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**Material Datasheet:**  
**CuZn40Pb2**  
**(CW617N)**

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**MACHINING / HOT STAMPING BRASS RODS**

# CuZn40Pb2

**Standard alloy for stamping rods**

**CuZn40Pb2 is the benchmark material for hot stamping brass rods. This alloy perfectly combines hot stamping and machining properties, making it the best solution for parts of high complexity that require demanding machining operations after stamping. It is also perfect for producing parts that only require free machining operations.**

## MATERIAL DESIGNATION

ASBW	International	EN	UNS	JIS	Further Restrictions**
B13	CuZn40Pb2	CW617N	C37800 C38000	C3603 C3604	4 MS Common Approach, Part B

## REFERENCE CHEMICAL COMPOSITION IN % (MAIN ELEMENTS) \*

Material	Cu	Pb	Ni	Fe	As	Sn	Al	Bi	Zn	Other elements
B13**	58,0	2,0	0,2	0,2	-	0,2	0,03	-	Rem.	≤ 0.2 %

\* Deviations from these values may occur within the restrictions of the relevant standard specifications.

\*\* ASBW / B13 complies with the restrictions to the chemical composition of the signed materials in the table, according to the specified in the 4 MS Common Composition List, on customer request.

## FABRICATION PROPERTIES

### FORMING

Machinability (CuZn39Pb3 = 100 %)	95 %
Cold Workability	Poor
Hot Workability	Excellent

### JOINING

Resistance Welding (Butt Welding)	Fair
Inert Gas Shielded Arc Welding	Not Recommended
Gas Welding (Most Commonly Oxyacetylene)	Not Recommended
Hard Soldering	Fair
Soft Soldering	Excellent
Brazing	Fair

### POLISHING

Mechanical	Good
Electrolytic	Poor
Electroplating	Excellent



Rods		acc. to EN 12165		
Temper	Diameter		Hardness HB	
	from [mm]	to [mm]	min.	max.
M	all		As manufactured	
H080	8	80	80	125

## FINISHING AND PACKAGING

Bar ends	<b>Marked according to customer's specification</b>
Bar surface	<b>Standard machining rods: bright, stripped surface</b> <b>Standard stamping rods: Dark and uniform surface</b>
Packaging	<b>Size range up to 10 mm:</b> <b>The rods are packed loose in a wooden box and protected with oiled paper (net weight of approx. 500 kg). Each box is strapped with 4 steel straps to ensure material integrity during shipping.</b>  <b>Size range &gt; 10 mm:</b> <b>ASBW machining rods are supplied by standard in bundles either of approximately 1.000 kg or 500 kg. Different bundle weights are also possible upon customer's request. Each bundle is steel strapped three times on cardboard and both ends are protected with litter, to ensure the material integrity during the transportation</b>
Identification	<b>Adhesive label on bundle strap: customer</b> - <b>number of customer's order</b> - <b>EN Standard of the material</b> - <b>ASBW material code and LOT number ensuring production tracking</b> - <b>rod length</b> - <b>ASBW's PO number</b> - <b>ASBW's Quality Approval Seal</b>

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For further detailing on technical aspects such as material condition, machining, mechanical data, temper selection through contact to our technical personal.



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