

GENERAL INFORMATION
General information

Typology	Master alloy for silver
Color	Silver
Production process	All-purpose
Grain refinement level	Minimum
Deoxidation level	Minimum

Commercial composition (%)

CU	97.0
ZN	2.0
IN	1.0

Melting Temperatures

Solidus [°C]	810.0
Liquidus [°C]	895.0
Melting range [°C]	85.0

FULL CHARACTERIZATION DATA
Color coordinates

L *	a*	b*	c*	Yellow Index
97.7	-0.6	4.7	4.8	8.3

Mechanical characteristics

As cast hardness [HV 0.2]	70.0
Hardness after 70% area red. [HV 0.2]	165.0
Hardness after annealing [HV 0.2]	80.0
Single step age-hardening hardness [HV 0.2]	105.0
Tensile strength (Rm) [Mpa]	271.0
Yield strength (Rp0.2) [MPa]	166.0
Elongation at rupture (A) [%]	26.0

Physical characteristics

Density [g/cm ³]	10.3
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General characteristics

As cast grain size [μm]	450.0
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Product applications

Continuous casting
 Ingot casting
 Massive chain production
 Wire production
 Sheet production

CASTING PROCESSING PARAMETERS
Pre-melting temperature

Temperature [°C] 1020

POURING TEMPERATURES

	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	640	680	995	1025
0.5 - 1.2 mm	560	640	975	995
> 1.2 mm	500	540	955	975

MECHANICAL WORKING PARAMETERS
Pre-melting temperature

Temperature [°C] 1020

Reductions

Wire - diameter (%)	45.0
Sheet - area or thickness (%)	70.0

POURING TEMPERATURES	Countinous from [°C]	Countinous to [°C]	Ingot to [°C]	Ingot from [°C]
Temperatures	1000	1080	980	1020

MECHANICAL WORKING ANNEALING	Temp. from [°C]	Temp. to [°C]	Time [min]
< 1 mm	560	620	20
1 - 5 mm	560	620	25
> 5 mm	560	620	30

Mechanical working quenching

Quench directly in water.

S925LE 925‰

ALL-PURPOSE MASTER ALLOY FOR 925‰ SILVER

AGE HARDENING PROCESSING PARAMETERS

SINGLE STEP	Temperature [°C]	Time [min]	Quenching
AGE HARDENING	300.0	90.0	In air or in furnace

DOUBLE STEP	Temperature [°C]	Time [min]	Quenching
Homogenization	730.0	40.0	In water, immediate
Age-hardening	300.0	60.0	In air or in furnace