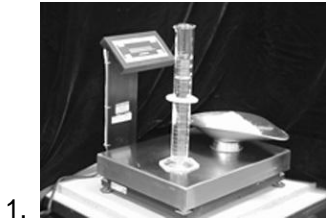




Application Instructions

R&R[®] Silver Jewelry Investment

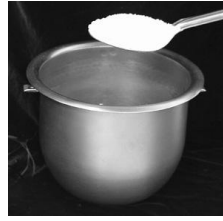
August 2005



1. Refer to back page. Weigh and measure required amounts of investment and water (1 g = 1 ml)



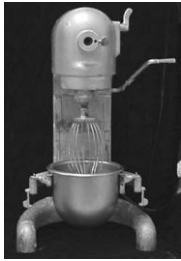
2. Always place water into mixing bowl first.



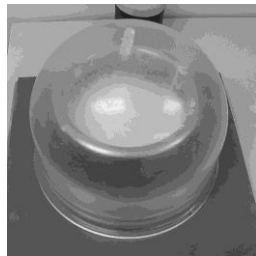
3. Add investment to water. Start timer immediately.



4. Hand mix for 30 seconds to wet out the powder.



5. Mechanically mix for 3 minutes.



6. Vacuum the investment until it rises and breaks. Do not exceed two minutes.



7. Pour the investment into and down the side of the flask until it barely covers the entire wax tree.



8. Vacuum the flask for about 90 seconds.



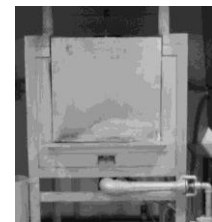
9. Fill the mold to the top of the flask and allow the investment to set undisturbed for 2 hours.



10. After 2 hours, remove the sprue base.



11. Load the flask into an oven preheated to 150C, with 1 inch of elevation above oven floor.



12. Follow the wax burnout schedule suitable for your application. (see back page)

1. To determine the proper amount of water and powder to use per flask, locate the volume of the flask size you are using on the chart below.

Cubic Volume By Flask Size							
Height → Diameter ↓	6.5 cm	7.5 cm	10.0 cm	12.5 cm	15.0 cm	17.5 cm	20.0 cm
6.5 cm	216 cm ³	249cm ³	332 cm ³	415 cm ³	497 cm ³	580 cm ³	663 cm ³
7.5 cm	287 cm ³	331 cm ³	442 cm ³	552 cm ³	662 cm ³	773 cm ³	883 cm ³
10.0 cm	510 cm ³	589 cm ³	785 cm ³	981 cm ³	1178 cm ³	1374 cm ³	1570 cm ³
12.5 cm	797 cm ³	920 cm ³	1227 cm ³	1533 cm ³	1840 cm ³	2146 cm ³	2453 cm ³
15.0 cm	1148 cm ³	1325 cm ³	1766 cm ³	2208 cm ³	2649 cm ³	3091 cm ³	3533 cm ³

2. Using the volume located in the previous step, calculate the weight of powder and the volume of water for your flask size using the following equations:

HEAVY CASTINGS = 39/100 WP (Men’s rings or pieces with thick sections)

[Volume (cm³) x 1.25 g]/1000 = _____ kg powder Volume (cm³) x .488 ml = _____ ml water

NORMAL CASTINGS = 40/100 WP (Ladies’ rings)

[Volume (cm³) x 1.23 g]/1000 = _____ kg powder Volume (cm³) x .494 ml = _____ ml water

DELICATE CASTINGS = 42/100 WP (Filigree and small pieces)

[Volume (cm³) x 1.20 g]/1000 = _____ kg powder Volume (cm³) x .506 ml = _____ ml water

Wax Burnout Schedule

Flask size: up to 6.5 cm x 12.5 cm	Flask size: up to 10.0 cm x 15.0 cm	Flask size: up to 15.0 cm x 30.5 cm
Hold at 150C for 2 hours	Hold @ 150C for 3 hours	Hold @ 150C for 4 hours
Elevate to 730C over the next 5 hours	Elevate to 730C over the next 6 hours	Elevate to 730C over the next 7 hours
Hold at 730C for 2 hours	Hold at 730C for 3 hours	Hold at 730C for 4 hours
Reduce to casting temperature & hold 1 hour before casting.	Reduce to casting temperature & hold for 2 hours before casting.	Reduce to casting temperature & hold for 3 hours before casting.

Note: Refer to the mold casting temperatures recommended by your alloy supplier.