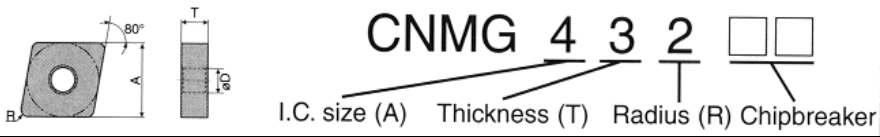


INSERTS - CNMG



Tungaloy INSERTS
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CN __				Chip Breaker:			
				TS- for SEMI FINISHING			
TS Chip breaker				Cermet Grades		Coated Carbide Grades	
				NS530	AT530	T9015	T9025
I.C.	T	Radius	Applications	<--Speed / Toughness-->			
			Geometry	Steel	Steel 700-1100	Steel 700-1000	Steel
1/2 0.500	3/16 0.187	1/64 0.016	CNMG431TS CNMG120404TS	TO-1317	TO-1315	TO-3516	TO-3517
1/2 0.500	3/16 0.187	1/32 0.031	CNMG432TS CNMG120408TS	TO-1397	TO-1395	TO-3527	TO-3528
1/2 0.500	3/16 0.187	3/64 0.047	CNMG433TS CNMG120412TS	TO-5222	-	TO-5224	TO-5225

D.O.C. = .020~.060, Feed = .003 ~ .008

TUNGALOY INSERTS QUANTITY DISCOUNT	
1-19 pcs	LIST
20-39 pcs	5% OFF
40-99 pcs	10% OFF
100 +	CALL

Reduce Cycle Time By Up To 75% With Tungaloy's T6020 Grade For Stainless Steels As Compared To Conventional CVD Coated Grades

CN __				Chip Breaker: SS- for STAINLESS STEEL	
				Coated Carbide Grades	
SS Chip breaker				T6020	T6030
				<--Speed / Toughness ---->	
I.C.	T	Radius	Applications	Stainless 500-750	Stainless 250-500
			Geometry		
1/2 0.500	3/16 0.187	1/64 0.016	CNMG431SS CNMG120404SS	TO-1271	TO-1272
1/2 0.500	3/16 0.187	1/32 0.031	CNMG432SS CNMG120408SS	TO-1340	TO-1341
1/2 0.500	3/16 0.187	3/64 0.047	CNMG433SS CNMG120412SS	-	TO-1417

D.O.C. = .020~.120, Feed = .003 ~ ..008

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OD Turning Holders
Are Located On Pages 298-305

CN __				Chip Breaker: SA- for LIGHT CUTTING	
				Coated Carbide Grades	
SA Chip Breaker				AH110	AH120
				<----Speed / Toughness ---->	
I.C.	T	Radius	Applications	S.A. 200-250	S.A. 150-200
			Geometry	Stainless 500-800	Stainless 450-700
1/2 0.500	3/16 0.187	1/64 0.016	CNMG431SA CNMG120404SA	TO-1265	TO-1266
1/2 0.500	3/16 0.187	1/32 0.031	CNMG432SA CNMG120408SA	TO-1330	TO-1331
1/2 0.500	3/16 0.187	3/64 0.047	CNMG433SA CNMG120412SA	TO-1410	TO-1411
3/4 0.750	1/4 0.249	3/64 0.047	CNMG643SA CNMG190612SA	-	TO-1511
3/4 0.750	1/4 0.249	1/16 0.062	CNMG644SA CNMG190616SA	-	TO-1532

D.O.C. = .040~.100, Feed = .008~ .014



Tungaloy's All New Grade AH120 - TiAlN coated - for medium speed general purpose to rough machining of Super Alloys and Stainless steels

Tungaloy Grade AH110 - TiAlN coated - machining of Super Alloys and Non Ferrous metals

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INSERTS - CNMG, CNGG



CN				Chip Breaker: TM- for MEDIUM CUTTING				
				Coated Carbide Grades				
				T9015	T9025	T9035	AH110	AH120
				<-----Speed * Toughness----->				
I.C.	T	Radius	Applications	Steel 500-1000	Steel 400-800	Steel	S.A. 125-200	S.A. 65-150
			Geometry					Stainless 400-600
3/8 0.375	1/8 0.125	1/64 0.016	CNMG321TM CNMG090304TM	TO-3508	TO-3509	-	-	-
3/8 0.375	1/8 0.125	1/32 0.031	CNMG322TM CNMG090308TM	TO-3510	TO-3511	-	-	-
1/2 0.500	3/16 0.187	1/64 0.016	CNMG431TM CNMG120404TM	TO-3513	TO-3514	TO-3515	TO-1284	TO-1285
1/2 0.500	3/16 0.187	1/32 0.031	CNMG432TM CNMG120408TM	TO-3524	TO-3525	TO-3526	TO-1363	TO-1364
1/2 0.500	3/16 0.187	3/64 0.047	CNMG433TM CNMG120412TM	TO-3536	TO-3537	TO-3538	TO-1434	TO-1435
1/2 0.500	3/16 0.187	1/16 0.062	CNMG434TM CNMG120416TM	TO-3540	TO-3541	TO-3542	-	-
5/8 0.625	1/4 0.249	3/64 0.047	CNMG543TM CNMG160612TM	TO-3547	TO-3548	-	-	TO-1486
3/4 0.750	1/4 0.249	1/32 0.031	CNMG642TM CNMG190608TM	TO-5279	TO-3553	-	-	TO-1507
3/4 0.750	1/4 0.249	3/64 0.047	CNMG643TM CNMG190612TM	TO-5294	TO-3558	-	-	TO-1528

D.O.C. = .040~.175, Feed = .008 ~ .020

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TUNGALOY INSERTS QUANTITY DISCOUNT	
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40-99 pcs	10% OFF
100 +	CALL

TUNGALOY GRADES
T9025 & T9035 - excellent for rough and tough turning of Steels

Tungaloy Grade AH120 - TiAlN Coated - for medium speed general purpose to rough machining of Super Alloys and Stainless Steels

Tungaloy Grade AH110 - TiAlN Coated - for general purpose turning Super Alloys and Non Ferrous materials

CN				Chip Breaker: 28- Finish to Medium	
				Coated Carbide Grades	
				AH110	AH120
				<-----Speed/Toughness----->	
I.C.	T	Radius	Applications	S.A. 100-225	S.A. 75-125
			Geometry	Non Ferr 650-3000	
1/2 0.500	3/16 0.187	1/64 0.016	CNMG431-28 CNMG12040428	TO-1302	TO-1303
1/2 0.500	3/16 0.187	1/32 0.031	CNMG432-28 CNMG12040828	TO-1381	TO-1382
1/2 0.500	3/16 0.187	3/64 0.047	CNMG433-28 CNMG12041228	-	TO-1446

D.O.C. = .060~.250, Feed = .006 ~ .020

OD Turning Holders
 Are Located On Pages 298-305

CN				Chip Breaker: SM - MED. CUTTING STAINLESS	
				Coated Carbide Grades	
				T6020	T6030
				<--Speed / Toughness-->	
I.C.	T	Radius	Applications	Stainless 400-750	Stainless 300-500
			Geometry		
1/2 0.500	3/16 0.187	1/64 0.016	CNMG431SM CNMG120404SM	TO-1267	TO-1268
1/2 0.500	3/16 0.187	1/32 0.031	CNMG432SM CNMG120408SM	TO-1336	TO-1337
1/2 0.500	3/16 0.187	3/64 0.047	CNMG433SM CNMG120412SM	TO-1414	TO-1415

(D.O.C. = .040~.150, Feed = .006 ~ .014)

CN				Chip Breaker: P- for GENERAL PURPOSE	
				Uncoated Carbide Grades	
				TH10	
I.C.	T	Radius	Applications	Non Ferrous 700-1500	
			Geometry		
1/2 0.500	3/16 0.187	1/64 0.016	CNGG431FLP CNGG120404LP	TO-1205	
1/2 0.500	3/16 0.187	1/64 0.016	CNGG431FRP CNGG120404RP	TO-1206	
1/2 0.500	3/16 0.187	1/32 0.031	CNGG432FLP CNGG120408LP	TO-1208	
1/2 0.500	3/16 0.187	1/32 0.031	CNGG432FRP CNGG120408RP	TO-1209	

D.O.C. = .02~.150, Feed = .004 ~ .016

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INSERTS - CNMG, CCMT, CCGT

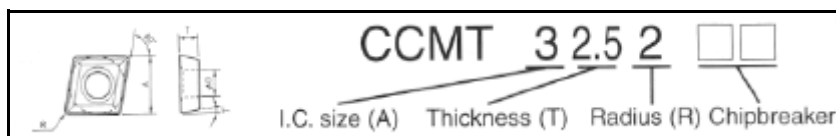
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CN			Chip Breaker: TH- for ROUGHING						
TH			Coated Carbide Grades						
Chip Breaker			T9005	T9015	T9025	T9035	T6030	AH120	
			-----Speed * Toughness----->						
I.C.	T	Radius	Applications	Steel 650-1050	Steel 500-800	Steel 300-700	Steel	Stainless 250-500	S.A. 65-150
			Geometry						
1/2 0.500	3/16 0.187	1/32 0.031	CNMG432TH CNMG120408TH	TO-3519	TO-3520	TO-3521	TO-3522	TO-1356	TO-1352
1/2 0.500	3/16 0.187	3/64 0.047	CNMG433TH CNMG120412TH	TO-3531	TO-3532	TO-3533	TO-3534	TO-1428	TO-1425
1/2 0.500	3/16 0.187	1/16 0.062	CNMG434TH CNMG120416TH	TO-3539	-	-	-	-	-
5/8 0.625	1/4 0.249	3/64 0.047	CNMG543TH CNMG160612TH	TO-3543	TO-3544	TO-3545	TO-3546	-	TO-1477
5/8 0.625	1/4 0.249	1/16 0.062	CNMG544TH CNMG160616TH	TO-3549	TO-3550	TO-3551	TO-3552	-	TO-1495
3/4 0.750	1/4 0.249	3/64 0.047	CNMG643TH CNMG190612TH	TO-3554	TO-3555	TO-3556	TO-3557	-	TO-1521
3/4 0.750	1/4 0.249	1/16 0.062	CNMG644TH CNMG190616TH	TO-3559	TO-3560	TO-3561	TO-3562	-	TO-1536

D.O.C. = .120~.250, Feed = .012 ~ .020

Tungaloy INSERTS
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CC			Chip Breaker: PP- Finish To Medium	
PP			Uncoated Carbide Grades	
Chip Breaker			H10T	
I.C.	T	Radius	Applications	NF, S.A.
			Geometry	
1/4 0.250	3/32 0.093	1/128 0.008	CCGT21.50PP CCGT060202PP	TO-1112
1/4 0.250	3/32 0.093	1/64 0.016	CCGT21.51PP CCGT060204PP	TO-1114
3/8 0.375	5/32 0.156	1/128 0.008	CCGT32.50PP CCGT09T302PP	TO-1116
3/8 0.375	5/32 0.156	1/64 0.016	CCGT32.51PP CCGT09T304PP	TO-1117
3/8 0.375	5/32 0.156	1/32 0.031	CCGT32.52PP CCGT09T308PP	TO-1118
1/2 0.500	3/16 0.187	1/128 0.008	CCGT430PP CCGT120402PP	TO-1119
1/2 0.500	3/16 0.187	1/64 0.016	CCGT431PP CCGT120404PP	TO-1120
1/2 0.500	3/16 0.187	1/32 0.031	CCGT432PP CCGT120408PP	TO-1121

D.O.C. = .020~.150, Feed = .004 ~ .014

CC			Chip Breaker: PS- Finish To Medium			
PS			Cermets grades			
Chip Breaker			Coated Carbide Grades			
			NS530	AT530	T9025	
			-----Speed/Toughness----->			
I.C.	T	Radius	Applications	Steel	Steel 600-1000	Steel 500-900
			Geometry	Stainless 400-600	Stainless 500-800	
1/4 0.250	3/32 0.093	1/128 0.008	CCMT21.50PS CCMT060202PS	TO-1134	TO-1133	TO-3500
1/4 0.250	3/32 0.093	1/64 0.016	CCMT21.51PS CCMT060204PS	TO-1142	TO-1141	TO-3501
1/4 0.250	3/32 0.093	1/32 0.031	CCMT21.52PS CCMT060208PS	TO-1150	TO-1149	TO-3502
3/8 0.375	5/32 0.156	1/128 0.008	CCMT32.50PS CCMT09T302PS	-	TO-1157	TO-3503
3/8 0.375	5/32 0.156	1/64 0.016	CCMT32.51PS CCMT09T304PS	TO-1164	TO-1163	TO-3504
3/8 0.375	5/32 0.156	1/32 0.031	CCMT32.52PS CCMT09T308PS	TO-1172	TO-1171	TO-3505

(D.O.C. = .010~.100, Feed = .003 ~ .008)

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