

GENERAL INFORMATION
General information

Color	Silver
Typology	Ready-to-use silver
Production process	Casting

Melting temperatures

Liquidus [°C]	895.0
Solidus [°C]	850.0
Melting range [°C]	45.0

Commercial composition

Silver (%)	93,00
Copper (%)	4,00
Zinc (%)	3,00


SILVER line
FULL CHARACTERIZATION DATA
Color coordinates

L*	95.5
a*	-0.2
b*	3.7
c*	3.7
Yellow index	6.7

General characteristics

As cast grain size [µm]	270.0
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Mechanical characteristics

As cast hardness [HV 0.2]	55.0
Hardness after annealing [HV 0.2]	60.0
Hardness after 70% area red. [HV 0.2]	165.0
Single step age-hardening hardness [HV 0.2]	90.0
Double step age-hardening hardness [HV 0.2]	120.0
Tensile strength (Rm) [Mpa]	255.0
Yield strength (Rp0.2) [MPa]	100.0
Elongation at rupture (A) [%]	33.0

Product applications

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

CASTING PROCESSING PARAMETERS

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	560.0	600.0	990.0	1020.0
0.5 - 1.2 mm	520.0	560.0	970.0	990.0
> 1.2 mm	480.0	520.0	950.0	970.0

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.

Stone-in-place casting trees

Let the flask cool down for 30-45 minutes, then quench in water.

Pickling

Dip in RADIAL solution (50 g/l conc. at 60°C for 2 min.), or in sulphuric acid (10% conc. at 50°C for 5 min.)

AGE HARDENING PROCESSING PARAMETERS

SINGLE STEP AGE-HARDENING TREATMENT	Temperature [°C]	Time [min]	Quenching
Age-hardening	300.0	90.0	Air or in furnace

DOUBLE STEP AGE-HARDENING TREATMENT	Temperature [°C]	Time [min]	Quenching
Solubilization	730.0	40.0	Water, immediate
Age-hardening	300.0	60.0	Air or in furnace