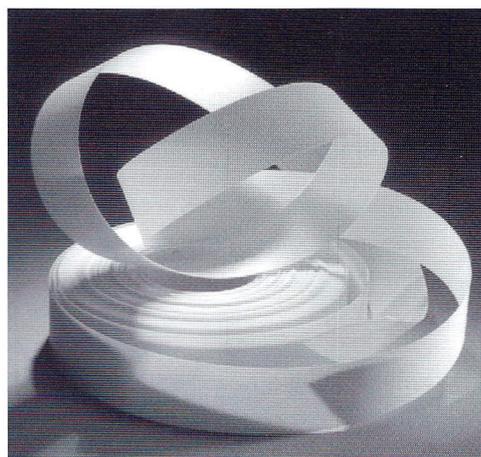


FABRICATION TECHNIQUES

It is possible to fabricate POREX Porous Plastics in a number of different ways. As most of the techniques discussed require heating a material to above its softening point, it is almost certain that the porous characteristics of the material will be altered. Nevertheless, the following recommendations are meant as starting points. The successful development of any product will almost always require a good deal of trial and error, followed by functionality experimentation. Experience with a method utilizing conventional plastics would be helpful.



When heating porous plastics, the user should adjust the temperature upward until a change of appearance occurs. A translucent appearance indicates softening, and a transparent appearance indicates melting. If porosity at a seal is desired, the material should not be heated beyond its translucent stage.

It will be noted by those experienced in solid plastics fabrication that longer dwell times are usually necessary to soften POREX Porous Plastics than would be necessary for non-porous polymers. This is due to the heat insulating property of the pores.

The softening and melting points given are approximate. Overheating the surface of porous plastics will seal the pores. In many cases, our materials are blends of several polymers, therefore, experimentation will be necessary to obtain best results.

The following recommendations apply to the listed materials:

<u>Material</u>	<u>Softening Point</u>	<u>Melting Point</u>
Ultra-High Molecular Weight Polyethylene UHMW	130°C(266°F)	160°C(320°F)
High Density Polyethylene HDPE	130°C(266°F)	160°C(320°F)
Polypropylene PP	172°C(342°F)	193°C(380°F)
Polyvinylidene Fluoride PVDF	176°C(349°F)	197°C(387°F)

Cleaning Techniques

Slightly soiled (dirt, grease smudges, etc.) sheets may be cleaned with mildly abrasive cleanser. Heavy grease or oil may be removed with readily available solvents. For organic materials and microbiological organisms, submerge the sheet in a solution of muriatic acid in a shallow tray or vessel and leave overnight. Rinse the part thoroughly with water and allow to dry.