How to make and colour rocks.

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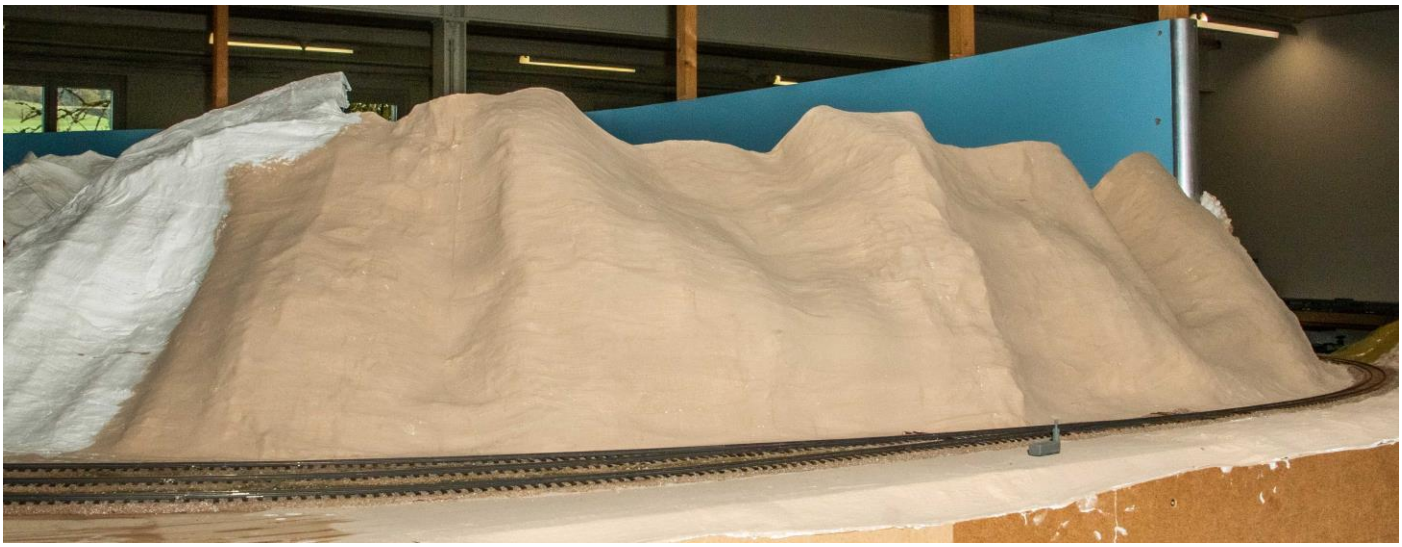
As you can take from the picture and videos on this homepage part of the attraction of the On3 Trainbuffs layout are the many large rock sections.

The most frequently asked question by visitors is: "How do you make these rocks"?

This article is intended to clarify this question by showing how a small rock section is formed.
The process was filmed at the same time. You will find the film as accompanying information in the video section of this homepage.

Now to making these rocks. Firstly the area for the rocks is prepared by building a wooden frame which is then covered by wire mesh. (Something you probably already know). This mesh is turn is covered with a double layer of plaster infused cloth. Another possibility is cloth soaked in glue.



In picture you can see an example of a landscape prepared this way. The plaster cloth was painted light brown so that the areas not covered by rocks have an earth like appearance.

You are probably familiar with the ready-made rock moulds available in model shops. (Woodland scenics or others). If you only model a single rock in a meadow, for example, then they serve the purpose well. However they are not suitable for large rock faces as they are much too small. In addition it is difficult to conceal the transitions. It will look more like a collection of identical stones than a continuous harmonious rock face.

An American company that produces latex rock moulds of different strata at high quality and various sizes does the trick. Their selection leaves nothing to be desired. You can see a small selection of these rock moulds in next Image.

The company Bragton Enterprises can be found on the Internet and delivers to Europe. For those interested go to their homepage https://www.bragdonent.com/ click on: Latex Rock Moulds > View Catalogue Now > Latex Rubber Rock Moulds. A list of available rock moulds will appear. Since the selection of moulds is too large to show all by individual images, click on the desired mould for details.

To the plaster. Definitely do not use common plaster sold in hardware stores. After drying it is sensitive to moisture and should therefore no longer come into contact with it else there is a risk of gypsum plague, also known as fungal infection.

Since we use water based paint and water for colouring the rocks this would not turn out well. Even fillers, of which there is a wide range, should not be used. They often contain plastics that affect the absorbency after drying. Model plaster also called “plaster of Paris” or hard plaster is used. This Plaster is finer in its consistency is produced differently and grounds finer without affecting the absorbency. This gives a smoother surface without being sensitive to moisture. After hardening it can only be worked on with a hammer and chisel. In our example plaster of Paris was used.

First, place the rock mould on a board roughly the size of the mould. Then underlay the edges of the mould (since it is flat) so that the liquid plaster cannot run out. Now wet the mould with a hand spray bottle filled with water.

Estimate how much water/plaster there is needed for the specific mould and fill a container with the corresponding amount of water. Add the plaster powder while stirring constantly (ideally with a whisk) until you get a creamy yet still liquid consistency which can easily be poured into the mould.

Always put the plaster in the water, not the other way around. It is better to have the plaster too thin than too thick. You can take your time. The plaster will always turn solid. Most important is to know when the plaster is ready to be poured. From time to time reach under the latex rock mould and push it slightly up. As long as no little cracks appear keep on waiting. As soon as small but visible cracks appear, it is the right time to apply the mould.

The plaster is now solid enough so that it will not leak out of the mould. Equally it is still soft enough to fill all contours of the mould.

Now carry the mould with the board to the desired location to apply it to the prepared subsurface. Smaller moulds apply by hand and larger by using the carrying board.

Press the mould onto the surface and hold it there for two to three minutes until you notice that the initially soft plaster no longer moves.

After about 8-12 minutes carefully remove the mould. Undesired Plaster that may have been squeezed out from under the mould can now be removed.

If you build a rock wall consisting of several rock mould applications, apply the next one near the previous one making sure that the new one overlaps just a little. This way the rock sections flow seamlessly into one another since the new, still soft plaster, adapts to the previous one.

You can also smoothen out any transitions with a spatula / scraper as long as the plaster is still slightly soft.

If you fail to catch the right moment to apply the mould i.e. when the first little cracks appear, do not apply the mould anymore. Just let the plaster dry completely in the mould. You can easily remove it from the mould thereafter without damaging the mould. Such Rock sections can then be used for practising colouring or cut to pieces for use at other locations.

What happens if you try to apply a mould too late can be seen in Figure.

The plaster has already hardened to such an extent that it no longer adheres properly to the substrate. When the mould is removed, part of the plaster comes loose and crumbles.

Before you start colouring, let the rocks harden for 1-2 days. Van Gogh watercolours in tubes (or equivalent) are used for colouring. These watercolours contain finely ground pigments in high concentrations which is important since the colour will be very much diluted with water. For our Colorado based rocks the shades are: ochre, burnt sienna and black. Use about 15-20mm of paint and mix it with 2-3dl of water. It's easiest if you fill the diluted paint into a spray bottle. You can also work with a brush if you prefer. First, spray the dry rock with the colour ocher.

Now spray spots of burnt sienna while it is still wet. With a spray bottle containing only water spray over the painted section so that some of the paint runs and doing so filling cracks etc.

Let this colouring dry. After drying, spray black paint on individual areas and immediately spray a black wash diluted with water so that it runs and with it emphasizing the rock structures.

Even if the colour seems too intense at first just wait as it will fade during drying.

Now if you say I like to model specific rocks that have different colours than what we showed in this article. No problem. The key is the rock shapes not the colour. Even if many different rock formations can be found all over the world, the structures of most common rocks are similar. Therefore it doesn't matter what mould type you use for your rocks. Ultimately the texture and colour will determine what you make of your rocks. Use different shades of grey, a light shade of brown, yellow and orange can also be applied maybe even a little green, just try it.

It is important to always start with the lightest colour. The first coat of paint is absorbed the most by the plaster. You can always darken afterwards. In order to illustrate this, a rock wall of the 0n3 Trainbuffs layout,

was re-coloured in Photoshop. You see the result below.

We hope you found this information useful and invite you to visit the homepage of the On3 Trainbuffs Layout. https://www.on3trainbuffs.com/. You will find many films and photos there. The preparation of the article was also filmed and can be viewed on the 0n3 Trainbuffs homepage.