

## MEEN 4336 / 5303 Composites

### Lab 3 Resin Infusion Molding

1. Go to the course web site and read the related VARTM notes.
2. Make sure that you have gloves and eye protection on. Also use lab coats if possible.
3. Form into 2 groups of 7 or 8.
4. Turn the oven on, and heat to 120 F. Make sure the no open flammable materials are inside.
5. In the small oven (140F), place closed containers of the Version G resin, and hardener. Also place a closed container of vinylester resin in the large oven.
6. Obtain an aluminum mold plate. Allow the surface to dry.
7. Finish the vacuum bagging of the two laminates, with inlet and exit ports as shown in the previous lecture.
8. Measure the approximate dimensions of the two dry laminates.
9. Place the completed vacuum bagged dry laminates in the oven, and allow them to warm up.
10. Calculate the amount of Version G resin and hardener needed, and add 75% more.
11. Calculate the amount of vinylester resin and hardener needed, and add 75% more.
12. Get the Version G resin, measure out the correct amount and degass the resin, degass the hardener if possible.
13. Mix the Version G resin and hardener, but don't mix vigorously.
14. Infuse the Version G resin, keeping the door closed as much as possible.
15. Mix the vinylester resin and hardener.
16. Infuse the Version G resin, keeping the door closed as much as possible.
17. Cure at 150 F.
18. Debag after 1 hour.

Write a 3 page or more report detailing what you did, with pictures, and discuss resin infusion, it's advantages and disadvantages. Hand in a copy at the next lab, and email it to me. One lab report for each group.