

**MASTER  
ALLOY**
**OTT80-20**

BRASS AT 20% ZINC

**GENERAL INFORMATION**
**General information**

Typology	Brass
Color	Yellow
Color shade	Rich yellow
Production process	All-purpose
Grain refinement level	Minimum
Deoxidation level	Minimum

**Commercial composition (%)**

CU	80.0
ZN	20.0

**Melting Temperatures**

Solidus [°C]	980.0
Liquidus [°C]	1010.0

**FULL CHARACTERIZATION DATA**
**Color coordinates**

L *	a*	b*	c*	Yellow Index
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**Mechanical characteristics**

As cast hardness [HV 0.2]	75.0
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**Physical characteristics**

Density [g/cm <sup>3</sup> ]	8.6
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**Product applications**

Ingot casting  
 Wire production  
 Sheet production

**CASTING PROCESSING PARAMETERS**
**Pre-melting temperature**

Temperature [°C]

POURING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660	720	1040	1070
0.5 - 1.2 mm	580	650	1020	1040
> 1.2 mm	460	600	1000	1020

**MECHANICAL WORKING PARAMETERS**
**Pre-melting temperature**

Temperature [°C]

**Reductions**

Wire - diameter (%)	45.0
Sheet - area or thickness (%)	70.0

POURING TEMPERATURES	Countinous from [°C]	Countinous to [°C]	Ingot to [°C]	Ingot from [°C]
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Temperatures

MECHANICAL WORKING ANNEALING	Temp. from [°C]	Temp. to [°C]	Time [min]
< 1 mm	660	700	25
1 - 5 mm	660	700	30
> 5 mm	660	700	35

**Mechanical working quenching**

Quench directly in water.