

2P18



High Performance Mechanical
Classic Casting

18 kt

GENERAL INFORMATION

Colour: Italian yellow
 colour coordinate: L*=91,56 a*=3,52 b*=25,94

Advised use: universal (both mechanical works and casting)

MECHANICAL WORKS	stamping	■	chains	■	tube	■	spring	■
CASTING	closed systems	■	open systems	■	pre-set stones			■

Density: 15,20 g/cm³
 Hardness (as cast): 145 HV
 Hardness (after cold work 70%): 258 HV
 Hardness (after annealing): 136 HV
 Hardness (after age hardening): 225 HV

DIRECTIONS FOR SUGGESTED USE

Melting temperature: 900 °C

Casting temperature:
 100 °C over its melting temperature to cast into ingot-mould and continuous casting.
 100 °C over its melting temperature to cast with centrifugal machines.
 120 °C over its melting temperature to cast in vacuum machines with controlled atmosphere.
 140 °C over its melting temperature to cast in outdoor cylinders with vacuum.

Ingot-mould temperature: 150 °C
 Cylinders temperature: from 550 °C to 650 °C depending on the machine and objects dimensions.

Cooling of ingots: quick in lukewarm water (about 40 °C)
 Cooling casted objects: in water after 10 minutes.
 Cooling casted objects (with stone): in water after 30/40 minutes.

Annealing: 650 °C for 20 minutes followed by a quick cooling in hot water (40 °C min.)

Age hardening: *Step 1: solubilization*
 680 °C for 30 minutes. Cooling quickly in warm water (about 40 °C).

Step 2: hardening
 300 °C for 2 hours. Cooling at room temperature.

HINTS

❖ Recommended Pandora Alloys 18 kt yellow solders: TG18 (soft), MG18 (medium), FG18 (hard)

The above directions are only indicative. Strong variations to the above data are possible, depending on personal experience. Please, do not hesitate to contact us for further information.