

TECHNICAL SHEET

B183N 585‰

MASTER ALLOY FOR MECHANICAL WORKING OF 750% (18 KT) YELLOW GOLD

GENERAL INFORMATION

General information	
Color	Yellow
Production process	Mechanical working
Typology	Master alloy for gold
Color shade	Light yellow
Melting temperatures	
Liquidus [°C]	820.0
Solidus [°C]	795.0
Melting range [°C]	25.0

Commercial composition	
Silver (%)	47,00
Copper (%)	51,00
Zinc (%)	2,00

GOLD line

FULL CHARACTERIZATION DATA

Color coordinates	
L*	90.2
a*	3.7
b*	17.8
C*	18.2
Physical characteristics	
Density [g/cm³]	13.0
General characteristics	
As cast grain size [µm]	60.0

Mechanical characteristics	
As cast hardness [HV 0.2]	225.0

Product applications	
Ingot casting	
Continuous casting	
Sheet production	
Wire production	

RELATED PRODUCTS LIST

Related Products			
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		

Alternative Products

Y142W Master alloy for mechanical working of

750‰ (18 Kt) yellow gold

C183N Master alloy for casting of 750% (18 Kt)

yellow gold



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CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 950.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]	
< 0.5 mm	660.0	720.0	920.0	950.0	
0.5 - 1.2 mm	580.0	650.0	900.0	920.0	
> 1.2 mm	460.0	600.0	880.0	900.0	
Trees without stones					

Let the flask cool down for 5 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] 950.0	Reductions		
	Sheet - area or thickness (%) 75.0		
	Wire - diameter (%) 45.0		

POURING TEMPERATURES	Countinous from [°C]	Countinous to [°C]	Ingot from [°C]	Ingot to [°C]
Temperatures	930.0	1010.0	910.0	950.0

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