

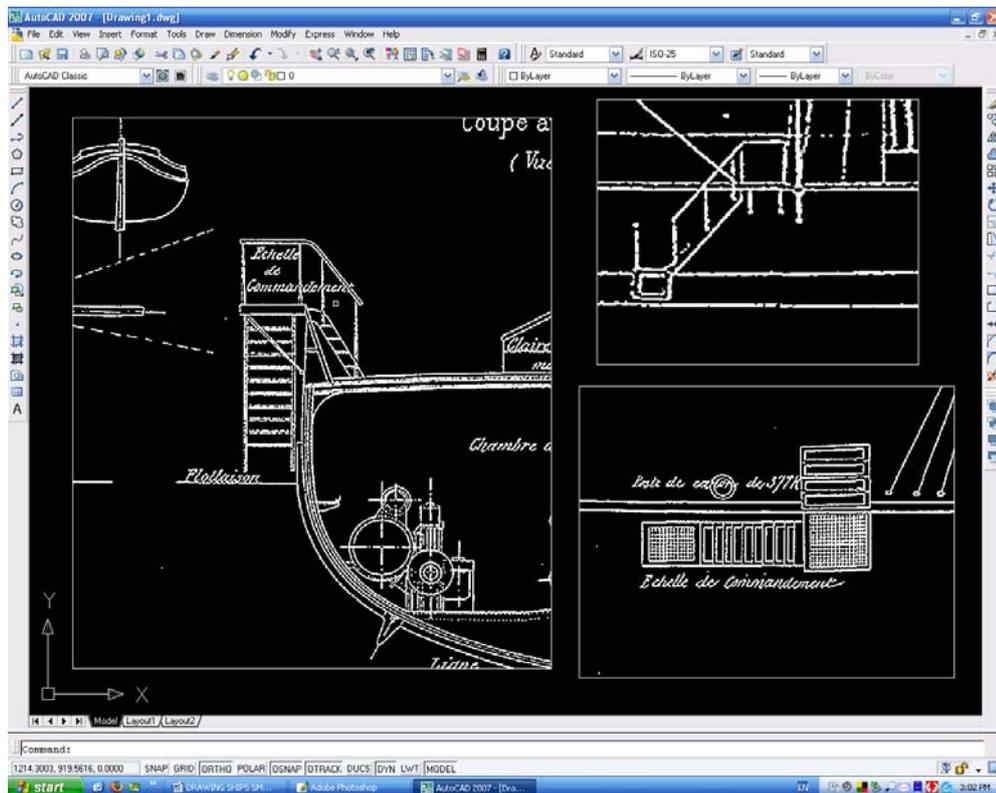
DRAWING SHIPS SMALLER DETAILS FROM EXISTING IMAGE FILES - PART 4

INTRODUCTION

The aim of this brief tutorial is to show how to generate smaller part details from an image (.bmp .jpeg .pdf etc) to a more accurate AutoCAD drawing.

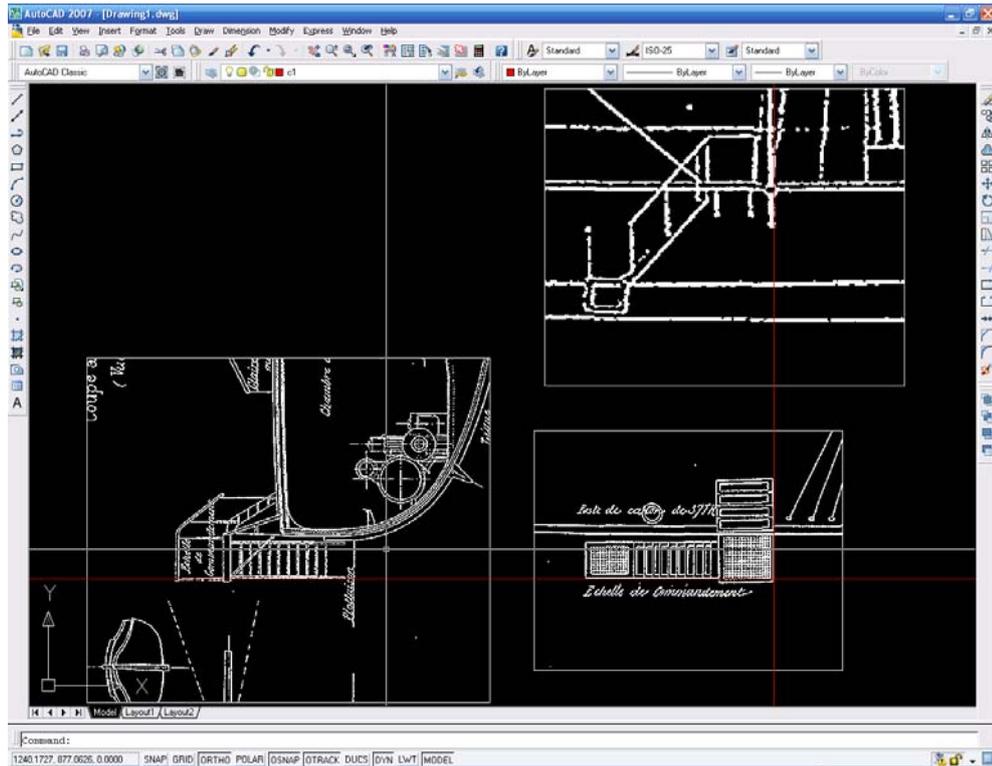
1 Insert Images into AutoCAD and Draw Reference Lines

It is often that details of smaller details are found scattered over different images (drawings), so we need to organise these on our drawing sheet where they are easiest to use. It is therefore important that we get both the scales and the orientation correct for all the parts. We then work our way along them scaling all to the same scale as the first one. The screenshot below shows all the images inserted into AutoCAD (following the steps outlined in Part 1), and in the rough position I want them to be in for redrawing later. Notice they are also of very different quality due to the scanning.



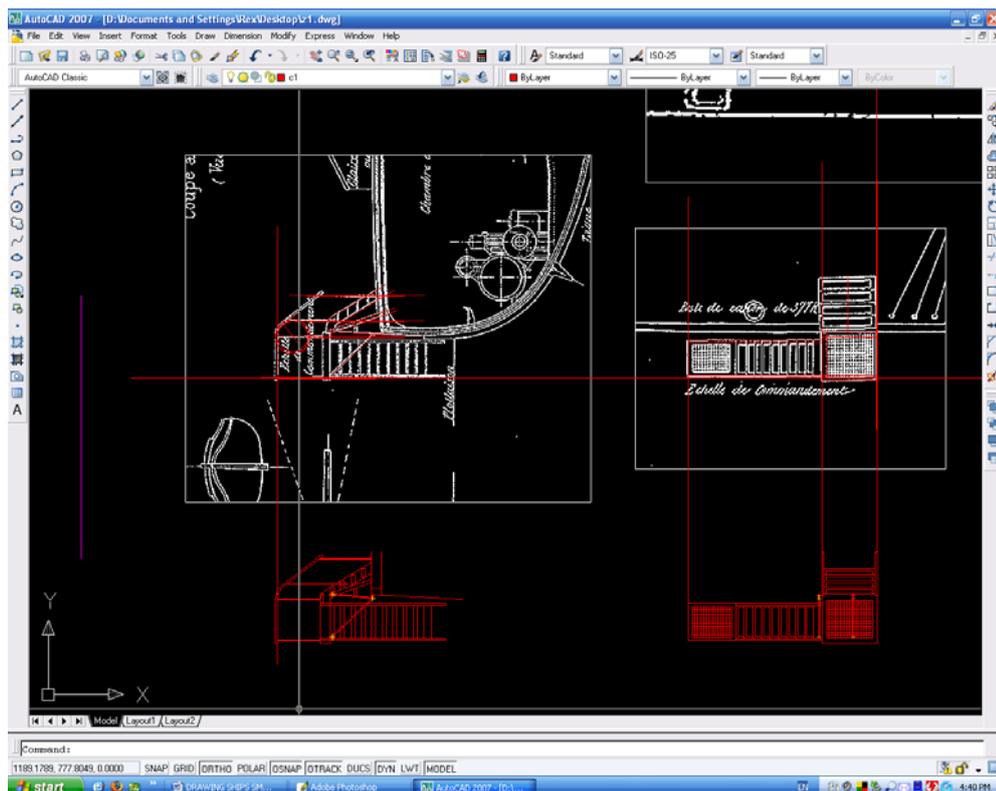
I tend to insert all the images (after I have cropped them to show only the parts we are interested in) and set them along common horizontal and vertical baselines. You will have to rescale each separate image to match that of the first image. Do not worry about overall scales at this moment as we will rescale all the views later on. Then they will need to be rotated to bring them all square on to the first (or main) image, they are ALL rotated to bring them square to the drawing page. It doesn't really matter which order you do this in, but check that they all line up! We are now ready to redraw the parts we want to generate our new view. The picture below shows all the views scaled and rotated. We don't need many reference lines here – 2 will do. One on the lower edge and one on the forward edge. We then need to

draw the reference line down the left hand side to where we will **copy** to and place the new drawing.

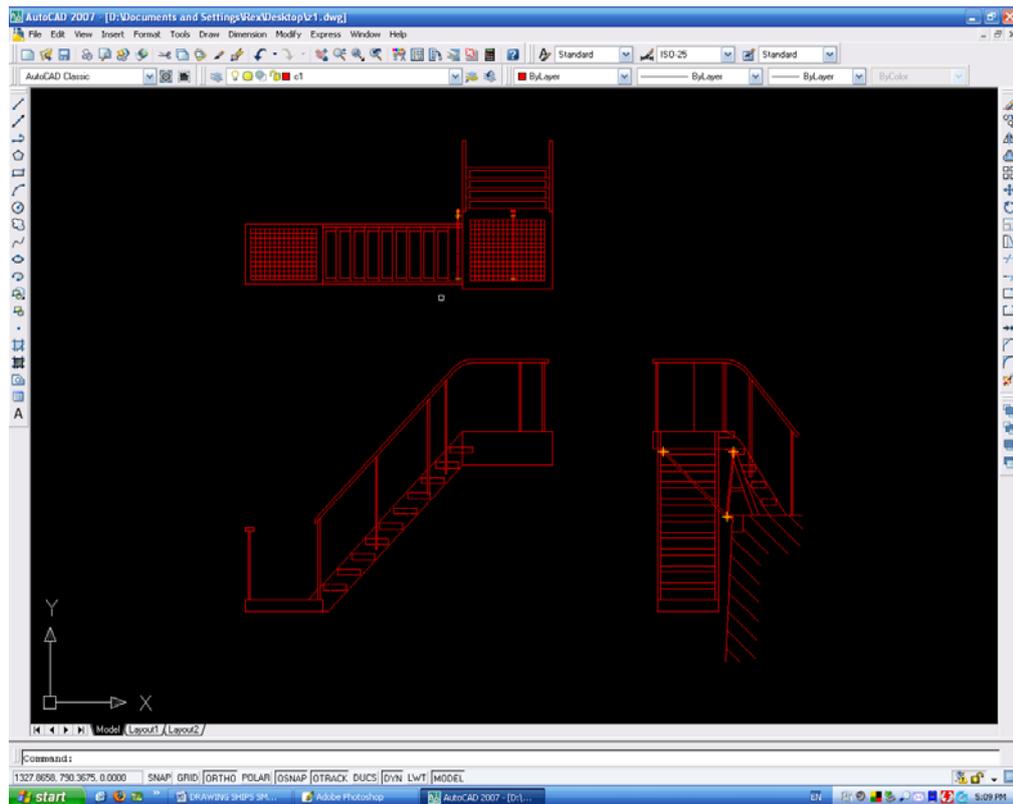


2 Draw Outlines

Copy the plan view outline and the starboard view outline to the new drawing below. We will need to realign lines, always use our baselines as a reference and adjust accordingly. It is worth mentioning here the **divide** command, which evenly divides a line into any number of equally spaced segments. Practise with this command.



We now have the outline of the accommodation ladder in two views, and it is an easy task to generate the third view from these and we can add all the smaller ancillary details. The final completed drawing is shown below:



We now have the detail in all three views. As we have been drawing in an unknown scale we need to **rescale** to full size, using steps shown in Part 1, and **save**. On the other hand, we may decide to save the plans as a block, so we can reuse them in other drawings, this can be done as shown in Part 3.

In Part 5, I will guide you through some other miscellaneous other tips, and introduce a couple more programmes that can help us in our drawing and modelling

As a matter of interest, the boat is the French Zelee, sister of the Atrolobe of Antarctic fame.