Copper and Copper Alloys
CW505L Sheet

DURBIN METAL INDUSTRIES

SPECIFICATIONS

Commercial	CZ106

Brasses are alloys of Copper and Zinc. They may also contain small amounts of other alloying elements to impart advantageous properties. Brasses have high corrosion resistance and high tensile strength. They are also suited to hot forging. Free machining brass sets the standard for machining, by which other metals are compared.
Brasses are divided into two classes. The alpha alloys, with less than 37% zinc, and the alpha/beta alloys with 37-45% zinc. Alpha alloys are ductile and can be cold worked. Alpha/beta or duplex alloys have limited cold ductility and are harder and stronger.

CHEMICAL COMPOSITION

EN 1652:1997
CW505L Brass

Element	% Present
Copper (Cu)	69 - 71
Nickel (Ni)	0.3 max
Others (Total)	0.1 max
Tin (Sn)	0.1 max
Lead (Pb)	0.05 max
Aluminium (Al)	0.02 max
Zinc (Zn)	Balance

ALLOY DESIGNATIONS

CZ106 / CW505L corresponds to the following designation **but may not be a direct equivalent:**
CuZN30

SUPPLIED FORMS

CZ106/CW505L is typically supplied as Sheet
• Sheet

MECHANICAL PROPERTIES

EN 1652:1997
Sheet
0.2mm to 5.0mm

Property	Value
Proof Stress	90-430 MPa
Tensile Strength	270-480 MPa
Elongation A50 mm	50-9 %
Hardness Vickers	55 to 155 HV

Mechanical properties vary widely according to condition (soft/half hard/etc)

CORROSION RESISTANCE

COLD WORKING

This alloy has excellent cold working properties and is used for extreme deep drawing and cold working applications

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CONTACT

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REVISION HISTORY

Datasheet Updated	18 July 2019

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