Revision Date: 05-14-2012 by: D. Johnson

APPLICATIONS DOCUMENT

Dyeing ProJet Parts for Single Color Finishing

Application Summary

Parts printed on all ProJet printers (1500, 3500, 5000) can quickly and easily be dyed for single color applications. Parts can be dyed using a water based dye, or for deeper color penetration and dyeing to opaque white, a solvent based leather dye can be used.

Supplies and Equipment

- Heat Source: single eye burner, hotplate, heating tank, etc. (need to be able to bring water to a boil)
- Heat proof can or jar (Pyrex bowl, metal pot, etc.)
- Rit fabric dye (any color). Dye is available in liquid and powder form.
- For dyeing white opaque, use Fiebings leather dye (solvent based)

Safety

- Be sure to use caution when handling boiling water.
- Use caution when handling dye as it can stain surfaces and clothing

Step 1: Thoroughly Clean Part

- Use normal cleaning procedure to remove support wax
- Make sure all residual wax, oil and water is removed completely
- Quick bath in Isopropyl Alcohol as a final rinse

Revision Date: 05-14-2012 by: D. Johnson

Step 2: Heat Water and Add Dye

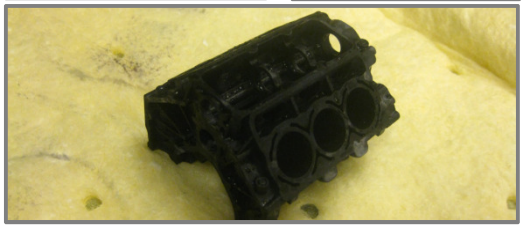
- Heat water to boiling on heating element
- Add full bottle of liquid dye or 1 packet of powder dye
- Stir thoroughly for 2-3 minutes

Step 3: Add Part to Dye

- Add part to dye and allow to soak for 10 minutes
- Small parts should be placed in easy to recover bins or tied to strings.

Step 4 – Rinse Part

- Rinse parts thoroughly under cold water
- Blow parts dry with compressed air or wrap in absorbent towel and let dry



Revision Date: 05-14-2012 by: D. Johnson

Step 4: Final Finish

- Dye finish can be dull and mottled with uneven color
- Use any clear coat enamel to give part a glossy, even finish.

Step 5: Allow Parts to Dry

- Allow parts to dry according to clear coat instructions.
- TIP: To prevent dripping and running of the clear coat, some geometries will need to be laid flat and sprayed one side at a time.

Dyeing With Solvent Based Dye for White Opaque Parts

Step 1: Fill Container with Dye

- Use any container that will allow part to be fully submerged

Step 2: Soak Parts In Dye

- Place parts in dye bath AT ROOM TEMPERATURE for 10 minutes making sure part is fully submerged and covered with dye.
- An alternative option is to brush the part with the supplied brush to apply an even coat

Step 3: Remove parts and dry

- Remove parts and wrap in absorbent towel to remove excess dye. This is important to achieve a uniform white finish.
- Allow parts to dry completely or blow dry with compressed air.