



INSTRUCTIONS FOR PLATINUM CASTING MACHINE

No. 170-008

Installation

This machine is completely assembled and ready to use when removed from the shipping carton. It is important that this casting machine be secured to a flat and level bench or table. The cross arm must be balanced. To balance the cross arm properly, place an inverted flask and a crucible in their proper positions. Bring the cross arm to a horizontal position and balance with the weight at the end opposite the casting flask and the crucible. To be sure of proper balance, jar the machine by hand. If it is not balanced, the heavy end will drop slowly. Adjust the weight accordingly. Without proper balance, the entire machine will vibrate and may spill molten metal during casting.

Operation

Allow $\frac{1}{2}$ " between the pattern and the top end of the casting flask when investing. Strength in the investment at that point is essential to prevent it from being pulled out the back of the flask in the casting machine. Do not over heat investment while burning out : it is apt to crack. Thus weakened, it might be pulled out of the flask. Be sure the investment does not protrude beyond the end of the flask. A flat end flask will hold more securely against the back plate.

Wind the arm, but do not exceed $1\frac{1}{2}$ turns of the arm. Turn $1\frac{1}{2}$ turns and push arm in while lifting the release lever. Allow release lever to hold the arm in position. Do not use lever to stop rotation of arm. Do not heat metal unless release lever is fully engaged.

Because of the high melting point of platinum (3225°F) it is necessary to heat the invested flasks to 1600°F to obtain a good casting. When metal is at casting temperature in the crucible, remove the pre-heated flask from your oven and place it into the casting arm. Release the arm by depressing the release lever. Push down firmly to release the cross arm for an exceptionally fast start. This fast start insures a good casting.

Maintenance

A few drops of oil occasionally in the lubrication hole in the shoulder support is the only lubrication required.