

A "Lanky" Tender – Keith Jones

I am now working on the tender body for my Lanky engine and have come to make the top coping plate. *Photo 1* shows the tender on No. 1300. As you can see these plates are not part of the tender side panels but curved strips fixed on to the top edges of the panels.



Photo 1



Photo 2

My first attempt was to try to roll the curve on a sheet of brass then cut off the rest of the sheet after rolling. Unfortunately I could not get the correct radius given the length of the strip, so I then decided to make them out of a 35mm diameter copper tube. This would mean cutting the tube into strips. I first made two plugs which were Loctited into each end of the tube. One end had first been centre drilled, so I now held one end in the three jaw chuck and the other was supported with the centre in the tailstock. Then (using what I call a lash up) I took the tool post and top slide off and clamped a very large vee block onto the cross slide. Mounted on this was a smaller vee block in which I clamped a small hand grinder (*photo 2*). End stops were set at each end of the lathe bed to limit the travel of the saddle.



Photo 3

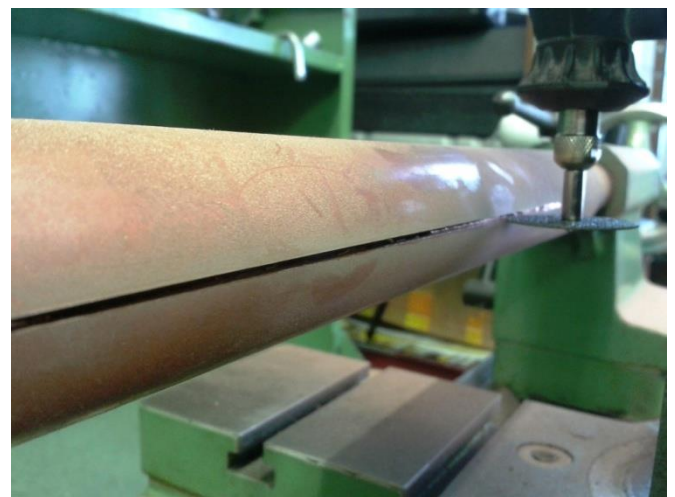


Photo 4

Now small cuts were taken with the cross slide as the saddle was worked up and down the bed. *Photos 3 and 4* show the cut and the slot in the tube. I then turned the chuck round to the next position using a small gauge I made out of a brass strip. I could then mark the position of the next slot and I scribed a line using a height gauge the length of the cut line (*photo 5*). I needed to make three cuts then the strips were cut out from the tube (*photo 6*)



Photo 5

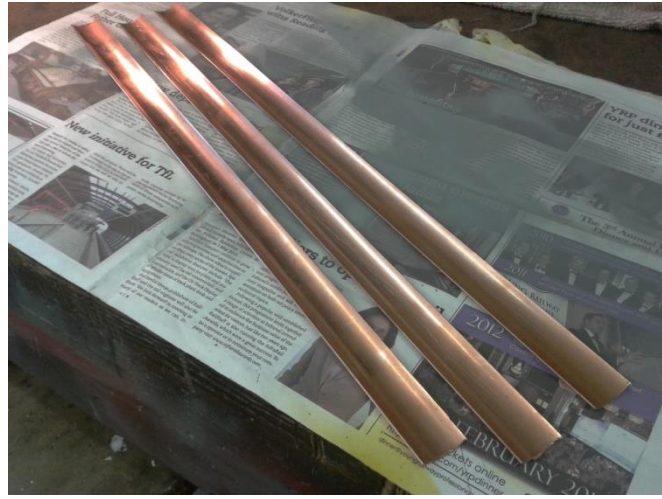


Photo 6

After cleaning them up, I will need to soft solder a half round beading along the top edge and then cut the rear corners at 45 degrees.

I had three lengths of copper to make the top tender coping, two of these were made oversize on the length and then rotary milled one end to the outside radius of the tube (see *photo1*). The two side coping rails were soldered to the side panels next. These were then soldered to the sole plate, and then the rear end plate was also fitted. Next the rear coping was fitted into place and soldered (see *photo 2*).



Photo 1



Photo 2

I will later need to fit half round beading to the outside edge of the coping but this can wait. Photo 3 shows how the tender looked with the body on. Next was the coal chute - this was first made up and soldered, then fitted into place onto the base plate. Then the two water valves for the live steam injectors and the hand pump were fitted, before finally fitting the top deck plate in position. The front end of this tender has two lockers, a screw brake, and a few small water fittings which will be made of brass as these are for show only.

Next the hand rails or stanchions are turned up. These were made from stainless steel and will be left unpainted. *Photo 4* shows most of the stanchions. I have also made and fitted a bridge plate between the loco and tender. As the drawings do not show this I have had to use my book on Locomotives of the Lancashire and Yorkshire Railway as a guide. Next the half round beading was fitted and then the corner

fillets where silver soldered and fitted into place. I had to make a jig to hold these at the correct angle while I soldered them together. Lastly the top lamp bracket was fitted to the coping rail.

Photo 5 shows the tank lid and top plate in position. I now need to run the water pipes under the tender body and make the hook and coupling to complete this tender.



Photo 3



Photo 4



Photo 5