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## PD325ECO2





High Performance Casting High Performance Mechanical

18kt

## **GENERAL INFORMATION**

Carats: 18kt, suitable also for 14kt (see specific tech data sheet)

Colour: white

colour coordinates: L\*=82.5 a\*=6.5 b\*=16.5

Advised use: universal (both casting and mechanical works)

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

Palladium content: 13% in 1kg of alloy – 3,25% in 18kt gold

Density: 15,07 g/cm³
Hardness (as cast): 167 HV
Hardness (after cold work 70%): 260 HV
Hardness (after annealing): 160 HV
Hardness (after age hardening): 251 HV

Nickel release UNI EN 1811:2011: not required, palladium alloy nickel-free

## DIRECTIONS FOR SUGGESTED USE

Melting temperature: 940 °C

Casting temperature:

100 °C over its melting temperature to cast into ingot-mould and continuous casting.

150 °C over its melting temperature to cast in every kind of machine.

Cylinders temperature: from 600 °C to 700 °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: 670 °C for 30 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 Palladium solders: TBJPD (soft), MBJPD (medium), FBJPD (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.