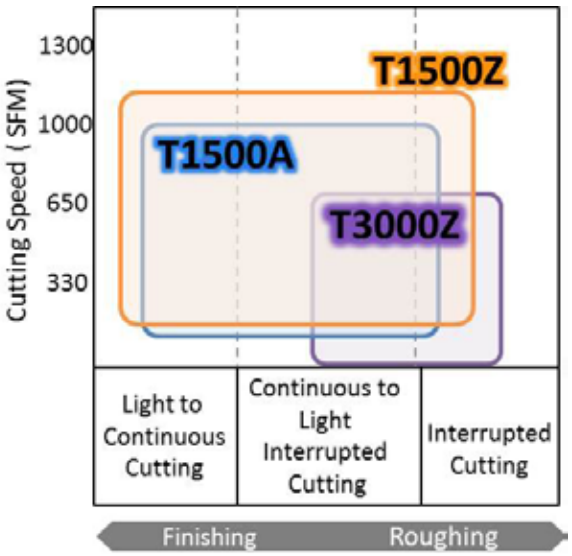




T1500Z Features & Benefits

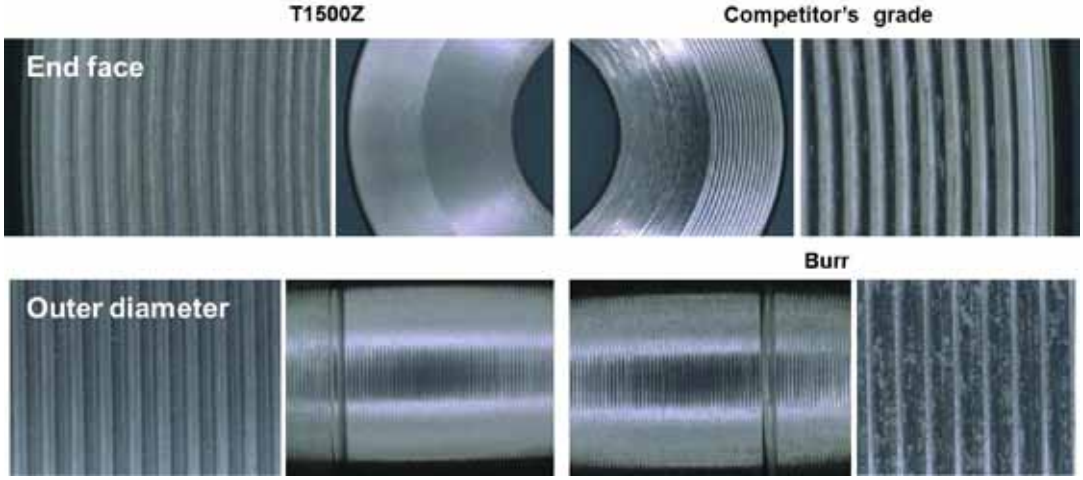
- General purpose coated cermet grade that employs Sumitomo's new Brilliant Coat™ PVD coating with excellent lubricity for longer tool life
- Excellent wear resistance, adhesion resistance, and fracture resistance adds tool life- reducing your cost per part
- Expanded chipbreaker lineup with newly developed "EFB" type gives excellent chip control when finishing

Cutting Conditions

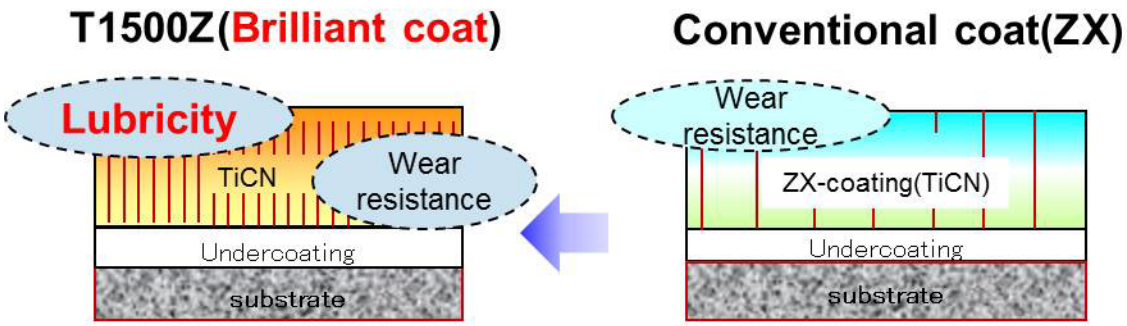


Application Example

Application Example
Cutting Conditions:
Work Material:
SNCM220 (20NiCrMo2/8622)
Insert: DNMG432
Cutting Condition:
V_c: 370 - 640 sfm ***f:*** 0.012 ipr
a_p: 0.040", Wet



T1500Z Brilliant Coat



T1500A & T1500Z Inventory - Negative Inserts

CNGG 80° Diamond/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
CNGG430.5ESU	●	●	.500	.1875	.0078	.2031
CNGG431ESU	●	●	.500	.1875	.0156	.2031
CNGG432ESU	★	●	.500	.1875	.0313	.2031

CNMG 80° Diamond/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
CNMG430.5EFA	●	●	.500	.1875	.0078	.2031
CNMG431EFA	●	●	.500	.1875	.0156	.2031
CNMG432EFA	●	●	.500	.1875	.0313	.2031
CNMG431EFL		●	.500	.1875	.0156	.2031
CNMG432EFL		●	.500	.1875	.0313	.2031
CNMG431EGU	★		.500	.1875	.0156	.2031
CNMG432EGU	●		.500	.1875	.0313	.2031
CNMG321ELU		★	.375	.125	.0156	.150
CNMG322ELU		★	.500	.1875	.0313	.150
CNMG431ELU	★	★	.500	.1875	.0156	.2031
CNMG432ELU	★	★	.500	.1875	.0313	.2031
CNMG433ELU	★	★	.500	.1875	.0469	.2031
CNMG431ELUW	●	●	.500	.1875	.0156	.2031
CNMG432ELUW	●	●	.500	.1875	.0313	.2031
CNMG433ELUW	●	●	.500	.1875	.0469	.2031
CNMG431ESE	●		.500	.1875	.0156	.2031
CNMG432ESE	●		.500	.1875	.0313	.2031
CNMG431ESEW	●		.500	.1875	.0156	.2031
CNMG432ESEW	●		.500	.1875	.0313	.2031
CNMG431ESU	●	●	.500	.1875	.0156	.2031
CNMG432ESU	●	●	.500	.1875	.0313	.2031
CNMG433ESU	★	●	.500	.1875	.0469	.2031
CNMG431ESX	★	●	.0156	.1875	.0156	.2031
CNMG432ESX	●	●	.0313	.1875	.0313	.2031

DNGG 55° Diamond/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
DNGG430.5ESU	●	●	.500	.1875	.0078	.2031
DNGG431ESU	●	●	.500	.1875	.0156	.2031
DNGG432ESU	●	●	.500	.1875	.0313	.2031

DNJG 55° Diamond/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
DNJG431R	●		.500	.1875	.0156	.2031
DNJG432R	●		.500	.1875	.0313	.2031
DNJG431L	●		.500	.1875	.0156	.2031
DNJG432L	●		.500	.1875	.0313	.2031

●= USA Stocked item

★= Worldwide Warehouse Stocked item

DNMX 55° Diamond/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
DNMX431ESEW	●		.500	.1875	.0156	.2031
DNMX432ESEW	●	●	.500	.1875	.0313	.2031

DNMG 55° Diamond/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
DNMG431EFA	●	●	.500	.1875	.0156	.2031
DNMG432EFA	●	●	.500	.1875	.0313	.2031
DNMG431EFL		●	.500	.1875	.0156	.2031
DNMG432EFL		●	.500	.1875	.0313	.2031
DNMG431EGU	●		.500	.1875	.0156	.2031
DNMG432EGU	●		.500	.1875	.0313	.2031
DNMG433EGU	★		.500	.1875	.0469	.2031
DNMG431ELU	●	●	.500	.1875	.0156	.2031
DNMG432ELU	●	●	.500	.1875	.0313	.150
DNMG433ELU	★	★	.500	.1875	.0469	.2031
DNMG431ESE	●		.500	.1875	.0156	.150
DNMG432ESE	●		.500	.1875	.0313	.2031
DNMG433ESE	●		.500	.1875	.0469	.2031
DNMG431ESU	●	●	.500	.1875	.0156	.2031
DNMG432ESU	●	●	.500	.1875	.0313	.2031
DNMG433ESU	●	●	.500	.1875	.0469	.2031
DNMG431ESX	●	●	.500	.1875	.0156	.2031
DNMG432ESX	★	●	.500	.1875	.0313	.2031

SNPR/L 90° Square/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
SNPL431M	★		.500	.1875	.0156	.2031
SNPL432M	★		.500	.1875	.0313	.2031
SNPR431M	★		.500	.1875	.0156	.2031
SNPR432M	★		.500	.1875	.0313	.2031
SNPR433M	●		.500	.1875	.0469	.2031
SNPL321T	●		.375	.125	.0156	.2031
SNPL322T	●		.375	.125	.0313	.2031
SNPR321T	★		.375	.125	.0156	.2031
SNPR322T	★		.375	.125	.0313	.2031

SNMG 90° Square/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
SNMG431EFJ	★		.500	.1875	.0156	.2031
SNMG432EFL		●	.500	.1875	.0313	.2031
SNMG322EGU	●		.375	.125	.0156	.150
SNMG431EGU	★		.500	.1875	.0156	.2031
SNMG432EGU	●		.500	.1875	.0313	.2031
SNMG432ELU		★	.500	.1875	.0313	.2031
SNMG432ESU	●	●	.500	.1875	.0313	.2031
SNMG431ESX	★	★	.500	.1875	.0156	.2031
SNMG432ESX	★	★	.500	.1875	.0313	.2031

TNGG Triangle/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TNGG330.5ESU	●		.375	.1875	.0078	.150
TNGG331ESU	●		.375	.1875	.0156	.150
TNGG332ESU	●		.375	.1875	.0313	.150

TNMG Triangle/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TNMG330.5EFA	★		.375	.1875	.0078	.150
TNMG331EFA	●	●	.375	.1875	.0156	.150
TNMG332EFA	●	●	.375	.1875	.0313	.150
TNMG331EFL		●	.375	.1875	.0156	.150
TNMG332EFL		★	.375	.1875	.0313	.150
TNMG331EGU	★		.375	.1875	.0156	.150
TNMG332EGU	●		.375	.1875	.0313	.150
TNMG331ELU	★	★	.375	.1875	.0156	.150
TNMG332ELU	★	★	.375	.1875	.0313	.150
TNMG333ELU	★	★	.375	.1875	.0469	.150
TNMG331ESE	●		.375	.1875	.0156	.150
TNMG332ESE	●		.375	.1875	.0313	.150
TNMG331ESU	●	●	.375	.1875	.0156	.150
TNMG332ESU	●	●	.375	.1875	.0313	.150
TNMG333ESU	●	●	.375	.1875	.0469	.150
TNMG431ESU		●	.500	.1875	.0156	.2031
TNMG432ESU		●	.500	.1875	.0313	.2031
TNMG331ESX	★	★	.375	.1875	.0156	.150
TNMG332ESX	★	★	.375	.1875	.0313	.150

TNPR/L Triangle/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TNPL330.5FFX	★	★	.375	.1875	.0078	.150
TNPL331FFX	★	★	.375	.1875	.0156	.150
TNPR330.5FFX	★	★	.375	.1875	.0078	.150
TNPR331FFX	★	★	.375	.1875	.0156	.150
TNPL330.5FFY	★	★	.375	.1875	.0078	.150
TNPL331FFY	★	★	.375	.1875	.0156	.150
TNPR330.5FFY	★	★	.375	.1875	.0078	.150
TNPR331FFY	●	●	.375	.1875	.0156	.150
TNPL330.5M	★	★	.375	.1875	.0078	.150
TNPL331M	●	●	.375	.1875	.0156	.150
TNPL332M	●	●	.375	.1875	.0313	.150
TNPL333M	★		.375	.1875	.0469	.150
TNPL431M	●		.500	.1875	.0156	.2031
TNPL432M	●		.500	.1875	.0313	.2031
TNPR330.5M	★	★	.375	.1875	.0078	.150
TNPR331M	●	●	.375	.1875	.0156	.150
TNPR332M	●	●	.375	.1875	.0313	.150
TNPR431M	●		.500	.1875	.0156	.2031
TNPR432M	●		.500	.1875	.0313	.2031
TNPL220.5Q	★		.325	.125	.0078	.089
TNPL221Q	●		.325	.125	.0125	.089
TNPL320.5T	★		.375	.125	.0078	.150
TNPL321T	●		.375	.125	.0156	.150
TNPL322T	★		.375	.125	.0313	.150
TNPR320.5T	★		.375	.125	.0078	.150
TNPR321T	●		.375	.125	.0156	.150
TNPR322T	●		.375	.125	.0313	.150

T1500A & T1500Z Inventory - Negative & Positive Inserts

VNGG 35° Diamond/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
VNGG330.5ESU	●	●	.375	.1875	.0078	.150
VNGG331ESU	●	●	.375	.1875	.0156	.150
VNGG332ESU	●	●	.375	.1875	.0313	.150

VNMG 35° Diamond/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
VNMG331EFA	●	●	.375	.1875	.0156	.150
VNMG332EFA	●	●	.375	.1875	.0313	.150
VNMG331EFL		●	.375	.1875	.0156	.150
VNMG332EFL		●	.375	.1875	.0313	.150
VNMG331EGU	●		.375	.1875	.0156	.150
VNMG332EGU	●		.375	.1875	.0313	.150
VNMG331ELU	●	●	.375	.1875	.0156	.150
VNMG332ELU	●	●	.375	.125	.0313	.150
VNMG331ESE	●		.375	.1875	.0156	.150
VNMG332ESE	●		.375	.1875	.0313	.150
VNMG331ESU	●	●	.375	.1875	.0156	.150
VNMG332ESU	●	●	.375	.1875	.0313	.150
VNMG331ESX	★		.375	.1875	.0156	.150

WNMG Trigon/Negative

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
WNMG430.5EFA	●	●	.500	.1875	.0078	.2031
WNMG431EFA	●	●	.500	.1875	.0156	.2031
WNMG432EFA	●	●	.500	.1875	.0313	.2031
WNMG431EFL		●	.500	.1875	.0156	.2031
WNMG432EFL		●	.500	.1875	.0313	.2031
WNMG431EGU	★		.500	.1875	.0156	.2031
WNMG432EGU	★		.500	.1875	.0313	.2031
WNMG431ELU	★	★	.500	.1875	.0156	.2031
WNMG432ELU	★	★	.500	.1875	.0313	.2031
WNMG433ELU	★	★	.500	.1875	.0469	.2031
WNMG331ELUW	●	●	.375	.1875	.0156	.150
WNMG332ELUW	●	●	.375	.1875	.0313	.150
WNMG431ELUW	●	●	.500	.1875	.0156	.2031
WNMG432ELUW	●	●	.500	.1875	.0313	.2031
WNMG433ELUW	●	●	.500	.1875	.0469	.2031
WNMG431ESE	●		.500	.1875	.0156	.2031
WNMG432ESE	●		.500	.1875	.0313	.2031
WNMG431ESEW	●		.500	.1875	.0156	.2031
WNMG432ESEW	●		.500	.1875	.0313	.2031
WNMG431ESU	●	●	.500	.1875	0.156	.2031
WNMG432ESU	●	●	.500	.1875	.0313	.2031
WNMG433ESU	★	★	.500	.1875	.0469	.2031
WNMG431ESX	★	★	.500	.1875	.0156	.2031
WNMG432ESX	★	★	.500	.1875	.0313	.2031

CCGT 80° Diamond/ 7° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
CCGT21.50MEFC	●		.250	.094	.0039	.110
CCGT21.50.5MEFC	●		.250	.094	.0078	.110
CCGT21.51MEFC	●		.250	.094	.0156	.110
CCGT32.50MEFC	●		.375	.156	.0039	.1732
CCGT32.50.5MEFC	●		.375	.156	.0078	.1732
CCGT32.51MEFC	●		.375	.156	.0156	.1732
CCGT21.5.001EFM	●		.250	.094	.0012	.110
CCGT21.50MEFM	●	●	.250	.094	.0039	.110
CCGT21.50.5MEFM	●	●	.250	.094	.0078	.110
CCGT2.51.50MEFM	●		.3125	.094	.0039	.134
CCGT2.51.50.5MEFM	●		.3125	.094	.0078	.134
CCGT32.5.001EFM	●		.375	.156	.0012	.1732
CCGT32.50MEFM	●	●	.375	.156	.0039	.1732
CCGT32.50.5MEFM	●	●	.375	.156	.0078	.1732
CCGT32.50MESI	●	●	.375	.156	.0039	.1732
CCGT32.50.5MESI	●	●	.375	.156	.0078	.1732
CCGT32.51MESI	●	●	.375	.156	.0156	.1732
CCGT21.5.001LFX	●		.250	.094	.0012	.110
CCGT21.50LFX	●		.250	.094	.0039	.110
CCGT21.50.5LFX	●	●	.250	.094	.0078	.110
CCGT32.5.001LFX	●		.375	.156	.0012	.1732
CCGT32.50LFX	●		.375	.156	.0039	.1732
CCGT32.50.5LFX	●		.375	.156	.0078	.1732
CCGT21.5.001RFX	●		.250	.094	.0012	.110
CCGT21.50RFX	●		.250	.094	.0039	.110
CCGT21.50.5RFX	●		.250	.094	.0078	.110
CCGT32.5.001RFX	●		.375	.156	.0012	.1732
CCGT32.50RFX	●		.375	.156	.0039	.1732
CCGT32.50.5RFX	●		.375	.156	.0078	.1732

CCMT 80° Diamond/ 7° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
CCMT21.50.5EFB	●		.250	.094	.0078	.110
CCMT21.51EFB	●	●	.250	.094	.0156	.110
CCMT32.51EFB	●	●	.375	.156	.0156	.1732
CCMT32.52EFB	●	●	.375	.156	.0313	.1732
CCMT32.51EFP	●		.375	.156	.0156	.1732
CCMT21.50.5ELU		●	.250	.094	.0078	.110
CCMT21.51ELU		●	.250	.094	.0156	.110
CCMT32.51ELU		●	.375	.156	.0313	.1732
CCMT32.52ELU		●	.375	.156	.0313	.1732
CCMT32.51ELUW	●	●	.375	.156	.0156	.1732
CCMT32.52ELUW	●	●	.375	.156	.0313	.1732
CCMT21.50.5ESU	●	●	.250	.094	.0078	.110
CCMT21.51ESU	●	●	.250	.094	.0156	.110
CCMT21.52ESU	●	●	.250	.094	.0313	.110
CCMT32.50.5ESU		●	.375	.156	.0078	.1732
CCMT32.51ESU	●	●	.375	.156	.0156	.1732
CCMT32.52ESU	●	●	.375	.156	.0313	.1732

CPGT 80° Diamond/11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
CPGT2.51.50.5	●	●	.3125	.094	.0078	.134
CPGT2.51.51	●	●	.3125	.094	.0156	.134
CPGT2.51.52	●	●	.3125	.094	.0313	.134
CPGT320.5	●	●	.375	.125	.0078	.1732
CPGT321	●	●	.375	.125	.0156	.1732
CPGT322	●	●	.375	.125	.0313	.1732
CPGT430.5	●		.500	.1875	.0078	.2165
CPGT431	●	●	.500	.1875	.0156	.2165
CPGT432	★		.500	.1875	.0313	.2165

CPMT 80° Diamond/11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
CPMT2.51.51EFB	●		.375	.125	.0313	.1732
CPMT321ELU		★	.375	.125	.0156	.1732
CPMT322ELU		★	.375	.125	.0313	.1732
CPMT321ELUW		★	.375	.125	.0156	.1732
CPMT322ELUW		★	.375	.125	.0313	.1732
CPMT21.51ESU	●	●	.250	.094	.0156	.110
CPMT21.52ESU		●	.250	.094	.0313	.110
CPMT2.51.51ESU		★	.3125	.094	.0156	.134
CPMT2.51.52ESU	●		.3125	.094	.0313	.134
CPMT32.51ESU		●	.375	.125	.0156	.1732
CPMT32.52ESU		●	.375	.125	.0313	.1732
CPMT321ESU	★	★	.375	.156	.0156	.1732
CPMT322ESU	★	★	.375	.156	.0313	.1732

DCGT 55° Diamond/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
DCGT21.50MEFC	●		.250	.094	.0039	.110
DCGT21.50.5MEFC	●		.250	.094	.0078	.110
DCGT21.51MEFC	●		.250	.094	.0156	.134
DCGT32.50MEFC	●		.375	.156	.0039	.1732
DCGT32.50.5MEFC	●		.375	.156	.0078	.1732
DCGT32.51MEFC	●		.375	.156	.0156	.1732
DCGT21.5.001MEFM	★		.250	.094	.0012	.110
DCGT21.50MEFM	●	●	.250	.094	.0039	.110
DCGT21.50.5MEFM	●	●	.250	.094	.0078	.110
DCGT21.51MEFM	●	●	.250	.094	.0156	.110
DCGT2.51.50MEFM	★		.3125	.094	.0039	.134
DCGT2.51.50.5MEFM	★		.3125	.094	.0078	.134
DCGT32.5.001MEFM	●		.375	.156	.0012	.1732
DCGT32.50MEFM	●	●	.375	.156	.0039	.1732
DCGT32.50.5MEFM	●	●	.375	.156	.0078	.1732
DCGT32.51MEFM	●	●	.375	.156	.0156	.1732
DCGT32.52MEFM	●	●	.375	.156	.0313	.1732

●= USA Stocked item

★= Worldwide Warehouse Stocked item

M before the chipbreaker indicates a negative nose tolerance (-0.0001" to -0.0005")

T1500A & T1500Z Inventory - Positive Inserts

DCGT 55° Diamond/ 7° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
DCGT21.50MESI	●	●	.250	.094	.0039	.110
DCGT21.50.5MESI	●	●	.250	.094	.0078	.110
DCGT21.51MESI	●	●	.250	.094	.0156	.110
DCGT32.50MESI	●	●	.375	.156	.0039	.1732
DCGT32.50.5MESI	●	●	.375	.156	.0078	.1732
DCGT32.51MESI	●	●	.375	.156	.0156	.1732
DCGT32.52MESI	●	●	.375	.156	.0313	.1732
DCGT21.50.5L	★		.250	.094	.0078	.110
DCGT21.51L	★		.250	.094	.0156	.110
DCGT32.51L	★		.375	.156	.0156	.1732
DCGT32.52L	★		.375	.156	.0313	.1732
DCGT21.50.5R	★		.250	.094	.0078	.110
DCGT21.51R	★		.250	.094	.0156	.110
DCGT32.51R	●		.375	.156	.0156	.1732
DCGT32.52R	★		.375	.156	.0313	.1732
DCGT21.5.001LFX	★		.250	.094	.0012	.110
DCGT21.50LFX	★		.250	.094	.0039	.110
DCGT21.50.5LFX	★		.250	.094	.0078	.110
DCGT32.5.001LFX	★		.375	.156	.0012	.1732
DCGT32.50LFX	★		.375	.156	.0039	.1732
DCGT32.50.5LFX	★		.375	.156	.0078	.1732
DCGT21.5.001RFX	★		.250	.094	.0012	.110
DCGT21.50RFX	★		.250	.094	.0039	.110
DCGT21.50.5RFX	●		.250	.094	.0078	.110
DCGT32.5.001RFX	★		.375	.156	.0012	.1732
DCGT32.50RFX	★		.375	.156	.0039	.1732
DCGT32.50.5RFX	★		.375	.156	.0078	.1732

DCMT 55° Diamond/ 7° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
DCMT21.50.5EFB	●		.250	.094	.0078	.110
DCMT21.51EFB	●		.250	.094	.0156	.110
DCMT21.52EFB	●		.250	.094	.0313	.110
DCMT32.50.5EFB	●		.375	.156	.0078	.1732
DCMT32.51EFB		●	.375	.156	.0156	.1732
DCMT32.52EFB	●	●	.375	.156	.0313	.1732
DCMT21.50.5EFP	●		.250	.094	.0078	.110
DCMT21.51EFP	●		.250	.094	.0156	.110
DCMT32.52EFP	●		.375	.156	.0313	.1732
DCMT21.50.5ELU		★	.250	.094	.0078	.110
DCMT21.51ELU		●	.250	.094	.0156	.110
DCMT32.50.5ELU		●	.375	.156	.0078	.1732
DCMT32.51ELU		●	.375	.156	.0156	.1732
DCMT32.52ELU		●	.375	.156	.0313	.1732
DCMT21.50.5ESU	★	★	.250	.094	.0078	.110
DCMT21.51ESU	●		.250	.094	.0156	.110
DCMT21.52ESU	★	★	.250	.094	.0313	.110
DCMT32.50.5ESU	●	●	.375	.156	.0078	.1732
DCMT32.51ESU	●	●	.375	.156	.0156	.1732
DCMT32.52ESU	★	★	.375	.156	.0313	.1732

●= USA Stocked item

★= Worldwide Warehouse Stocked item

M before the chipbreaker indicates a negative nose tolerance (-0.0001" to -0.0005")

SCGT 90° Square/ 7° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
SCGT2.51.50MEFM	★		.3125	.094	.0039	.134
SCGT2.51.50.5MEFM	●		.3125	.094	.0078	.134
SCGT32.50.5MEFM	●		.375	.156	.0078	.1732

SCMT 90° Square/ 7° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
SCMT32.51EFB	●		.375	.156	.0156	.1732
SCMT32.52EFB	★		.375	.156	.0313	.1732
SCMT32.51EFP	★		.375	.156	.0156	.1732
SCMT32.52EFP	●		.375	.156	.0313	.1732

SPG 90° Square/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
SPG321	●		.375	.125	.0156	-
SPG322	●		.375	.125	.0313	-
SPG421	●		.500	.125	.0156	-
SPG422	●	●	.500	.125	.0313	-

SPGG 90° Square/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
SPGG320.5L		★	.375	.125	.0039	-
SPGG321L	●	●	.375	.125	.0078	-
SPGG322L	★	★	.375	.125	.0156	-
SPGG322R	★		.375	.125	.0313	-

SPMN 90° Square/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
SPMN322	★		.375	.125	.0313	-
SPMN422	★		.500	.125	.0313	-
SPMN423	★		.500	.125	.0469	-

SPMR 90° Square/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
SPMR321EFK	●		.375	.125	.0156	-
SPMR322EFK	●	●	.375	.125	.0313	-
SPMR421EFK	★		.500	.125	.0156	-
SPMR422EFK	●	●	.500	.125	.0313	-

SPMT 90° Square/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
SPMT322EFK		●	.375	.125	.0313	.130

TBGT Triangle/ 5° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TBGT520.5L	●	●	.156	.0625	.0078	.090
TBGT521L	●	●	.156	.0625	.0156	.090
TBGT520.5LFW	●	●	.156	.0625	.0078	.090
TBGT521LFW	●	●	.156	.0625	.0156	.090
TBGT521LFY	●		.156	.0625	.0156	.090
TBGT520.5R	●	●	.156	.0625	.0078	.090
TBGT521R	●	●	.156	.0625	.0156	.090
TBGT520.5RFW	★		.156	.0625	.0078	.090
TBGT521RFW	★		.156	.0625	.0156	.090
TBGT520.5RFY	★		.156	.0625	.0078	.090
TBGT521RFY	★		.156	.0625	.0156	.090

TCGT Triangle/ 7° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TCGT630MEFM	★		.1875	.094	.0039	.090
TCGT630.5MEFM	★		.1875	.094	.0078	.090
TCGT1.81.50EFM	●		.219	.094	.0039	.098
TCGT1.81.50.5EFM	★		.219	.094	.0078	.098
TCGT21.50MEFM	●	●	.250	.094	.0039	.110
TCGT21.50.5MEFM	●	●	.250	.094	.0078	.110
TCGT21.51MESI	●		.250	.094	.0039	.110

TCMT Triangle/ 7° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TCMT21.51EFB	●	●	.250	.094	.0156	.110
TCMT21.52EFB	●	●	.250	.094	.0313	.110
TCMT21.51EFP	●		.250	.094	.0156	.110
TCMT21.52EFP	★		.250	.094	.0313	.110
TCMT32.51EFP	★		.375	.156	.0313	.1693
TCMT32.52EFP	●		.375	.156	.0078	.1693
TCMT21.51ELU		●	.250	.094	.0156	.110
TCMT21.52ELU		★	.250	.094	.0313	.110
TCMT21.51ESU		●	.250	.094	.0156	.110

TPG Triangle Type/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TPG220.5	●		.250	.125	.0078	-
TPG221	●		.250	.125	.0156	-
TPG222	●		.250	.125	.0313	-
TPG320.5	●	●	.375	.125	.0078	-
TPG321	●	●	.375	.125	.0156	-
TPG322	●	●	.375	.125	.0313	-

T1500A & T1500Z Inventory - Positive Inserts

TPGA Triangle/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TPGA221	●		.250	.125	.0156	.130
TPGA222	●		.250	.125	.0313	.130

TPGG Triangle/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TPGG220.5L	●	●	.250	.125	.0078	.130
TPGG221L	●	●	.250	.125	.0156	.130
TPGG222L	●	●	.250	.125	.0313	.130
TPGG330.5L	●	●	.375	.1875	.0078	.1693
TPGG331L	●	●	.375	.1875	.0156	.1693
TPGG332L	●	●	.375	.1875	.0313	.1693
TPGG220.5R	●	●	.250	.125	.0078	.130
TPGG221R	●	●	.250	.125	.0156	.130
TPGG222R	★		.250	.125	.0313	.130
TPGG330.5R	★		.375	.1875	.0078	.1693
TPGG331R	●	●	.375	.1875	.0156	.1693
TPGG332R	★		.375	.1875	.0313	.1693

TPGT Triangle/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TPGT220.5MEFC	●		.250	.125	.0078	.130
TPGT221MEFC	●		.250	.125	.0156	.130
TPGT630.5L	●	●	.1875	.094	.0078	.090
TPGT631L	●	●	.1875	.094	.0156	.090
TPGT630.5LFW	●	●	.1875	.094	.0078	.090
TPGT631LFW	●	●	.1875	.094	.0156	.090
TPGT21.50.5LFW	●	●	.250	.094	.0078	.110
TPGT21.51LFW	●	●	.250	.094	.0156	.110
TPGT1.81.51LFX	●		.219	.094	.0156	.102
TPGT630.5LFY	★		.1875	.094	.0078	.090
TPGT631LFY	★		.1875	.094	.0156	.090
TPGT21.50.5LFY	★		.250	.1875	.0156	.110
TPGT21.51LFY	★		.250	.094	.0156	.110
TPGT21.52LFY	●		.250	.094	.0313	.110
TPGT220.5LFY	★	★	.250	.125	.0078	.130
TPGT221LFY	●	●	.250	.125	.0156	.130
TPGT630.5R	●	●	.1875	.094	.0078	.090
TPGT631R	●	●	.1875	.094	.0156	.090
TPGT630.5RFW	●		.1875	.094	.0078	.090
TPGT631RFW	●	●	.1875	.094	.0156	.090
TPGT21.50.5RFW	●	●	.250	.094	.0078	.110
TPGT21.51RFW	●	●	.250	.094	.0156	.110
TPGT630.5RFY	★		.1875	.094	.0078	.090
TPGT631RFY	●		.1875	.094	.0156	.090
TPGT21.50.5RFY	★		.250	.1875	.0156	.110
TPGT21.51RFY	★		.250	.094	.0156	.110
TPGT220RFY	★	●	.250	.125	.0039	.130
TPGT220.5RFY		●	.250	.125	.0078	.130
TPGT221RFY	★	●	.250	.125	.0156	.130
TPGT222RFY	★		.250	.125	.0313	.130

TPMN Triangle/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TPMN322	★		.375	.125	.0313	-
TPMN432	★		.500	.1875	.0313	-

TPMR Triangle/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TPMR1.81.51EFK	●	●	.219	.094	.0156	-
TPMR1.81.52EFK		●	.219	.094	.0313	-
TPMR220.5EFK			.250	.125	.0078	-
TPMR221EFK	●	●	.250	.125	.0156	-
TPMR222EFK	●	●	.250	.125	.0313	-
TPMR321EFK	●	●	.375	.125	.0156	-
TPMR322EFK	●	●	.375	.125	.0313	-
TPMR323EFK	★		.375	.125	.0469	-

TPMT Triangle/ 11° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
TPMT222EFB		●	.250	.125	.0156	.110
TPMT221EFK		●	.250	.125	.0156	.110
TPMT222EFK	●		.250	.125	.0313	.110
TPMT331EFK	●		.375	.1875	.0156	.1693
TPMT332EFK	●		.375	.1875	.0313	.1693
TPMT221ELU		●	.250	.125	.0156	.110
TPMT222ELU		●	.250	.125	.0313	.110
TPMT220.5ESU	●	●	.250	.125	.0078	.130
TPMT221ESU	●	●	.250	.125	.0156	.130
TPMT222ESU	★	★	.250	.125	.0313	.130
TPMT331ESU	★	★	.375	.1875	.0156	.1693
TPMT332ESU	★	★	.375	.1875	.0313	.1693

VBMT 35° Diamond/ 5° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
VBMT221ELU		●	.250	.125	.0156	.134
VBMT331ELU		●	.375	.1875	.0156	.1732
VBMT332ELU		●	.375	.1875	.0313	.1732
VBMT221ESU		●	.250	.125	.0156	.134
VBMT222ESU		●	.250	.125	.0313	.134
VBMT331ESU	●	●	.375	.125	.0156	.1732
VBMT332ESU	●		.375	.125	.0313	.1732

VCGT 35° Diamond/ 7° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
VCGT220EFC	●		.250	.125	.0039	.134
VCGT220MEFC	●		.250	.125	.0039	.134
VCGT220.5EFC	●		.250	.125	.0078	.134
VCGT220.5MEFC	●		.250	.125	.0078	.134
VCGT221EFC	●		.250	.125	.0156	.134
VCGT221MEFC	●		.250	.125	.0156	.134
VCGT220MESI	●	●	.250	.125	.0039	.134
VCGT220.5MESI	●	●	.250	.125	.0078	.134
VCGT221MESI	●	●	.250	.125	.0156	.134
VCGT222MESI	●	●	.250	.125	.0313	.134
VCGT330MESI	●	●	.250	.125	.0039	.134
VCGT330.5MESI	●	●	.250	.125	.0078	.134
VCGT331MESI	●	●	.250	.125	.0156	.134
VCGT220LFX	★		.250	.125	.0039	.134
VCGT220.5LFX	★		.250	.125	.0078	.134
VCGT220RFX	●		.250	.125	.0039	.134
VCGT220.5RFX	★		.250	.125	.0078	.134

VCMT 35° Diamond/ 7° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
VCMT331EFB	●	●	.375	.1875	.0156	.1732
VCMT332EFB	●	●	.375	.1875	.0313	.1732
VCMT331ELU		●	.375	.1875	.0156	.1732
VCMT332ELU		★	.375	.1875	.0313	.1732

WBGT 80° Trigon/ 5° Relief Angle

Sumitomo Catalog Number	T1500A	T1500Z	Inscribed Circle	Thickness	Nose Radius	Insert Hole Diameter
WBGT520.5L	●		.156	.0625	.0078	.090
WBGT521L	★	★	.156	.0625	.0156	.090
WBGT520.5LFW	★	★	.156	.0625	.0078	.090
WBGT521LFW	★	★	.156	.0625	.0156	.090
WBGT630.5LFW	★	★	.1875	.094	.0078	.090
WBGT631LFW	★		.1875	.094	.0156	.090
WBGT520.5LFY	★		.156	.0625	.0078	.090
WBGT521LFY	●		.156	.0625	.0156	.090
WBGT521R	★		.156	.0625	.0156	.090
WBGT520.5RFW	★		.156	.0625	.0078	.090
WBGT521RFW	★		.156	.0625	.0156	.090
WBGT630.5RFW	★		.1875	.094	.0078	.090
WBGT631RFW	★		.1875	.094	.0156	.090
WBGT520.5RFY	★		.156	.0625	.0078	.090
WBGT521RFY	★		.156	.0625	.0156	.090

●= USA Stocked item

★= Worldwide Warehouse Stocked item

M before the chipbreaker indicates a negative nose tolerance (-0.0001" to -0.0005")

SUMITOMO

CARBIDE - CBN - DIAMOND

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CAT.T1500A/T1500Z.11/14