

PREPARING A METAL MOLD

Metal, like most mold materials, needs a good coat of kiln wash to keep the glass from sticking to the mold when heated to bending temperatures. Unfortunately metal molds can be uncooperative in this regard. As fast as the kiln wash is brushed on it all runs to the bottom of the mold, leaving the sides bare.

The trick in getting the kiln wash to stick to the mold is to heat the metal to approximately 500^o F. (260C) in your kiln (Do Not Overheat). **Put on a dust mask.** Using gloves or tongs remove the mold from the kiln and place it on a nonflammable surface such as a kiln shelf. Working quickly before the metal cools, spray the kiln wash onto the molds using an airbrush, spray bottle, garden sprayer or atomizer. Because the metal is hot, the mist of kiln wash dries before it has a chance to run. Stop spraying as soon as you begin to see wet spots in the metal. Reheat the mold and repeat the spraying operation. It may take five or so reheats to achieve a good surface coating For more information, refer to *The Fused Glass Handbook* or *Kiln Crafted Glass, Slumping Video*, both are by Gil Reynolds.

DO NOT sandblast the mold first. That is a waste of time and although it is not a problem with our hand spun solid stainless steel molds, some inexpensive commercial “clad” molds are a base metal with a thin layer of stainless that can become compromised when sandblasted.

An alternative to spraying shelf primer onto a hot mold is to use MR-97 Boron Nitride. This is an aerosol release that can be sprayed onto a room temperature mold (wear a dust mask and spray outside only please). To date this is the best release agent we have form for preparing metal or ceramic molds for slumping and bending.

