

ROUND TOOL BLANKS

Round Tool Blanks Grade and Application Information

TECHNICAL DATA

Standard Cemented Tungsten Carbide Grades for Machining Cast Irons, Non-Ferrous Alloys, Woodworking, etc.

Kennametal Grade Name	Alternative Name	Grain Family	Industry Classification	Cobalt Content (wt. %)	Hardness (HRA)	Density (g/cm ³)	TRS (1000 psi)
K313	KFS33	Submicron	C3 K10–K20 M10–M20	6.0	93.0	14.90	450
2210	KFS64 KMS CD636	Submicron	C2 K20–K30 M25–M40	10.0	91.8	14.40	625

Specialty Grades (minimum order quantities apply)

Kennametal Grade Name	Alternative Name	Grain Family	Industry Classification	Cobalt Content (wt. %)	Hardness (HRA)	Density (g/cm ³)	TRS (1000 psi)
2506	KFS06 CD630	Submicron	C4 K05–K20 M10–M20	6.0	93.3	14.90	500
2608	KFU08	Ultrafine	C4 K05–K10 M10–M20	8.0	93.5	14.58	515
2612	KFU66	Ultrafine	C3 K15–K25 M10–M25	12.0	92.2	14.15	480

A Kennametal application specialist should be consulted with to assist in the grade selection. Application suitability should be evaluated from initial field trial performance. Grade properties listed are nominal values and are subject to change or upgrade without notice. Grades featured on this chart are primarily supplied to the North American market. For additional options please refer to our European brochure.

Grades for Machining Cast Irons, Non-Ferrous Materials, High-Temp Alloys													Grade	Characteristics/Applications
K01	K05	K10	K15	K20	K25	K30	K35	K40	K45	ISO	ANSI			
													2608	A 6% cobalt micrograin of high hardness and wear resistance. Often applied as a rotary tool. Ideal for finish turning and light roughing of cast irons and high-temp alloys, and machining aluminum and titanium alloys.
													2506	Grade 2506 is used primarily for drills in medium-to-large diameter ranges and is the primary choice for most applications in drilling or routing of composite-type materials. It has a broad range of general-purpose uses and performs well on fiberglass composites, graphite materials, steel, and exotic alloys.
													K313	Grade K313 grade features exceptional edge wear resistance combined with very high strength for machining titanium, cast irons, austenitic stainless steels, non-ferrous metals, nonmetals, and most heat-resistant alloys. Grade K313 is an ideal substrate for the manufacture of thin-film, diamond-coated carbide tools.
													2612	Grade 2612 combines exceptional wear resistance with extra strength to enhance tool life for drills or end mills. This is our strongest grade and should be used primarily where strength is an important factor in tool choice. This grade works well with a variety of coatings.
													2210	Grade 2210 combines exceptional wear and impact resistance for a broad range of applications. This is the primary grade used for end mills, reamers, drills, countersinks, engraving tools, and other rotary tools. It may be used for cutting cast iron, non-ferrous metals, plastic and wood, and for most applications in steel, fiberglass, and exotic metals. This is our best general-purpose grade for use in rotary tools.

FOR MORE INFORMATION, CONTACT:
Tel: + 1 800 433 7295
k-rgrs.cs@kennametal.com



kennametal.com