Help! There are bubbles in my parts.

A common problem encountered when casting or potting is air bubbles in the finished parts. Air in the parts can come from a few different places:

1. Air trapped in the part, under components or stuck to the wall of the part. These are normally larger bubbles in the area or on the surface above the parts that trap the air.

2. Air mixed in with the material by over running or splashing in the part or mold. Normally larger bubbles around the area where the part is being filled. Fill the part slowly. Put the mixer under the surface of the material when filling the part.

3. Air in the mixer or machine, normally a new machine problem that will clear up in a few minutes of operation.

4. Gas bubbles pulled out of solution during the intake stroke (low pressure) often very fine bubbles seen in waves or streaks. Degassing the material will help.

5. Bubbles formed by moisture damaged Polyol. Very fine bubbles that appear as the material cures due to a reaction between the Isocyanate and the water in the poly.

6. Bubbles formed by dissolved gasses coming out of solution during the curing process. Very fine bubbles that appear as the material cures due to a reduction in solubility as the material cures. Degassing the material will help.

7. Air pulled in through the piston seal during the intake stroke. If the seals are leaking it is possible to get air pulled into the pump. Normally there will be significant leaking at the seals if this is happening. Adjust the packing nut or replace the seals.

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