

Airbrushing Natural Metal Finishes

With Alclad2 Metallising Lacquers by Peter Shum

Introduction

Reproducing realistic bare metal finishing on aircraft models used to be considered as one of the higher arts in modelling.

However, the availability of specialist materials has made it far easier. One of these products is Alclad2, a metallising lacquer which can be airbrushed to achieve very life like aluminium and other metal colours.

The technique covered here should require little skill beyond a good basic operation of an airbrush.

Is it natural metal or just painted silver?

Before you jump in and start "Alclading" your model, be sure the subject you are painting is actually natural metal and not just painted in silver.

The kit instructions are not much use here as they would normally note the colour is silver and leaves it at that.

Check photos of the subject. For example many of the post-war RAF and RAAF aircraft such as Meteors and Vampires were in fact painted in silver.

Preparing the Model

Filling and sand smooth any imperfections. Brush on Mr Surfacer to fill in the smaller seams and joins.

To ensure the model is free from oils and dust wash the model in warm water with a tiny amount of dishwashing detergent, and lightly scrub with an old toothbrush, then leave to dry overnight.

Priming

A primer helps paint to adhere onto the surface of the model and provides an even coloured base. It also highlights surface blemishes and imperfections for more refilling and sanding.

As an airbrushing primer I use;

- Mr Surfacer 1000/Mr Thinner (30/70 paint/thinner mix)
- 0.3mm nozzle/needle
- 10 psi air pressure

Due to their stickier nature primers need extra thinners for airbrushing.

Apply a thin first coat and after it is dried, look for any surface imperfections and fill in with Mr Surfacer and sand smooth with a 1500 grade sanding sponge.

Spray a second thin coat of primer to smooth out the finish.

Undercoat

This may sound unusual but we are going to apply an undercoat even though we have already primed the model.

The idea is using gloss enamel as an undercoat is it provides so a hard smooth based for the Alclad2 lacquer and cuts down on the amount of sanding and polishing to a minimum.

As an undercoat I use;

- Strokes Enamel/Lacquer Thinners (40/60 mix)
- 0.3mm nozzle/needle
- 10 psi air pressure

Apply a thin first coat and leave overnight to dry.

Then lightly rub the model with some 1200 or 1500 grade sanding sponge and wash the model to remove dust.

Once the model is dried, apply a second final undercoat with extra thinners added to smooth out the finish to a high gloss and leave to dry overnight.

The colour of the undercoat is not that important. You can use the Strokes Mist Grey which is a medium grey as the undercoat.

I actually use a mixture of 2:1 mix of White and Mist Grey to produce a much lighter grey as this mix just happens to be a good approximation of Boeing Grey used on airliners.

Applying Alclad2

Alclad2 is no different from other paints when applied with an airbrush. It comes pre-thinned and ready to airbrush, however I do like to add a little Mr Thinner

Shake the bottle of Alclad well and occasionally stir the mixture in the airbrush cup to prevent the metal particles from settling to the bottom.

Select an Alclad colour that will be the main colour of your model. Duralumin or airframe aluminium are good choices

- Alclad2/Mr Thinner
- 0.3mm nozzle/needle
- 8 psi air pressure

Apply in thin layers until an even coverage is achieved. Do not spray heavy coats as lacquers have strong thinners which can attack the paint beneath. Leave dry for 30 minutes.

Adding Metallic Shades

The aim is to reproduce the subtle variation of metallic shades seen on natural metal aircraft.

Whilst Alclad have a mind boggling range of aluminium colours it is not practical for the average model to keep such a large range at home.

A better way is to add a tint to the base colour to achieve the subtle shade differences. Take the base Alclad colour you used as the main colour and add a tiny amount of another colour. For example, light grey will produce a light, slightly dull finish where adding magnesium or steel will produce a darker tone. You can use enamels or lacquers to tint. I use old jars of other metallising lacquers such Testors Metalizers or Mr Color metal lacquers.

Unlike other metallising products Alclad will not rub off and can be safely handled and masked over without taking the paint off.

Use U-Star or Tamiya masking tape just outline the panel you are spray with

Materials

Mr Hobby Mr Surfacer

Mr Surfacer is "paint on putty" for filling fine joins and gaps but can also be used as primer and airbrushed. Thin with Mr Thinner (lacquer thinner) for airbrushing and clean equipment with hardware store lacquer thinners.

Mr Thinner Lacquer Thinners

Not to be confused with acrylic thinners with the same name, Mr Thinner Lacquer Thinner is excellent for thinning lacquers and gloss enamels. It can be hard to find in shops and hardware store lacquer thinners can be used as a substitute with reasonable results.

White Knight Strokes Enamel

Available from Bunnings and other hardware store, Strokes is an enamel that produces a very hard finish. For airbrushing, thin with a mixture of half lacquer thinners and half general purpose enamel thinners to give a fast drying high gloss finish. Clean with either lacquer or enamel thinners.

Italeri Gloss Vanish

This paint is truly water based paint. I am still testing the Italeri paints but early results are good. For airbrushing thin with Vallejo airbrush thinner and clean with methylated spirits.

Alclad2

This is a metallising lacquer available in a wide range of metal finishes. Alclad is different as the finish can be handled with a little bit of care. Other metallising paints can be quite messy as the metal flakes easily rubs off by touch until the finish is sealed with a clear topcoat. Alclad is lacquer based and is ready to airbrush from the bottle. However it can be further thinned with Mr Thinner.

U-Star Sanding Sponges

These are long lasting sanding sponges available in grades from 600 to 1500. They are pre-cut into jigsaw shaped pieces and are soft so they can mould to the surface for sanding wet or dry.

U-Star and Tamiya Masking Tape

This is the yellow high grade tape with a great adhesive that is just right for masking on models. Both the U-Star and Tamiya products are great but U-Star does have about 3 times more tape width in their range.

the tinted colour. There is no need to protect the whole model as any overspray of tinted metal colour is invisible on the base colour.

Spray a very light coat of the tinted colour to create a slight difference for that panel. As the light coat of Alclad dries almost instantaneously, you can gently remove the outline masking tape, reuse the tape for the next panel and continue. Apply 2 or 3 different tints to build the metal panel effect.

Sealing the Finish

Normally I seal Alclad finishes with Johnson Future but this time I thought I will give the Italeri gloss vanish a try.

Unlike the Tamiya and Mr Hobby acrylic paints which contains alcohol, the Italeri acrylics are truly water based. This means it can be used as a top coat for Alclad as will not grain up and dull the finish.

For airbrushing use;

- Italeri Gloss Vanish/Vallejo Airbrush Thinner (40/60 paint/thinner mix)
- 0.3mm nozzle/needle
- 10 psi air pressure

Apply the first coat as a light mist only as water-based paints have high surface tension and a heavy first coat will just bead up like water. After the first coat is dried, you can apply heavier coats to build up the finish.

Once the metal finish is sealed apply decals weather you model as normal.

Further Information

I hope you will find these notes interesting and useful. If you have any further questions feel free to contact me by email at;

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