LEGOR®

MASTER ALLOY

TECHNICAL SHEET

B182NM 750‰

PRE-MASTER ALLOY FOR MECHANICAL WORKING OF 750‰ (18 KT) YELLOW GOLD

GENERAL INFORMATION

General information	
Color	Yellow
Typology	Pre-master alloy for gold
Production process	Mechanical working
Color shade	Light yellow
Melting temperatures	
Liquidus [°C]	910.0
Solidus [°C]	860.0
Melting range [°C]	50.0

Commercial composition	
Copper (%)	95,00
Zinc (%)	5,00

GOLD line

FULL CHARACTERIZATION DATA

Color coordinates	
L*	87.4
a*	3.0
b*	24.5
c*	24.7
Physical characteristics	
Density [g/cm³]	15.0

Mechanical characteristics	
As cast hardness [HV 0.2]	130.0
Hardness after 70% area red. [HV 0.2]	175.0
Single step age-hardening hardness [HV 0.2]	175.0
Tensile strength (Rm) [Mpa]	402.0
Yield strength (Rp0.2) [MPa]	272.0
Elongation at rupture (A) [%]	41.0

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

Print Date 06/02/2020

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CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C]	1030.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	620.0	700.0	990.0	1020.0
0.5 - 1.2 mm	560.0	650.0	980.0	1000.0
> 1.2 mm	500.0	620.0	970.0	980.0

Trees without stones

Let the flask cool down for 5 minutes, then quench in water.

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

Mechanical working quenching

Quench directly in water

AGE HARDENING PROCESSING PARAMETERS

SINGLE STEP AGE-HARDENING TREATMENT	Temperature [°C]	Time [min]	Quenching
Age-hardening	275.0	90.0	Air or in furnace

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PRODUCT TECHNICAL GUIDELINES

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