

How are teams building thier bodies??

I have the same question. We're looking at doing carbon or fiberglass with a foam core. How have other teams made molds in the past? I guessing it can be very involved work.

Jeremy, what type of plastic are you using for your contoured clear canopies? How was it heated an formed?

All our canopies used .125" thick polycarbonate. The students can cold bend it using a typical sheetmetal brake. I would suggest not using polycarbonate thicker than .125". It gets a little tough to bend past 90 degrees without cracking. You can buy it clear, tinted and one-way mirrored. Check out www.USPlastic.com

The canopies on our old hybrid hornet utilized an aluminum structure that the flat pannels were attached. The students then mounted lift struts from NAPA to automatically open the canopy.

The canopies on our fully enclosed shells were also just flat panels. We just used some .060" thick polycarbonate that would form to the fiberglass canopy structure when bolted to it.

We also proved that you CAN attach static cling window tint to polycarbonate, but it is a real pain to make sure it looks good. I'd suggest spending the money on tinted polycarbonate to make your life easier.

You can also purchase polycarbonate with an anti-scratch coating, but the price goes up considerably!

If you want to blown canopy, I'd check out some of the suppliers to the amateur aircraft builders. They just might have one in stock that's defective. Never hurts just to make a phone call and ask.

You can blow your own canopies, but it's not that easy. Check out this site from the recumbent bike builders.

<http://www.recumbents.com/WISIL/bubbles/hpvbubbles.htm>

First, I would recommend S-Glass for first time body work. It is strong, easy to work with, and relatively inexpensive. To form our foam for the foam core fiberglass body, we made cross section stations fixed to a strong back, then ran strips of foam (3/8"-1/2") to form the basic shape. We then sanded, shaped, filled and sanded again. Apply 1-3 layers of glass, pop it off the stations and do the same to the inside.

This year we are using our old shell as a mold and going to form right over it (covering it with shrink wrap so it will release).

pics available on request
