

## T13



High Performance Mechanical

**18 kt**

### GENERAL INFORMATION

Carats: 18 kt, suitable also for 14 kt (see specific tech data sheet)  
 Colour: white – standard  
 Advised use: mechanical works

MECHANICAL WORKS	stamping	■	chains	■	tube	■	spring	■
------------------	----------	---	--------	---	------	---	--------	---

Density: 14,59 g/cm<sup>3</sup>  
 Hardness (as cast): 192 HV  
 Hardness (after cold work 70%): 294 HV  
 Hardness (after annealing): 184 HV  
 Hardness (after age hardening): 271 HV

Nickel release UNI EN 1811:2011: Nickel release test on finished objects is required

### DIRECTIONS FOR SUGGESTED USE

Melting temperature: 910 °C

Casting temperature:  
 80 °C over its melting temperature for continuous casting with sinker thermocouple.  
 100 °C over its melting temperature to cast into ingot-mould and continuous casting

Ingot-mould temperature: 150 °C

Cooling of ingots: quick in lukewarm water (about 40 °C)

Annealing: 660 °C for 20 minutes followed by a quick cooling in hot water (40 °C min.)

Age hardening: *Step 1: solubilization*  
 720 °C for 30 minutes. Cooling quickly in lukewarm water (about 40 °C), better if with alcohol.  
*Step 2: hardening*  
 300 °C for 2 hours. Cooling at room temperature.

### HINTS

- ❖ Recommended Pandora Alloys 18kt white solders: TB18 (soft), MB18 (medium), FB18 (hard)
- ❖ Suggested Pandora Alloys plating solutions: Rhodium P2 and Palladium PDSOL/BE

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.