



Firstray Ventures

Master Alloy for Gold, Silver & Imitation Jewellery

ALLOY CODE: - AP1427YC

Carat : 14 - 22	Color : Indian Yellow 2n	Melting Temp of Alloy : 950 °C
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Application: The alloy SP AP1427YC is so formulated as to ensure optimized combination of hardness and color in 22 carat jewelry. It also has proved its usage for 18 carat jewelry where a slight reddish tinge is desired. It is an all-purpose alloy, recommended for both hand-made, investment cast jewelry and CNC jewelry work.

	<u>18K</u>	<u>22K</u>
Application	Casting / H-made	Casting / H-made
Alloying Temp.	1050°C - 1060°C	1070°C - 1080°C
Casting Temp.	1040°C - 1050°C	1060°C - 1070°C
Flask Temp. [Normal Cast]	650°C - 660°C	670°C - 680°C
Flask Temp. [Stone Cast]	630°C - 650°C	660°C - 670°C
Quenching Time	7 - 10 minutes	12 - 15 minutes

Notes:

- The actual casting temperatures and flask temperatures shall be decided by the parameters like the section thickness of the items (thick, medium or thin), the overall size/bulk of the cast tree, the design intricacies etc.
- As a thumb rule, for thinner sections higher temperatures are selected and for thicker sections lower temperatures are preferred. At the same time, designs demanding higher form filling capabilities, higher than normal temperatures are an obvious choice.
- The 18 carat casings have a tendency to get hardened and subsequently give problems of cracking especially when flasks are cooled very slowly. For this reason, it is recommended that the flasks are cooled as fast as permitted by the quality of diamonds and also by the design parameters.
- For reusing the castings we recommend 50% fresh carat gold with 50% castings.