

TL-Silver Glass Fibre Blanks

Usage Advice

Temperature is very important factor in thermoforming. Be sure that the temperature does not vary more than 10°F from the set temperature and should be monitored with reliable temperature indicator or recorder. Avoid gumming up the cutting and grinding tools by not generating excessive heat, that would melt the plastic matrix, due to excessive speed, application of too much pressure or both.

The matrix is acrylic, which can micro-crack when contacted by acetone, dissolved by MEK, Toluene and other strong organic solvents. Isopropyl alcohol is usually used for cleaning.

Forming Procedure

1. Stabilise the convection oven at 390°F (198°C) ± 10°F (5°C)
2. Set Vacuum at >=25 inches Hg
3. Heat the blanks for 3 - 5 minutes.
4. Locate the heated blank on the cast (mould).
5. Hold the blank by partially lowering the lid and putting hand or fingers outside the bladder.
6. Apply vacuum by fully closing the lid and triggering the vacuum solenoid valve.
7. Help forming the contoured area, e.g. heel cups, with finger and palm pressures.
8. Hold vacuum for about 1 minute allowing the formed part to cool and harden.
9. Remove formed components from cast.

Note: Steps 4 through to 7 should be accomplished within 10 seconds. When applying palm motion during forming, work the material from high to low regions.

Heat Adjustment

TL-Silver Rigid and Semi-Rigid devices can be heat adjusted using a conventional industrial grade hot air gun. For best results, use a heat gun that blows hot air at temperatures ranging from 300°F (148°C) to 500°F (260°C). When applying heat to the device, maintain a distance of 1.5 to 2 inches between the heat source and the material. Avoid spot heating by continuously moving the device and the heat source for best results. When properly heated, the material may be adjusted for approximately five seconds.

Bonding

TL-Silver Rigid and Semi-Rigid is an acrylic-based system; thus all primers and adhesives used for acrylic provide good to excellent results. Surfaces should be prepared prior to bonding, using scouring pad (as used in the kitchen) to roughen the bonding area, and clean wipes dampened with MEK (not soaking wet).

Storage

For best forming results, TL-Silver Rigid and Semi-Rigid should be protected from the effects of moisture prior to forming, similar to sheet acrylic. The bags can be re-sealed. The safe total out-time is eight (8) hours.



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