LEGOR®

MASTER ALLOY

TECHNICAL SHEET

PRECIOUS line

PD950G 950‰

ALL-PURPOSE READY TO USE 950‰ PALLADIUM ALLOY

GENERAL INFORMATION

General information	
Typology	Ready to use palladium
Color	White
Production process	All-purpose
Grain refinement level	Minimum
Deoxidation level	Medium

Commercial composition (%)	
PD	95.5
GA	4.5

Melting Temperatures	
Solidus [°C]	1430.0
Liquidus [°C]	1480.0
Melting range [°C]	50.0

FULL CHARACTERIZATION DATA

Color coordinates

L *	a*	b*	c*	Yellow Index
83.6	0.7	4.0	4.1	10.0

Mechanical characteristics	
As cast hardness [HV 0.2]	110.0
Hardness after 70% area red. [HV 0.2]	215.0
Hardness after annealing [HV 0.2]	120.0
Tensile strength (Rm) [Mpa]	345.0
Yield strength (Rp0.2) [MPa]	180.0
Elongation at rupture (A) [%]	35.0

Physical characteristics	
Density [g/cm³]	11.8

General characteristics	
As cast grain size [µm]	50.0

Product applications

Ingot casting
Centrifugal casting
Casting without stones
Sheet production

13/04/2023

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CASTING PROCESSING PARAMETERS

Pre-melting temperature

Temperature [°C]

POURING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	900	1000	1550	1600
0.5 - 1.2 mm	800	900	1550	1600
> 1.2 mm	700	800	1550	1600

Trees without stones

Let the flask cool down for 3-4 minutes under inert atmosphere, then quench it in water.

Pickling

Use water jet or sandblaster.

MECHANICAL WORKING PARAMETERS

Pre-melting temperature

Temperature [°C]

Reductions

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

POURING TEMPERATURES	Countinous from [°C]	Countinous to [°C]	Ingot to [°C]	Ingot from [°C]
Temperatures	1580	1660	1560	1600

MECHANICAL WORKING ANNEALING	Temp. from [°C]	Temp. to [°C]	Time [min]
< 1 mm	870	920	20
1 - 5 mm	870	920	30
> 5 mm	870	920	40

Mechanical working quenching

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