

Technical Specifications

CW508L

Alloy	
EN Symbol	CuZn37
EN No	CW508L
ASTM	C27200
DIN	

CW508L Chemical Composition								
	Cu	Pb	Sn	Fe	Ni	Al	Si	Zn
Min	62,00	-	-	-	-	-	-	-
Max	64,00	0,10	0,10	0,10	0,30	0,05	0,01	Kalan

CW508L-DW Chemical Composition								
	Cu	Pb	Sn	Fe	Ni	Al	Si	Zn
Min	62,00	-	-	-	-	-	-	-
Max	64,00	0,10	0,10	0,10	0,20	0,05	0,01	Kalan

Applications and Features

It is a brass alloy suitable for scientific applications, commonly used in connectors, springs, electrical components, and for decorative purposes.

It is an alloy that provides excellent performance in bending applications.

It complies with the Drinking Water Directive and is included in the 4MS Positive List. For CW510L-DW material, it is classified under material group B-D according to 4MS and UBA guidelines.

* The standards EN 12165 and EN 12167 are referenced.

Production Standard	
Solid Bar for Forging	EN 12165
Profile for Machining	EN 12167

Heat Treatment		
Annealing	450 – 550 °C	1 – 2 hours
Stress Relieving Annealing	200 – 320 °C	1 – 2 hours

Technical Properties		
Structure		α
Density	g/cm ³	8,44
Coefficient of Thermal Expansion	10-6/K	00022
Electrical Conductivity (%)	IACS	00026
Thermal Conductivity	W/(m K)	00116
Elastic Modulus	GPa	00103
Melting Temperature	°C	850-920

Machining Properties	
Machinability	Poor
Hot Forming (700-800 °C)	Very Good
Cold Forming	Very Good

Corrosion Resistance	
Good Corrosion Resistance	

EN 12165:2024 - Forging Stock Standard Mechanical Properties

Material Condition	Diameter (mm)		Hardness	
	(mm)		(HBW)	
	Above	Included	Min.	Max.
M	All		As produced	
H070	10	110	70	100

* Mechanical properties are referenced according to the EN 12165:2024 standard.

EN 12165:2024 - Round Forging Stock Diameter Tolerance

Nominal Diameter(mm)		Tolerances(mm)	
Above	Up to and including...	Class A	Class B
10	18	±0,25	±0,14
18	30	±0,30	±0,17
30	50	±0,60	±0,20
50	65	±0,70	±0,37
65	80	±0,70	-
80	110	±2	-

* For forged stocks, length and length tolerance are determined mutually. If no request is specified, the manufacturer will decide on the length.

Chamfer
Determining Shaped End Dimensions (mm)

Nominal Diameter or Distance Between Parallel Surfaces		Chamfer - Length			Sharpened Length
Above	Up to and including...	Min.	Max.	Min.	Max.
5	10	0,2	1,5	2	7
10	20	0,2	2	3	10
20	30	0,2	3	4	12

*Chamfering is done to remove burrs.

*Tapering is done for easy feeding of bars into automatic feeding devices.

*Please contact us for chamfering on products over 50mm.

Stress Relieving

According to the EN 12167 standard, stress relieving annealing is not performed unless a special request is specified.

Packaging

After chamfering, all products according to the EN 12164 and EN 12168 standards are packaged in thick nylon.

Bundles range from 500 to 1000 kg.

If there is a special request, the products are shipped in wooden crates.