

<b>PRODUCT CODE</b>	<b>OT M1</b>
<b>TYPE</b>	<b>SPECIAL BRASS</b>
<b>COLOR</b>	<b>YELLOW</b>



### Brief description

Brass for casting, especially designed for casting in closed systems and with pre-mounted stones.  
 OT M1 has a good hardness after casting, that allows an easier polishing and gives shining finished objects.  
 Hardness of casted items can not be increased with heat treatment.  
 OT M1 is nickel-free.

### Suitable applications

Plates&Sheets	Solid Chains	Hollow Chains	Soldered Tubes	CNC Works	Open Casting	Closed Casting	Wax Setting
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### Proprieties

<b>Composition</b>	Cu83 Zn13	Commercial composition of the alloy
<b>Density</b>	8.5	(g/cm <sup>3</sup> )
<b>Melting Range</b>	850-940	Solidus - Liquidus (°C)
<b>Hardness</b>	120-N.A.	Annealed - Hardened (HV)

### Casting

Cylinders' temperature should be 500-700°C, based on casted items' size and models' intricacy.  
 Casting temperature is 60-130°C higher than the liquidus temperature. After casting wait 5-10 min before cooling the metal in warm water (≈40°C).  
 In case of wax settings, wait 30-45 min before cooling the metal in warm water (≈40°C).

### Annealing

Heat the metal in protective atmosphere at 650°C for 15-20 min, then quickly cool it in a solution of 90% water and 10% alcohol or in warm water (≈40°C).

### Hardening

Not suitable.

### Pickling

Sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) at 15-30% concentration and 50-60°C can be used to remove surface oxide. Rinse with attention the metal after pickling.

### Scraps reuse

Up to 50% scraps can be added to the melting, removal of the sprue button is suggested. Always pay attention to the cleanliness of the scraps, pickling before adding them to new metal is suggested.