

OTTGR

BRASS FOR CASTING

GENERAL INFORMATION

General information

Typology	Brass
Color	Yellow
Color shade	Light yellow
Production process	Casting
Grain refinement level	Medium
Deoxidation level	Very high

Commercial composition (%)

CU	83.5
ZN	13.0
SI	3.5

Melting Temperatures

Solidus [°C]	835.0
Liquidus [°C]	940.0
Melting range [°C]	105.0

FULL CHARACTERIZATION DATA

Color coordinates

L *	a*	b*	c*	Yellow Index
85.7	1.2	14.3	14.4	

Mechanical characteristics

As cast hardness [HV 0.2]	130.0
Single step age-hardening hardness [HV 0.2]	150.0
Tensile strength (Rm) [Mpa]	404.0
Yield strength (Rp0.2) [MPa]	328.0
Elongation at rupture (A) [%]	16.0

Physical characteristics

Density [g/cm³]	8.5
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General characteristics

As cast grain size [µm]	1200.0
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Product applications

Stone-in-place casting
 Casting in closed systems
 Casting in open systems
 Casting without stones

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CASTING PROCESSING PARAMETERS

Pre-melting temperature

Temperature [°C] 1060

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

Trees without stones

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

Stone-in-place casting trees

Let the flask cool down for 30-45 minutes, then quench it in water.

Pickling

Dip in RADIAL solution (50 g/l conc. at 60°C) for 2 minutes, or in sulphuric acid (10% concentration at 50°C) for 5 minutes.

AGE HARDENING PROCESSING PARAMETERS

SINGLE STEP	Temperature [°C]	Time [min]	Quenching
AGE HARDENING	350.0	90.0	In air or in furnace