

22ct DS Yellow Alloy Properties and Process Data

- A general purpose alloy suitable for all applications

Technical Information

Alloy Composition:

- 91.75% gold
- + 3.18% silver + copper.

Properties

- Colour Yellow (Dark Shade)
- Density 17.8 g/cm³
- Melting Range 965 – 980°C
- Annealed Hardness 75 +/- 5 HV
- 10% reduction of area 90 +/- 10 HV
- 20% reduction of area 115 +/- 10 HV
- 40% reduction of area 145 +/- 10 HV

Property Annealed

UTS	275 N/mm ²
Elongation	21%
Proof Stress	120 N/mm ²

Process Data

Rolling/Drawing/Stamping:

May be cold worked up to 80% area reduction between anneals.

Annealing:

Furnace anneal at 650°C or heat with a torch to a dull red colour. Hold at temperature for a minimum amount of time to avoid excessive grain growth. The alloy can be water quenched.

Spinning:

Suitable for most applications.

Casting:

Suitable for casting. Casting temperatures vary between 1030 – 1100°C.

Machining:

Fully hard, cold-worked material should be used for best machining properties.