# Osprey Modelling



# Modelling Panzer Crewmen of the Heer

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## Introduction

A wonderfully detailed and beautifully finished armour model can easily be let down if accompanied by a poorly painted figure. All too often, armour modellers spend enormous energy and time bringing their AFVs to life with realistic weathering, expensive accessories and a scenic base, then spend very little time painting the figures that go with it. In many cases, figures become an afterthought. This is a shame, because while not every viewer will know exactly what your model is supposed to look like in real life, everyone knows what a human being is supposed to be. Inevitably, some viewers' opinion of the accuracy of the armour model will depend on the overall realistic appearance of the figure.

The addition of scale figures helps provide depth, weight and realism to a model. A well-painted figure can even distract the viewer from a mediocre model. But to this end, painting and working with figures continues to be most armour modellers' worst nightmare, even though building and painting scale armour is far more demanding and time-consuming.

The purpose of this manual is to provide tips and techniques for building, converting and painting World War II German army Panzer crew figures. To add variety, several award-winning modellers will share their own techniques and style. The main themes include how to paint different uniforms using enamels and oils, converting and scratch-building figures, as well as painting heads.

Success in figure painting can only be reached by applying, attempting and comparing one technique to another, thus determining which methods work best for you, and from this, developing your own personal style. For this reason, there are no hard-and-fast rules for painting figures. However, the key to success lies in the 'three Ps': practice, patience and perseverance.

While I have always considered myself first and foremost an armour modeller, my intention has always been to attain a level in my figure painting that allows me to safely add figures to my models without taking away from the kit being presented. This continues to be my philosophy, and for this reason, this manual is really an armour modeller's guide to painting figures, and has been written from this perspective. The approaches in this manual are,



by and large, the same techniques used on armour models, with some small variations and slight modifications.

The many types of Panzer uniform offer a wide choice of schemes that are, with small modifications, equally applicable to other uniform types, such as the Panzer uniforms of the Luftwaffe, Waffen-SS and the Polizei. The techniques presented in this manual are also generic enough to allow you to apply them to any other figure size, subject or period. There has been much documented and published on the uniforms and insignia of the German Panzer and assault gun crews of the Third Reich. However, this manual is about building and painting figures, and only a brief explanation of the uniforms being depicted will be described.

Most of the tools required for figure modelling are the same as those used for armour modelling.





Good quality cutting tools are necessary. The nail clippers are ideal for clean removal of small parts from plastic sprues and resin carrier blocks.

The most important tool required for painting figures is an assortment of various-sized brushes ranging from a small size 5/0 to a larger size 2 or 3.

#### The tools of the figure modeller

The tools and materials required for modelling figures are the same as those for modelling tanks (scalpels, putty, glues, sandpaper, files and tweezers). However, there are a few additional requirements that need to be discussed.

The most important tool required for painting figures – regardless of the paint being used – is an assortment of various-sized brushes. There are hundreds of brushes available on the market with prices ranging from very cheap to the obscenely expensive. Brushes are made with natural bristle, natural hair or synthetic fibres. Bristle hair and natural hair are similar, but have two major differences: natural hair has a single individual point, while bristle has a number of natural tips, which makes the bristle less flexible but more durable.

Many will argue that expensive and long-lasting brushes are the only option for successful figure painting. While I agree that quality sable brushes are excellent tools, I tend to believe that less expensive brushes will serve equally well. The key to finding a very good brush is less about finding the brush with the smallest tuft of hairs, and more about finding a brush that has a nicely tapered point.

Brush sizes start at 5/0 or smaller, and run to 1 and 2 and beyond, with the higher numbers being larger brushes. The price is almost always contingent on the point of the brush. Most of the brushes I purchase at my local art store are good quality, and for the price of one expensive sable brush I am able to purchase five or six brushes that will probably last two to three years. If one of my 'no-name brand' brushes dries accidentally full of paint, my replacement cost is minimal.

As an added note, oils and enamels are not typically harsh on brushes, and with proper care, any brush should last a very long time. Proper care of your brushes requires a few easy steps: keep paint from getting in or on the metal that holds the bristles, clean your brush thoroughly with the proper brush cleaner for the type of paint you are using, never clean brushes used for metallic paints in the cleaner used for other colours, and always store brushes in a container with bristles up. With the exception of the round brushes, the brush tips all have a nice taper and finely pointed tips. The key to keeping brushes from flaring is to properly clean the brush and then lightly bring the tip of the brush to a fine point using saliva applied with your finger.



Before the painting process begins, it is important to apply a coat or two of primer to a figure – regardless of whether the figure is white metal, plastic or resin. A conversion piece may be made up of a variety of materials, each with its own natural colour. A coat of primer will even out the surface and give a good working base on which to apply other colours. A primer of a light colour will also greatly help in identifying glitches, sink holes and seam lines. Priming also avoids different materials used on the model reacting differently to subsequent paint. Most fillers and putties will absorb the first coat of paint, which seals them, thereby preventing them from absorbing further coats. Lastly, primers provide a surface for paint to adhere to. The most common and popular primers are the aerosol type offered by Tamiya and Citadel Warhammer. A large canister of primer should allow for priming up to 10 to 15 figures, and is well worth the cost.

I mostly use oils for painting flesh on figures. Oil paints are vivid, and slow drying, which allows ample time to make corrections. Oil paints are not hazardous to breathe, and tend not to emit strong odours. Different brands of oil paint can easily be intermixed without any negative chemical reactions, and the average drying time of most oil paints is anywhere between two and seven days. I do not have a preferred brand, as all of the oil paints on the market are quality paints. Some of the better-known oil paint brands include Rembrandt, Winsor & Newton Artist's Oils, Van Gogh and Daler-Rowney Georgian oils. All four of these brands are readily available at most art stores, and each has a wide range of colours with high pigmentation and excellent clarity of colour. Winsor & Newton also offers a lower grade line (Winton), which offers a smaller range of colours and are less expensive.

While I sometimes use enamel paints for painting flesh, I use these exclusively for painting World War II uniforms. Enamel paints are fairly tough and resistant to handling, and are usually colourfast (they do not change colour with time). Enamels are solvent-based and the vapours can be a little nasty if used in large quantities. My preferred choice of enamels is Humbrol. Humbrol provides the largest selection of colours (more than 100 colours in the matt range), is carried by most hobby stores and is relatively inexpensive. This paint dries to a matt finish, has a slower drying time than acrylics and can easily be mixed with oil paints to create a larger variety of tones and colour values.

An equally important piece of equipment is some form of optical magnification. Working with figures requires focusing the eyes on a very small area, and the exacting nature of the hobby will typically necessitate some visual aid. Various companies offer magnification devices, such as the Optivisor. This contraption has true optical glass lenses that resist scratching and can be worn over regular prescription glasses. I have found that the best standard magnification is a '5' (the 5 stands for 5 Dioptre magnification). Other powers (2, 3, 4, 5, 7, 10) are either too weak (2, 3 and 4), or too strong (7, 10) – resulting in headaches over long painting sessions. Of course, much depends on the individual.



These are the Humbrol enamel paints I use for figure painting. The four tins on the left side are the colours I use for mixing flesh tones (Natural Wood 110, White 34, Wine 73 and Flesh 61). The matt colours on the right side are those I use for uniforms. I also use Model Master and Testors thinners for thinning enamel paints.



I use oil paints for mixing flesh tones. Different brand oil paints can easily be inter-mixed without any negative chemical reaction. My preferred mix includes Winton Burnt Umber, Rembrandt Gold Ochre, Van Gogh Titanium White and Winsor & Newton Burnt Sienna.



Some form of magnification aid will help considerably, such as the Optivisor with 5 Dioptre, inexpensive reading glasses with 1.25 magnification, strong reading glasses with 1.75 magnification, a Jeweller's loupe with 5X magnification, a hand-held magnifier and the all-important protective eye-glasses when filing resin or metal or when using a Dremel tool for drilling and sanding.



A somewhat daunting-looking collection of tools that can be used for sculpting figures. It is not necessary to have all of these tools and one only needs a good scalpel and one scriber to do the work.

As an endnote, most of the images in this book were taken with a Canon PS45 digital camera with magnification filters. The close-up images of the painting process were shot using four or six 100-watt lightbulbs. I discovered using several hundred watts of intense lighting was not the most flattering means to illustrate the process, but it provides you with a close-and-clear perspective through the painting process. Once the projects in this manual were finished, the figures were then photographed under regular room lights to provide you with a better appreciation of how the finished figures would typically appear under normal conditions.

A selection of resin figures by (left to right) Yoshi, Wolf, Mori, Wolf and TANK. Note the convenient carrier block attachment points on resin figures – under the boots. A small jeweller's saw is very handy for removing these large blocks.





The 90-degree scraping action of a sharp scalpel blade will remove seams and surface blemishes.



White metal figures are heavy and depending on how you opt to position the figure in its final resting spot, it is beneficial to drill a hole up into one of the heels and place a small metal post or large pin to allow the figure to stand on its own weight.



Resin heads in various stages of completion. I usually have a dozen or so heads on the go at any one time. The bottom row comprises heads that have been primed and/or base-coated and the upper row features heads that are nearing completion.

# Getting started

With thousands of figures on the market, it is worth discussing, in very general terms, the various types of figure available, how to select a suitable figure and how to prepare a figure for painting.

#### Figure types

The most popular, inexpensive and readily available figures are made of injection moulded plastic. The typical set contains four to eight figures, usually broken down with separate upper torso, arms, heads, helmets and legs. Plastic figures offer ease of assembly, many conversion possibilities and an overall consistency of scale among manufacturers. The disadvantage is that plastic figures are not quite as crisp in detail as their more expensive white metal and resin cousins. However, many of the new releases by Tamiya, Tristar and DML are exceptional in crispness of detail, and these continue to be the best value for money.

The second most popular choice among modellers is resin figures. Resin figures are generally superior in detail, and are considerably easier to work with when removing surface blemishes, casting seams or flash. The disadvantages are potentially hazardous dust from sanding seams and removing attachment plugs, and the wide variation of scale among different manufacturers. On this last point, a 1/35-scale figure from one company may be quite a bit bigger or smaller than that of another, which can make mixing figures from different resin manufacturers cumbersome. Despite scale irregularities, I will freely mix and match different-sized figures because, in real life, there are shorter and tall people. However, I always use standard-size equipment, helmets, accessories and weapons from one of DML's excellent accessory and weapon sets. Using same-sized accessories on different-sized figures will go a long way to bringing the scale of each figure closer. Some of the more popular companies offering good quality resin figures are Wolf, Artisan Mori, S&T, Alpine Miniatures, Royal, Verlinden, Ultracast and Warriors.

White-metal figures are a bit of a rare find in the 1/35-scale armoured realm, but they do exist. They are generally very well sculpted and cast, and offer some of the best figures on the market. The disadvantage of white metal is that they are not as easily converted, and the weight of a figure will almost always require a pin drilled up through the heel of a boot to allow the figure to stand on its own weight. Companies offering white-metal figures include Hornet and Takahashi.

#### Choosing a figure

Selecting a figure is about personal choice. Some look for uniform accuracy, others look for clarity and sharpness of surface detail or the level of sculpting of the head. Whatever your criteria, examine the figure carefully. An off-centre eye socket or flattened nose will not look any better once it is painted. Try to look beyond the superbly painted figure on the box art and determine if the figure has the detail, pose and overall appeal you are seeking. Search for a review of the figure on the internet. I typically ask other modellers for their opinion at club meetings or via discussion groups. The golden rule to finding a good figure is that the most expensive figures are not necessarily the best.

#### Preparing a figure for painting

Regardless of the material composition, a figure will always require a good scrubbing with liquid soap and water to remove casting agents. Most modellers