

Presenting a View of:

Thermo Forming



Why Form?

Can I do this?

Can I justify the expense?



- Thermo forming a convenient means to create form.
- Name items you have created using this technology.
- Reasons to use forming.

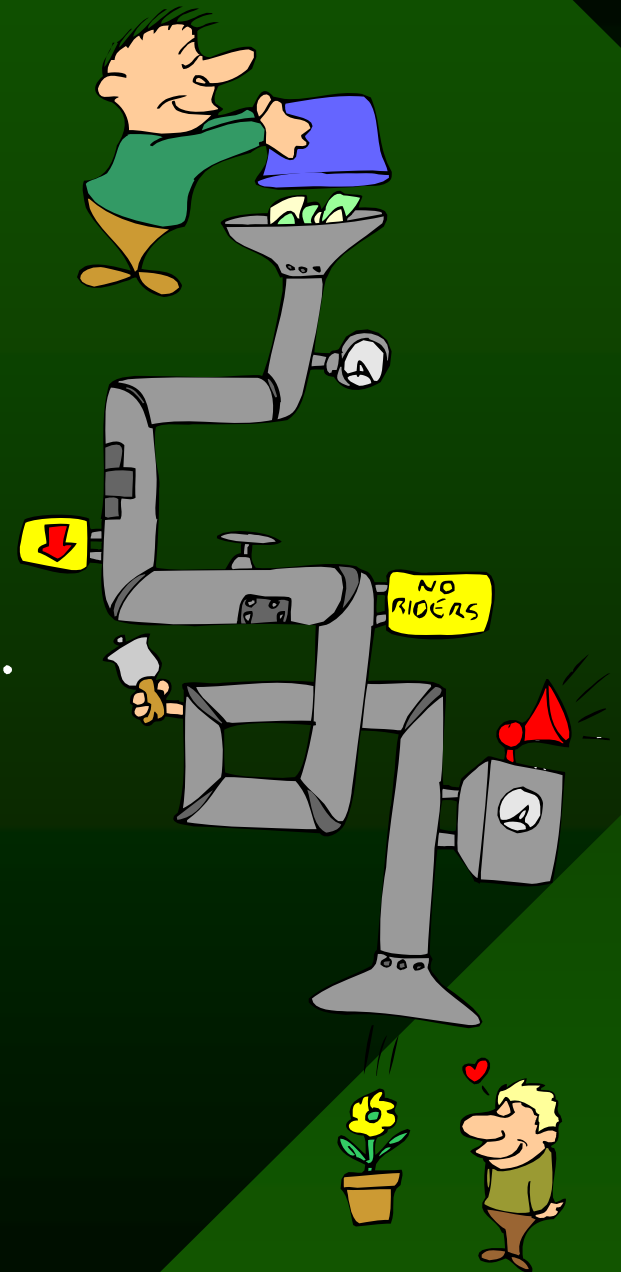
Point #1



- Is Forming too complicated to employ?
- Does this procedure replace all other fabrication techniques?
- Should it be used in cases where large curves are required.
- We should discuss the reasons for forming and the advantages and disadvantages.

Point #2

- Equipment:
- Ovens verses platen heaters.
- Temperatures.
- Speed of bending.
- Membrane Presses.



Point #3

- Molds and fixtures.
- One piece molds.
- Two piece molds.
- Power verses manual compressions.
- Mold function and action.



Point #4

- Materials: Are not created equal.
- Acrylic.
- Acrylic solid surface.
- Polyesters.
- Epoxy.

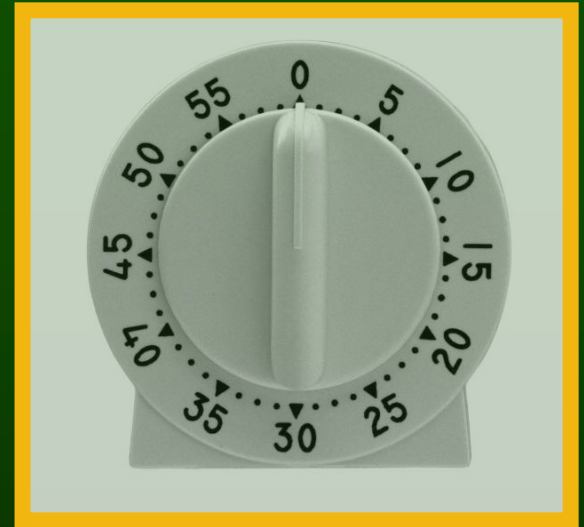


Point #5



- Heated Material Handling:
- Safety first.
- Reheating
- Product strength and flexing.
- Opening and closing molds.

Point #6



- Bending Material:
- Speed into mold.
- Pressure, can there be too much?
- How long does it stay in the mold?
- Cooling materials before removal and use.

Point #7

- Expansion & Contraction:
- The long side is stretching.
- The short side is compressing.
- Cause and effect.
- What are some of the results?



Point #8



- Thickness ratio to radius:
- Every color and brand is different.
- Following manufactures recommendations.
- 2D verses 3D.

Point #9



- White out:
- Where did it come from?
- What can I do to correct it?
- Will it go away?
- Are all color subject to white out?

Point #10

- Tear out:
- Why did it disintegrate?
- What can I do to correct it?
- What did I do wrong?



Point #11



- Finishing Formed Material:
- The material will sometimes become rough.
- Sanding and finishes?
- Gloss finish or not?

Point #12



- Some do's and don'ts:
- Do NOT seam before bending, why?
- Do expect some disappointments.
- Do NOT believe everything you hear.
- Do plan, plan, plan?



Point #13



- Troubles, it just didn't work:
- Re-bending is a great salvation.
- How many times ?
- Will white out go away when re-bent?

Final Points:

- Have fun being creative:
- Enjoy using forming as a new opportunity.
- Let forming speed your production.
- It won't always work the first time.
- Start small and build.
- Remember...
- "From the wee acorn the mighty oak grew."

