



October 16, 2025

October Update:

*Abbey Organ Builders, Opus II*  
*St. Peter Catholic Church*  
*Volo, IL*

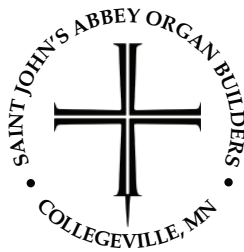
This past month, we were blessed to begin construction on *Opus II*. While much of our team continues putting the finishing touches on *Opus I*, the pipe makers have been hard at work crafting the metal pipes for St. Peter's. As we began production, it quickly became clear that we needed more metal sheets. This meant our pipe makers have spent a good amount of time in the casting room with cauldrons and hammers in hand.

Casting is one of the most exciting and labor-intensive activities in organ building. Remarkably, the art of casting pipe metal has changed very little over the centuries. In *L'Art du Facteur d'Orgues* (the great 18th-century treatise by Dom Bédos, a Benedictine monk) you can see illustrations of the same tools and techniques we still use nearly three hundred years later. Casting our own metal is uncommon for a shop of our size, but we believe it is essential. It gives us greater control over the quality of our materials and allows us to experiment in ways that enhance the sound and stability of our pipes.



**Folia pertaining to castin from Dom Bédos' *The Art of the Organ-BUILDER***

While certain pipes can be made from zinc or copper, lead and tin remain the two principal metals used in organ building. We cast three different alloys: 97% lead, 90% tin, and a 50/50 lead-tin mixture. Each alloy and the thickness of its sheet serves a specific purpose depending on the design and function of the pipes.



Our pipe makers begin by melting lead and tin ingots in the furnace. Once the metal reaches the proper temperature, it is transferred to the casting table. The molten metal is poured into the box and spread across a five-inch-thick granite slab covered with a special cloth. The speed at which the box moves determines the thickness of the sheet. After cooling, the sheets are cut to length and hammered. This hammering process closes the pores in the metal and increases its tensile strength, preparing the sheets to be sized and sent up to the pipe shop.

Though this is a simplified explanation, casting demands exceptional technical skill and experience. Unlike many other metalworking processes that have been industrialized, this centuries-old craft resists mechanization. We take great pride in our ability to cast metal in-house and, just as importantly, to pass on this traditional knowledge to the next generation of organ builders.

In Christ,

Fr. Lew Grobe, O.S.B.

Director, Saint John's Abbey Woodworking and Organ Builders



Casting a sheet.





Lead and tin ingots



Various metal alloys. (Top) Hammered sheet  
(Bot. L-R) 50%, 90% tin, 97% lead



Pouring molten metal into the cauldron.



Finished rolls ready for cutting and hammering.



Hammering machine.



Hammered sheets ready for sizing