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**# 795 DARK YELLOW ALLOY FOR 18 K YELLOW GOLD SHEET, PLATE, AND WIRE FABRICATION**

United # 795 Alloy is formulated for **18 Karat** Dark Yellow Gold sheet, plate and wire fabrication giving a **Dark Yellow color**. The # 795 Alloy can also be used for Investment Casting if desired.

<b>MELTING</b>	The # 795 Alloy, and fine gold should be melted together in a clean crucible. Put alloy in the bottom of the crucible and fine gold on top. Initial melting temperature should be <b>1070° C / 1958° F</b> . Drop temperature somewhat before pouring as listed below. Boric acid flux may be used to keep the metal clean during the melting process. The metal should be mixed well with a stirring rod before pouring to assure a good mix.
<b>POURING TEMP FOR INGOTS</b>	18 K - <b>1000° - 1010° C</b> <b>1832° - 1850° F</b>
<b>POURING</b>	Metal should be poured into a preheated, vertical graphite or lightly lubricated iron mold. A steady even pouring motion should be used slowing down at the end of the pour to prevent shrinkage in the top of the ingot. Use a round rod mold for wire and a 2 piece L shaped mold for plate and sheet.
<b>QUENCHING</b>	The metal ingot should be removed from the mold and quenched immediately in pickle solution or water. For heavy ingots a one-minute cool down before quenching prevents quench cracking.
<b>FABRICATION</b>	The metal ingot should be cleaned of all adhering oxide or fluxes before rolling. The ingot should be rolled or drawn to a 50% reduction in size before annealing. After annealing continue the reduction at 50% before annealing again. Clean the ingot after each anneal. Keep rolls, dies and metal clean to prevent defects in the finished stock.
<b>ANNEALING</b>	Annealing temperature <b>704° C / 1300° F for 20 minutes</b> . <b>Quench immediately in water or pickle solution</b> . A boric acid fire coat should be applied before annealing in open atmosphere ovens to protect the metal from heavy oxidation. Avoid over-annealing wire or plate stock as this can cause excessive grain growth creating orange peel effect on the surface of finished goods.
<b>REMELTING</b>	Use 50% scrap to fresh mix when re-melting to prevent oxide build up in the metal.
<b>TECHNICAL ASSISTANCE</b>	Always available... Call 1-800-999-3463 / 1-800-999-FINE E-mail / <a href="mailto:doc@unitedpmr.com">doc@unitedpmr.com</a> Web-Site / <a href="http://www.unitedpmr.com">www.unitedpmr.com</a>

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