

GENERAL INFORMATION
General information

Typology	Master alloy for gold
Color	Red
Color shade	Red
Production process	All-purpose
Grain refinement level	Very high
Deoxidation level	Minimum

Commercial composition (%)

CU	93.0
AG	5.0
ZN	2.0

Melting Temperatures

Solidus [°C]	905.0
Liquidus [°C]	920.0
Melting range [°C]	15.0

FULL CHARACTERIZATION DATA
Color coordinates

L *	a*	b*	c*	Yellow Index
86.8	9.6	15.4	18.1	

Mechanical characteristics

As cast hardness [HV 0.2]	185.0
Hardness after 70% area red. [HV 0.2]	290.0
Hardness after annealing [HV 0.2]	180.0
Single step age-hardening hardness [HV 0.2]	335.0
Tensile strength (Rm) [Mpa]	531.0
Yield strength (Rp0.2) [MPa]	378.0
Elongation at rupture (A) [%]	29.0

Physical characteristics

Density [g/cm ³]	14.7
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General characteristics

As cast grain size [μm]	60.0
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Product applications

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

CASTING PROCESSING PARAMETERS
Pre-melting temperature

Temperature [°C] 1040

POURING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660	720	1020	1050
0.5 - 1.2 mm	580	650	1000	1020
> 1.2 mm	460	600	980	1000

Trees without stones

Take out the flask within 1 minute from pouring, and quench it directly in water.

Stone-in-place casting trees

Remove the flask immediately from the machine. Dip only the bottom part of the tree in cold water and keep under ventilation for 15 minutes. Quench in warm water.

Pickling

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

MECHANICAL WORKING PARAMETERS
Pre-melting temperature

Temperature [°C] 1040

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	1020	1100	1000	1040

MECHANICAL WORKING ANNEALING	Temp. from [°C]	Temp. to [°C]	Time [min]
< 1 mm	620	660	25
1 - 5 mm	620	660	30
> 5 mm	620	660	35

Mechanical working quenching

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

OR134 750‰

ALL-PURPOSE MASTER ALLOY FOR 375-585-750-875-917‰ (9-14-18-21-22 KT) RED GOLD

AGE HARDENING PROCESSING PARAMETERS

SINGLE STEP	Temperature [°C]	Time [min]	Quenching
AGE HARDENING	250.0	90.0	In air or in furnace