

GENERAL INFORMATION
General information

Production process	Universal
Color	Red
Typology	Master alloy for gold

Melting temperatures

Liquidus [°C]	915.0
Solidus [°C]	905.0
Melting range [°C]	10.0

Commercial composition

Silver (%)	3,00
Copper (%)	95,00
Zinc (%)	2,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	86.1
a*	9.7
b*	15.1
c*	18.0

General characteristics

As cast grain size [µm]	35.0
-------------------------	------

Mechanical characteristics

As cast hardness [HV 0.2]	190.0
Hardness after annealing [HV 0.2]	180.0
Hardness after 70% area red. [HV 0.2]	280.0
Single step age-hardening hardness [HV 0.2]	330.0
Tensile strength (Rm) [Mpa]	554.0
Yield strength (Rp0.2) [MPa]	376.0
Elongation at rupture (A) [%]	24.0

Product applications

Casting without stones
Ingot casting
TIG tube production
Hand production
Sheet production
Casting in closed systems
Hollow chain production
Cladding production
Massive chain production
Continuous casting
Stamping production
Age-hardening
CNC and lathe production
Blanking production
Wire production

CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 1040.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	1020.0	1050.0
0.5 - 1.2 mm	580.0	650.0	1000.0	1020.0
> 1.2 mm	460.0	600.0	980.0	1000.0

Trees without stones

Remove the flask within 1 minute after pouring, then quench immediately 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] 1040.0

Reductions

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

POURING TEMPERATURES	Countinous from [°C]	Countinous to [°C]	Ingot from [°C]	Ingot to [°C]
Temperatures	1020.0	1100.0	1000.0	1040.0

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