

## SPECIFICATION NORDIC STANDARD

Phosphorous deoxidised copper (DHP-Copper)

**EN**

**CW024A**

### **Dimension:**

Width range	max 1100 mm
Thickness range	0,4...1,5 mm
Coils	max. 4000 kg
Sheet length	max 6000mm

### **Chemical Composition %:**

Copper (Cu)	99.90 (min.)
Phosphorus (P)	0,015-0,040.

### **Physical properties:**

Density	8.94 kg/dm <sup>3</sup>
Thermal expansion	17*10 <sup>-6</sup> 1/K ( $\Delta T$ 100°C = 1,7mm/m)
Specific heat	385 J/kg K
Thermal conductivity	335 %W/Cm

## Mechanical properties:

The material fulfils the requirements of standard EN 1172.

Table 2 — Mechanical properties

Designation		Material condition	Tensile strength		0,2 % proof strength		Elongation	Hardness	
Material Symbol	Number		$R_m$		$R_{p0,2}$		$A_{50mm}$	HV	
			N/mm <sup>2</sup>		N/mm <sup>2</sup>		%	min.	max.
		min.	max.	min.	max.	min.	min.	max.	
Cu-DHP CuZn0,5	CW024A CW119C	R220	220	260	—	140	33	—	—
		H040	—	—	—	—	—	40	65
		R240	240	300	140	—	8	—	—
		H065	—	—	—	—	—	65	95
		R290	290	—	250	—	—	—	—
		H090	—	—	—	—	—	—	90
CuSn0,15	CW117C	R250	250	320	200	—	9	—	—
		H060	—	—	—	—	—	60	90
		R300	300	370	250	—	4	—	—
		H085	—	—	—	—	—	85	110
CuAl5Zn5Sn1	CW309G	R400	400	—	170	—	45	—	—
		H080	—	—	—	—	—	80	—
CuSn4	CW450K	R290	290	390	—	190	40	—	—
		H070	—	—	—	—	—	70	100
CuZn15	CW502L	R310	310	370	200	290	10	—	—
		H090	—	—	—	—	—	90	115

## Fabrication properties:

Formability	Excellent
Soldering	Excellent
Brazing	Excellent
TIG	Good
MIG	Good
EBW	Poor

Oxide layer must be removed before the welding, soldering and brazing

## Typical use

Architecture, eg. roofing, facades, window and door frames, decoration