

18ct HCB Yellow Alloy Properties and Process Data

- An alternate version of this alloy is available for wrought products (18 HB).
- A casting alloy with good form filling capabilities.

Technical Information

Alloy Composition:

- 75.1% Gold,
- 15.97% Silver + Copper.

Properties

- Colour Yellow, 2N
- Density 15.5 g/cm³
- Melting Range 905-960°C
- Annealed Hardness 125 +/- 10 HV

Process Data

Annealing:

The alloy may be annealed at 650°C in a furnace, the time depending on the size of the work piece. Alternatively it may be heated to cherry red and allowed to cool. The alloy may be quenched from a black heat (550°C) for maximum ductility.

Casting:

The casting temperature of this alloy ranges between 1000 - 1100°C. Small, detailed work will require a temperature at the top end of the scale. This alloy has very good flow properties.

Machining:

For the best results this alloy must be machined in a cold condition.

Solders:

Any of the hall marking quality silver solders supplied by Cooksongold may be used with this alloy.

Enamelling information:

This alloy can be enamelled successfully. Any oxide or surface imperfection must be removed prior to application.