

Precision brass rod



W5006 Precision brass rod

W5006 the brass rod for highest demandse

Our W5006 bars are the premium product for your high-performance machining. The closer the starting material is to the end product, the more efficient the subsequent machining. The Wieland precision hexagonal bar W5006 meets these expectations in a special way: It precisely reproduces the outer contour of a workpiece. In contrast to polygonal crosssections produced by machining, drawn hexagonal bars are characterized by very smooth, even and compacted surfaces. They also give the workpiece an uninterrupted notch-insensitive microstructure. Significant material savings are another plus.

The rod ends are suitable for automatic machines and allow smooth feeding and unmanned operation. Our bars up to 60 mm are supplied in drawn condition and enable trouble-free machining due to their high precision and constant properties.

Geometry

- Our rods with width across flats 10-30 mm have with max. 1 mm/m a much better straightness than required by DIN EN 12164
- Fix bar lengths, no deviation within one batch
- Width across flats hardly differs to each other
- High consistency of the width across flats within the bar/ bundle/packaging unit
- Reduced width across flats variance within a batch
- Confirmed twist tolerance only half EN 12164

Size range Width across flats in mm	Twist (mm/m)	
	Wieland	EN 12164
10 to 18	0.5	1.0
> 18 to 30	1.0	2.0
> 30 to 60	1.5	3.0

Technical delivery conditions

- Rod end finsh suitable for automated bar feeding
- Blank, drawn surface
- All bars are eddy current tested
- Supplier identification on rod face from diameter
 13 mm upwards

Width across flats	Camfer length	Point length
mm	mm	mm
4–5	0.2–1.0	1.5-4
6–10	0.2–1.5	2–7
11–16	0.2–2.0	3–10
17–32	0.2–3	gesägt
33–60	gesägt	gesägt

Quality features that speak for themselves

- Chemical composition, specially optimized to polygon bars
- Constant properties due to narrow alloy tolerances
- Good machinability due to fine and uniform lead distribution
- Long tool life due to optimized alloy composition and grain distribution
- On request thermally stress relieved with verification according to ISO 6957
- Sharp-edged as standard according to EN 12164

Material designation		Composition in %			
Wieland	EN	UNS	Cu	Zn	Pb
Z33	CuZn39Pb3 CW614N	C38500	58.5	Rest	3

Packaging

Size range 2 to 5 mm

The rods are tied in small bundles of around 25 kg with string, wrapped in recyclable PE-foil and packed in wooden boxes : Net weight approx. 250 kg.

Size range > 5.5 to 7.5 mm

The rods are tied in small bundles of around 25 kg with string, wrapped in recyclable PE-foil and packed in wooden boxes : Net weight approx. 500 kg.

Size range 8 mm to 10 mm

The rods are packed loose in wooden boxes: Net weight approx. 500kg.

Size range > 10mm

The bars are preferably supplied in bundles of approx. 1,000 kg, alternatively bundles up to approx. 500 kg are possible. The bundles are tied several times with steel strip and secured against slipping with a burlap bag. These specifications apply to our standard packaging. Special packaging is possible on request.

Work efficiently and cost-effectively thanks to our consitant quality

A calculation that pays off. Make use of the advantages of our consistently high quality for a stable manufacturing process!

Mechanical Properties

We guarantee constant strength values for reliable finished products.

Mechanical properties	R430 (halfhard)	R500 (hard)	
Width across flats (mm)	>10-35	4–10	
Tensile strength R _m (MPa)	min. 430	min. 500	
Yield strength R_p 0.2 (MPa)	min. 220	min. 350	
Elongation (%)	to EN 12164		

Temper "M" according to EN 12164 applies to rods with width across flats from 36 mm.

From width across flats 46mm additionally thermally stress relieved.

Lead distribution

A decisive influence on the formation of the needle chip is a balanced ratio of alpha and beta microstructure with evenly distributed lead. In addition to a short breaking chip, the lead is also responsible for low tool wear and low cutting forces.



For further dimensions and products please have a look in our stock brochure.

wieland

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