

C185N 750‰

MASTER ALLOY FOR CASTING OF 375-585-750‰ (9-14-18 KT) RED GOLD

GENERAL INFORMATION
General information

Typology	Master alloy for gold
Color	Red
Color shade	Red
Production process	Casting
Grain refinement level	Very high
Deoxidation level	High

Commercial composition (%)

CU	92.1
AG	4.4
ZN	3.5

Melting Temperatures

Solidus [°C]	890.0
Liquidus [°C]	910.0
Melting range [°C]	62.0

FULL CHARACTERIZATION DATA
Color coordinates

L *	a*	b*	c*	Yellow Index
86.5	9.2	16.4	18.8	

Mechanical characteristics

As cast hardness [HV 0.2]	170.0
Hardness after 70% area red. [HV 0.2]	280.0
Hardness after annealing [HV 0.2]	170.0
Single step age-hardening hardness [HV 0.2]	325.0
Tensile strength (Rm) [Mpa]	451.0
Yield strength (Rp0.2) [MPa]	316.0
Elongation at rupture (A) [%]	34.0

Physical characteristics

Density [g/cm ³]	14.7
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General characteristics

As cast grain size [μm]	340.0
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Product applications

Stone-in-place casting
 Casting in open systems
 Casting without stones
 Age hardening

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CASTING PROCESSING PARAMETERS
Pre-melting temperature

Temperature [°C] 1030

POURING TEMPERATURES

	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660	720	1010	1040
0.5 - 1.2 mm	580	650	990	1010
> 1.2 mm	460	600	970	990

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 m

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.