

Mithril Modelling Guides

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Advanced Techniques

Burnished Metal

How to produce effective metallic finishes on Mithril Miniature Figures

It can be argued that one of the most difficult effects to create when painting figures is that of metal. There are several schools of thought on the subject ranging from various types of paint, metallic powders and special paints that can be buffed to a shine when dry. With plastic and resin figures we are restricted to using paints, but with metal figures there is another option. Mithril Figures are made of a soft metal alloy (white metal) and parts of the figure such as Armour, Chain Mail and Edged Weapons can be treated to produce a bright shine which then can be tinted to give a very realistic metal finish, This technique is known as 'burnishing'.

Techniques:

This procedure involves the use of paint stripper. Be aware that it is a strong chemical and can cause irritation to the skin. Read and understand the instructions on the bottle before you start.

As Mithril figures are ready primed for painting we need to remove this primer in order to achieve this effect. To do this place the figure in an old dish and cover it with paint stripper then leave it in the chemical for about 15-20 minutes. Lift out the figure and remove all the excess chemical, then clean the figure roughly with an old tooth brush and plenty of warm soapy water.

with all metal figures the first step is to give the casting a good clean and to remove any flash, then give the figure a good, brush with a soft wire brush. This will have the effect of enhancing the detail of the figure As this technique uses the metal of the casting to produce the metallic effect it is vital that the surfaces to be treated are smooth and free from any small imperfections.

The process has two distinct stages, the first being the polishing of the metal with the second being that of glazing the polished surfaces with tinted varnishes to give the effect of the various types of metal such as brass, steel, copper, gold and silver.

Polishing:

The polishing process is a series of treatments applied to the casting, with each stage using a finer abrasive to bring up a mirror like finish. First take a small ball of wire wool and rub over the surface of the parts to be treated, the wool can be used dry or with a little oil to help prevent scratching, When using wire wool do not press on too hard, use light movements making sure to cover the whole area. Wash the casting and dry,

The final stage is to burnish the areas with the edge of a blunt needle or bodkin lightly rubbing the surface to a bright shine. It is important that you do not scratch, mark or the

remove the fine detail of the casting by using too much pressure. the entire area and to get into awkward corners and around rivets heads. Finish this stage of the process with another wash and polish with a metal polishing wool to a bright mirror like shine.

Now that this stage is complete it is important to avoid spoiling the surface of the polished areas as even the lightest mark will ruin the finish and the process will have to be started over again. At the end of a work session wrap the figure in a soft cloth or tissue paper to prevent accidental damage.

There are of course substances that can be used to good effect when polishing castings, various types of scouring powder, abrasive papers, metal polishes such as Brasso and chrome polish, even toothpaste used on its own or mixed with a little scouring powder rubbed on with an old tooth brush can be used to good effect.

Glazing:

Before we start a word or two about varnishes. There are a number of good quality varnishes available to the modeler. Polyurethane hard glazes, Yacht varnish, Artist varnish, Acrylic varnishes and the range from Humbrol, My first choice is Polyurethane based varnishes, because they dry relatively quickly to a good hard shine that can be over glazed without any fear of lifting the coat beneath. The Humbrol range is good for applying a final matt or satin finishing if your aim is to have a weathered finish. Humbrol varnishes are crystal clear as apposed to the honey colour of Polyurethane. This can be an advantage by not inducing any colour via the medium its self, but in the end it is a case for using a varnish the works best for you.

The glazing process consists of applying layers of glazing medium to polished metal surfaces. This is done by applying a series of washes of varnish tinted with oil colour. First make up a quantity of a special basic glazing medium which is a 50-50 mix of polyurethane varnish and white sprit. Keep the medium in a screw top jar or small bottle until required.

To colour the glazing medium use very small quantities of oil colour mixed into the glaze on a clean palette, remember that the aim is only to tint the medium and to keep it well thinned as a guide the colour in your wash is barely noticeable. Coloured inks are another tinting medium but be careful you don't get a chemical reaction that will make the glaze dry with a sticky surface.

Use a soft brush to lay on the glaze allowing the glaze to flow over the area, using the side of the brush will in most cases yield better results than using the point. At this stage you will hardly notice any change of colour on the glazed surface, this is normal because the build up of colour is very subtle and will be built up with 3 or 4 coats Making sure that each coat is completely dry before adding the next, it is best to be patient and dry each coat over night. Be aware that it is the shine on the metal showing through the glazes that will give the metallic effect so take care not to blot out the shine with too many coats or too much colour in the glaze. This process is very much a case of trial and error until you find a method and depth of colour that suits you.

These are suggested colors to use for the various metals.

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| 1. Dark steel: | Winsor & Newton Blue Black. |
| 2. Bright steel: | Winsor & Newton Payne Gray. |
| 3. Blue steel: | Winsor & Newton Indigo or Prussian Blue. |
| 4. Copper: | Winsor & Newton Burnt Umber or Burnt Sienna. |
| 5. Iron: | Winsor & Newton Ivory Black. |
| 6. Bronze: | Rowney Sepia. |
| 7. Silver: | Glazing varnish only. |

Brass and Gold:

A brass effect needs to be done 2 stages. First colour area with yellow ochre glazes and when dry and lay on a light glaze of Raw Umber, then Shade with a wash of Raw Umber. Finishing with two coats of clear varnish.

Gold is a difficult colour to produce by the burnishing technique. The aim here is to produce a strong bright yellow tint. Use a mix of Humbrol clear varnish tinted with Naples yellow with a touch of yellow Ochre, build up the layers to the required degree of colour then finish with 1 light coat of clear varnish.

Lining In:

When the glaze is dry you need to shade the areas where joints occur in the same way as normal painting. Using the point of a fine brush paint a thin line of dark colour around the hard edges to make the treated areas stand out.

Mail Armour:

The two most common types of mail Armour are Chain or Ring mail and Lamellar or Scale Armour. Chain mail was made by a series of metal rings interlinked and riveted together, or sometimes sewn onto a cloth or leather backing, Lamellar Armour consisted of strips or discs of metal tied together so they overlapped and formed a continuous flexible sheet.

To produce a metallic finish on these surfaces uses a different technique is used and is relatively easy. Brush the area lightly with a soft wire brush and give it a good scrub with a tooth brush to bring out the detail. Make up a dark Blue Black and white spirit wash and lay onto the surface of the mail. Allow to dry for a few minutes and lightly rub the surface with a clean cloth to give a highlighting effect. When fully dry a gentle rub with your burnishing needle will brighten the highlights but be careful not to destroy the detail. Dry overnight and finish with two coats of thinned clear varnish

Lamellar Armour:

On Overlapping lamellar armour first brush the surface with a soft wire brush to bring out the detail. Next brush with water and scouring powder using an old tooth brush until a shine begins to develop, Wash the area with plenty of water to remove all traces of

powder and dry with a soft cloth, finish with a metal polishing wool and buff with a clean dry cloth to produce a bright shine. To colour the mail lay on a coat of glazing medium tinted with the colour you required and dry overnight. Make up a strong wash of white spirit and Blue Black colour and using a tip of a fine brush allow the wash to flow into the joints and edges of the scales. Let this wash dry for about five or ten minutes then lightly rub the surface with a soft lint free cloth to remove the excess paint allow to dry and finish with a final coat of varnish.

Swords and Edged Weapons:

The metal parts of weapons such as Swords, Axes, Spears and Lances can all be treated with the same techniques. To produce the effect of a sharp honed edge, first finish the weapon with the required metallic effect then lightly scrape away the tinted varnish to reveal the polished metal underneath and finish with a coat of varnish.

Weathering

If you are aiming to add a weathered finish to you metallic areas you need to aim for a less shiny finish. This can be achieved by using a finishing glaze of *matt* or *satin* varnish, which will tone down but still retain the metallic effect. Armour worn on campaign and in battle will of course collect a fair rendering of dents, cuts, scrapes and general ware also a good deal of rust. Your damage needs to be worked into your metallic areas after burnishing, this will allow your glazes to run into cuts and dents giving a three dimensional effect.

Conclusion:

This technique can be a little difficult to master in the short term, but after a couple applications you will find that it produces some very effective results. The key is to keep your glazing medium well thinned and the colours very weak. Altering the properties of the medium and trying different colours will yield some interesting effects. Using Alizarin Crimson and Prussian blue can be used to represent gemstones such as rube and sapphire's. Humbrol sell a medium that is applied, allowed to dry then buffed with a clean cloth to bring out the shine of metal. Glazing the treated area with a blue varnish tint will give a brighter shine. If at the end of the day you don't get a satisfactory result you can remove the glazes with paint stripper you will find that the burnished surfaces will remain unspoiled and you can start again.