

FROM THE WORKBENCH

VOLUME 2 A PUBLICATION OF THE ERIE LACKAWANNA HISTORICAL SOCIETY, INC. NUMBER 2
Copyright © 2004. All rights reserved, including reproduction in whole or in part in any form without written permission from the Erie Lackawanna Historical Society, Inc.

EDITED BY JIM HARR

WEB ADDENDUM 2.2.1

Forming Sheet Styrene Into a Curve

By Paul Cappelloni

While trying to neatly fill the hole left by removal of the original sand dome, I hit upon a technique often employed by military and aircraft modelers for creating a curved sheet of styrene. In order to form the bottom patch and top plug into a radius to match the boiler, you will be boiling the patch and plug while they are clamped to the required radius and then rapidly cooling the pieces in a cold-water bath so they hold their shape. You will need to make a cylindrical clamp out of a piece of 1" brass tube and an adjustable pipe clamp (see fig. 1). Cut the tube length-wise so that you can spread it wide enough to put in the two pieces of styrene. When this is done the styrene will form an arch. Take the pipe clamp and place it around the 1" tube and tighten it so that the inside diameter is close to that of the model boiler. Now place the cylindrical clamped styrene into boiling water for a few minutes. Next remove the clamp and place it into the pan of cold water. Lastly remove the pipe clamp and the styrene pieces. Notice how the styrene retains the radius and cannot be flattened. You can now trim your parts to size as needed.

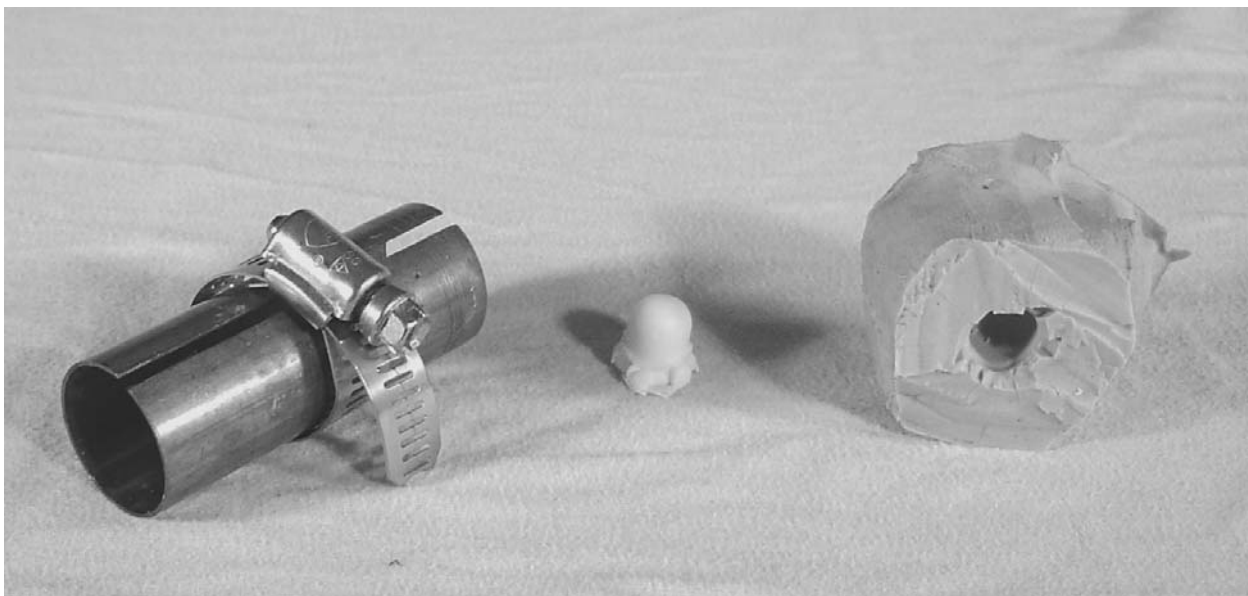


Figure 1: From left to right, clamp for making curved sheet styrene; also shown are cast sand dome, sand dome mold.

See Web Addendum 2.2.2 for a photo of the unpainted locomotive with these parts installed.