

**Ideal for Live Tooling and Swiss!**



**Diameters:**  
.750" - 2.00"

**Cutter Series:**  
1TJ1C

**Insert Series:**  
ENHU05 (5mm I.C.)

**Materials:**  
Cast Iron, Steel, Stainless Steel,  
Hardened Steel, High-Temp Alloys

**Depth of Cut:**  
.18"

**Big Head and Small Adaption...Easiest Loading Micro Insert on the Market.**

- *Double-Dovetail-Pocket clamps insert in pocket while affixing the screw. Easy loading!*
- *Double-Dovetail-Pocket promotes stable insert mounting. Low stress on screw!*
- *Straight-Shank cutter design for spring collet systems*
- *Modular design with Solid-ER-Shank promotes blend of quick-change and rigidity.*

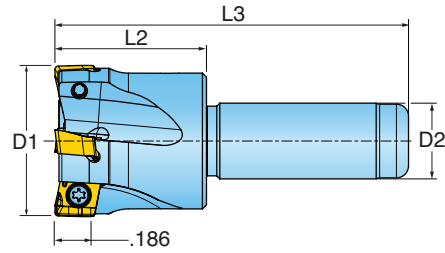


**NEW  
PRODUCT  
ANNOUNCEMENT  
2016**



# DIPOSOTETRA™ SERIES 1TJ1C (5MM)

90° END MILL WITH 2 INDEXES (SHANK FOR LIVE TOOLING & SWISS)



Cutter Number	D1 Nominal Diameter	L2 Extension Length	L3 Overall Length	D2 Shank Size/Style	Number of Inserts	Ramp Angle
1TJ1C-0700777R01	0.750	0.75	1.75	.375" Cylind.	4	3.3
1TJ1C-1000777R01	1.000	0.75	1.75	.375" Cylind.	5	2.2
1TJ1C-15007S4R01	1.500	0.75	1.75	.500" Cylind.	7	1.3
1TJ1C-20007S6R01	2.000	0.75	1.75	.625" Cylind.	7	.9

ENHU050302R	ENHU050304R	ENHU050304R-PH
ENHU050308R	ENHU050308R-PH	

Part Number	Application	Grades	IN2504	IN2505	IN2510	IN2530	IN6515	IN7035
ENHU050302R	Multi-Purpose - 0.008" R							
ENHU050304R	Multi-Purpose - 0.015" R							
ENHU050304R-PH	SS/Hi-Temp/Ti - 0.015" R							
ENHU050308R	Multi-Purpose - 0.031" R							
ENHU050308R-PH	SS/Hi-Temp/Ti - 0.031" R							

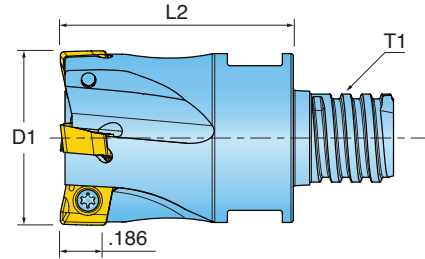
HARDWARE				
	SM20-043-00	DS-TP06S-NEU	DTN005S	DS-TP06TB

● = P ● = M ● = K ● = N ● = S ○ = H



# DIPOSOTETRA™ SERIES 1TJ1C (CHIP-SURFER STYLE) (5MM)

90° END MILL WITH 2 INDEXES (CHIP-SURFER STYLE)



Cutter Number	T1 Thread Size	D1 Nominal Diameter	Number of Inserts	L2 Extension Length	Ramp Angle
1TJ1C-07007T8R01	T08	0.750	4	0.75	3.3
1TJ1C-10007T8R01	T08	1.000	5	0.75	2.2

ENHU050302R	ENHU050304R	ENHU050304R-PH
ENHU050308R	ENHU050308R-PH	

Part Number	Application	Grades	Material Grades						
			IN2504	IN2505	IN2510	IN2530	IN6515	IN7035	
ENHU050302R	Multi-Purpose - 0.008" R								
ENHU050304R	Multi-Purpose - 0.015" R								
ENHU050304R-PH	SS/Hi-Temp/Ti - 0.015" R								
ENHU050308R	Multi-Purpose - 0.031" R								
ENHU050308R-PH	SS/Hi-Temp/Ti - 0.031" R								

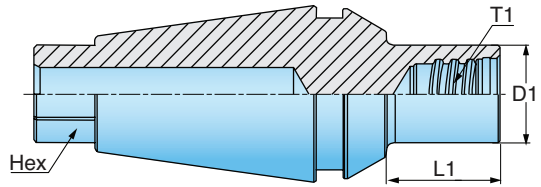
Hardware					
	Insert Screw	Driver	Thin Wrench	Torque Driver Handle (Optional)	Torque Driver Blade (Optional)
1TJ1C-07007T8R01	SM20-043-00	DS-TP06S-NEU	WS-0030	DTN005S	DS-TP06TB
1TJ1C-10007T8R01	SM20-043-00	DS-TP06S-NEU	WS-0059	DTN005S	DS-TP06TB

● = P ● = M ● = K ● = N ● = S ○ = H



**CHIP SURFER™ SERIES ER\*SA**

SOLID ER SHANK (SIMULTANEOUS FIT "T" STYLE ADAPTION)

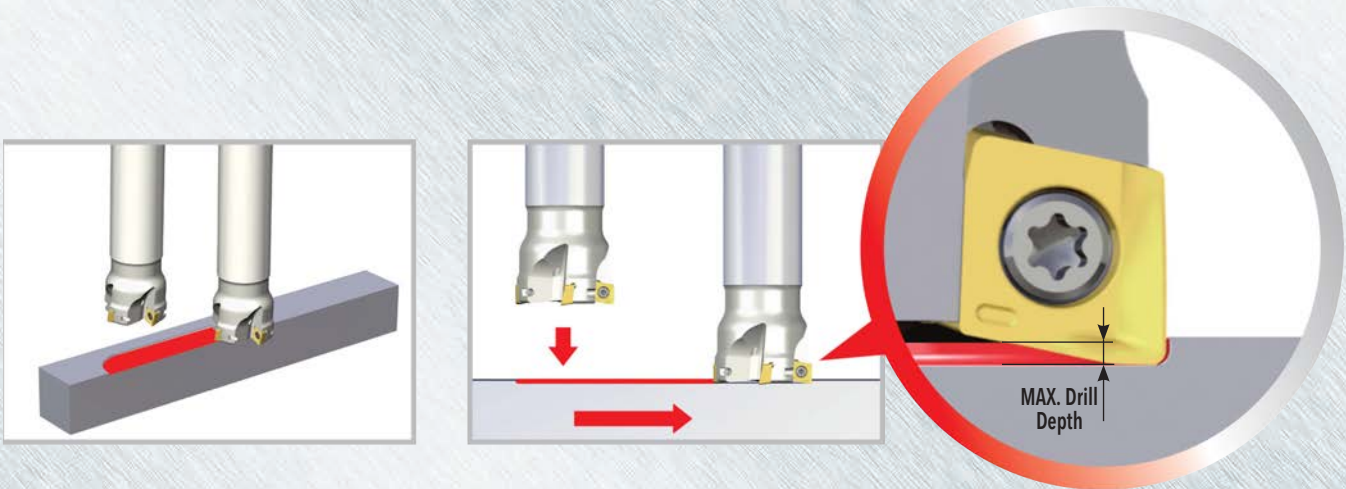


Part Number	ER Size	T1 Thread Size	L1 Length	D1 Diameter	Hex
ER16T08SA-02	ER16	T08	0.157	0.472	.31
ER16T08SA-06	ER16	T08	0.512	0.472	.31

When assembling, be sure carbide tip is seated firmly on shank with no gap.  
 Note: DO NOT apply lubricant to the thread connection.

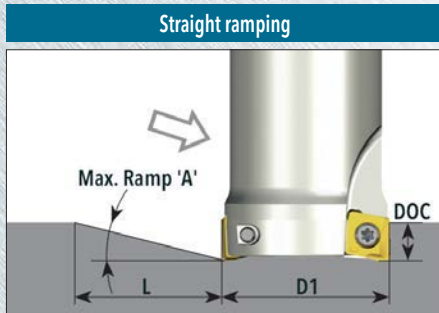


DiPos TETRA - Series 1TJ1C, TJ1C					IN7035	IN2504	IN2505	IN2510	IN2530	IN6515	Coolant
Material	Brinnell Hardness	SFM	Feed per Insert								
Cast Iron	Gray	150 - 250	300 - 1000	.003 - .007				1		2	No
	Nodular		300 - 600					2		1	
Steel	Low Carbon 1018, 8620	100 - 250	400 - 1000	.003 - .007							No
	High Carbon F-6180	250 - 400	350 - 500				2		1		
	Alloyed Steel 4140, 4340	150 - 300	300 - 700								
	Tool Steel A-6, D-1, D-2	Up to 300									
Stainless Steel	300 Series, 304, 316	-	300 - 550	.002 - .005	1	3		2			May not be required at high speeds
	400 Series 15-5 PH	Up to 320	350 - 600								Yes
	13-8 PH	-	200 - 400								
Nickel Alloys	Inconel, Hastelloy, Waspalloy	-	75-120	.002 - .005	1	3		2			Yes
Titanium	6AL-4V	-	100 - 150	.002 - .005	1	3		2			Yes
Hardened Steel	All	-	165 - 360	.002 - .005		1	2				Yes

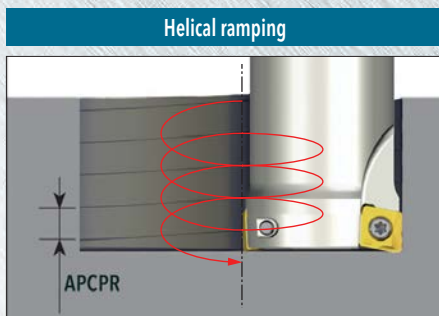


Cutter Dia.	MAX. Drill Depth
0.50	0.027
0.62	0.027
0.75	0.027
1.00	0.027
1.50	0.027
2.00	0.027





Cutter Diameter	A Ramping Angle	L	DOC
0.50	6.9	1.48	0.18
0.62	4.4	2.34	0.18
0.75	3.3	3.12	0.18
1.00	2.2	4.68	0.18
1.50	1.3	7.93	0.18
2.00	0.9	11.45	0.18



Cutter Dia. (D1) Using R.031 Insert	MIN. Diameter Milled Hole	MIN. Advance Per Cutter Path Rev. (APCPR)	MAX. Diameter Milled Hole	MAX. Advance Per Cutter Path Rev. (APCPR)
0.50	0.61	0.041	1.00	0.180
0.62	0.86	0.057	1.25	0.150
0.75	1.11	0.065	1.50	0.135
1.00	1.60	0.072	2.00	0.120
1.50	2.60	0.078	3.00	0.180
2.00	3.60	0.078	4.00	0.098



- Step 1: Screw tip into shank until finger tight (Figure 1a). Note a .010" gap (Figure 1b).
- Step 2: Use wrench to torque approximately 1/4 turn, creating a simultaneous fit (Figure 2).
- Step 3: Use .001" shim stock to check the simultaneous fit at the intersection of the tip and the shank.  
The shim should not be able to enter the intersection (Figure 3a).  
If it does, tighten further with the wrench until there is no gap (Figure 3b).

Note: Pre-set torque wrenches (series DT- . . .) can be purchased.

Figure 1a. Finger tight

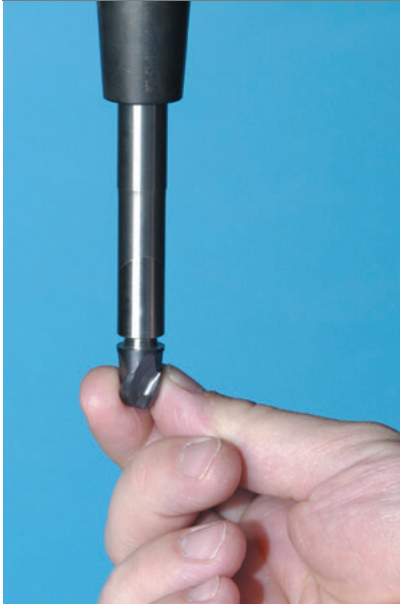


Figure 1b. .010" gap



Figure 2. 1/4 turn



Figure 3a. Shim should NOT enter intersection



Figure 3b. Proper fit



Series DT- . . . Optional Torque Wrench







**WRONG WAY**



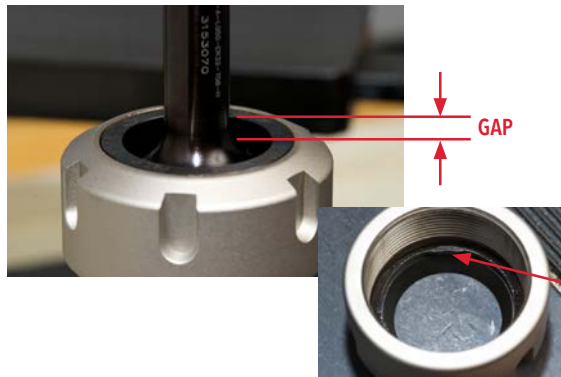
Remove nut from ER holder



Place ER shank in holder



Screw the nut on the holder



The nut will BIND up on the retention tabs prematurely - leaving a gap. Extra force may break the nut.



**RIGHT WAY**



Place the nut on the ER shank



Assemble the nut with the shank by mating the Retension Tabs with the ER Groove



Place the nut/shank assembly into the holder

