

AG108M Master alloy for casting of 925‰ silver

Technical datasheet and guideline for 925 ‰

GENERAL INFORMATION AND RECOMMENDED APPLICATIONS

Typology	Master alloy for silver
Production process	Casting
Color	Silver

Color	
Density [g/cm ³]	10.3
Melting temperatures	Solidus [°C] 708 Liquidus [°C] 880
As cast hardness [HV 0.2]	60

Product applications

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

FULL CHARACTERIZATION DATA

General characteristics	
As cast grain size [μm]	600
Color coordinates	
L*	93.6
a*	-0.5
b*	4
c*	4
Color shade	

Mechanical characteristics	
Tensile strength (Rm) [MPa]	229
Yield strength (Rp0.2) [MPa]	75
Elongation at rupture (A) [%]	34
As cast hardness [HV 0.2]	60
Hardness after 70% area red. [HV 0.2]	148
Hardness after annealing [HV 0.2]	67
Hardness after age-hardening [HV 0.2]	115

CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 1000

Casting temperatures	Metal - from [°C]	Metal - to [°C]	Flask - from [°C]	Flask - to [°C]
Thin (below 0.5 mm)	1010	1030	640	680
Medium (from 0.5 to 1.2 mm)	990	1010	560	640
Thick (above 1.2 mm)	970	990	500	540

Stone-in-place casting trees

Remove the flask from the chamber immediately (< 1 min) after pouring. Let it cool for 25 minutes in air, then quench in water.

Trees without stones

Let the flask cool down in the chamber for 1 minute after pouring. Take the flask out of the machine without shaking it, let it cool for 15 minutes in air, then quench it in water.

MECHANICAL WORKING PARAMETERS

Pre-mixing temperature [°C] 1000

Casting temperature	Metal - from [°C]	Metal - to [°C]
Ingot making		
Continuous casting		

AGE HARDENING PROCESSING PARAMETERS

Age-hardening using solubilization treatment	Temperature [°C]	Time [min]	Quenching
Solubilization	700	30	Water, immediate
Age-hardening	300	60	Air or in furnace

Single step age-hardening treatment	Temperature [°C]	Time [min]	Quenching
Age-hardening	300	90	Air or in furnace



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