

3NL/HT



High Performance Mechanical
High Performance Casting

18kt

GENERAL INFORMATION

Colour: French yellow

Advised use: casting and mechanical

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

Density: 14,92 g/cm³
 Hardness (as cast): 148 HV
 Hardness (after cold work 70%): 260 HV
 Hardness (after annealing): 150 HV
 Hardness (after age hardening): 240 HV

DIRECTIONS FOR SUGGESTED USE

Melting range (Solidus – Liquidus): 830 - 850 °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.

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

Ingot-mould temperature: 150 °C

Cooling casted objects: in water after 10 minutes.

Cooling casted objects (with stones): in water after 30/40 minutes.

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

Annealing: 620 °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 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.

Tech Chart and Safety Data Sheet available on our website www.pandoralloys.com