



BRILLIANT CORNERING PRODUCES BEAUTIFUL CURVES!



Tip Style:
Corner Round

Tip Repeatability:
± .001

Available Adaptions:
T05, T06, T08, T10, T12

Radius Options:
Inch: .031", .062", .093",
.125", .187"
Metric: 1.0, 1.6, 2.0, 2.5, 3.0,
4.0, 5.0, 6.0mm

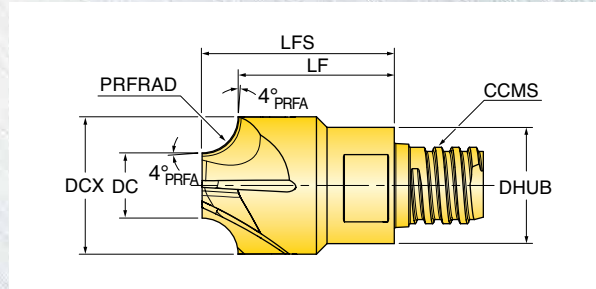
**PRODUCT
ANNOUNCEMENT
UPDATE
2018**

General Features:

- Ideal for finish work of aerospace materials....eliminate hand work!
- Tips repeat within +/- .001. No need to touch off when indexing the tip off the shank.
- 4 degree flares off the radius form promote smooth blends....no mismatch lines!
- 200% feed rate acceleration with 4 flutes.

SERIES 47R



SOLID CARBIDE CORNER ROUNDING TIP - 4 FLUTE



Cutter Number	DC Cutting Diameter	DCX Cutting Diameter Max.	PRFRAD Profile Radius	ZEFF Effective Flutes	LF Functional Length	LFS Functional Length Secondary	CCMS Connection Code	DHUB Hub Diameter
47R-3605T6RA03	0.298	0.362	.031	4	0.468	0.50	T06	.369
47R-3505T6RA06	0.234	0.357	.062	4	0.438	0.50	T06	.369
47R-4806T8RA09	0.295	0.480	.093	4	0.547	0.64	T08	.485
47R-6008TRRA12	0.351	0.601	.125	4	0.685	0.81	T10	.605
47R-7110TRRA18	0.343	0.715	.187	4	0.813	1.00	T10	.605

When assembling, be sure tip is seated firmly on shank with no gap. No lubricant on adaption. Wrenches sold separately.

HARDWARE

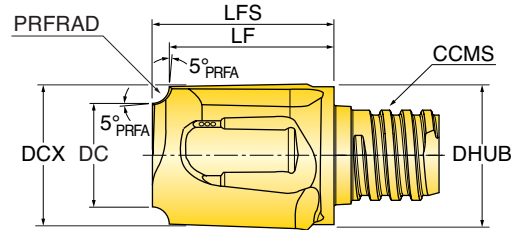
	 Wrench	 Optional Torque Driver	CCMS Connection Code	Torque Value
47R-3605T6RA03	WS-0029	DT-90-08	T06	90in/lbs
47R-3505T6RA06	WS-0029	DT-90-08	T06	90in/lbs
47R-4806T8RA09	WS-0030	DT-130-10	T08	130in/lbs
47R-6008TRRA12	WS-0044	DT-250-13	T10	250in/lbs
47R-7110TRRA18	WS-0044	DT-250-13	T10	250in/lbs

SERIES 45R

SOLID CARBIDE CORNER ROUNDING TIP - 2 FLUTE



Corner Rounding



Cutter Number	DC Cutting Diameter	DCX Cutting Diameter Max.	PRFRAD Profile Radius	LF Functional Length	LFS Functional Length Secondary	ZEFF Effective Flutes	CCMS Connection Code	DHUB Hub Diameter
45R08007TQRA10	6.00 mm	8.00 mm	1.00 mm	10.50 mm	9.40 mm	2	Chip Surfer T05	7.60 mm
45R10009T6RA16	6.80 mm	10.00 mm	1.60 mm	12.50 mm	10.90 mm	2	Chip Surfer T06	9.50 mm
45R10009T6RA20	6.00 mm	10.00 mm	2.00 mm	12.50 mm	10.50 mm	2	Chip Surfer T06	9.60 mm
45R10009T6RA25	5.00 mm	10.00 mm	2.50 mm	12.50 mm	10.00 mm	2	Chip Surfer T06	9.50 mm
45R12012T8RA30	6.50 mm	12.70 mm	3.00 mm	15.60 mm	12.50 mm	2	Chip Surfer T08	12.20 mm
45R12012T8RA40	4.70 mm	12.70 mm	4.00 mm	15.60 mm	11.60 mm	2	Chip Surfer T08	12.20 mm
45R16015TRRA50	6.00 mm	16.00 mm	5.00 mm	19.10 mm	14.10 mm	2	Chip Surfer T10	15.15 mm
45R20007TSRA60	8.00 mm	20.00 mm	6.00 mm	17.40 mm	11.40 mm	2	Chip Surfer T12	18.30 mm

NOTE: When assembling, be sure tip is seated firmly on shank with no gap. Tightening Torque: T05=60in/lbs, T06=90in/lbs, T08=130in/lbs, T10=250in/lbs, T12=250in/lbs. No lubricant on adaption. Wrenches sold seperately.

HARDWARE

	Wrench	Optional Torque Driver	CCMS Connection Code	Torque Value
45R08007TQRA10	WS-0043	DT-60-06	T05	60in/lbs
45R10009T6RA16	WS-0029	DT-90-08	T06	90in/lbs
45R10009T6RA20	WS-0029	DT-90-08	T06	90in/lbs
45R10009T6RA25	WS-0029	DT-90-08	T06	90in/lbs
45R12012T8RA30	WS-0030	DT-130-10	T08	130in/lbs
45R12012T8RA40	WS-0030	DT-130-10	T08	130in/lbs
45R16015TRRA50	WS-0044	DT-250-13	T10	250in/lbs
45R20007TSRA60	WS-0044	DT-250-13	T12	250in/lbs

TECHNICAL INFORMATION

Material		Brinnell Hardness	SFM	Feed per Tooth	Coolant
Cast Iron	Gray	150-250	450-700	.002-.005	NO
	Nodular	150-250	400-600	.002-.004	
Steel	Low Carbon 1018, 8620	150-250	350-600	.002-.004	NO
	High Carbon F-6180	250-400			
	Alloyed Steel 4140, 4340	150-300			
	Tool Steel A-6, D-1, D2	Up to 300	300-500		
Stainless Steel	300 Series, 304, 316	-	250-500	.002-.004	May not be needed at high speeds
	400 Series, 15-5 PH	Up to 320			YES
	13-8 PH	-			YES
Nickel Alloys	Inconel, Hastelloy, Waspalloy	-	75-125	.002-.004	YES
Titanium	6AL-4V	-	125-200	.002-.004	YES

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.