

Datasheet: EN Cu-DHP / CW024A 99,90% Pure Copper Cold rolled Alumeco ApS 13-01-2025		Internal alloy name: CW024A Metal: Copper Chemical Symbol: Cu-DHP EN: EN Cu-DHP UNS: C12200 SIS: 5015 GB: TP2 / C12200 JIS: C1220 Also known as: - Alloy type: Electrical conducting																																									
Main usage: - Automotive – Radiators - Building – Roofing & Gutters - Consumers – Household equipment - Electrical conductors - Piping – Gas, Water, Heating & Air Conditioning - Industrial – Barrels & Containers		Important norms and literature: General Standards EN 1652: Copper and copper alloys – Plate, sheet, strip and circles for general purposes General Standards EN 1652: Copper and copper alloys – Plate, sheet, strip and circles for general purposes																																									
Main properties: - Excellent for welding and soldering properties - Great for deforming, either hot or cold																																											
Chemical composition in %: EN 1652 <table><tr><td>Cu</td><td>P</td><td colspan="2">Other elements</td></tr><tr><td></td><td></td><td>Each</td><td>Together</td></tr><tr><td>99,90</td><td>0,015 – 0,040</td><td>-</td><td>-</td></tr></table>				Cu	P	Other elements				Each	Together	99,90	0,015 – 0,040	-	-																												
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Properties and information's (3 Excellent; 2 Good; 1 Poor/not recommendable)¹ <table><tr><td> Machinability (Zerspanbarkeitsindex): 20* *(CuZn39Pb3 = 100) Forming Methods: Hot Formability: 2 Cold Formability: 3 Corrosion resistance: Atmosphere: 2 Waters and alkaline: 2 Acids, Ammonia, Seawater: 1 </td><td> Joining Methods: Soldering: 3 Brazing: 3 Oxy-acetylene welding: 2 Gas-shielded arc welding: 3 TIG welding: 3 MIG welding: 3 Spot/seam welding: 1-2 Butt welding: 2 Gluing/adhesion: 2 </td><td> Surface Treatment: Polishing: Mechanical: 2 Electrolytic/chemical: 3 Galvanizing: 3 Hot Dipping: 2 </td></tr></table>				Machinability (Zerspanbarkeitsindex): 20* *(CuZn39Pb3 = 100) Forming Methods: Hot Formability: 2 Cold Formability: 3 Corrosion resistance: Atmosphere: 2 Waters and alkaline: 2 Acids, Ammonia, Seawater: 1	Joining Methods: Soldering: 3 Brazing: 3 Oxy-acetylene welding: 2 Gas-shielded arc welding: 3 TIG welding: 3 MIG welding: 3 Spot/seam welding: 1-2 Butt welding: 2 Gluing/adhesion: 2	Surface Treatment: Polishing: Mechanical: 2 Electrolytic/chemical: 3 Galvanizing: 3 Hot Dipping: 2																																					
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¹Information extracted from Künferverband:																																											

Tolerances for Cold rolled Products of CW024A

Dimensions: EN 1652:1997*

Tolerances on thickness of cold rolled products (sheet, strip and circles)

Nominal thickness t (mm)	Tolerance on thickness for nominal widths w (mm)			
	$w \leq 350$	$350 < w \leq 700$	$700 < w \leq 1000$	$1000 < w \leq 1250$
$0,1 < t \leq 0,2$	$\pm 0,018$	-	-	-
$0,2 < t \leq 0,3$	$\pm 0,022$	$\pm 0,03$	$\pm 0,04$	-
$0,3 < t \leq 0,4$	$\pm 0,025$	$\pm 0,04$	$\pm 0,05$	$\pm 0,07$
$0,4 < t \leq 0,5$	$\pm 0,030$	$\pm 0,05$	$\pm 0,06$	$\pm 0,08$
$0,5 < t \leq 0,8$	$\pm 0,040$	$\pm 0,06$	$\pm 0,07$	$\pm 0,09$
$0,8 < t \leq 1,2$	$\pm 0,050$	$\pm 0,07$	$\pm 0,09$	$\pm 0,10$
$1,2 < t \leq 1,8$	$\pm 0,060$	$\pm 0,08$	$\pm 0,10$	$\pm 0,11$
$1,8 < t \leq 2,5$	$\pm 0,070$	$\pm 0,09$	$\pm 0,11$	$\pm 0,13$
$2,5 < t \leq 3,2$	$\pm 0,080$	$\pm 0,10$	$\pm 0,13$	$\pm 0,17$
$3,2 < t \leq 4,0$	$\pm 0,10$	$\pm 0,12$	$\pm 0,15$	$\pm 0,20$
$4,0 < t \leq 5,0$	$\pm 0,12$	$\pm 0,14$	$\pm 0,17$	$\pm 0,23$
$5,0 < t \leq 6,0$	$\pm 0,14$	$\pm 0,16$	$\pm 0,20$	$\pm 0,26$
$6,0 < t \leq 7,0$	$\pm 0,16$	$\pm 0,19$	$\pm 0,23$	$\pm 0,29$
$7,0 < t \leq 8,0$	$\pm 0,18$	$\pm 0,22$	$\pm 0,26$	$\pm 0,32$
$8,0 < t \leq 9,0$	$\pm 0,20$	$\pm 0,25$	$\pm 0,29$	$\pm 0,35$
$9,0 < t \leq 10,0$	$\pm 0,22$	$\pm 0,28$	$\pm 0,32$	$\pm 0,38$

* Values are referred from Table 5 of EN 1652:1997

Dimensions: EN 1652:1997*

Tolerances on width of cold rolled strip

Nominal thickness t (mm)	Tolerance on thickness for nominal widths w (mm)						
	$w \leq 50$	$50 < w \leq 100$	$100 < w \leq 200$	$200 < w \leq 350$	$350 < w \leq 500$	$500 < w \leq 700$	$700 < w \leq 1250$
$0,1 < t \leq 1,0$	+0,2 0	+0,3 0	+0,4 0	+0,6 0	+1,0 0	+1,5 0	+2,0 0
$1,0 < t \leq 2,0$	+0,3 0	+0,4 0	+0,5 0	+1,0 0	+1,2 0	+1,5 0	+2,0 0
$2,0 < t \leq 2,5$	+0,5 0	+0,6 0	+0,7 0	+1,2 0	+1,5 0	+2,0 0	+2,5 0
$2,5 < t \leq 3,0$	+1,0 0	+1,1 0	+1,2 0	+1,5 0	+2,0 0	+2,5 0	+3,0 0
$3,0 < t \leq 4,0$	+2,0 0	+2,3 0	+2,5 0	+3,0 0	+4,0 0	+5,0 0	+6,0 0

* Values are referred from Table 6 of EN 1652:1997

Dimensions: EN 1652:1997*

Tolerances on width of plate and sheet

Nominal thickness t (mm)	Tolerance on thickness for nominal widths w (mm)		
	$w \leq 350$	$350 < w \leq 1250$	$1250 < w$
$t \leq 2,0$	+2,0 0	+6,0 0	By agreement
$2,0 < t \leq 5,0$	+4,0 0	+8,0 0	
$5,0 < t$	+8,0 0	+10,0 0	

* Values are referred from Table 7 of EN 1652:1997

Dimensions: EN 1652:1997*

Tolerances on length of plate, sheet and strip cut for lengths up to 5000 mm

Length	Nominal thickness (mm)	Tolerance on length (mm)
As Manufactured (ML)	$t \leq 15$	± 50
Fixed length (FL)	$t \leq 5,0$	+10 0
	$5,0 < t$	+15 0

* Values are referred from Table 8 of EN 1652:1997

Dimensions: EN 13599:2014* Squariness of cut plate and sheet			
Nominal width w (mm)	Maximum allowable differences between diagonals, for lengths l (mm)		
	$1000 < l \leq 2000$	$2000 < l \leq 3000$	$3000 < l$
$350 < w \leq 700$	6	7	8
$700 < w \leq 1250$	8	9	10
$1250 < w$	By agreement		

* Values are referred from Table 9 of EN 1652:1997

Dimensions: EN 1652:1997* Tolerances on diameter for circles			
Nominal diameter d (mm)	Maximum allowable differences between diagonals, for lengths l (mm)		
	$1000 < l \leq 2000$	$2000 < l \leq 3000$	$3000 < l$
$d \leq 500$	± 1	$\pm 1,5$	± 2
$500 < d \leq 1000$	± 2	$\pm 2,5$	± 3
$1000 < d \leq 2000$	± 3	$\pm 3,5$	± 4
$700 < d$	-	-	By agreement

* Values are referred from Table 10 of EN 1652:1997

Dimensions: EN 1652:1997* Edgewise curvature c		
Nominal width w (mm)	Maximum edgewise curvature c for thicknesses t (mm)	
	$t \leq 1,0$	$1,0 < t \leq 4,0$
$3 < w \leq 8$	12	-
$8 < w \leq 15$	8	10
$15 < w$	4	6

* Values are referred from Table 11 of EN 1652:1997