

METALTalk

COPPER ALLOYS



Copper and its alloys are well known for their conductivity – thermal and electrical, some of our alloys utilise these features in **Tooling Applications**. For the **plastics industry** we have round bar in Alloy 25H (C17200) that may be used for plastic blow moulding and injection moulding parts or as inserts in moulds to aid in the extraction of heat and thereby reduce the cycle time. Plate in this grade or modifications of it can also be supplied for the manufacture of moulds. When aged, C17200 has exceptional strength.

This grade is also used for **resistance welding** tooling. It is categorised as RWMA CL 4 as a consequence of its high strength and moderate conductivity. For this application we do also supply 2 other grades:

- **C17510**, a lower Be grade than Alloy 25. It categorised as RWMA CL 3 offering lower strength but higher conductivity than C17200
- **CuCrZr**. A RWMA CL 2 alloy which has higher conductivity than both the Be - containing alloys

Alloy C17200 has also been supplied

- in strip form for use as electrical / electronic contacts. (feature: stress relaxation resistance)
- as tubes for use as exploration drilling equipment (feature: high strength and non-magnetic)
- as bar for non-spark tooling and shear pins



ToughMet® 3 is a premium bearing alloy that has been designed to meet a variety of performance demands. It has a high yield strength, low coefficient of friction, excellent machinability, good corrosion resistance. It has performed well in applications in which lubrication is difficult or unreliable. A range of items are stocked in support of local users.

We are well placed to supply, and have supplied, copper-nickel products for further applications and or industries including:

- 55 Copper-45 nickel wire (feature: resistivity which is stable over a wide temperature range)
- 70/30 and 90/10 cupro-nickel (feature: corrosion resistance and anti-fouling properties in sea water)

