



PROOTRIO™

MILLING PRODUCTS

Cutter Style:
2TW7K

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

Grades:
IN2505
IN2530
IN6537

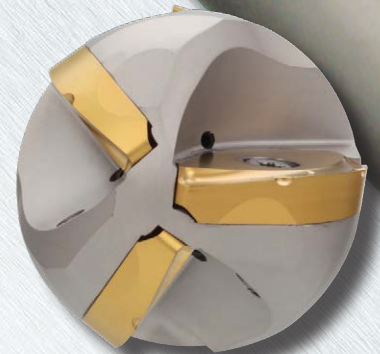
Applications:
Die & Mold
Aerospace
General



Rough Ball For Triple Feed Rates

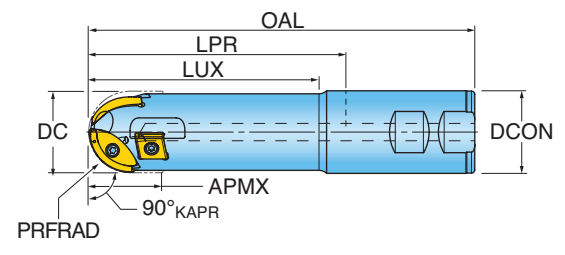
Features & Benefits:

- 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

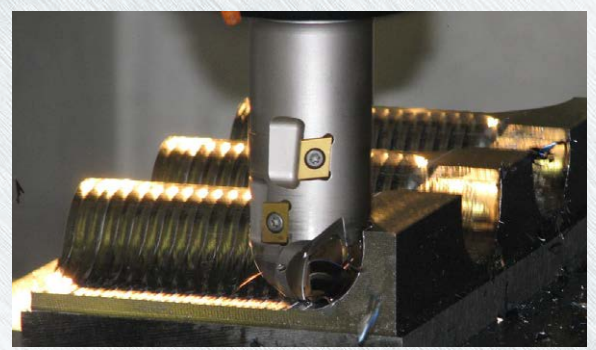
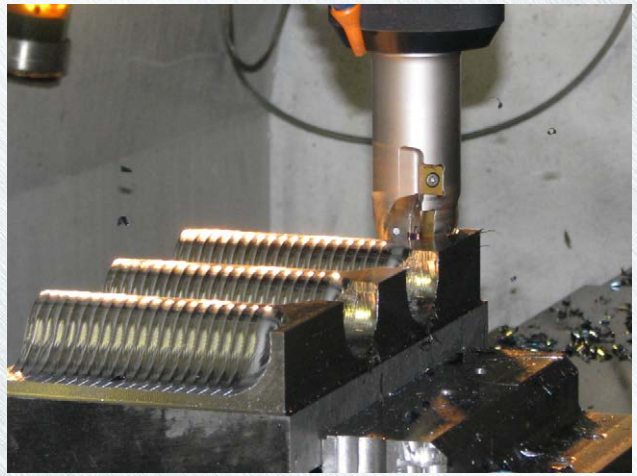


PROOTRIO™ SERIES 2TW7K

BALL NOSE ENDMILL, 3 FLUTES

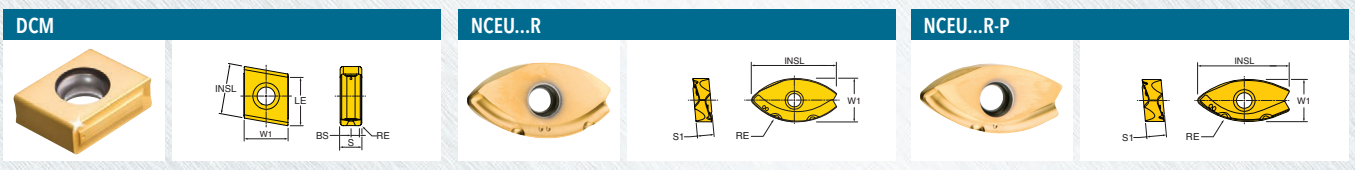


Part Number	DC Cutting Dia.	APMX Depth of Cut Max.	LUX Usable Length Max.	LPR Protruding Length	OAL Overall Length	ZEFF Eff. Teeth	PRFRAD Profile Radius	DCON Shank Dia.
2TW7K-1203781R01	1.250	1.50	3.59	3.75	6.00	3	0.625	Weldon 1.250"
2TW7K-1205281R01	1.250	1.50	5.09	5.25	7.50	3	0.625	Weldon 1.250"
2TW7K-1504386R01	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"





PROOTRIO™ INSERTS





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	IN2505	IN2530	IN6537
DCM323R01	Multi-Purpose	0.031	0.500	0.43 mm	0.508	0.21 mm	4	Right	•	•	•	
DCM324R01	Multi-Purpose	0.031	0.640	0.630	0.472	0.252	4	Right	•	•		
NCEU320500R	Center Cutting	0.625	0.906	0.471	-	0.205	-	Right	•	•	•	
NCEU320500R-P	Side Ball Station	0.625	0.827	0.389	-	0.205	-	Right	•	•	•	
NCEU380600R	Center Cutting	0.750	1.080	0.551	-	0.236	-	Right	•	•	•	
NCEU380600R-P	Side Ball Station	0.750	1.022	0.473	-	0.236	-	Right	•	•	•	
NCEU500700R	Center Cutting	1.000	1.433	0.763	-	0.274	-	Right	•	•	•	
NCEU500700R-P	Side Ball Station	1.000	1.295	0.622	-	0.274	-	Right	•	•	•	

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)



PROOTRIO™ HARDWARE

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

PROOTRIO™ TECHNICAL INFORMATION

Material	Brinnell Hardness	SFM	Feed per Insert	Grades			Coolant	
				IN2505	IN2530	IN6537		
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					
	Alloyed Steel 4140	275-325	390-820					
	Tool Steel P20 - H13	200-250	330-660					
Stainless Steel	300 Series, 304, 316	-	590-918	.003-.014	3	1	2	No
	400 Series 15-5 PH, 17-4 PH	-	650-985					Yes
	13-8 PH	-	200-400					Yes
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.