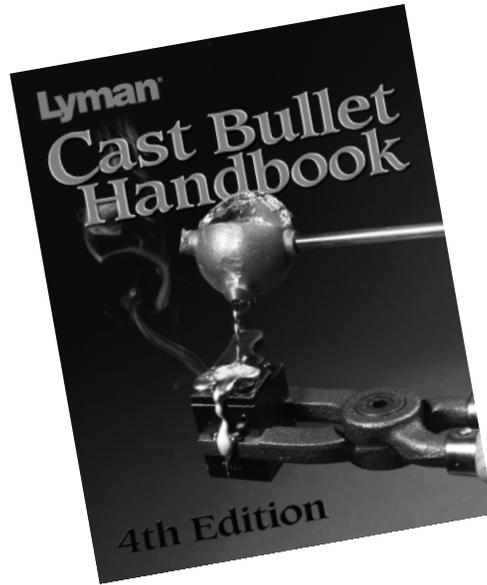


The perfect companion to your Big Dipper Casting Furnace:



Lyman – the pioneer of reloading manuals introduces the 4th Edition of their popular Cast Bullet Handbook.

This is the first new Cast Bullet Handbook from Lyman in 30 years!

It includes data for all Lyman Moulds, plus additional data for select RCBS, Redding and Lee Moulds.

Written by well-known cast bullet authority, Mike Venturino, this is the most up-to-date and comprehensive cast bullet data available.

Lyman Products Corp.

475 Smith St., Middletown, CT 06457
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Lyman®

Big Dipper

Casting Furnace



Operating Instructions

Operating Instructions for the Big Dipper



WARNING: Melting lead and casting lead objects will expose you and others in the area to lead, which is known to cause birth defects, other reproductive harm and cancer.

REDUCING EXPOSURE:

Lead contamination, dust in the air and on your skin is invisible. Keep children and pregnant women away during use until cleanup is complete. Risk can be reduced (but not eliminated) with strong ventilation; washing hands immediately after use of these products before eating or smoking; and careful cleaning of surfaces and floors with disposable wipes, after lead dust has had a chance to settle. Use a lead specific cleaner with EDTA, or a high-phosphate detergent (like most detergents sold for dishwashers) and bag used wipes for disposal.

CAUTIONS:

- **Never allow moisture near molten lead as when introduced to lead, a volatile steam explosion occurs and molten lead is sprayed not only out over immediate area but also all over bullet caster.** This moisture could be introduced by a wet ladle or dipper, wet lead added to pot, condensation from over head pipes, perspiration from bullet caster or many other ways.
- Never attempt to touch any of the furnaces surfaces as all are extremely hot.
- Always be sure unit is plugged into a properly grounded outlet.
- No casting should be done without proper safety wear. This includes: long pants, long sleeve shirt, heat resistant gloves, eye protection, closed toe shoes.
- Keep all flammable materials away from casting area and do not operate on flammable materials such as wood, paper or carpeting.
- Casting should be done in a well ventilated area. Avoid breathing in fumes or dust that comes from the furnace.
- Keep children away from casting and reloading areas.
- Do not cast or reload if distracted.
- Do not smoke, eat or drink near or during the casting processes.
- Do not run dry without lead (except for initial warm-up period)
- Always wash hands after handling lead.
- Use caution when adding bullet metal to furnace or pot containing molten metal to avoid splashing.

FURNACE SET-UP:

Before using your new furnace for the first time, we suggest you plug it into an appropriate wall socket, turn knob to max and run empty for 10-15 minutes in a well ventilated area to burn off preservatives. The unit will smoke a bit and would be ideal in an outdoor area. The temperature of the furnace is controlled by a precision rheostat. The furnace face plate is marked with graduations, when the ideal casting temperature is found you can note the graduation mark for future reference. The Lyman casting thermometer is particularly useful here.

MELTING COLD BULLET METAL:

Once the preservatives have been heated out of the furnace, load furnace with up to 10 pounds of bullet metal. The pot contents will reach the designated temperature in approximately 15 minutes. Once up to temperature, the heating system can be controlled to give various temp settings. The marks on the face plate are for reference and do not relate to a specific temperature. You will need to experiment with different settings in order to find the temperature that works best with your bullet metal and mould combination. If you have a casting thermometer, 700 degrees F is a good starting point. Once you find your best temperature make note of the reference mark so you can return to it for future casting sessions.

When replenishing a near-empty pot, there is no need to adjust the control knob. Add bullet material and allow pot 5 minutes to reach set temp and return to casting.

OPERATING YOUR FURNACE:

The Big Dipper furnace is designed for dipper casting. For best results, fill the dipper with lead alloy and place the spout of the dipper against the pouring hole in the mould's sprue plate. Holding the mould and dipper together, slowly rotate them to a vertical position with the dipper above the mould. This sequence will give the most consistent castings.

PRESERVING YOUR FURNACE:

To realize the longest possible life from your furnace, follow these precautions:

1. Disconnect your furnace when it is not in use.
2. Do not operate furnace above rated voltage (115 Volts, AC)
3. For maximum life, run the furnace at the lowest temperature that provides satisfactory casting. Establish appropriate temperatures by trial for each type of bullet metal. Normally a 650-720 degrees F temperature range proves adequate for most bullet casting.