

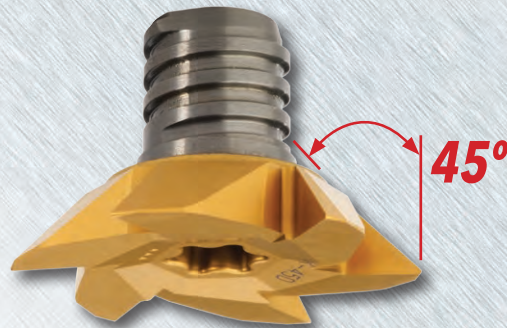
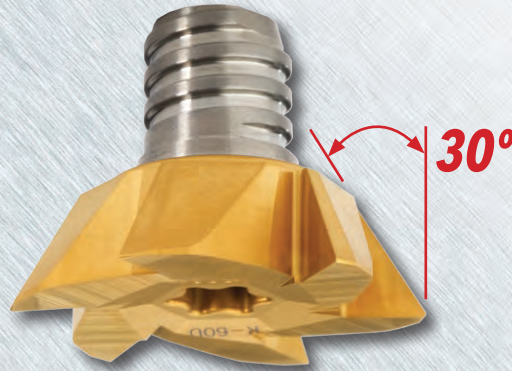
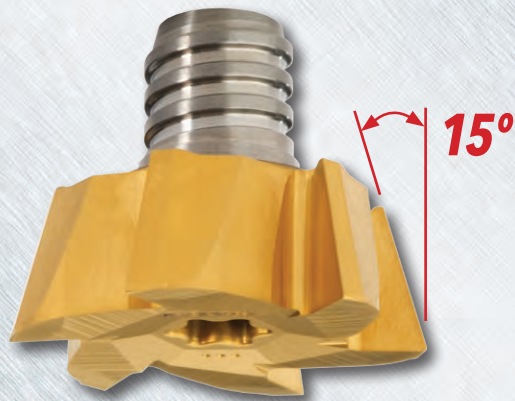


**Tip Style:**  
Dovetail / Undercut

**Tip Repeatability:**  
± .001

**Available Adaptions:**  
T10

**Angle Options:**  
15°  
30°  
45°



**NEW  
PRODUCT  
ANNOUNCEMENT  
2017**

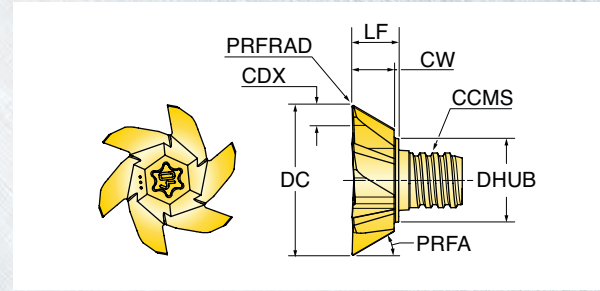
## ***Dovetail with Positive-rake-angular Advantage and Six-flute Productivity Performance!***

### **General Features:**

- Ideal for aerospace fixturing and pocket undercutting
- 200% feed rate benefit when compared to indexable versions
- At least 3x tool life increase when compared to indexable versions
- Solid carbide tips index on the shank in seconds and repeat within +/- .001"

# CHIP SURFER™ SERIES 18V

## SOLID CARBIDE DOVETAIL TIP



Cutter Number	DC Cutting Diameter	PRFA Profile Angle	PRFRAD Profile Radius	CW Cutting Width	CDX Cutting Depth Max	LF Functional Length	ZEFF Effective Flutes	CCMS Connection Code	DHUB Hub Diameter
18V02750TRRA45	1.090	45	.008	0.197	0.16	0.23	6	T10	0.600
18V02778TRRA60	1.090	30	.008	0.307	0.16	0.34	6	T10	0.600
18V02710TRRA75	1.090	15	.008	0.398	0.09	0.46	6	T10	0.600

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 - T15=350in/lbs  
 No lubricant on adaption. Wrenches sold separately.

# CHIP SURFER™ HARDWARE



	Driver	Torque Bit (optional)
18V02710TRRA75	DS-T40T	DS-T40B
18V02750TRRA45	DS-T40T	DS-T40B
18V02778TRRA60	DS-T40T	DS-T40B

# CHIP SURFER™ TECHNICAL INFORMATION

Material		Brinnell Hardness	SFM	Feed per Insert	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			
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.