

TECHNICAL DATASHEET AND GUIDELINE

SF928CH
Title 925 ‰

Master alloy for casting of 925‰ silver

GENERAL INFORMATION

Typology	Master alloy for silver
Production process	Casting
Color	Silver
Color shade	--
Density [g/cm ³]	10.3
Melting temperatures	
Solidus [°C]	730
Liquidus [°C]	900

Commercial composition	
Cu (%)	72
Zn (%)	28



FULL CHARACTERIZATION DATA

General characteristics	
As cast grain size [µm]	180
Fluidity (grid filling test) [%]	80
Color coordinates	
L*	93.9
a*	-0.6
b*	6.2
c*	6.2
Yellow index	11.99

Mechanical characteristics	
Tensile strength (Rm) [MPa]	251
Yield strength (Rp0.2) [MPa]	113
Elongation at rupture (A) [%]	26
As cast hardness [HV 0.2]	50
Hardness after 70% area red. [HV 0.2]	160
Hardness after annealing [HV 0.2]	70
Single step age-hardening hardness [HV 0.2]	110

PRODUCT APPLICATIONS

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

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CASTING PROCESSING PARAMETERS

Casting temperatures	Metal - from [°C]	Metal - to [°C]	Flask - from [°C]	Flask - to [°C]
Thin (below 0.5 mm)	1000	1030	560	600
Medium (from 0.5 to 1.2 mm)	980	1000	520	560
Thick (above 1.2 mm)	960	980	480	520

Stone-in-place casting trees

Let the flask cool down for 30-45 minutes, 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.

AGE HARDENING PROCESSING PARAMETERS

Age-hardening using solubilization treatment	Temperature [°C]	Time [min]	Quenching
Solubilization	730	40	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