

**MASTER
ALLOY**
SM1 917‰

MASTER ALLOY FOR MECHANICAL WORKING OF 750-917‰ (18-22 Kt) YELLOW GOLD

GENERAL INFORMATION
General information

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

Melting temperatures

Liquidus [°C]	980.0
Solidus [°C]	955.0
Melting range [°C]	25.0

Commercial composition

Silver (%)	40,00
Copper (%)	57,00
Zinc (%)	3,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	87.2
a*	7.9
b*	27.1
c*	28.2

Physical characteristics

Density [g/cm ³]	17.3
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Product applications

CNC and lathe production
Cladding production
Blanking production
Stamping production
Hollow chain production
Continuous casting
Massive chain production
Production of tube from continuous casting
Sheet production
TIG tube production
Wire production
Ingot casting

Mechanical characteristics

As cast hardness [HV 0.2]	70.0
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RELATED PRODUCTS LIST
Related Products

CUT10X2	Copper tube, 10.0 mm diameter, 2.0 mm wall thickness, 2500 mm length, cold worked
L1A	Powder for soldering of gold and silver chains
LSG406B	Master alloy for soldering of 750‰ (18 Kt) yellow gold
LSG409V	Master alloy for soldering of 750‰ (18 Kt) yellow gold
TOMBACP	Tombac plate, 10.0 mm thickness, 100.0 mm width

Alternative Products

Y142W	Master alloy for mechanical working of 750‰ (18 Kt) yellow gold
SCA4	Master alloy for casting of 750-917‰ (18-22 Kt) yellow gold

MECHANICAL WORKING PARAMETERS
Reductions

Sheet - area or thickness (%)	60.0
Wire - diameter (%)	40.0

POURING TEMPERATURES

Countinous from [°C]

Countinous to [°C]

Ingot from [°C]

Ingot to [°C]

Temperatures

1070.0

1150.0

1050.0

1090.0

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 a 50% water/50% alcohol solution or in water