

**MASTER
ALLOY**
A183N1 875‰

ALL-PURPOSE MASTER ALLOY FOR 750-917‰ (18-22 KT) YELLOW GOLD

GENERAL INFORMATION
General information

Color	Yellow
Production process	Universal
Color shade	Rich yellow
Typology	Master alloy for gold

Melting temperatures

Liquidus [°C]	960.0
Solidus [°C]	930.0

Commercial composition

Silver (%)	49,00
Copper (%)	51,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	85.0
a*	5.5
b*	27.0

Mechanical characteristics

As cast hardness [HV 0.2]	75.0
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CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 1080.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	1060.0	1090.0
0.5 - 1.2 mm	620.0	660.0	1040.0	1060.0
> 1.2 mm	560.0	620.0	1020.0	1040.0

Trees without stones

Let the flask cool down for 10-15 minutes, then quench 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] 1080.0

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	1060.0	1140.0	1040.0	1080.0

MECHANICAL WORKING ANNEALING	Temp. from [°C]	Temp. to [°C]	Time [min]
<1 mm	650.0	680.0	25.0
1 - 5 mm	650.0	680.0	30.0
>5 mm	650.0	680.0	35.0

Mechanical working quenching

Quench directly in water.