

Model-making with etched models for Scale N implies:

- True to scale
- Lots of detail
- Individuality

Etch model: KT018 Container Crane Basis

Level of difficulty: Level 5 from 5

Congratulations

to your new *etchIT*-Model!

With this assembling manual we want to provide you with important suggestions building your new model

KT018 Container Crane Basis

Follow these instructions and you will get your individually gem on your model railway!

If you are satisfied with this model – we guess you will – then visit our website from time to time

www.etchIT.de

the amount of available models is permanently growing.

Now we wish you a lot of success and a lot of fun while assembling this detailed model from *etchIT*.

General information

The basic material of this model kit is nickel silver sheet metal. This material is robust even in thin sheets and it is stainless. You can glue this metal or you can solder it. The soldering method adds extra stability and should be the preferred method to fit nickel silver parts together.

More information about soldering are to be found in this manual some pages downwards.

Please find all the actually available assembling manuals (most of them in german language) on the following web address (put as ONE line into the address line of your web browser):

<http://www.easy01.de/etchIT-store/assets/own/manuals.htm>

Folding edges

As mentioned, nickel silver is very tough and so all edges which to be fold are pre-etched on one side of the sheet metal. Most of the time this etched edge is the INNER edge.

There are commercial tools on the market that may help you while bending nickel silver or brass sheet metal. These tools are highly helpfull except for bending very long edges. And these tools are a bit expensive.

So the following paragraphs show you how you can build your own tool(s) for bending edges exactly.

Take...

- ...an old carbide metal saw blade
- ...chip a 5 to 7 cm long piece of that saw blade on both sides (you can't saw! It is too hard. A parting-off grinder maybe usable). **Please always watch your personal safety and use safety goggles and/or other safety material to protect your eyes, hands and body.**

- ... put the two pieces together with a rivet through the holes of the pieces or with a fitting screw and nut.

- ...and you have finally made your first bending tool

The folding is to be made on the straight side of the coupled sawblade pieces. The metal sheet which should be folded is right between the two saw blades and the pre-etched edge is visible in full width (see picture below).

To avoid that the two saw blade pieces will drift apart clamp the pieces with the inside sitting metal sheet into a machine vise or use gripping pliers as shown in

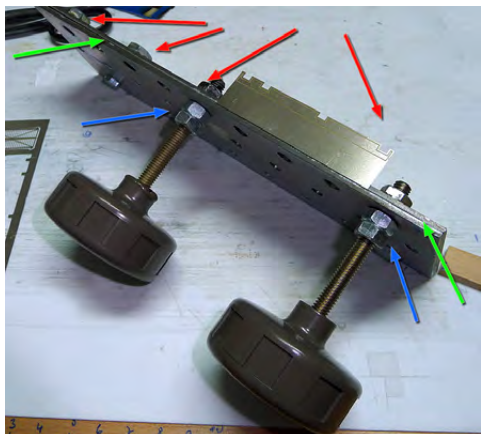
the picture below:



Now you bend the metal along the pre-etched edge with an appropriate piece of hardwood :



There is another bending tool we want to introduce to you. This one always is used when long edges have to be fold (until 170 mm!). Maybe its not a candidate for a design award but it is very useful:



This tool uses 2 perforated plates (timber connectors) from your local Do-It-Yourself-center sized $200 \times 60 \times 2$ mm. Both plates are connected with two screws and nuts on one of the long sides of the plates. Please watch that the two plates diverge a bit on the opposite long side of the plates — into this gap we will put the edge for bending.

Now you solder on one side of a plate 4 pcs. of M6 nuts (fix them temporarily with M6-screws); shown in the picture at the red arrows.

Two pcs. of threaded rods will get two additional hex nuts tightened together (blue arrows). On the ends of the rods toggles are mounted so you can press the two plates together onto the metal sheet in between.

Please press the plates together and watch the upper small sides of the plates. If they do not fit together exactly please grind this ledge until it is flat and plain.

In the following context of this assembly manual we assume that you are able to bend even small and long edges perfectly without deformate the metal sheet in any way — the perfect fit of a metal model is the appeal no plastic modelkit ever can accomplish.

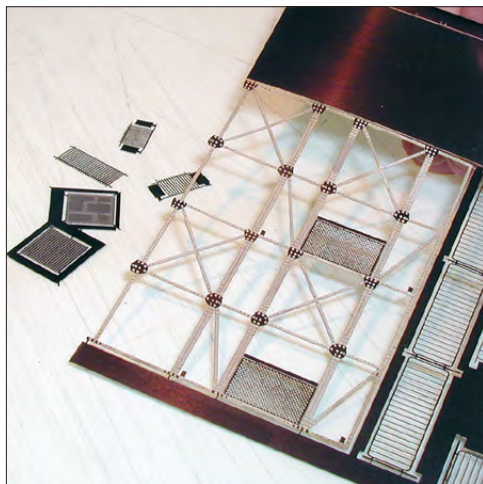
And now: Have fun and success while building your new modelkit made by etchIT!

Container Crane

The tableau of this container crane is closely packed with a huge amount of model parts in very detailed and fine structured surfaces. Since the best method to put parts together is soldering, this model kit is mainly intended for experienced model builders.

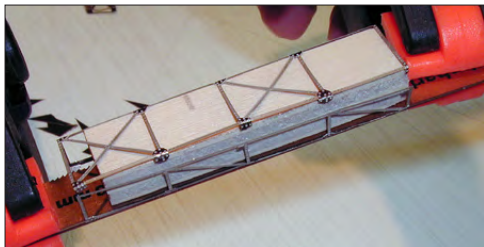
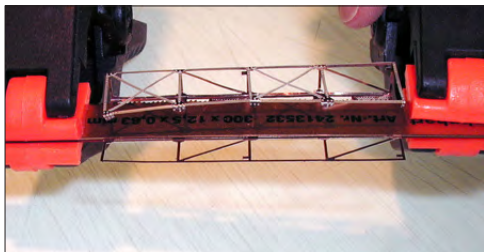
This manual contents a lot of pictures and whenever you are not sure how to proceed, have a look at these pictures; they will show all what you need.

In case we have a lot of single parts on the metal sheet there are needed parts in between the holes of the lattice as shown in the following picture. So please detach these parts carefully and store them for later usage.

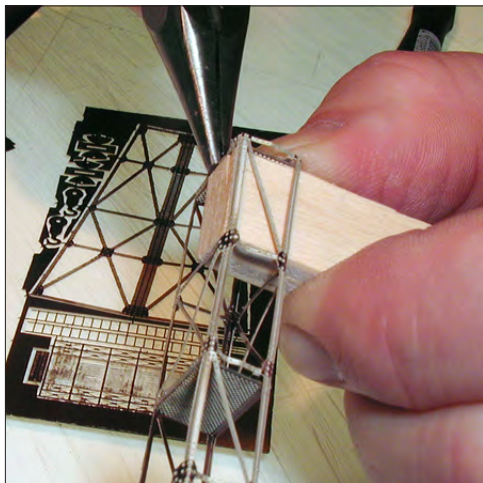
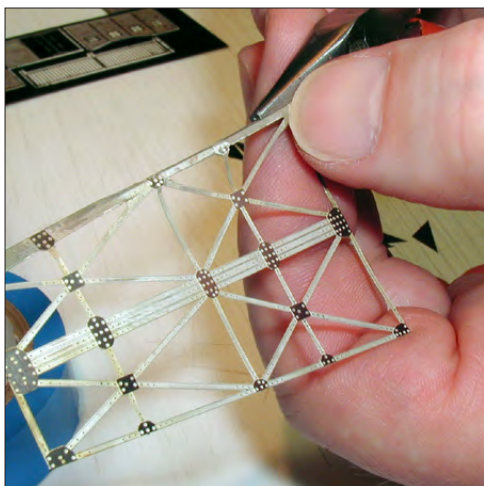


The challenge in building the lattice supports is to fold the long edges of the lattice. You use a tool as described on the pages before. Always make sure that the small edges will not be deformed other than lengthwise. See pictures below:

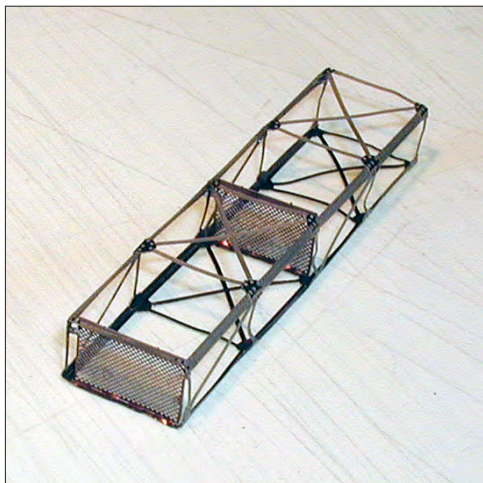




To protect already folded parts please use fitting wooden pieces. Also a flat pliers is helpful.



As soon as the 4 sides of the lattice are folded rectangular we have to connect the edge where sides 1 and 4 abut. To stabilize the construction please solder these edges together as described in the pages before. Now the two platform grids will be bended 90° inwards and here we are:



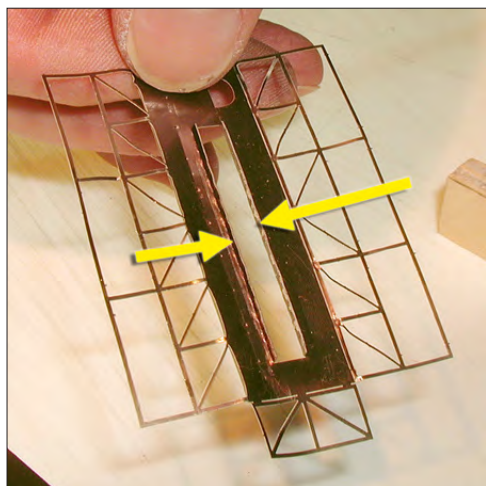
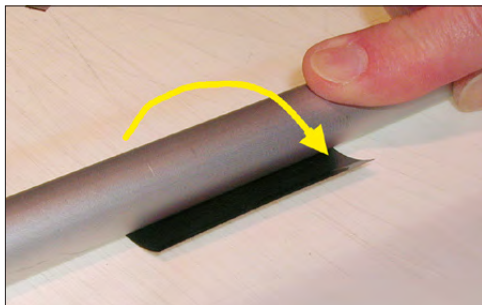
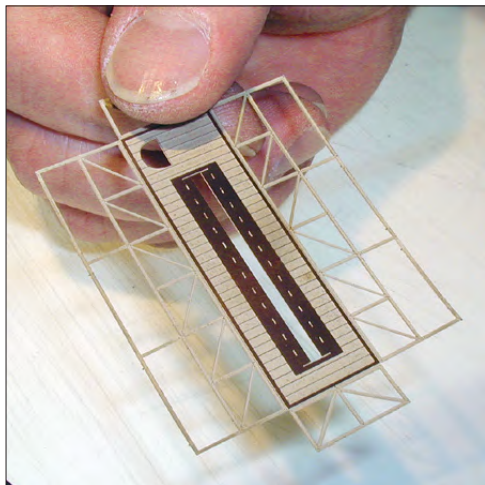
Two small huts for the service personell will be glued onto these platforms later.

Upper part

The upper part or bridge of the crane will connect the two side lattices. The upper part houses the trolley as well as the motors box.

In the middle of the bridge you see two small strips.

Bend them 90° up and we have the two rails of the trolley (see arrows).



Now fold up the 4 side parts of the bridge showing the struts and solder the fitting edges.

Roof

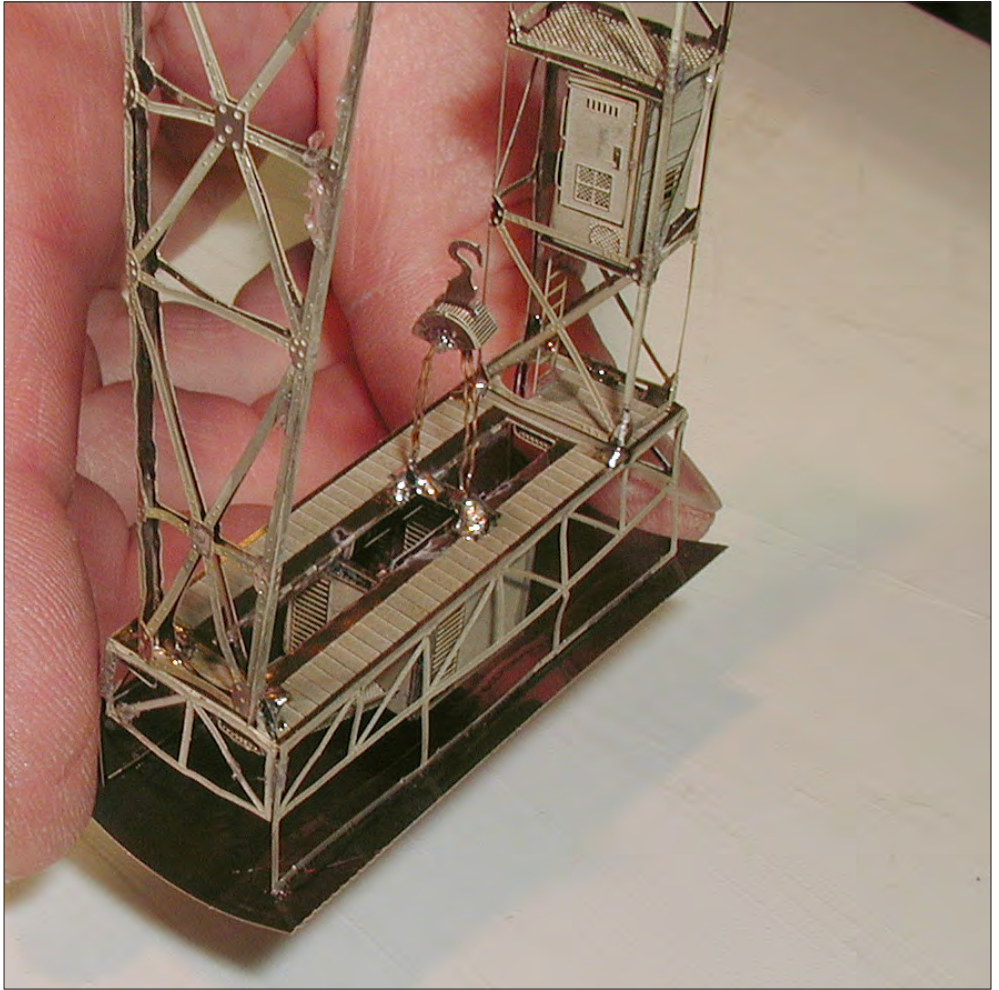
To round the roof as shown here the easiest way is to fit the long side of the roof with a tape lengthwise on a round material with a diameter of ca. 15 mm as shown below. Then turn around the rod (see arrow) and get a perfect rounded roof area.

Container

The folding of the container is very easy and shown in the pictures.

The locking of the container is very filigree and you can mount it after you colored the containers body. So the locking in natural nickel silver color, it looks very similar to a real world containers locking. Or you paint the locking in any color you want — best when the fine structure is still situated in the metal sheet frame.

In the following you see some views of the assembled model:



You certainly find a better material for the ‚chains‘ of the crane hook. And also you will realize smaller and almost unvisible soldering dots — we’re sure!

Color Design

By no means you should color stairs, grids and other filigree parts with a paint brush. Whether your color is runny or it is viscous — the paint brush occludes filigree perforations and reduces details dramatically. The realistic charme of your precious model is blown away...

The best way is to use an airbrush and fine grained acrylic airbrush colors. But — to use such an airbrush in the right way is not easy and needs a lot of experience and training.

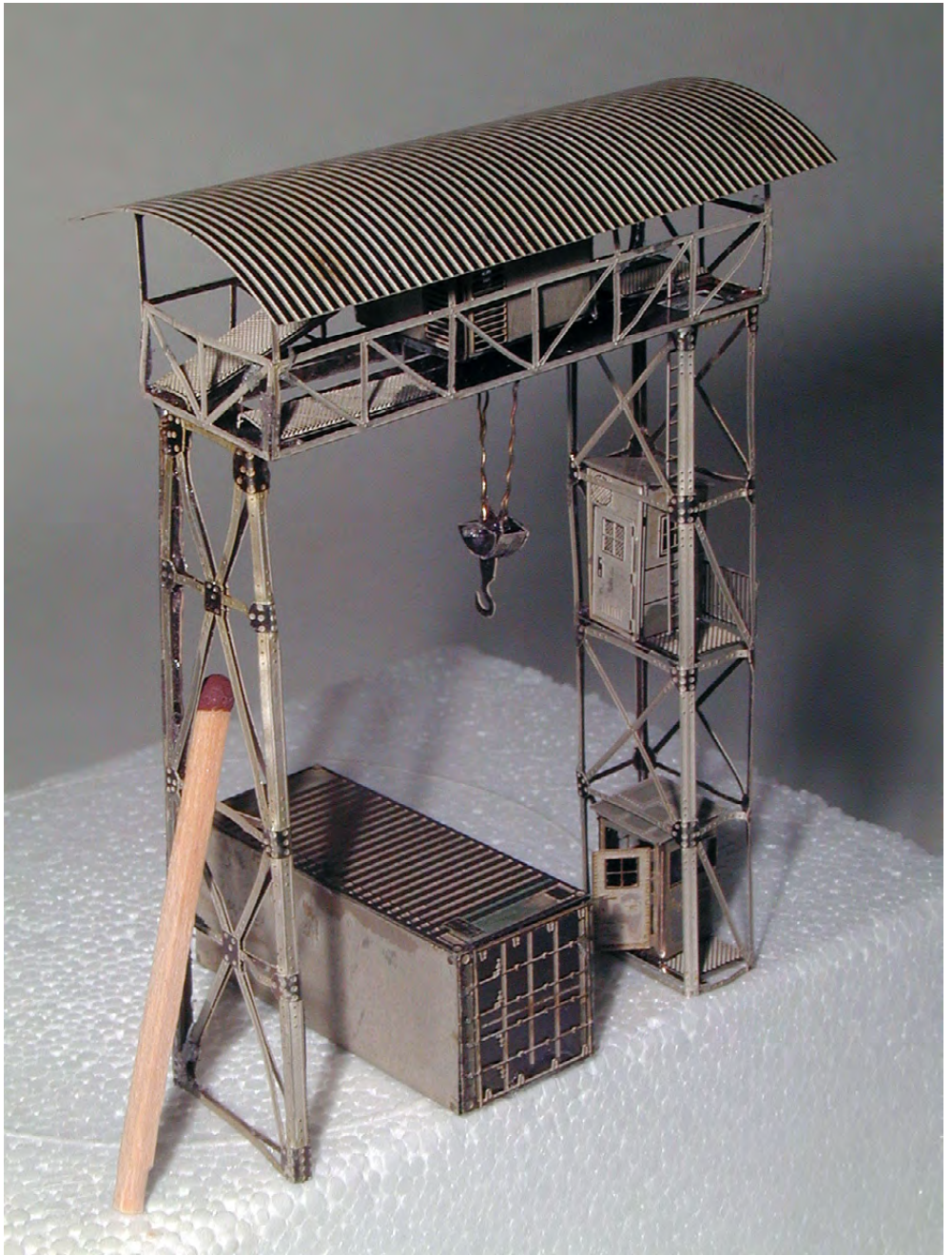
Another method is the use of color in spray cans especially made for model making purposes (e. g. Tamiya spray colors for plastic model making).

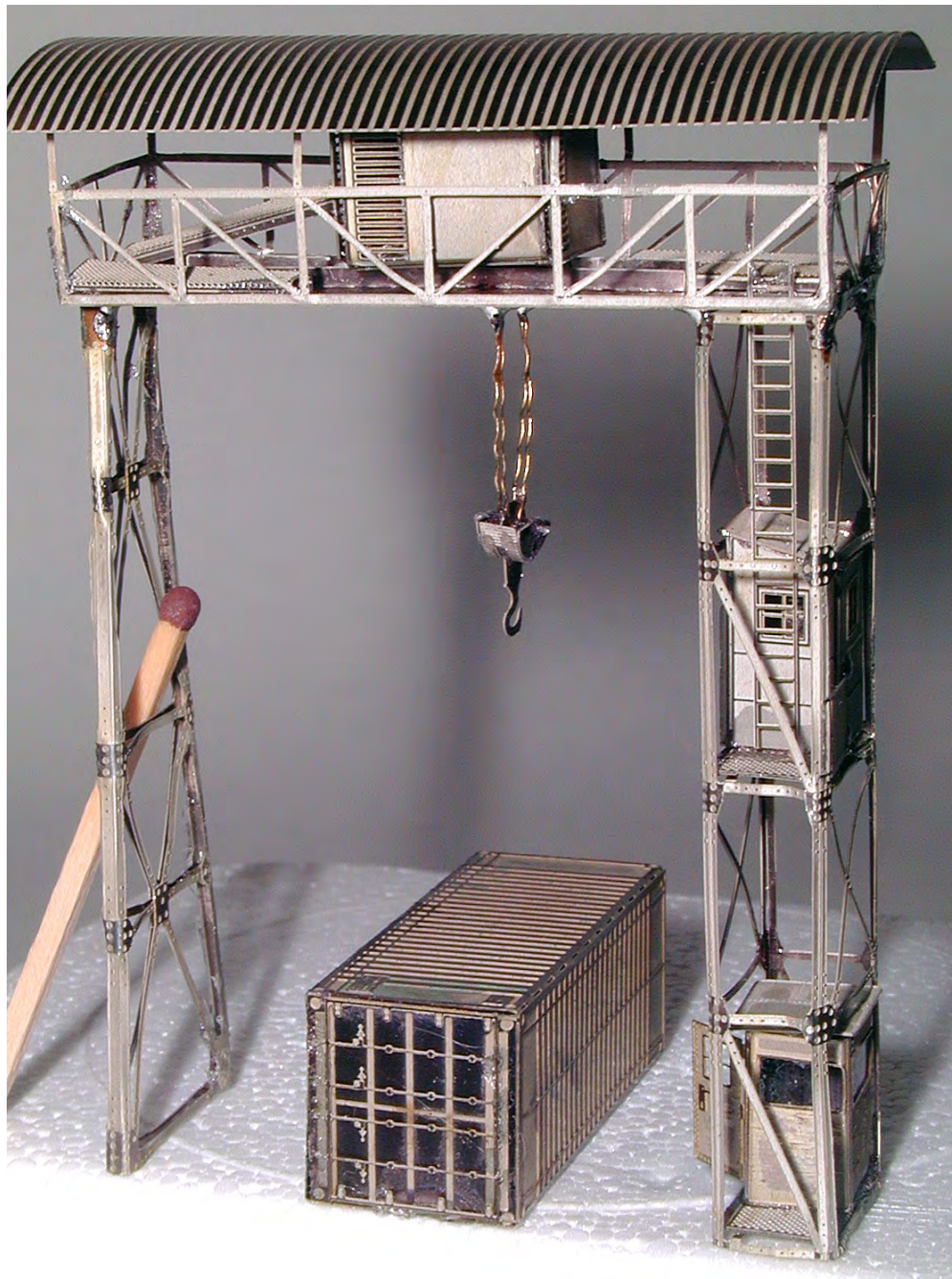
First of all use a primer on the degreased metal surface (with Aceton for example) and let the primer dry overnight. Then you color your model in thin layers of spray laquer.

Always pay attention to the safety notes on all products you use!

We wish you a lot of success and enjoyment in the following hours of model making fun and once again:

Congratulations for your detailed etchIT model!







Please keep in mind:

This finalized and colored model contains additional parts (e.g.: KT020) not included at KT018.