



GM High performance universal machining end mills

GM-4EL-S

GM-4E-S



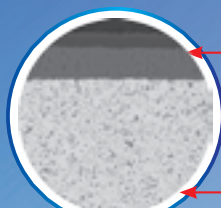
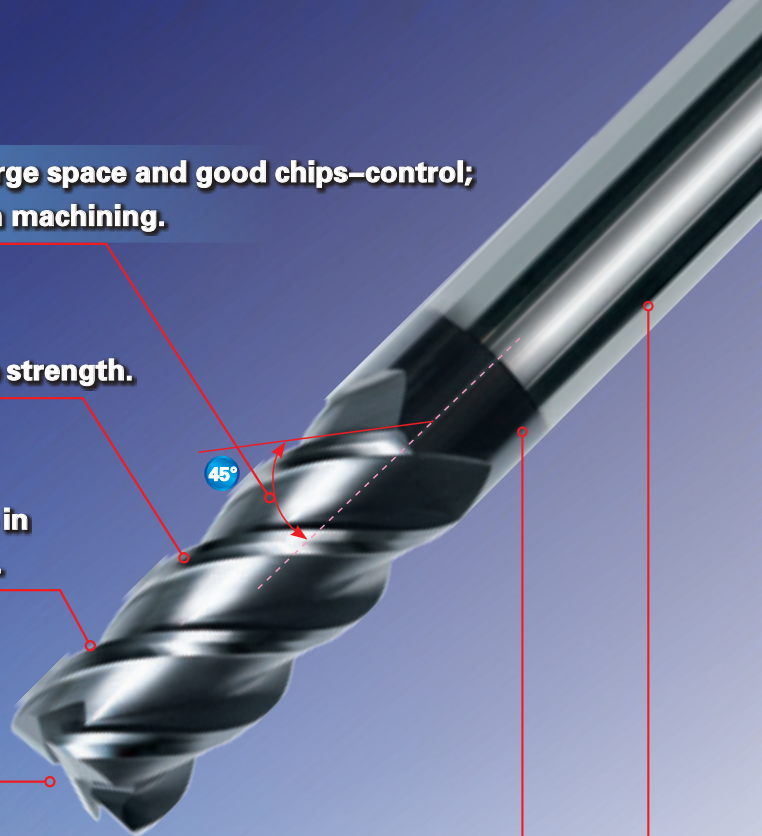
ZHUZHOU CEMENTED CARBIDE CUTTING TOOLS CO.,LTD.

● 45 degree helix angle design with large space and good chips-control; low radial cutting force with smooth machining.

● Double flank design, high cutting edge strength.

● The unique treatment on the cutting edge in order to keep the ideal surface roughness.

● High efficient, good general application can be optimized the various machining.



KMG405

Heat-resistant Nano-coating

Ultra fine cemented carbide substrate with high strength, toughness and wear-resistance

Application: Suitable for the high-efficiency processing of **P**、**M**、**K**、**N**、**S** materials!

Application of GM-4E-7/16"-S milling NAK80

Machine tool: CNC

Cooling system: air blow

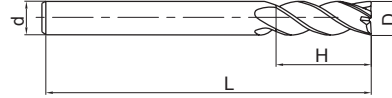
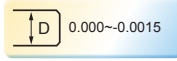
Workpiece material: NAK80(HRC36)

Cutting style: side milling

Tool type	Cutting parameters	Cutting force	Surface quality
GM-4E-7/16"-S	n=4000 r/min ap=7/16" ae=3/32" fz=0.003 in/z		
Similar product of company A	n=3500 r/min ap=7/16" ae=3/32" fz=0.002 in/z		

4-flute flattened end mills with straight shank

GM-4E-S

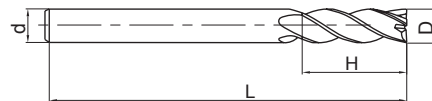
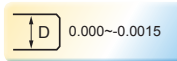


Art.No.	Specification				
	D	d	H	L	Z
GM-4E-3/64"-S	3/64"	1/8"	7/64"	1-1/2"	4
GM-4E-1/16"-S	1/16"	1/8"	3/16"	1-1/2"	4
GM-4E-5/64"-S	5/64"	1/8"	3/16"	1-1/2"	4
GM-4E-3/32"-S	3/32"	1/8"	9/32"	1-1/2"	4
GM-4E-7/64"-S	7/64"	1/8"	3/8"	1-1/2"	4
GM-4E-1/8"-S	1/8"	1/8"	1/2"	1-1/2"	4
GM-4E-9/64"-S	9/64"	3/16"	1/2"	2"	4
GM-4E-5/32"-S	5/32"	3/16"	1/2"	2"	4
GM-4E-11/64"-S	11/64"	3/16"	5/8"	2"	4
GM-4E-3/16"-S	3/16"	3/16"	5/8"	2"	4
GM-4E-13/64"-S	13/64"	1/4"	5/8"	2-1/2"	4
GM-4E-7/32"-S	7/32"	1/4"	5/8"	2-1/2"	4
GM-4E-15/64"-S	15/64"	1/4"	3/4"	2-1/2"	4
GM-4E-1/4"-S	1/4"	1/4"	3/4"	2-1/2"	4
GM-4E-17/64"-S	17/64"	5/16"	3/4"	2-1/2"	4
GM-4E-9/32"-S	9/32"	5/16"	3/4"	2-1/2"	4
GM-4E-19/64"-S	19/64"	5/16"	13/16"	2-1/2"	4
GM-4E-5/16"-S	5/16"	5/16"	13/16"	2-1/2"	4

Art.No.	Specification				
	D	d	H	L	Z
GM-4E-21/64"-S	21/64"	3/8"	1"	2-1/2"	4
GM-4E-11/32"-S	11/32"	3/8"	1"	2-1/2"	4
GM-4E-23/64"-S	23/64"	3/8"	1"	2-1/2"	4
GM-4E-3/8"-S	3/8"	3/8"	1"	2-1/2"	4
GM-4E-25/64"-S	25/64"	7/16"	1"	2-3/4"	4
GM-4E-13/32"-S	13/32"	7/16"	1"	2-3/4"	4
GM-4E-27/64"-S	27/64"	7/16"	1"	2-3/4"	4
GM-4E-7/16"-S	7/16"	7/16"	1"	2-3/4"	4
GM-4E-29/64"-S	29/64"	1/2"	1"	3"	4
GM-4E-15/32"-S	15/32"	1/2"	1"	3"	4
GM-4E-31/64"-S	31/64"	1/2"	1"	3"	4
GM-4E-1/2"-S	1/2"	1/2"	1"	3"	4
GM-4E-9/16"-S	9/16"	9/16"	1-1/8"	3-1/2"	4
GM-4E-5/8"-S	5/8"	5/8"	1-1/4"	3-1/2"	4
GM-4E-11/16"-S	11/16"	3/4"	1-3/8"	4"	4
GM-4E-3/4"-S	3/4"	3/4"	1-1/2"	4"	4
GM-4E-7/8"-S	7/8"	7/8"	1-1/2"	4"	4
GM-4E-1"-S	1"	1"	1-1/2"	4"	4

4-flute flattened long cutting edge end mills with straight shank

GM-4EL-S



Art.No.	Specification				
	D	d	H	L	Z
GM-4EL-1/8"-S	1/8"	1/8"	3/4"	2-1/4"	4
GM-4EL-3/16"-S	3/16"	3/16"	3/4"	2-1/2"	4
GM-4EL-1/4"-S	1/4"	1/4"	1-1/8"	3"	4
GM-4EL-5/16"-S	5/16"	5/16"	1-1/8"	3"	4
GM-4EL-3/8"-S	3/8"	3/8"	1-1/8"	3"	4

Art.No.	Specification				
	D	d	H	L	Z
GM-4EL-7/16"-S	7/16"	7/16"	2"	4-1/2"	4
GM-4EL-1/2"-S	1/2"	1/2"	2"	4-1/2"	4
GM-4EL-5/8"-S	5/8"	5/8"	2-1/4"	5"	4
GM-4EL-3/4"-S	3/4"	3/4"	2-1/4"	5"	4
GM-4EL-1"-S	1"	1"	2-1/4"	5"	4



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