

5P18/L



High Performance Mechanical
Classic Casting

18kt

GENERAL INFORMATION

Carats: 18kt , suitable also for 14kt (see specific tech data sheet) and 8, 9, 10kt (see specific tech data sheet)
 Colour: intense red colour coordinates: L*=84.1 a*=11.0 b*=18.0
 Advised use: universal (both mechanical works and casting)

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

Density: 14,56 g/cm³
 Hardness (as cast): 174 HV
 Hardness (after cold work 70%): 277 HV
 Hardness (after annealing): 170 HV
 Hardness (after age hardening): 310 HV

DIRECTIONS FOR SUGGESTED USE

Melting range (Solidus – Liquidus): 902 - 910 °C

Casting temperature:

100 °C over its Liquidus temperature to cast into ingot-mould and continuous casting
 100 °C over its Liquidus temperature to cast with centrifugal machines and vacuum machines with controlled atmosphere
 140 °C over its Liquidus 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

Annealing: 670 °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 18kt 5N red solders: TR5NJ (soft), MR5NJ (medium), FR5NJ (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.