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L. C. Smith

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OSTI

Lt. Topper

Procedure for Casting 2S 0-49 and 2S 30-50 Hemispherical  
Composition B Charges

1. The following is the procedure developed by Dinerstein and Levy for casting the inner charges required for 12L30B and 12L30D lenses, using special removal steel tampers of 3.010 inches outside diameter:

**Tamper designation** - Y1893C-1B, six (6) available at 11:00 AM of April 7.  
Two removal brass handles with brass lock pin, also marked Y-1893C-1B, furnished with the tampers to aid in removing them from castings.

**Tamper Adapters** - H30-12, dural, for use in the 2S30-49 mold G70-2, steel, for use in the 2S30-50 mold.

**Tamper Temperature at time of pouring** - 66°-71°C. (150° - 160° F.)

**Mold Temperature at time of pouring** - 60°-70°C. (140° - 160° F.)

**Pouring Temperature** 80°-82°C. (176° - 179° F.)

**Riser Data** - Stencilboard or flexible cardboard cylinder wrapped with several turns of felt or other insulating material, 4-5 inches high, taped to outside of riser neck on mold and filled with molten Composition B heated to the pouring temperature.

**Removal of Tamper** - Lift mold cap containing casting from mold base, invert, and place three ice cubes in cavity in the tamper. Allow the ice to melt for about one minute, and then attach the brass handle to the tamper and apply gentle pressure to the handle in such a way as to impart a rocking motion to the tamper. If the tamper fails to slip out of the casting, tap the top end of the handle gently until the tamper is loosened from the casting.

**Removal of Casting from Mold** - Allow the casting to remain in the mold cap resting on a sheet of felt or other soft insulating material until cooled to room temperature. Break off the riser and force casting from mold by applying gentle pressure to the riser stub through the riser neck.

2. Request that the above procedure be tried by your section and the writer informed of any difficulties encountered.

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CLASSIFICATION CANCELLED  
PER DOC REVIEW JAN. 1973

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Laboratory Files - 2 copies

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L. M. Resman  
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