

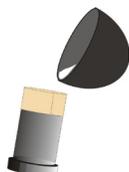
J Formula Platinum Investment

Romanoff's "J" Formula Platinum Phosphate-Bonded Investment is one of the world's most popular two part high temperature investment. It has been carefully formulated to produce better platinum, palladium, stainless and other high temperature metal castings than any other high-temperature investments.



Description	Item Number
"606" Investment and White Binder - 45lb	Z14-305-606
"606" Investment and Blue Binder - 45lb	Z14-305-606C
"606" Investment and Orange Binder - 45lb	Z14-305-606A
J Formula Investment and White Binder - 45lb	Z14-305-50J

BEFORE INVESTING



1. When using a non-asbestos paper square base, cut a 3/4 inch (19mm) hole in the center of the square base. Most commonly used is the 4" x 4" (SKU: 76-0881-SQ) with a 3" x 3" size flask and a wax button.
2. Attach the wax button (SKU: 74-000-WC) by heating the bottom of it and center it over the 3/4" (19mm) hole.
3. Mount your wax patterns to the button at a minimum 45° angle up from the button.
4. For a 3" long flask, use non-asbestos rolls, which measure 2 1/2" (53mm) wide (SKU: 76-0655) so that it will be 1/4" (6mm) short at each end of the flask. This allows for the necessary absorbency of the binder and allows space for the investment to attach to the inside of the flask.
5. Place the stainless steel flask 3" x 3" (SKU: 76-047) over the wax patterns and center it over the 4" x 4" non-asbestos square (SKU: 76-0881-SQ).
6. Then use hot sticky wax (SKU: 74-0603-KG) to attach and seal the outside of the flask to the 4" x 4" base, making it water-tight.
7. Add masking tape around the top of the flask, approximately 1.5" to extend around the top of the flask to allow the investment to rise during vacuuming. It is important that you fill the flask up to the top the first time rather than "top off" with a second filling.

INVESTING (Measure water and binder by VOLUME, not by WEIGHT)



St. Louis
Mini Mixer
76-113-MINI

1. Be sure to wear clear safety glasses and rubber gloves and full rubber apron when handling the binder solution.
2. Also wear a proper dust mask to avoid inhalation of the powder.
3. The importance of accurate weighing and adequate mixing cannot be overemphasized. Guessing at the proportions or proportioning "by eye" is the surest way to casting failures. Follow these instructions carefully.
4. The bottle of binder concentrate contains 16-ounces (474ml) of liquid.
 - a. To make binder working solution, pour 115.2 fluid ounces (3410ml) of distilled water into a clean one gallon (4-liters) empty bottle.
 - b. Add 12.8 fluid ounces (379ml) of binder concentrate to the water. Shake the bottle thoroughly mixing the binder and water. This combination makes one gallon of Binder Working Solution. Use a graduated measuring cylinder (SKU: 76-109-250ML)
 - c. Mix 100 parts investment powder with 30 parts binder working solution. (*EVEN THOUGH WE ARE GIVING YOU EXACT MEASUREMENTS, WE HAVE FOUND THAT EVERY CUSTOMER USES A SLIGHTLY DIFFERENT LIQUID/POWDER RATIO TO BEST SUIT HIS/HER NEEDS*). A strong electric mixer with a stainless steel flat blade should be used. An ordinary type of household electric mixer may NOT prove satisfactory and can eventually burn out.
5. The powder should be added slowly to the liquid as the mixer runs at a slow speed.
6. Mixing should continue for about 6 - 7 minutes at a slow speed.
7. The flasks are then put aside at room temperature to set **UNDISTURBED** for 90 minutes. (120 minutes if using flask larger than 3"x 3") This time period is important.

REVISIED 2/2022

8. After thorough mixing, first vacuum the bowl for two (2) minutes and secondly; vacuum the flask for two (2) minutes. If properly proportioned mixed and vacuumed. It should pour into the flask as a smooth heavy cream.
9. The flasks are then put aside on a table or placed into the furnace at room temperature to set **UNDISTURBED** for 90 minutes. (120 minutes if using flask larger than 3"x 3") This time period is important.
10. You can place several paper towels under the attached paper base to insure complete absorption of the binder solution. The non-asbestos paper base is not removed.
11. The investment does not become dry and hard after setting up, this is normal. It will have the consistency of "toothpaste".
12. It will become dry and hard during the burnout cycle.
13. After casting, allow the flask to cool until it can be held in a non-asbestos glove. Then quench in water, and use a high pressure water gun to remove the bulk of the investments. The quickest way to remove the balance of the investment is with the "J" Break (P/n 80-137-1CAR) Investment Remover Solution.

This much Powder	Requires this much distilled Water (90%)	+	And this much Binder (10%)	= Binder Working solution
1 lb. (454g)	4.61 oz. fl. (136.3ml)		0.51 oz. fl. (15.2 ml)	5.12 oz. (151.5 ml)
5 lbs. (2270g)	23.oz. fl. (681 ml)		2.56 oz. fl. (75.7 ml)	25.6 oz. (757 ml)
10lbs (4540g)	46oz. fl. (1363ml)		5.12 oz. fl. (151.5 ml)	51.2 oz. (1514.7 ml)
25 lbs. (11350g)	115.2 oz. fl. (3410ml)		12.8 oz. fl. (379 ml)	128 oz. (3789 ml)

OVERNIGHT BURNOUT



1. Room temperature up to 200°F (93°C) in 30 minutes.
 2. **Hold** at 200°F for 2 hours
 3. **Climb** up to 350°F (177C) in 1 hour.
 4. **Hold** at 350°F for 1 hour
- *If using rapid-prototyping resins, replace step 5 with steps 4a, 4b, and 4c.
- 4a. Climb up to 700°F (371°C) in 30 minutes
 - 4b. Hold at 700°F for 1 hour
 - 4c. Climb up to 1600°F in 4 hours.
 5. **Climb** to 1600°F (871°C) over 5 hours.
 6. **Hold** at 1600°F for 1 hour.
- Flasks are now ready to cast.

RAPID PROTOTYPE MODELS



1. RP resin models can be dipped into Pro-Tech Barrier Liquid (SKU: 78-8603) to protect the surface of cad models.
2. This will protect the surface during the investment set up. Spray the wax lightly from a distance on all surfaces then let it dry.
3. Do this 2-3 times to ensure a good protective coating.
4. If putting RP resins in the same flask as regular waxes, place the RP resins at the top of the tree to reduce the time they are in contact with the water/binder.

