

## 5P18/3



**High Performance Mechanical**  
**High Performance Casting**

**18 kt**

### GENERAL INFORMATION

**Carats:** 18 kt, suitable also for 8, 9, 10 kt (see specific tech data sheet) and 14 kt (see specific tech data sheet)  
**Colour:** intense red colour coordinates: L\*=85.1 a\*=10.8 b\*=16.0  
**Advised use:** universal (both mechanical works and casting)  
**Special alloy for extra light items**

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

**Density:** 14,34 g/cm<sup>3</sup>  
**Hardness (as cast):** 184 HV  
**Hardness (after cold work 70%):** 289 HV  
**Hardness (after annealing):** 180 HV  
**Hardness (after age hardening):** 308 HV

### DIRECTIONS FOR SUGGESTED USE

**Melting temperature:** 910 °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 stones) :** 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 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.