

FlashCast™ investment

Properties*

Diluted Binder:Powder Ratio	Working Time
25:100	6–8 minutes

*These results are based on the testing methods, frequency and procedures of Ransom & Randolph or its approved suppliers. The levels referenced herein are only for general guidance and do not constitute a firm specification.

Pattern & Flask Preparation

Use a removable or burn-away flask.

Mixing & Investing

Use flask calculator for accurate measurement

1. Dilute Binder. Use binder at 100% or at 80:20 L:W.
Note: More binder yields more strength.
2. Weigh investment.
3. Measure diluted binder.
4. Add investment to diluted binder.

Conventional

5. Hand spatulate for 20–30 seconds then mix for 60 seconds at 250–350 RPM.
6. Vacuum for 1 minute.
7. Pour into the flask, avoid pouring directly onto the pattern. Apply vibration if possible. Do not fill the flask all the way; just enough to cover the pattern.
8. Vacuum up to 90 seconds.
9. Top off the flask with vibration if possible.

Vacuum Mixer

5. Hand spatulate for 20–30 seconds then mix 60 seconds under vacuum at 250–350 RPM.
6. Pour into the flask with vibration, avoid pouring directly onto the pattern.

*Leave the flask undisturbed for 20 minutes.

Oven Loading & Burnout Cycle

1. Remove sprue base and removable flask.
2. Load into preheated oven at 1500–1700°F (815–927°C).
3. Allow oven to stabilize and cast after a minimum of 1 hour.

Note: Adjustments may be required for various furnace types, flask sizes, and oven loading.

Tips

- Use demineralized water at 72–75°F (22–24°C).
- Working time is defined as the time from when the powder is added to the water until the investment becomes thick.
- Keep equipment clean of any set investment.
- Maintain a minimum pattern clearance of 1/4 inch (0.5 cm) at the sides and 1 inch (2.54 cm) at the top and bottom of the flask.
- To check a vacuum system for leaks, place water in a glass or ceramic container in the vacuum chamber. It should boil vigorously in 20 seconds.
- It is extremely important to leave flasks undisturbed while curing.
- While loading the oven, do not place flasks too close to the heat source.
- Flasks should be elevated at least 1 inch (2.54 cm) above the oven floor to allow for proper air circulation.

Calculate with Confidence

Scan to access R&R Flask Calculators



Ransom-Randolph.com/flask-calculators

Storage

Keep container tightly closed when not in use. Store investment in a dry area at room temperature. Shelf life is 2 years from the date of manufacture (found in the first six digits of the lot number on the label in MMDDYY format).

Safety

Danger. Contains crystalline silica. Causes damage to lungs through prolonged or repeated exposure by inhalation. Avoid skin or eye contact. Avoid breathing dust. Wear Personal Protective Equipment (PPE) when handling. Wash hands thoroughly after handling. See SDS for more information.

North America: May cause cancer by inhalation.

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user. All potential liability related to the sale and use of this product is limited to the cost of the particular goods sold in their respective transactions.