

**MASTER  
ALLOY**
**OTT67-33M**

BRASS FOR CASTING

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

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

**Commercial composition (%)**

CU	67.0
ZN	33.0

**Melting Temperatures**

Solidus [°C]	825.0
Liquidus [°C]	900.0
Melting range [°C]	75.0

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

L *	a*	b*	c*	Yellow Index
87.0	-0.2	21.6	21.6	

**Mechanical characteristics**

As cast hardness [HV 0.2]	80.0
Hardness after 70% area red. [HV 0.2]	240.0
Hardness after annealing [HV 0.2]	85.0
Tensile strength (Rm) [Mpa]	277.0
Yield strength (Rp0.2) [MPa]	70.0
Elongation at rupture (A) [%]	41.0

**Physical characteristics**

Density [g/cm³]	8.4
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**Product applications**

Casting in closed systems  
 Casting in open systems  
 Casting without stones

**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	1000	1030
> 1.2 mm	460	600	960	980
0.5 - 1.2 mm	580	650	980	1000

**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.