

ROUGH BALL FOR TRIPLE FEED RATES!



Cutter Style:
2TW7K

Insert Styles:
DCM
NCEU...R
NCEU...R-P

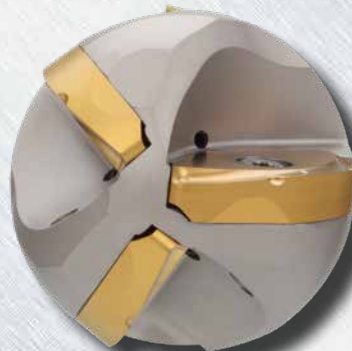
Grades:
IN2505
IN2530
IN6530

Applications:
Die & Mold
Aerospace
General

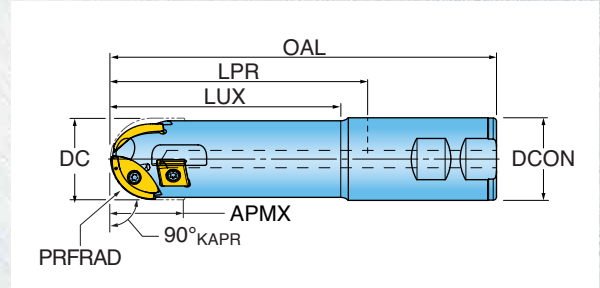
**PRODUCT
ANNOUNCEMENT
UPDATE
2019**

Features and Benefits

- 3 Flute Design Enables Increased Feed Rates
- Unique Double-Sided Insert with 2 Cutting Edges
- Highly Stable Cutting Performance with Exceptionally Strong Cutting Edges
- Coolant Through Provides Excellent Chip Evacuation

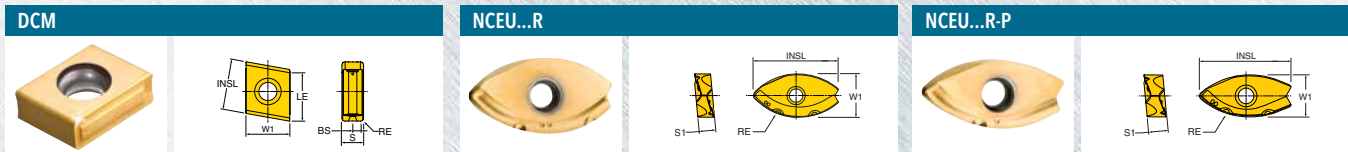


BALL NOSE ENDMILL, 3 FLUTES





Part Number	DC Cutting Dia.	APMX Depth of Cut Max.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	PRFRAD Profile Radius	DCON Shank Dia.
2TW7K-1203781R01	1.250	1.50	3.59	3.75	6.00	3	0.625	Weldon 1.250"
2TW7K-1205281R01	1.250	1.50	5.09	5.25	7.50	3	0.625	Weldon 1.250"
2TW7K-1504386R01	1.500	1.70	4.17	4.34	7.00	3	0.750	Weldon 1.500"
2TW7K-1506386R01	1.500	1.70	6.17	6.34	9.00	3	0.750	Weldon 1.500"
2TW7K-2004782R01	2.000	3.34	4.58	4.75	8.00	3	1.000	Weldon 2.000"
2TW7K-2007582R01	2.000	3.34	7.58	7.75	11.00	3	1.000	Weldon 2.000"

PROTRIO INSERTS
PROFILE



Part Number	Application	RE Corner Radius	INSL Length	W1 Width	LE Cutting Edge Length	S/S1 Thickness	NOI Number of Inserts	IH Insert Hand	Grade
DCM323R01	Multi-Purpose	0.031	0.500	0.43 mm	0.508	0.21 mm	4	Right	IN2505 • IN2530 • IN6530
DCM324R01	Multi-Purpose	0.031	0.640	0.630	0.472	0.252	4	Right	IN2505 • IN2530 • IN6530
NCEU320500R	Center Cutting	0.625	0.906	0.471	-	0.205	-	Right	IN2505 • IN2530
NCEU320500R-P	Side Ball Station	0.625	0.827	0.389	-	0.205	-	Right	IN2505 • IN2530
NCEU380600R	Center Cutting	0.750	1.080	0.551	-	0.236	-	Right	IN2505 • IN2530 • IN6530
NCEU380600R-P	Side Ball Station	0.750	1.022	0.473	-	0.236	-	Right	IN2505 • IN2530 • IN6530
NCEU500700R	Center Cutting	1.000	1.433	0.763	-	0.274	-	Right	IN2505 • IN2530 • IN6530
NCEU500700R-P	Side Ball Station	1.000	1.295	0.622	-	0.274	-	Right	IN2505 • IN2530 • IN6530

Cutter Diameter	Part Number	Center Ball Station	Side Ball Station	Side Station
1.250	2TW7K-1203781R01	NCEU320500R (1)	NCEU320500R-P (2)	DCM323R01 (2)
1.250	2TW7K-1205281R01	NCEU320500R (1)	NCEU320500R-P (2)	DCM323R01 (2)
1.500	2TW7K-1504386R01	NCEU380600R (1)	NCEU380600R-P (2)	DCM323R01 (2)
1.500	2TW7K-1506386R01	NCEU380600R (1)	NCEU380600R-P (2)	DCM323R01 (2)
2.000	2TW7K-2004782R01	NCEU500700R (1)	NCEU500700R-P (2)	DCM324R01 (4)
2.000	2TW7K-2007582R01	NCEU500700R (1)	NCEU500700R-P (2)	DCM324R01 (4)

Part Number	 Screw	Torque Specification	 Driver
2TW7K-1203781R01	SM40-093-20	Torque 30-35 in. lbs.	DS-T15T
2TW7K-1205281R01	SM40-093-20	Torque 30-35 in. lbs.	DS-T15T
2TW7K-1504386R01	SM40-120-00	Torque 30-35 in. lbs.	DS-T15T
2TW7K-1506386R01	SM40-120-00	Torque 30-35 in. lbs.	DS-T15T
2TW7K-2004782R01	SM50-113-20	Torque 40-45 in. lbs.	DS-T20T
2TW7K-2007582R01	SM50-113-20	Torque 40-45 in. lbs.	DS-T20T

PRO^oTRIO **TECHNICAL INFORMATION**
PROFILE

Pro-Trio - Series 2TW7K					Grades			Coolant
Material	Brinnell Hardness	SFM	Feed per Insert	IN2505	IN2530	IN6530		
Cast Iron	Gray	-	785-1250	.004-.020	1	2	3	No
	Nodular		590-940					
Steel	Low Carbon 1018, 8620	85-175	650-1150	.004-.020	1	2	3	No
	High Carbon F-6180	175-225	590-1050	.004-.016				
	Alloyed Steel 4140	275-325	390-820	.002-.014				
	Tool Steel P20 - H13	200-250	330-660	.006-.016				
Stainless Steel	300 Series, 304, 316	-	590-918	.003-.014	3	1	2	No
	400 Series 15-5 PH, 17-4 PH	-	650-985	.002-.018				Yes
	13-8 PH	-	200-400	.003-.015				
Nickel Alloys	Inconel 600, 706, 718, 903, Hastelloy	-	65-265	.002-.008	3	1	2	Yes
Titanium	6AL-4V	-	130-360	.002-.012	3	1	2	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.

