



**Chipmaker®**  
O.D. & I.D.  
Grooving

**Octicut®**  
Threading

**Ranger™**  
Face Grooving

**Chipmaker®**  
O.D. & I.D. Grooving

**Separator®**  
Cutoff

**MTC™**  
Cutoff & Grooving

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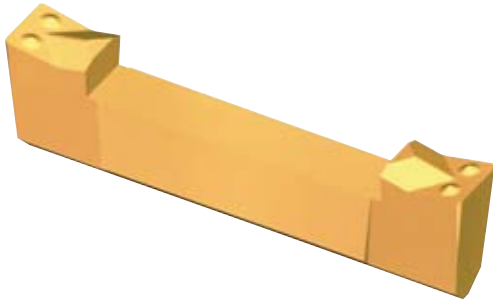
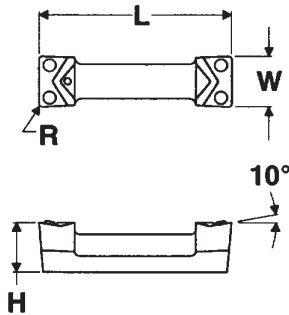
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# O.D. GROOVING

## Chipmaker® Inserts



### Chipmaker® Inserts

**INCH**

Part Number	W	L	R	H
508-238	.126	7/8	.010	1/4
508-244	.126	7/8	.030	1/4
508-241	.156	7/8	.010	1/4
508-245	.156	7/8	.030	1/4
508-239	.188	1.0	.010	1/4
508-246	.188	1.0	.030	1/4
508-240	.250	1.0	.010	1/4
508-247	.250	1.0	.030	1/4
508-242	.312	1-1/8	.010	11/32
508-248	.312	1-1/8	.030	11/32
508-243	.376	1-1/8	.010	11/32
508-249	.376	1-1/8	.030	11/32

### Chipmaker® Inserts

**METRIC**

Part Number	W mm	L mm	R mm	H mm
508-256	3	22.2	0.3	6.35
508-257	3	22.2	0.6	6.35
508-258	4	22.2	0.3	6.35
508-259	4	22.2	0.6	6.35
508-260	5	25.4	0.3	6.35
508-261	5	25.4	0.6	6.35
508-262	6	25.4	0.3	6.35
508-263	6	25.4	0.6	6.35
508-279	8	28.6	0.3	8.70
508-280	8	28.6	0.6	8.70

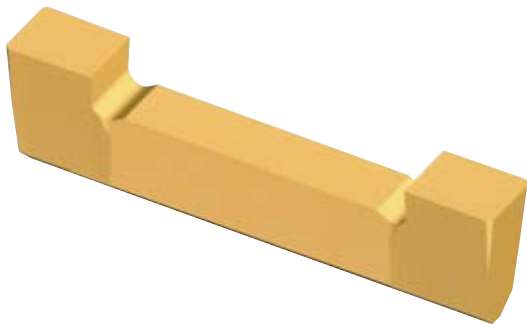
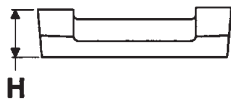
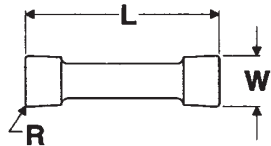
Chipmaker® Inserts are available in TiN (M40), TiAlN (M43), TiCN (M45), TiN (M50) & TiAlN (M93).

See pages C7-C13 and C21 for Holders.

See Section A – MTC™ Products for additional OD Grooving tools.

# O.D. GROOVING

## Central Neutral Rake Inserts (O.D.)



Central Neutral Rake Inserts				INCH
Part Number	W	L	R	H
508-301	.126	7/8	.010	1/4
508-307	.126	7/8	.030	1/4
508-313	.126	7/8	FNR	1/4
508-302	.156	7/8	.010	1/4
508-308	.156	7/8	.030	1/4
508-314	.156	7/8	FNR	1/4
508-303	.188	1.0	.010	1/4
508-309	.188	1.0	.030	1/4
508-315	.188	1.0	FNR	1/4
508-304	.250	1.0	.010	1/4
508-310	.250	1.0	.030	1/4
508-340	.250	1.0	.060	1/4
508-316	.250	1.0	FNR	1/4
508-305	.312	1-1/8	.010	11/32
508-311	.312	1-1/8	.030	11/32
508-341	.312	1-1/8	.060	11/32
508-317	.312	1-1/8	FNR	11/32
508-306	.376	1-1/8	.010	11/32
508-312	.376	1-1/8	.030	11/32
508-318	.376	1-1/8	FNR	11/32

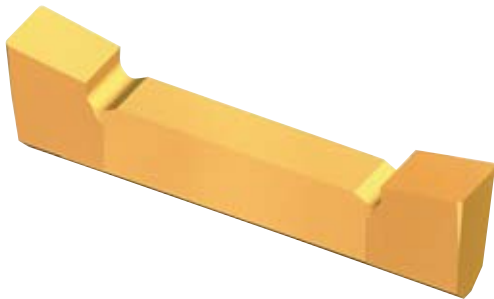
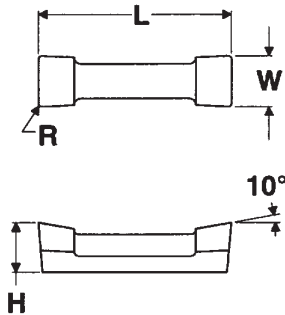
Central Neutral Rake Inserts				METRIC
Part Number	W mm	L mm	R mm	H mm
508-446	3	22.2	0.3	6.35
508-447	3	22.2	0.6	6.35
508-448	3	22.2	FNR	6.35
508-449	4	22.2	0.3	6.35
508-450	4	22.2	0.6	6.35
508-451	4	22.2	FNR	6.35
508-452	5	25.4	0.3	6.35
508-453	5	25.4	0.6	6.35
508-454	5	25.4	FNR	6.35
508-456	6	25.4	0.3	6.35
508-457	6	25.4	0.6	6.35
508-458	6	25.4	FNR	6.35

Central Neutral Rake Inserts are available in Uncoated (C2 & C5), TiN+TiC+TiN (GC) & Al<sub>2</sub>O<sub>3</sub> (M24). Some inserts available in TiN (M40 & M50). FNR = Full Nose Radius.

See pages C7-C13 and C21 for Holders.

# O.D. GROOVING

## Central Positive Rake Inserts (O.D.)



### Central Positive Rake Inserts **INCH**

Part Number	W	L	R	H
508-319	.126	7/8	.010	1/4
508-325	.126	7/8	.030	1/4
508-331	.126	7/8	FNR	1/4
508-320	.156	7/8	.010	1/4
508-326	.156	7/8	.030	1/4
508-332	.156	7/8	FNR	1/4
508-321	.188	1.0	.010	1/4
508-327	.188	1.0	.030	1/4
508-333	.188	1.0	FNR	1/4
508-322	.250	1.0	.010	1/4
508-328	.250	1.0	.030	1/4
508-334	.250	1.0	FNR	1/4
508-323	.312	1-1/8	.010	11/32
508-329	.312	1-1/8	.030	11/32
508-335	.312	1-1/8	FNR	11/32
508-324	.376	1-1/8	.010	11/32
508-330	.376	1-1/8	.030	11/32
508-336	.376	1-1/8	FNR	11/32

### Central Positive Rake Inserts **METRIC**

Part Number	W mm	L mm	R mm	H mm
508-461	3	22.2	0.3	6.35
508-462	3	22.2	0.6	6.35
508-463	3	22.2	FNR	6.35
508-464	4	22.2	0.3	6.35
508-465	4	22.2	0.6	6.35
508-466	4	22.2	FNR	6.35
508-467	5	25.4	0.3	6.35
508-468	5	25.4	0.6	6.35
508-469	5	25.4	FNR	6.35
508-470	6	25.4	0.3	6.35
508-471	6	25.4	0.6	6.35
508-472	6	25.4	FNR	6.35

Central Positive Rake Inserts are available in Uncoated (C2 & C5) & TiN+TiC+TiN (GC). Some inserts available in TiN (M40 & 50).

FNR = Full Nose Radius.

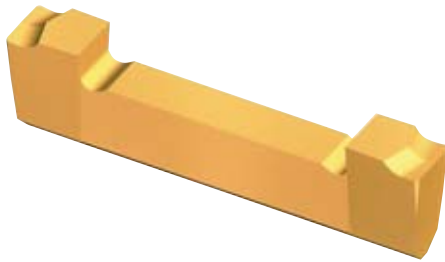
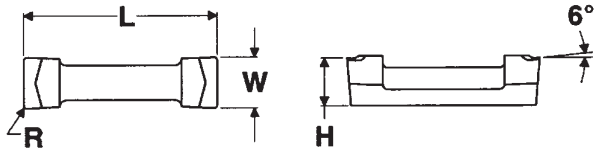
See pages C7-C13 and C21 for Holders.

See Section A – MTC™ Products for additional OD Grooving tools.

# O.D. GROOVING

Chipmaker® 95 Inserts

Chipmaker® Single End Inserts



## Chipmaker® 95 Inserts

**INCH**

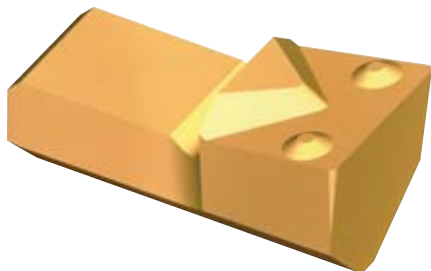
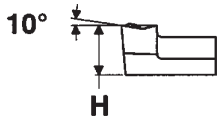
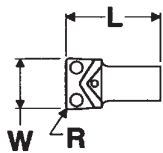
Part Number	W	L	R	H
508-403	.126	7/8	.010	1/4
508-404	.126	7/8	.030	1/4
508-405	.126	7/8	FNR	1/4
508-412	.188	1.0	.010	1/4
508-413	.188	1.0	.030	1/4
508-422	.250	1.0	.010	1/4
508-423	.250	1.0	.030	1/4
508-424	.250	1.0	.060	1/4

## Chipmaker® 95 Inserts

**METRIC**

Part Number	W mm	L mm	R mm	H mm
508-435	8	28.6	.76	8.70
508-436	8	28.6	1.52	8.70

Chipmaker® 95 Inserts are available in TiN (M40) & TiAlN (M53).  
See pages C7-C13 and C21 for Holders.



## Chipmaker® Single End Inserts

**INCH**

Part Number	W	L	R	H
507-182	.250	.490	.010	1/4
507-183	.250	.490	.030	1/4
507-185	.312	.550	.010	11/32
507-186	.312	.550	.030	11/32

## Chipmaker® Single End Inserts

**METRIC**

Part Number	W mm	L mm	R mm	H mm
507-386	6	12.5	0.3	6.3
507-387	6	12.5	0.6	6.3
507-388	8	14	0.3	8.7
507-389	8	14	0.6	8.7

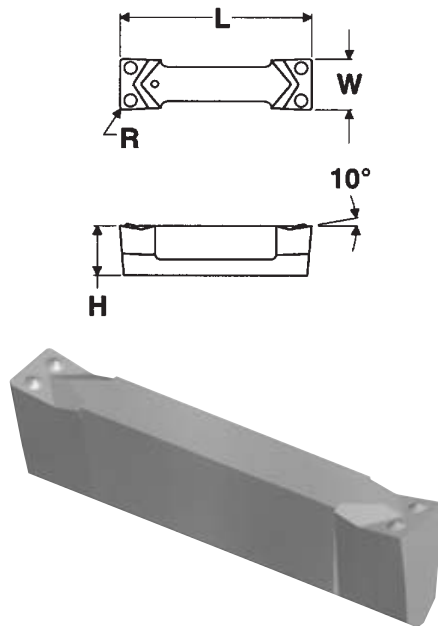
Chipmaker® Single End Inserts are available in TiN (M40), TiAlN (M93).  
See pages C14 and C15 for Holders.

# O.D. GROOVING

Chipmaker® Cermet Inserts

Ceramic Inserts

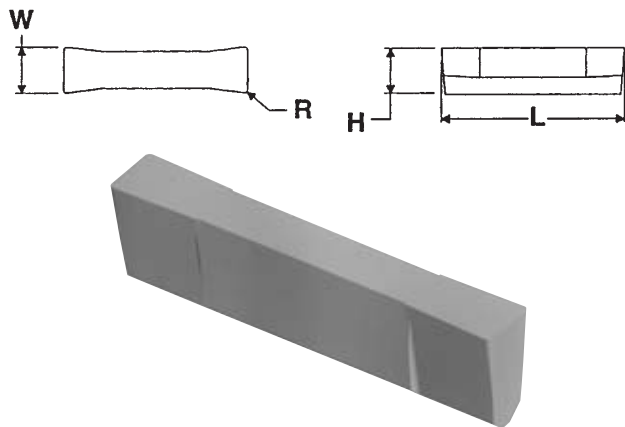
Cubic Boron Nitride (CBN) Inserts (O.D.)



Chipmaker® Cermet Inserts				INCH
Part Number	W	L	R	H
505-238	.126	7/8	.010	1/4
505-244	.126	7/8	.030	1/4
505-241	.156	7/8	.010	1/4
505-245	.156	7/8	.030	1/4
505-239	.188	1.0	.010	1/4
505-246	.188	1.0	.030	1/4
505-240	.250	1.0	.010	1/4
505-247	.250	1.0	.030	1/4

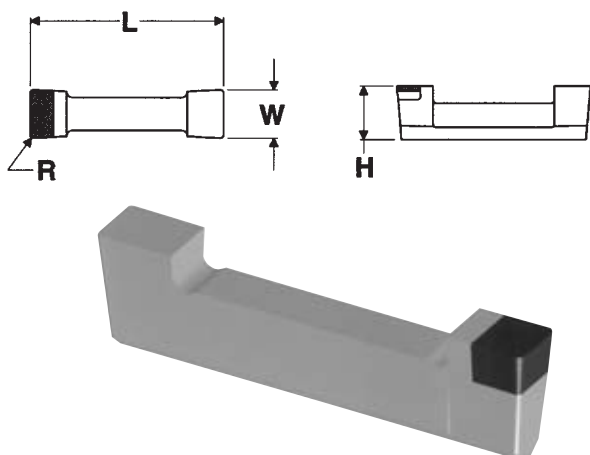
Chipmaker® Cermet Inserts				METRIC
Part Number	W mm	L mm	R mm	H mm
505-256	3	22.2	0.3	6

Chipmaker® Cermet Inserts are available in TiC+TiN (M74).  
See pages C7 and C11-C13 for Holders.



Ceramic Inserts				INCH
Part Number	W	L	R	H
505-110	.126	7/8	.010	1/4
505-116	.188	1.0	.010	1/4
505-119	.250	1.0	.010	1/4

Ceramic Inserts are available in TiC (M70).  
See pages C7 and C11-C13 for Holders.

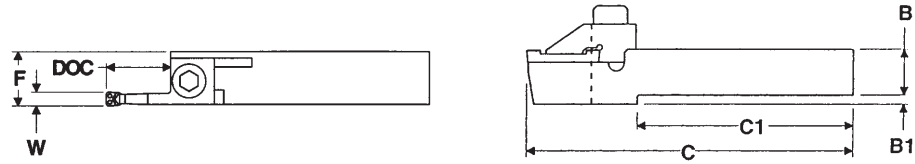


Cubic Boron Nitride (CBN) Inserts				INCH
Part Number	W	L	R	H
528-301	.126	7/8	.010	1/4
528-303	.188	1.0	.010	1/4
528-304	.250	1.0	.010	1/4

Cubic Boron Nitride Inserts are available in CBN-CI and CBN-HT.  
See pages C7-C13 and C21 for Holders.

# O.D. GROOVING

## TGT Toolholders



Right Hand Shown

TGT Toolholders												INCH
Left Hand	Clamp	Clamp for Cermet/Ceramic	W	DOC	B	B <sub>1</sub>	C	C <sub>1</sub>	F	Clamp for Cermet/Ceramic	Clamp	Right Hand
236-127	441-103	437-149	.126	.750	.625	.125	4.50	3.12	.75	437-147	441-101	236-125
236-128	441-104	437-150	.188	.875	.625	.125	4.50	3.12	.75	437-148	441-102	236-126
236-110	441-103	437-149	.126	.750	.750	—	5.00	—	.75	437-147	441-101	236-107
236-111	441-104	437-150	.188	.875	.750	—	5.00	—	.75	437-148	441-102	236-108
236-112	441-104	437-150	.250	.875	.750	—	5.00	—	.75	437-148	441-102	236-109
236-104	441-103	437-149	.126	.750	1.00	—	5.00	—	1.00	437-147	441-101	236-101
236-105	441-104	437-150	.188	.875	1.00	—	5.00	—	1.00	437-148	441-102	236-102
236-106	441-104	437-150	.250	.875	1.00	—	5.00	—	1.00	437-148	441-102	236-103

Note: Above toolholders are supplied with clamps.  
 Toolholders with clamp for ceramic insert should be ordered with suffix "C." Example: 236-125C.  
 See pages C2-C6 for inserts.

See Section A – MTC™ Products for additional OD Grooving tools.

Replacement Hardware	INCH
Clamp Screw	
619-168	

TGT Toolholders												METRIC
Left Hand	Clamp	Clamp for Cermet/Ceramic	W	DOC	B	B <sub>1</sub>	C	C <sub>1</sub>	F	Clamp for Cermet/Ceramic	Clamp	Right Hand
236-215	441-103	437-149	3	19	16	4	115	79	20	437-147	441-101	236-213
236-216	441-104	437-150	5	22	16	4	115	79	20	437-148	441-102	236-214
236-210	441-103	437-149	3	19	20	—	125	—	20	437-147	441-101	236-207
236-211	441-104	437-150	5	22	20	—	125	—	20	437-148	441-102	236-208
236-212	441-104	437-150	6	22	20	—	125	—	20	437-148	441-102	236-209
236-204	441-103	437-149	3	19	25	—	150	—	25	437-147	441-101	236-201
236-205	441-104	437-150	5	22	25	—	150	—	25	437-148	441-102	236-202
236-206	441-104	437-150	6	22	25	—	150	—	25	437-148	441-102	236-203

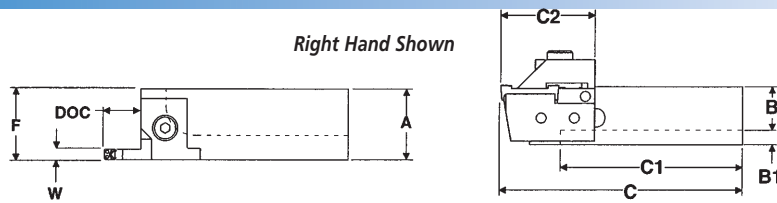
Note: Above toolholders are supplied with clamps.  
 Toolholders with clamp for ceramic insert should be ordered with suffix "C." Example: 236-125C.  
 See pages C2-C6 for inserts.

Replacement Hardware	METRIC
Clamp Screw	
619-168	

# O.D. GROOVING

Square Shank

5/16" and 1/2" Depth of Cut Toolholders



## Square Shank – 5/16" and 1/2" Depth of Cut Toolholders INCH

Left Hand	DOC	A	B	B <sub>1</sub>	C	C <sub>1</sub>	C <sub>2</sub>	F*	Right Hand
203-333	5/16	.750	.750	.250	4.00	2.97	1.032	1.00	203-331
203-334	5/16	.750	.750	.250	4.50	3.75	1.032	1.00	203-332
203-345	5/16	1.212	.750	.250	4.00	3.25	1.440	1.25	203-343
	1/2	1.212	.750	.250	4.18	3.25	1.625	1.25	
203-346	5/16	1.212	.750	.250	4.50	3.75	1.440	1.25	203-344
	1/2	1.212	.750	.250	4.68	3.75	1.625	1.25	
203-234	5/16	1.212	1.00	—	4.00	—	1.440	1.25	203-219
	1/2	1.212	1.00	—	4.18	—	1.625	1.25	
203-275	5/16	1.212	1.00	—	5.00	—	1.440	1.25	203-223
	1/2	1.212	1.00	—	5.18	—	1.625	1.25	
203-285	5/16	1.212	1.00	—	6.00	—	1.440	1.25	203-281
	1/2	1.212	1.00	—	6.18	—	1.625	1.25	
203-308	5/16	1.212	1.25	—	6.00	—	1.440	1.25	203-235
	1/2	1.212	1.25	—	6.18	—	1.625	1.25	
203-277	5/16	1.462	1.25	—	6.00	—	1.440	1.50	203-250
	1/2	1.462	1.25	—	6.18	—	1.625	1.50	

\*Add .113 when using 5/16" and 3/8" WOC inserts. See pages C2-C6 for inserts.

## Replacement Hardware INCH

Support Blade Screws	Clamp Screw for 203-331, -332, -333, -334	Clamp Screw	Stop Screw
619-102	619-121	619-111	619-102

## Components for 5/16" Depth of Cut INCH

W*	Left Hand			Right Hand			Support Blade
	Support Blade	Clamp	Clamp 203-333 & -334	Stop	Clamp 203-331 & -332	Clamp	
.126	308-123	407-118	407-182	601-101	407-180	407-101	308-106
.156	308-124	407-119	407-182	601-101	407-180	407-102	308-107
.188	308-125	407-120	407-183	601-102	407-181	407-103	308-108
.250	308-126	407-121	407-183	601-102	407-181	407-104	308-109
.312	308-127	407-122	—	601-103	—	407-105	308-110
.376	308-128	407-123	—	601-103	—	407-106	308-111

\*Note: Maximum recommended width of cut for 3/4" Shank Holder is 1/4".

## Components for 1/2" Depth of Cut INCH

W*	Left Hand			Right Hand			Support Blade
	Support Blade	Clamp	Clamp for Cermet/Ceramic	Stop	Clamp for Cermet/Ceramic	Clamp	
.126	308-130	407-124	437-129	601-104	437-123	407-107	308-113
.156	308-143	407-129	437-130	601-104	437-124	407-108	308-114
.188	308-131	407-125	437-131	601-105	437-125	407-109	308-115
.250	308-137	407-127	437-132	601-105	437-126	407-110	308-116
.312	308-145	407-130	—	601-106	—	407-111	308-117
.376	308-132	407-126	—	601-106	—	407-112	308-118

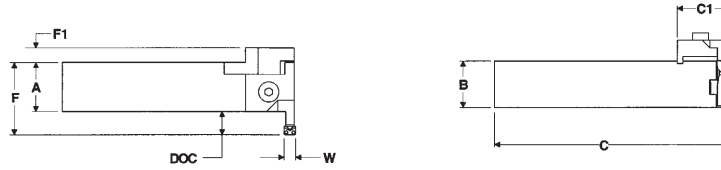
\*Note: Maximum recommended width of cut for 3/4" Shank Holder is 1/4".

See pages C2-C6 for inserts.

# O.D. GROOVING

Right Angle

5/16" and 1/2" Depth of Cut Toolholders



Right Hand Shown

## Right Angle – 5/16" and 1/2" Depth of Cut Toolholders INCH

Left Hand	DOC	A	B	C*	C <sub>1</sub>	F	F <sub>1</sub>	Right Hand
204-110	5/16	1.058	1.00	5.00	1.082	1.37	.317	204-101
	1/2	1.058	1.00	5.00	1.082	1.56	.317	
204-111	5/16	1.375	1.25	6.00	1.082	1.70	—	204-109
	1/2	1.375	1.25	6.00	1.082	1.88	—	

\*Add .113 when using 5/16" and 3/8" WOC inserts.  
See pages C2-C6 for inserts.

## Replacement Hardware INCH

Support Blade Screws	Clamp Screw	Stop Screw 204-101 & -110	Stop Screw 204-109 & -111	Wrench
619-103	619-111	619-102	619-103	608-101

See Section A – MTC™ Products for additional OD Grooving tools.

## Components for 5/16" Depth of Cut INCH

W*	Left Hand			Right Hand	
	Support Blade	Clamp	Stop	Clamp	Support Blade
.126	308-123	407-118	601-101	407-101	308-106
.156	308-124	407-119	601-101	407-102	308-107
.188	308-125	407-120	601-102	407-103	308-108
.250	308-126	407-121	601-102	407-104	308-109
.312	308-127	407-122	601-103	407-105	308-110
.376	308-128	407-123	601-103	407-106	308-111

\*Note: Maximum recommended width of cut for 3/4" Shank Holder is 1/4".

## Components for 1/2" Depth of Cut INCH

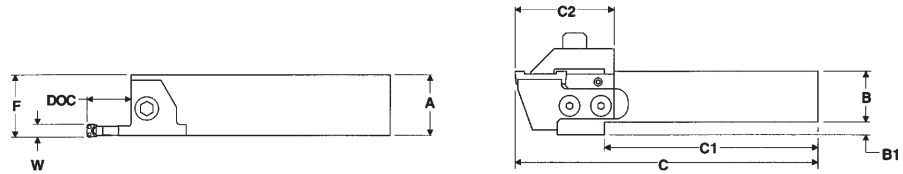
W*	Left Hand				Right Hand		
	Support Blade	Clamp	Clamp for Cermet/Ceramic	Stop	Clamp for Cermet/Ceramic	Clamp	Support Blade
.126	308-130	407-124	437-129	601-104	437-123	407-107	308-113
.156	308-143	407-129	437-130	601-104	437-124	407-108	308-114
.188	308-131	407-125	437-131	601-105	437-125	407-109	308-115
.250	308-137	407-127	437-132	601-105	437-126	407-110	308-116
.312	308-145	407-130	—	601-106	—	407-111	308-117
.376	308-132	407-126	—	601-106	—	407-112	308-118

\*Note: Maximum recommended width of cut for 3/4" Shank Holder is 1/4".  
See pages C2-C6 for inserts.

# O.D. GROOVING

Square Shank

5/8" or 13/16" Depth of Cut Toolholders



Right Hand Shown

## Square Shank – 5/8" or 13/16" Depth of Cut Toolholders INCH

Left Hand	DOC	A	B	B <sub>1</sub>	C	C <sub>1</sub>	C <sub>2</sub>	F	Right Hand
203-352	5/8	1.199	1.00	.250	5.81	4.25	1.750	1.250	203-287
	13/16	1.199	1.00	.250	6.00	4.25	1.937	1.250	
203-271	5/8	1.449	1.25	—	5.56	—	1.750	1.500	—
	13/16	1.449	1.25	—	5.75	—	1.937	1.500	—
—	5/8	1.199	1.25	—	6.31	—	1.750	1.250	203-245
—	13/16	1.199	1.25	—	6.50	—	1.937	1.250	
203-232	5/8	1.449	1.25	—	5.81	—	1.750	1.500	203-231
	13/16	1.449	1.25	—	6.00	—	1.937	1.500	
203-233	5/8	1.949	1.50	—	6.31	—	1.750	2.000	203-112
	13/16	1.949	1.50	—	6.50	—	1.937	2.000	

See pages C2-C6 for inserts.

## Components for 5/8" Depth of Cut INCH

W	Left Hand			Stop	Right Hand		
	Support Blade	Clamp	Clamp for Cermet/Ceramic		Clamp for Cermet/Ceramic	Clamp	Support Blade
.126	308-148	407-133	437-137	601-112	437-135	407-131	308-146
.156	308-149	407-134	437-138	601-112	437-136	407-132	308-147

## Components for 13/16" Depth of Cut INCH

W	Left Hand			Stop	Right Hand		
	Support Blade	Clamp	Clamp for Cermet/Ceramic		Clamp for Cermet/Ceramic	Clamp	Support Blade
.188	308-150	407-135	437-143	601-107	437-139	407-113	308-119
.250	308-151	407-144	437-144	601-107	437-140	407-143	308-120
.312	308-152	407-137	—	601-108	—	407-115	308-121
.376	308-153	407-138	—	601-108	—	407-116	308-122

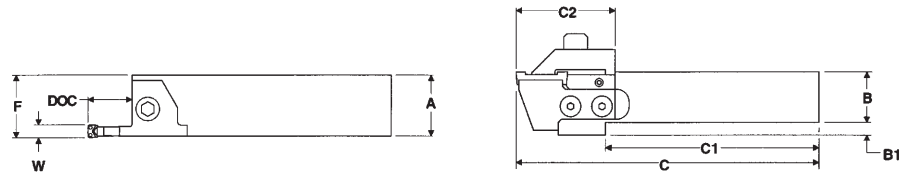
## Replacement Hardware INCH

Support Blade Screw	Clamp Screw	Stop Screw
606-160	619-110	619-101

# O.D. GROOVING

Square Shank

14.3mm and 19mm Depth of Cut Toolholders



Right Hand Shown

## Square Shank – 14.3mm and 19mm Depth of Cut Toolholders METRIC

Left Hand	DOC	A	B	B <sub>1</sub>	C	C <sub>1</sub>	C <sub>2</sub>	F	Right Hand
203-354	14.3	32	25	7	160	123	44.4	32.8	203-353
	19	32	25	7	165	123	49.2	32.8	
203-356	14.3	32	32	—	180	—	44.4	32.8	203-355
	19	32	32	—	185	—	49.2	32.8	

Toolholders supplied without support blade, clamp and stop.  
See pages C2-C6 for inserts.

## Components for 14.3mm Depth of Cut METRIC

W mm	Support Blade	Left Hand Clamp	Clamp for Cermet/Ceramic	Stop	Right Hand Clamp for Cermet/Ceramic	Clamp	Support Blade
3	308-148	407-133	437-137	601-112	437-135	407-131	308-146
4	308-149	407-134	437-138	601-112	437-136	407-132	308-147

See Section A – MTC™ Products for additional OD Grooving tools.

## Components for 19mm Depth of Cut METRIC

W mm	Support Blade	Left Hand Clamp	Clamp for Cermet/Ceramic	Stop	Right Hand Clamp for Cermet/Ceramic	Clamp	Support Blade
5	308-150	407-135	437-143	601-107	437-139	407-113	308-119
6	308-151	407-144	437-144	601-107	437-140	407-143	308-120
8	308-152	407-137	—	601-108	—	407-115	308-121
9.55	308-153	407-138	—	601-108	—	407-116	308-122

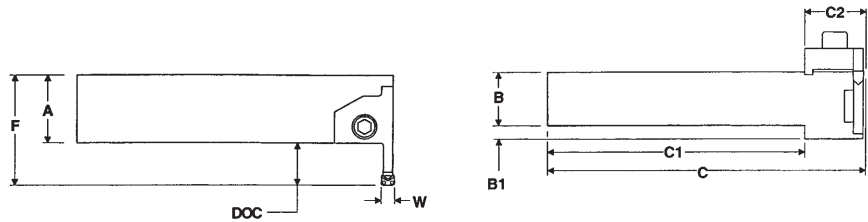
## Replacement Hardware METRIC

Support Blade Screw	Clamp Screw	Stop Screw
606-222	619-161	619-162

# O.D. GROOVING

Right Angle

5/8" and 13/16" Depth of Cut Toolholders



Right Hand Shown

## Right Angle – 5/8" and 13/16" Depth of Cut Toolholders

**INCH**

Left Hand	DOC	A	B	B <sub>1</sub>	C	C <sub>1</sub>	C <sub>2</sub>	F	Right Hand
204-270	5/8	1.312	1.00	.250	6.00	4.85	1.140	1.938	204-269
	13/16	1.312	1.00	.250	6.00	4.85	1.140	2.125	
204-215	5/8	1.312	1.25	—	6.00	—	1.140	1.938	204-214
	13/16	1.312	1.25	—	6.00	—	1.140	2.125	
204-259	5/8	1.500	1.50	—	6.00	—	1.140	2.125	204-258
	13/16	1.500	1.50	—	6.00	—	1.140	2.312	

See pages C2-C6 for inserts.

## Components for 5/8" Depth of Cut

**INCH**

W	Left Hand			Stop	Right Hand		Support Blade
	Support Blade	Clamp	Clamp for Cermet/Ceramic		Clamp for Cermet/Ceramic	Clamp	
.126	308-148	407-133	437-137	601-112	437-135	407-131	308-146
.156	308-149	407-134	437-138	601-112	437-136	407-132	308-147

## Components for 13/16" Depth of Cut

**INCH**

W	Left Hand			Stop	Right Hand		Support Blade
	Support Blade	Clamp	Clamp for Cermet/Ceramic		Clamp for Cermet/Ceramic	Clamp	
.188	308-150	407-135	437-143	601-107	437-139	407-113	308-119
.250	308-151	407-144	437-144	601-107	437-140	407-143	308-120
.312	308-152	407-137	—	601-108	—	407-115	308-121
.376	308-153	407-138	—	601-108	—	407-116	308-122

## Replacement Hardware

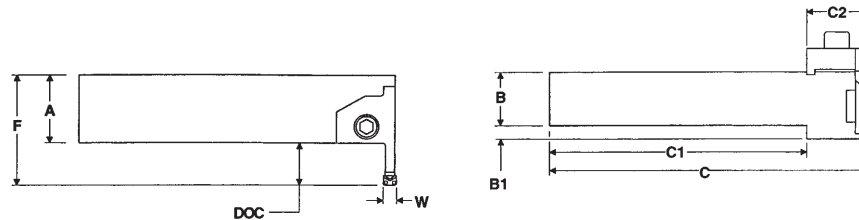
**INCH**

Support Blade Screw	Clamp Screw	Stop Screw
606-160	619-110	619-101

# O.D. GROOVING

Right Angle

14.3mm and 19mm Depth of Cut Toolholders



Right Hand Shown

## Right Angle – 14.3mm and 19mm Depth of Cut Toolholders

**METRIC**

Left Hand	DOC	A	B	B <sub>1</sub>	C	C <sub>1</sub>	C <sub>2</sub>	F	Right Hand
204-272	16	35	25	7	166	137	29	51	204-271
	20	35	25	7	166	137	29	55	
204-274	16	35	32	—	166	—	29	51	204-273
	20	35	32	—	166	—	29	55	

Toolholders supplied without support blade, clamp and stop.  
See pages C2-C6 for inserts.

## Components for 14.3mm Depth of Cut

**METRIC**

W mm	Left Hand Support Blade	Left Hand Clamp	Clamp for Cermet/Ceramic	Stop	Right Hand Clamp for Cermet/Ceramic	Right Hand Clamp	Support Blade
3	308-148	407-133	437-137	601-112	437-135	407-131	308-146
4	308-149	407-134	437-138	601-112	437-136	407-132	308-147

See Section A –  
MTC™ Products  
for additional  
OD Grooving tools.

## Components for 19mm Depth of Cut

**METRIC**

W mm	Left Hand Support Blade	Left Hand Clamp	Clamp for Cermet/Ceramic	Stop	Right Hand Clamp for Cermet/Ceramic	Right Hand Clamp	Support Blade
5	308-150	407-135	437-143	601-107	437-139	407-113	308-119
6	308-151	407-144	437-144	601-107	437-140	407-143	308-120
8	308-152	407-137		601-108		407-115	308-121
9.55	308-153	407-138		601-108		407-116	308-122

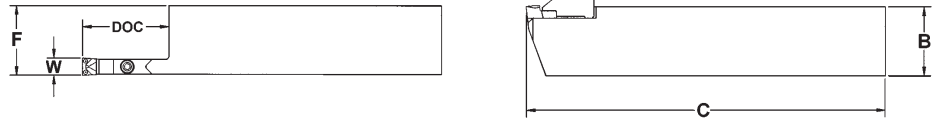
## Replacement Hardware

**METRIC**

Support Blade Screw	Clamp Screw	Stop Screw
606-222	619-161	619-162

# O.D. GROOVING

## TGT Toolholders Extended Capacity



Right Hand Shown

### TGT Toolholders Extended Capacity INCH

Left Hand	Clamp	W	DOC	B	C	F	Clamp	Right Hand
237-103	442-101	.250	1.50	1.00	6.50	1.00	442-101	237-101
237-104	442-102	.312	1.50	1.00	6.50	1.00	442-102	237-102
237-107	442-101	.250	1.50	1.25	6.50	1.25	442-101	237-105
237-108	442-102	.312	1.50	1.25	6.50	1.25	442-102	237-106

Note: Above toolholders are supplied with clamps.  
See page C5 for inserts.

### Replacement Hardware INCH

TGT Extended Capacity	Clamp Screw
442-101	619-170
442-102	619-170

### TGT Toolholders Extended Capacity METRIC

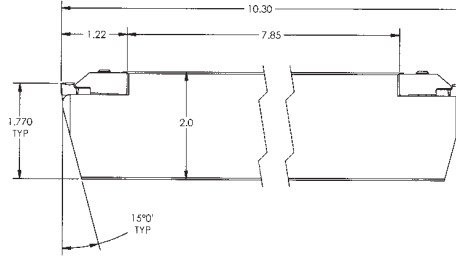
Left Hand	Clamp	W	DOC	B	C	F	Clamp	Right Hand
237-203	442-101	6	38	25	165	25	442-101	237-201
237-204	442-102	8	38	25	165	25	442-102	237-202
237-207	442-101	6	38	32	180	32	442-101	237-205
237-208	442-102	8	38	32	180	32	442-102	237-206

Note: Above toolholders are supplied with clamps.  
See page C5 for inserts.

### Replacement Hardware METRIC

TGT Extended Capacity	Clamp Screw
442-101	619-170
442-102	619-170

# DAG BLADES



Dimensions are shown in drawing.

Right Hand Shown

DAG Blades				INCH
Width of Cut	Blade No.	Clamp No.	Insert No.	Radius
.250	341-101	442-101	507-182	.010
.250	341-101	442-101	507-183	.030
.312	341-102	442-102	507-185	.010
.312	341-102	442-102	507-186	.030

Available in TiN (M40) & TiAlN (M93).

Replacement Hardware		INCH
DAG Blades	Clamp Screw	
341-101	619-170	
341-102	619-170	

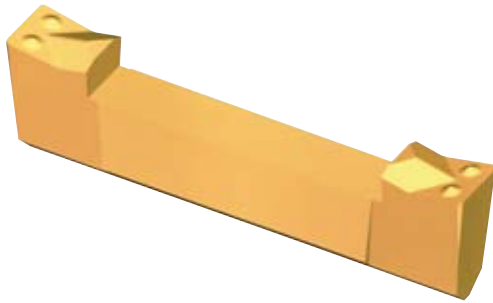
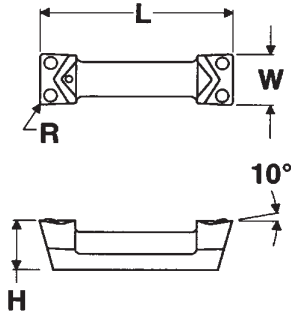
DAG Blades				METRIC
Width of Cut	Blade No.	Clamp No.	Insert No.	Radius
6	341-101	442-101	507-386	0.3
6	341-101	442-101	507-387	0.6
8	341-102	442-102	507-388	0.3
8	341-102	442-102	507-389	0.6

Available in TiN (M40) & TiAlN (M93).

Replacement Hardware		METRIC
DAG Blades	Clamp Screw	
341-101	619-170	
341-102	619-170	

# I.D. GROOVING

## Chipmaker® Inserts (I.D.)



### Chipmaker® Inserts (I.D.)

**INCH**

I.D. Grooving Toolholders	Part Number	W	L	R	H
204-265	507-172**	.126	7/16	.010	1/4
204-262, 204-263	508-250	.126	7/8	.010	1/4
	508-276*	.125	7/8	FNR	1/4
204-264, 204-217	508-251	.188	1.0	.010	1/4
	508-252	.250	1.0	.010	1/4
204-218	508-238	.126	7/8	.010	1/4
	508-244	.126	7/8	.030	1/4
204-256	508-239	.188	1.0	.010	1/4
	508-246	.188	1.0	.030	1/4
204-256	508-240	.250	1.0	.010	1/4
	508-247	.250	1.0	.030	1/4

### Chipmaker® Inserts (I.D.)

**METRIC**

I.D. Grooving Toolholders	Part Number	W mm	L mm	R mm	H mm
226-250	507-200**	3	11.1	0.3	6.35
226-261, 226-252,	508-264	3	22.2	0.3	6.35
	508-265	5	25.4	0.3	6.35
226-262	508-256	3	22.2	0.3	6.35
	508-257	3	22.2	0.6	6.35
226-265	508-260	5	25.4	0.3	6.35
226-255	508-261	5	25.4	0.6	6.35
	508-262	6	25.4	0.3	6.35
	508-263	6	25.4	0.6	6.35

Chipmaker Inserts are available in Uncoated (C2 & C5), TiN+TiC+TiN (GC), TiN (M40) & TiN (M50) & TiAlN (93).

\*Available only in TiCN (M45).

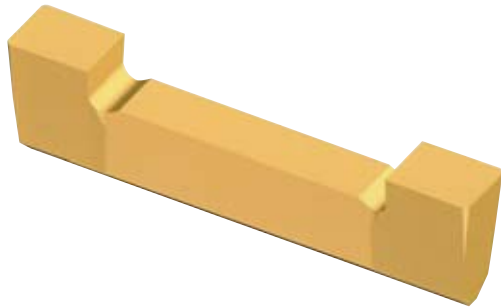
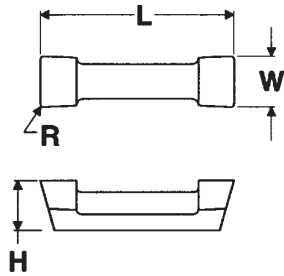
\*\*Single end chipmaker.

FNR = Full Nose Radius.

# I.D. GROOVING

Central Neutral Inserts (I.D.)

Central Positive Inserts (I.D.)



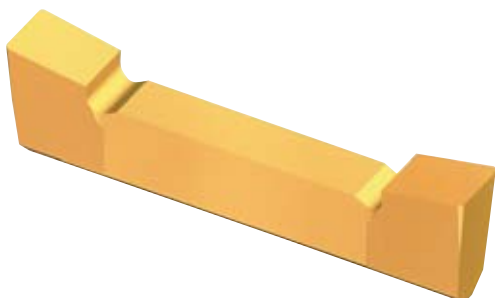
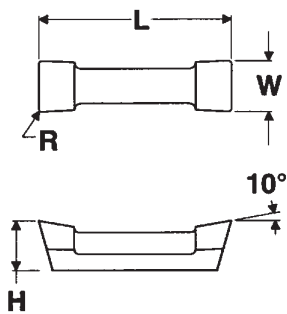
## Central Neutral Inserts (I.D.)

**INCH**

I.D. Grooving Toolholders	Part Number	W	L	R	H
	508-301	.126	7/8	.010	1/4
	508-307	.126	7/8	.030	1/4
	508-313	.126	7/8	FNR	1/4
204-218	508-303	.188	1.0	.010	1/4
204-256	508-309	.188	1.0	.030	1/4
	508-315	.188	1.0	FNR	1/4
	508-304	.250	1.0	.010	1/4
	508-310	.250	1.0	.030	1/4
	508-316	.250	1.0	FNR	1/4

Central Neutral Inserts are available in Uncoated (C2 & C5), TiN+TiC+TiN (GC), AL<sub>2</sub>O<sub>3</sub> (M24), TiN (M40) & TiN (M50).

FNR = Full Nose Radius.



## Central Positive Inserts (I.D.)

**INCH**

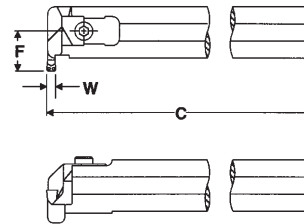
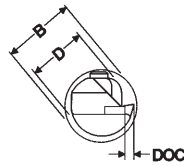
I.D. Grooving Toolholders	Part Number	W	L	R	H
204-261,204-262	508-337	.126	7/8	.010	1/4
204-263,204-264	508-338	.188	1.0	.010	1/4
204-217	508-339	.250	1.0	.010	1/4
	508-319	.126	7/8	.010	1/4
	508-325	.126	7/8	.030	1/4
	508-331	.126	7/8	FNR	1/4
	508-321	.188	1.0	.010	1/4
204-218	508-327	.188	1.0	.030	1/4
204-256	508-333	.188	1.0	FNR	1/4
	508-322	.250	1.0	.010	1/4
	508-328	.250	1.0	.030	1/4
	508-334	.250	1.0	FNR	1/4

Central Positive Inserts are available in Uncoated (C2 & C5), TiN+TiC+TiN (GC), TiN (M40) & TiN (M50).

FNR = Full Nose Radius.

# I.D. GROOVING

Replaceable End Toolholders  
For 1" Dia. Holes and Larger



Left Hand Shown

## Replaceable End Toolholders

**INCH**

Counter Clockwise Left Hand	Min. Enter Diameter			Bar Diameter		Clockwise Right Hand
	DOC	B	C	D	F	
204-265	5/32	1.00	7.56	.750	.562	204-265

*Note: These bars use a single end insert.  
See page C16 for inserts.*

## Components

**INCH**

W	Counter Clockwise Left Hand		Clockwise Right Hand	
	Support Blade	Clamp	Clamp	Support Blade
.126	308-202	407-189	407-196	308-216

## Replacement Hardware

**INCH**

Support Blade Screws	Clamp Screw
606-197	619-122

## Replaceable End Toolholders

**METRIC**

Counter Clockwise Left Hand	Min. Enter Diameter			Bar Diameter		Clockwise Right Hand
	DOC	B	C	D	F	
226-250	4	25	250	20	14.3	226-250

*Note: These toolholders use a single end insert. Toolholders supplied without support blade and clamp.  
See page C16 for inserts.*

## Components

**METRIC**

W mm	Counter Clockwise Left Hand		Clockwise Right Hand	
	Support Blade	Clamp	Clamp	Support Blade
3	308-202	407-189	407-196	308-216

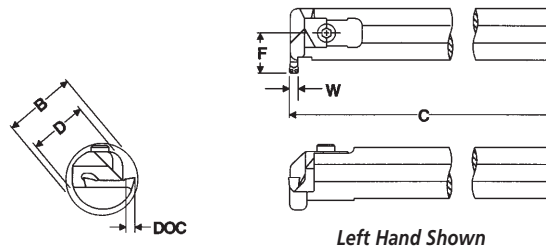
## Replacement Hardware

**METRIC**

Support Blade Screws	Clamp Screw
606-223	619-151

# I.D. GROOVING

Replaceable End Toolholders  
For 1-1/4" Dia. Holes and Larger



Replaceable End Toolholders						INCH
Counter Clockwise Left Hand	Min. Enter Diameter			Bar Diameter		Clockwise Right Hand
	DOC	B	C	D	F	
204-262	5/32	1-1/4	12.0	1.00	.688	204-262
204-263	7/32	1-5/8	14.0	1.25	.875	204-264

See pages C16 and C17 for inserts.

Components					INCH
W	Counter Clockwise Left Hand		Clockwise Right Hand		
	Support Blade	Clamp	Clamp	Support Blade	
.126	308-193	407-177	407-186	308-199	
.188	308-194	407-178	407-187	308-200	

Replacement Hardware			INCH
Support Blade Screws	Clamp Screw	Clamp Spring	
606-192	619-120	700-101	

Replaceable End Toolholders						METRIC
Counter Clockwise Left Hand	Min. Enter Diameter			Bar Diameter		Clockwise Right Hand
	DOC	B	C	D	F	
226-261	4	32	250	25	17.5	226-261
226-262	5	41	300	32	22.2	226-252

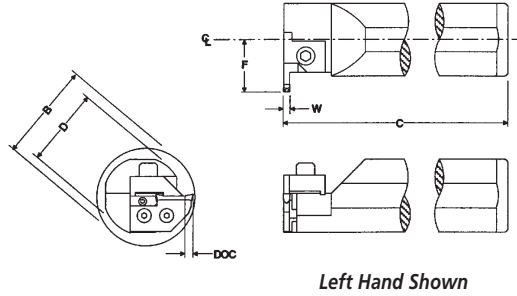
Toolholders supplied without support blade and clamp. See pages C16 and C17 for inserts.

Components					METRIC
W mm	Counter Clockwise Left Hand		Clockwise Right Hand		
	Support Blade	Clamp	Clamp	Support Blade	
3	308-193	407-177	407-186	308-199	
5	308-194	407-178	407-187	308-200	

Replacement Hardware			METRIC
Support Blade Screws	Clamp Screw	Clamp Spring	
606-225	619-152	700-101	

# I.D. GROOVING

Replaceable End Toolholders  
For 2-1/2" Dia. Holes and Larger



## Replaceable End Toolholders

**INCH**

Counter Clockwise Left Hand	Min. Enter Diameter		Bar Diameter			Clockwise Right Hand
	DOC	B	C	D	F	
<b>204-217</b>	1/4	2-1/2	12.0	2.00	1.312	<b>204-261</b>

See pages C16 and C17 for inserts.

## Components

**INCH / METRIC**

W	Counter Clockwise Left Hand			Clockwise Right Hand	
	Support Blade	Clamp	Stop	Clamp	Support Blade
.126" and 3mm	308-156	407-124	601-117	407-107	308-180
.188" and 5mm	308-155	407-125	601-116	407-109	308-181
.250" and 6mm	308-154	407-127	601-116	407-110	308-182

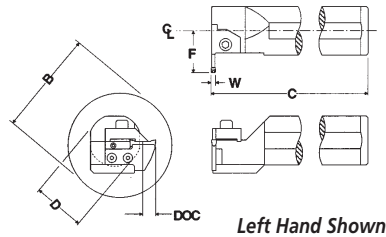
## Replacement Hardware

**INCH**

Support Blade Screws	Clamp Screw	Stop Screw
606-174	619-121	619-145

# I.D. GROOVING

Replaceable End Toolholders  
For 4" Dia. Holes and Larger



Replaceable End Toolholders						INCH
Counter Clockwise Left Hand	DOC	Min. Enter Diameter B	C	Bar Diameter D	F	Clockwise Right Hand
204-218	5/16*	4.00	12.0	2.00	1.375	204-256
	1/2	4.00	12.0	2.00	1.562	

\*.126" width has 5/16" DOC. See pages C2 -C6 for inserts.

Components						INCH
W	Counter Clockwise Left Hand		Stop	Clockwise Right Hand		
	Support Blade	Clamp		Clamp	Support Blade	
.126	308-157	407-133	601-112	407-131	308-188	
.188	308-159	407-135	601-107	407-113	308-183	
.250	308-160	407-144	601-107	407-143	308-184	

Replacement Hardware			INCH
Support Blade Screws	Clamp Screw	Stop Screw	
606-160	619-110	619-101	

Replaceable End Toolholders						METRIC
Counter Clockwise Left Hand	DOC	Min. Enter Diameter B	C	Bar Diameter D	F	Clockwise Right Hand
226-265	8*	100	350	50	34,7	226-255
	12,5	100	350	50	38,9	

\* 3mm WOC has 8mm DOC. Toolholders supplied without support blade and clamp. See pages C2-C6 for inserts.

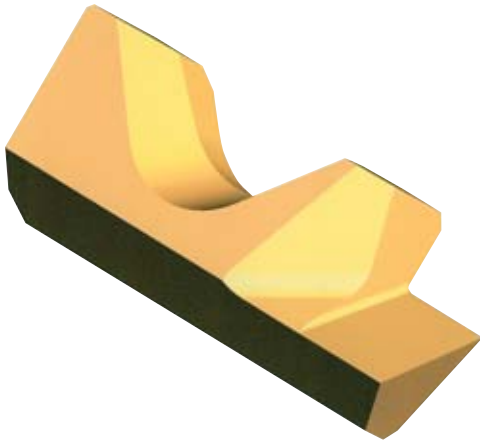
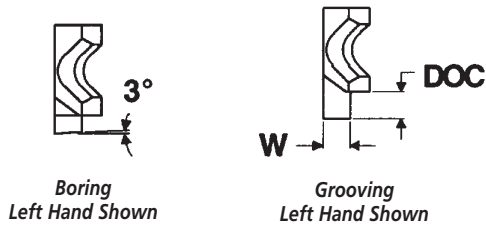
Components						METRIC
W mm	Counter Clockwise Left Hand		Stop	Clockwise Right Hand		
	Support Blade	Clamp		Clamp	Support Blade	
3	308-157	407-133	601-112	407-131	308-188	
5	308-159	407-135	601-107	407-113	308-183	
6	308-160	407-144	601-107	407-143	308-184	

\* 3mm WOC has 8mm DOC.

Replacement Hardware			METRIC
Support Blade Screws	Clamp Screw	Stop Screw	
606-222	619-161	619-162	

# O.D. GROOVING

## S-LOC™ Insert (I.D. Boring and Grooving )



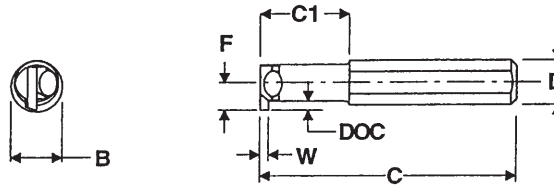
S-LOC™ Inserts				INCH
Left Hand Insert	W	DOC	Description	Right Hand Insert
510-102	—	—	Boring	510-105
510-113	.040/.042	.062	Grooving	510-124
510-114	.046/.049	.062	Grooving	510-125
510-115	.052/.055	.062	Grooving	510-126
510-116	.056/.058	.062	Grooving	510-127
510-117	.063/.065	.094	Grooving	510-128
510-118	.070/.072	.094	Grooving	510-129
510-119	.074/.079	.094	Grooving	510-130
510-120	.086/.089	.094	Grooving	510-131
510-101	.093/.095	.094	Grooving	510-104
510-121	.097/.100	.094	Grooving	510-132
510-122	.103/.105	.094	Grooving	510-133
510-123	.105/.108	.094	Grooving	510-134

S-LOC™ Inserts are available in Uncoated (C2 & C5), TiN+TiC+TiN (GC) & TiN (M40).

See page C23 for Holders.

# I.D. GROOVING

## S-LOC™ Toolholders



Left Hand Shown

S-LOC™ Toolholders								INCH
Counter Clockwise Left Hand	DOC (Max)	Min. Enter Diameter B	C	C <sub>1</sub>	Bar Diameter D	F*	Clockwise Right Hand	
218-119	.094	.560	6.0	1.0	.500	.312	218-119	
218-121	.094	.560	6.0	1.5	.625	.312	218-121	
218-122	.094	.780	6.0	0	.625	.419	218-123	
218-124	.094	.940	8.0	0	.750	.510	218-124	

\*For inserts with .062" DOC subtract .032". See page C22 for inserts.

### Replacement Hardware

INCH

#### Locking Clamp Screws

606-190

S-LOC™ Toolholders								METRIC
Counter Clockwise Left Hand	DOC (Max)*	Min. Enter Diameter B	C	C <sub>1</sub>	Bar Diameter D	F	Clockwise Right Hand	
218-134	2.4	14.2	150	25	12	8	218-134	
218-142	2.4	14.2	150	38	16	8	218-142	
218-143	2.4	24.0	200	—	20	13	218-143	

\*Refer to insert table for specific DOC. See page C22 for inserts.

### Replacement Hardware

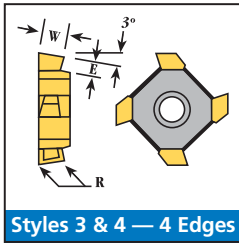
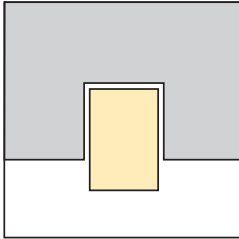
METRIC

#### Locking Clamp Screws

606-193

# O.D./I.D. GROOVIDEX® INSERTS

## External/Internal Grooving



Styles 3 & 4 — 4 Edges

Right Hand Shown

### External/Internal Grooving Inserts

**INCH**

Left Hand MTC No.	Width	IC	Dimensions			Style	Right Hand MTC No.
			W	E	R		
571-122	0.031	7/16	0.031	0.050	0.005	3	571-131
571-194	0.062	7/16	0.062	0.125	0.008	3	571-138
571-128	0.094	7/16	0.094	0.125	0.008	3	571-141
571-130	0.125	7/16	0.125	0.125	0.008	3	571-143
571-147	0.062	9/16	0.062	0.125	0.008	4	571-170
571-153	0.094	9/16	0.094	0.180	0.010	4	571-177
571-159	0.125	9/16	0.125	0.180	0.010	4	571-183
571-163	0.156	9/16	0.156	0.180	0.010	4	571-185
571-164	0.188	9/16	0.188	0.190	0.020	4	571-188

### External/Internal Grooving Inserts

**METRIC**

Left Hand MTC No.	Width mm	IC mm	Dimensions			Style	Right Hand MTC No.
			W mm	E mm	R mm		
571-285	1.0	11.1	1.0	1.3	0.15	3	571-284
571-287	1.5	11.1	1.5	3.2	0.2	3	571-286
571-289	2.0	11.1	2.0	3.2	0.2	3	571-288
571-291	3.0	11.1	3.0	3.2	0.2	3	571-290
571-293	2.0	14.3	2.0	3.2	0.2	4	571-292
571-295	3.0	14.3	3.0	4.6	0.2	4	571-294
571-297	4.0	14.3	4.0	4.6	0.25	4	571-296

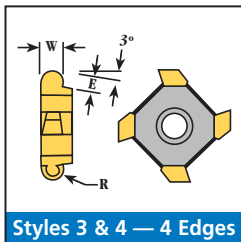
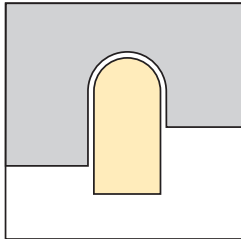
External/Internal Grooving Inserts are available in Grades TiCN (M45), TiN (M40), TiN (M50) and TiAlN (M93). Call for availability.  
See pages C26-C28 for Holders.

See Section A – MTC™ Products for additional OD Grooving tools.

# O.D./I.D. GROOVIDEX® INSERTS

External/Internal Grooving

Full Nose Radius



Styles 3 & 4 — 4 Edges

Right Hand Shown

## External/Internal Grooving (Full Nose Radius) Inserts **INCH**

Left Hand MTC No.	Width	IC	Dimensions			Style	Right Hand MTC No.
			W	E	R		
571-123	0.062	7/16	0.062	0.125	.031	3	571-132
571-124	0.094	7/16	0.094	0.125	.047	3	571-135
571-126	0.125	7/16	0.125	0.125	.062	3	571-139
571-146	0.094	9/16	0.094	0.180	.047	4	571-169
571-148	0.125	9/16	0.125	0.180	.062	4	571-171

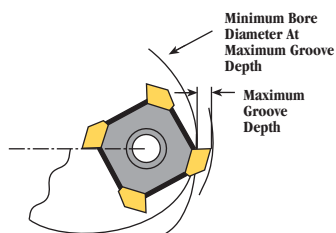
External/Internal Grooving Inserts are available in Grades TiCN (M45), TiN (M40), TiN (M50) and TiAlN (M93). Call for availability.

See pages C26-C28 for Holders.

## Depth of Cut Limits with Standard Inserts

### INTERNAL GROOVING

Internal Groove Depth vs. Insert Interference

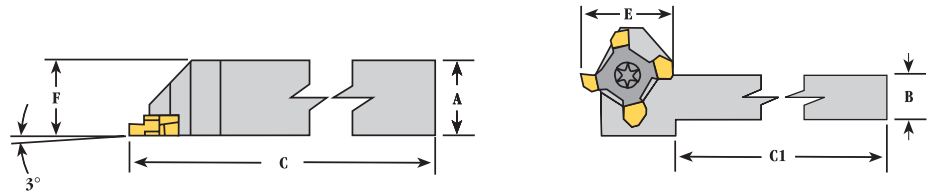


NOTE: Internal grooving depth limits are a function of insert clearance versus bore diameters.

Left Hand	Max. Groove Depth	Min. Bore Diameter	Right Hand
571-122	0.050	0.950	571-131
571-194	0.125	1.050	571-138
571-128	0.125	1.050	571-141
571-130	0.125	1.050	571-143
571-147	0.125	1.450	571-170
571-153	0.180	1.750	571-177
571-159	0.180	1.750	571-183
571-163	0.180	1.750	571-185
571-164	0.190	1.750	571-188

# GROOVIDEX® EXTERNAL GROOVING

External Toolholders  
Fixed Pocket



Right Hand Shown

## External Grooving Fixed Pocket

**INCH**

Left Hand MTC No.	A	B	C	C <sub>1</sub>	E	F	Insert Style	Right Hand MTC No.
245-202	0.37	3/8	4	3.23	3/4	3/8	3	245-201
245-204	0.49	1/2	5	—	3/4	1/2	3	245-203
245-206	0.62	5/8	5	—	3/4	5/8	3	245-205
245-208	0.74	3/4	5	—	3/4	3/4	3	245-207
245-210	0.99	1	6	—	3/4	1	3	245-209
245-214	0.62	5/8	5	—	1	5/8	4	245-213
245-216	0.74	3/4	5	—	1	3/4	4	245-215
245-218	0.99	1	6	—	1	1	4	245-217

## External Grooving Fixed Pocket

**METRIC**

Left Hand MTC No.	A mm	B mm	C mm	C <sub>1</sub> mm	E mm	F mm	Insert Style	Right Hand MTC No.
245-302	9.8	10	100	80.4	19	10	3	245-301
245-304	11.7	12	125	—	19	12	3	245-303
245-306	15.7	16	125	—	19	16	3	245-305
245-308	19.7	20	125	—	19	20	3	245-307
245-310	24.7	25	150	—	19	25	3	245-309
245-316	19.7	20	125	—	25.4	20	4	245-315
245-318	24.7	25	150	—	25.4	25	4	245-317

**NOTE:** Holder Supplied with screw, less insert.  
See pages C24 and C25 for inserts.

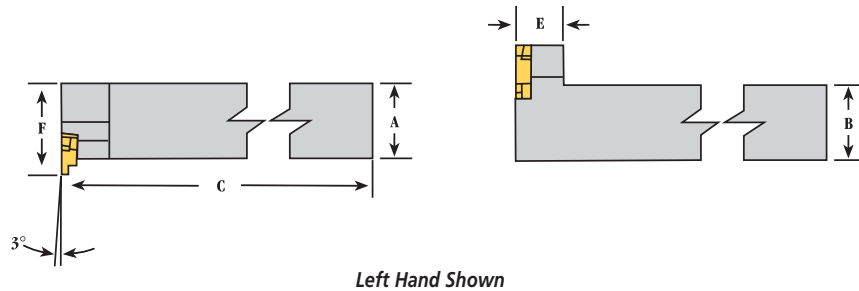
## Replacement Hardware

**INCH / METRIC**

Insert Screw	Wrench	Insert Style
644-107	644-110	3
644-108	644-111	4

# GROOVIDEX® EXTERNAL GROOVING

## Angle Head Style



### External Type Angle Head Style

**INCH**

Left Hand MTC No.	A	B	C	E	F	Insert Style	Right Hand MTC No.
245-222	0.63	5/8	5	1/2	0.78	3	245-221
245-224	0.75	3/4	5	1/2	0.91	3	245-223
245-226	1.00	1	6	1/2	1.16	3	245-225
245-230	0.82	5/8	5	5/8	1.03	4	245-229
245-232	0.82	3/4	5	5/8	1.03	4	245-231
245-234	1.01	1	6	5/8	1.22	4	245-233

### External Type Angle Head Style

**METRIC**

Left Hand MTC No.	A mm	B mm	C mm	E mm	F mm	Insert Style	Right Hand MTC No.
245-324	20	20	125	12.7	24	3	245-323
245-326	25	25	150	12.7	29	3	245-325
245-332	20.7	20	125	15.9	26	4	245-331
245-334	25	25	150	15.9	30.3	4	245-333

**NOTE:** Holder Supplied with screw, less insert.  
See pages C24 and C25 for inserts.

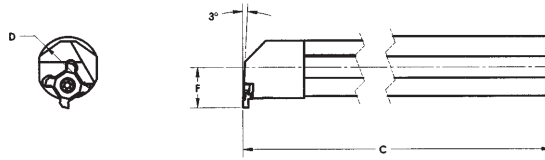
### Replacement Hardware

**INCH / METRIC**

Insert Screw	Wrench	Insert Style
644-107	644-110	3
644-108	644-111	4

# INTERNAL BARS

## Internal Grooving Fixed Pocket with Clamp



Left Hand Shown

Internal Grooving Fixed Pocket with Clamp						INCH
Left Hand MTC No.	D	C	F	Min. Bore	Style	Right Hand MTC No.
244-222	0.750	7	0.510	0.950	3	244-221
244-224	1.000	8	0.650	1.150	3	244-223
244-228	1.000	8	0.850	1.450	4	244-227

**NOTE:** Coolant port standard feature. Bar furnished complete with hardware, less insert. See pages C24 and C25 for inserts and depth of cut.

### Replacement Hardware

INCH

Insert Screw	Wrench
644-107	644-110