The Art of Decaling
by Jimi Ellis

The art of decaling ranges from very simple applications to extremely detailed. The simple end of the art is when we apply a decal on an extremely flat, smooth surface where there is almost no way to mess up unless you do not follow our simple tips. The application of a decal on a difficult substrate takes much practice, patience, and time.

In this article, I will be covering what is needed to place a decal on the substrate (fishing rod). To some, this is a difficult thing to do while others finding it to be a very simple task. This line of thought goes along with everything that we do in life. Most of us are experts in some areas, while others of us are perplexed at how some people accomplish what they do.

I am in no way the supreme expert in this art, but maybe something I say can help get you on the way to a better end product. Following these simple rules of application can make a big difference with your finished decal. There are many of you out there that I feel know more than I do when it comes to application, but you have no way to spread the news. So from here, let us relax and take it in.

Waterslide Instructions

Let me start by explaining the hardest of decal applications so you will be able to see that the process may not be as difficult as you may think. Some are applying decals on things like model railroad cars. When they apply the decals, they have several things that they have to accomplish.

1. They must apply the decal on a surface that has grooves, much like those that resemble gaps between slats of wood or metal.

2. They must apply the decal on a surface that has grooves that appear to be the grain of wood.

3. They must apply the decal on a surface that has pieces of plastic that resemble rivets or bolt heads.

How would you attack this project so the decal looks like it is painted on? Give up?

If you look at the finished product of these individuals, this is exactly what you would see. It looks painted on and you cannot tell that it is a decal. You, too, can get this appearance with the rods that you build whether you build them for family members or you are a full-blown rod shop.

These modelers use extremely harsh chemicals on the substrate before applying the decal. These chemicals actually melt the decal material and therefore allow the decal to form on and over the aforementioned surfaces. It is amazing that when they are finished it looks the way it does.

You, too, can have people say the same thing about your finished product on each and every rod that you complete.
In the article, we will cover mainly waterslide decals, because that is what 98% of the rod builders that I deal with use. I will just touch base on the Peel-n-Stick decals at the end.

Let me say that, just like completing other jobs that we do, if you do not have the right attitude, and especially the right tools, your project may not come out the way you would like. We can start with the best attitude, but if we do not have the right equipment, our great attitude will become bad.

Most of you do not skimp in anyway when it comes to equipment used to build a rod, but try to do the least when it comes to a very important part of your finishing touch.

Some of you have other tools that you find appropriate for your application of decals, but here is a list of tools that you will need for applying decals properly:

1. good working surface
2. quality made decal (this is extremely important)
3. good surfactant (wetting agent like Micro Set)
4. good setting solution (like Micro Sol)
5. distilled water
6. clean paper towels
7. soft brush
8. good lighting

Remember, you may find something else that works for you. Yet, I recommend adding any of these items to your list.

When cutting the decal, use sharp scissors or an exacto knife to trim as close to the logo and or the writing as you are able. This reduces the size of the decal and makes it easier to apply. That way, if you do mess it up in some way, there will be less to fix.

If you have your scissors and are holding them with the top part of the scissors angled to the right (if you are right-handed, you are cutting an edge that will leave a wrong angle. Decals cut in this manner will lead to a angled edge that leaves a minute air pocket around the decal. This angle, once coated with epoxy, appears to be a white hair on the rod). Make sure that the top of your scissors are held with the top of the
scissors to the left (if you are right handed). If you think about this, you will realize that if you cut the decal this way, you will have a thinner edge and it will lay flat on the rod blank better. In doing so, you will become confident that you will never have “stray white hair” ever appear around the decal again. Be sure to make your corners rounded and not square. This helps with the way the decal lays on the substrate.

Then, clean the area with a very small amount of rubbing alcohol to remove any contaminates. Make sure that the area is dry before applying the decal.

Next, place the decals in distilled water for about 5 seconds. You can then place a drop of water on your table and put the decal face up in that drop of water. Never place the decal in the water and leave it until you think it is ready or until the decal comes off the paper backing. In doing the following, you can be assured your decal will be ruined.

Let me, at this time, comment on what makes a decal look cloudy when your project is finished. There are three main reasons why you may have cloudiness behind your decal.

1. You did not put a coat of epoxy on the rod blank before applying the decal. Even in the smoothest and shiniest rod blank, there are hundreds of tiny holes on the surface of the blank. When you apply the decal directly on the blank, these minute pockets trap air and, therefore, cause cloudiness.

2. As mentioned above, if you leave the decal in the water too long it either starts to come off the backing or comes completely off. This causes the water to remove most or all of the water based adhesive and, therefore, the decal is only sitting on the surface and not sticking to it. What you have is one complete air pocket underneath.

3. You do everything right up to this point, but you move the decal around so much that all the adhesive is on other parts of the rod blank than where it should be.

Now back to the instructions.
Once you have the decal placed on your table in a small drop of water (only enough to keep the backing moist for a few minutes) brush some Micro Set on the area where the decal is going to be placed. This allows you two things: one, it allows you to move the decal around a little without loosing your entire adhesive; two, because of that, it will adhere to the rod blank better. This solution does not give you the right to move the decal four feet up the rod, then back, then onto another rod. This however, does allow you adjust the decal in the area that you want.

When you are ready to place the decal on the rod blank, take the decal and push it off one edge of the paper backing about an eighth of an inch or so. Place the decal flat on the rod blank where you want it to go. Hold the exposed end on the blank with your thumb, take your fingernail or a pin, and pull the paper backing off while allowing it to lay flat on the blank. By placing the decal this way, you are not taking any risk of it curling up in your fingers while you hold it in mid-air (holding the decal in mid-air for application is incorrect. It is a total disaster in the making.)

Now that the decal is on the rod blank, gently align it into position. Once it is in place, take your thumb and lightly hold one end of the decal in place and with a soft brush, dampened paper towel, or your other thumb and lightly rub from the center out to remove any excess Micro Set, water or adhesive.
After about 30 minutes brush one stroke of Micro Sol and wait one hour. After one hour, re-apply one more stroke of Micro Sol to the decal. Wait 24 hours to apply the finish coat to the rod. I say 24 hours because of the many factors that can speed or slow the curing time of the decal like humidity, heat, cold, and air movement.

Your Waterslide decal has a water base adhesive so you do not have to worry about the decal or the edges of the decal peeling up from the epoxy.

Note: There have been about 6 reports over the years about problems from time to time with LS Supreme. U40 and we ourselves have not been able to duplicate this reported problem.

**Peel-N-Stick Instructions**

Tools needed:

1. good working surface
2. quality made decal (this is extremely important)
3. good lighting
4. a surfactant
5. clean paper towels
6. soft brush
7. vinyl roller
Follow the same instructions in the waterslide section, as it refers to cutting the decal.

1. When gluing a vinyl label to any surface, clean the surface and remove residual grease, soot, dust, etc.

2. It is not recommended (on larger labels) to remove all the backing before installing. It is better to remove the paper from a small area at one end first.

3. Line up label. When the position looks correct, let the label make contact with the surface on the edge where you removed the back paper.

4. Now bend the label back and carefully remove the rest of the protective backing and glue the label down. Working your way towards the other end holding that end away from the surface.

5. You can use your finger or sponge, but it is recommended that you use a hand-held roller and only press down (glue) small areas at a time to prevent trapping air bubbles.

6. Do not use excessive pressure when working the label in this way as you will then smudge the ink (the use of a roller eliminates this problem when used properly.)

General:
The vinyl is soft. As you glue it at one end and hold it away from the surface at the other end, do not pull on the label or you may stretch the material. If you trap air bubbles that you cannot work out, make small holes using a small, sharp object like a pin, razor blade, or hobby/utility knife. Letting the air out in this manner may leave almost no marks at all. Always handle the vinyl gently before and after printing, as rough handling can stretch the material and/or easily leave crumple marks.

Remember, you always get what you pay for and that includes the application of decals.