

**MASTER
ALLOY**
WD481CWPD 750‰

MASTER ALLOY FOR CASTING OF 585-750‰ (14-18 KT) WHITE GOLD

GENERAL INFORMATION
General information

Typology	Master alloy for gold
Color	White
Production process	Casting
Grain refinement level	Low
Deoxidation level	Medium

Commercial composition (%)

CU	57.5
NI	18.0
ZN	17.0
AG	7.0
PD	0.5

Melting Temperatures

Liquidus [°C]	920.0
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FULL CHARACTERIZATION DATA
Color coordinates

L *	a*	b*	c*	Yellow Index
82.0	2.4	12.3		

Mechanical characteristics

As cast hardness [HV 0.2]	160.0
Single step age-hardening hardness [HV 0.2]	240.0

Physical characteristics

Density [g/cm ³]	14.8
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Product applications

Stone-in-place casting
 Casting in closed systems
 Casting without stones

CASTING PROCESSING PARAMETERS
Pre-melting temperature

Temperature [°C] 1040

POURING TEMPERATURES

	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660	720	1020	1050
> 1.2 mm	460	600	980	1000
0.5 - 1.2 mm	580	650	1000	1020

Trees without stones

Let the flask cool down for 10-15 minutes, then quench it in water.

Stone-in-place casting trees

Let the flask cool down for 45-60 minutes, then quench it in water.

Pickling

Dip in RADIAL solution (50 g/l concentration at 60°C) for 5-10 minutes, or in sulphuric acid (10% concentration at 50°C) for 10 minutes.

AGE HARDENING PROCESSING PARAMETERS

SINGLE STEP	Temperature [°C]	Time [min]	Quenching
AGE HARDENING	250.0	90.0	In air or in furnace