

GENERAL INFORMATION
General information

Production process	Universal
Color shade	Premium white
Color	Platinum
Typology	Master alloy for platinum

Melting temperatures

Melting range [°C]	30.0
Liquidus [°C]	1750.0
Solidus [°C]	1720.0

Commercial composition

Palladium (%)	76,00
Cobalt (%)	24,00



PRECIOUS line

FULL CHARACTERIZATION DATA
Color coordinates

L*	87.2
a*	0.5
b*	3.8
c*	3.8
Yellow index	8.1

Physical characteristics

Density [g/cm ³]	21.4
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General characteristics

As cast grain size [μm]	90.0
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Product applications

Casting in closed systems
Sheet production
Centrifugal casting

Mechanical characteristics

As cast hardness [HV 0.2]	130.0
Hardness after annealing [HV 0.2]	135.0
Hardness after 70% area red. [HV 0.2]	225.0
Tensile strength (Rm) [Mpa]	380.0
Yield strength (Rp0.2) [MPa]	150.0
Elongation at rupture (A) [%]	26.0

CASTING PROCESSING PARAMETERS

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	800.0	900.0	1840.0	1880.0
0.5 - 1.2 mm	750.0	850.0	1820.0	1860.0
> 1.2 mm	700.0	800.0	1800.0	1840.0

Trees without stones

Let the flask cool down for 3-4 minutes after pouring under protective gas, then quench in water.

Pickling

Use water jet or sand blasting

MECHANICAL WORKING PARAMETERS
Reductions

Wire - diameter (%)	40.0
Sheet - area or thickness (%)	60.0

POURING TEMPERATURES	Countinous from [°C]	Countinous to [°C]	Ingot from [°C]	Ingot to [°C]
Temperatures	1830.0	1870.0		

MECHANICAL WORKING ANNEALING	Temp. from [°C]	Temp. to [°C]	Time [min]
<1 mm	920.0	960.0	30.0
1 - 5 mm	920.0	960.0	45.0
>5 mm	920.0	960.0	60.0

Mechanical working quenching

Let cool in air down to 550°C, then quench in water