

GENERAL INFORMATION
General information

Production process	Universal
Color	Red
Color shade	Red
Typology	Master alloy for gold

Melting temperatures

Liquidus [°C]	985.0
Solidus [°C]	950.0
Melting range [°C]	35.0

Commercial composition

Silver (%)	5,00
Copper (%)	92,00
Zinc (%)	3,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	85.0
a*	9.6
b*	14.3
c*	16.9

General characteristics

As cast grain size [µm]	270
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Mechanical characteristics

As cast hardness [HV 0.2]	100.0
Hardness after annealing [HV 0.2]	120.0
Hardness after 70% area red. [HV 0.2]	240.0
Single step age-hardening hardness [HV 0.2]	110.0
Tensile strength (Rm) [Mpa]	414.0
Yield strength (Rp0.2) [MPa]	208.0
Elongation at rupture (A) [%]	29.0

Product applications

Casting in closed systems
Casting without stones
Continuous casting
Massive chain production
Sheet production
Stamping production
TIG tube production
Wire production

CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 1105.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	1085.0	1115.0
0.5 - 1.2 mm	580.0	650.0	1065.0	1085.0
> 1.2 mm	460.0	600.0	1045.0	1065.0

Trees without stones

Remove the flask within 1 minute after pouring, then quench immediately 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.)

MECHANICAL WORKING PARAMETERS

Pre-mixing temperature [°C] 1105.0

Reductions

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

POURING TEMPERATURES	Countinous from [°C]	Countinous to [°C]	Ingot from [°C]	Ingot to [°C]
Temperatures	1085.0	1165.0	1065.0	1105.0

MECHANICAL WORKING ANNEALING	Temp. from [°C]	Temp. to [°C]	Time [min]
<1 mm	620.0	660.0	25.0
1 - 5 mm	620.0	660.0	30.0
>5 mm	620.0	660.0	35.0

Mechanical working quenching

Quench directly in a 50% water/50% alcohol solution or in water.