



Master Alloys Technical Specifications

Doc No
MA/YG/03

YC892

Casting Alloy for 22Kt and 18Kt Yellow Gold

General Information

1	Suitable Karatage	18KT/22KT	4	Application	Lost Wax Casting,
2	Color	Yellow	5	Solid State Hardness After Melting	22 KT : 74HRB
3	Color Shade	Deep Yellow			18KT : 81HRB

Melting Parameters

	Karatage	Temperature *C	Time min.sec
1	22KT	1000	4
2	18KT	900	5.2

Casting Parameters

	Karatage	Melting Casting Temperature		Investment Flask Temperature	
		Temp	Quenching Time	Temp	Type of Casting
1	22KT	1050	15 minutes	650	Vacuum Casting
2	18KT	980	15 minutes	600	Vacuum Casting

Mechanical Working Parameters

	Thickness	Temperature *C	Time
Annealing	>5	550	30
	1-5mm	550	25
	<1mm	550	20

Color Coordinatates

22KT			18KT		
L	a	b	L	a	b
90.15	11.25	33.2	92.26	7.73	25.18

Technical Guidelines

1	For mixing, place master alloy grains under the gold in the crucible.
2	Ensure an inert atmosphere of N2 Gas over the metal during melting.
3	On reaching the melting temperature, hold metal for few minutes and stir with graphite stirrer before pouring into mould.
4	Induction melting is strongly recommended.
5	After casting, leave flask for atleast 15 minutes and then quench in normal water.
6	Pickle in sulfuric acid (10% conc. At 60°C for 5 min.)
7	Ideal for lost wax casting process with high fluidity.

Remarks: The information is for reference only. The parameters should be adjusted according to the particular casting conditions.

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