

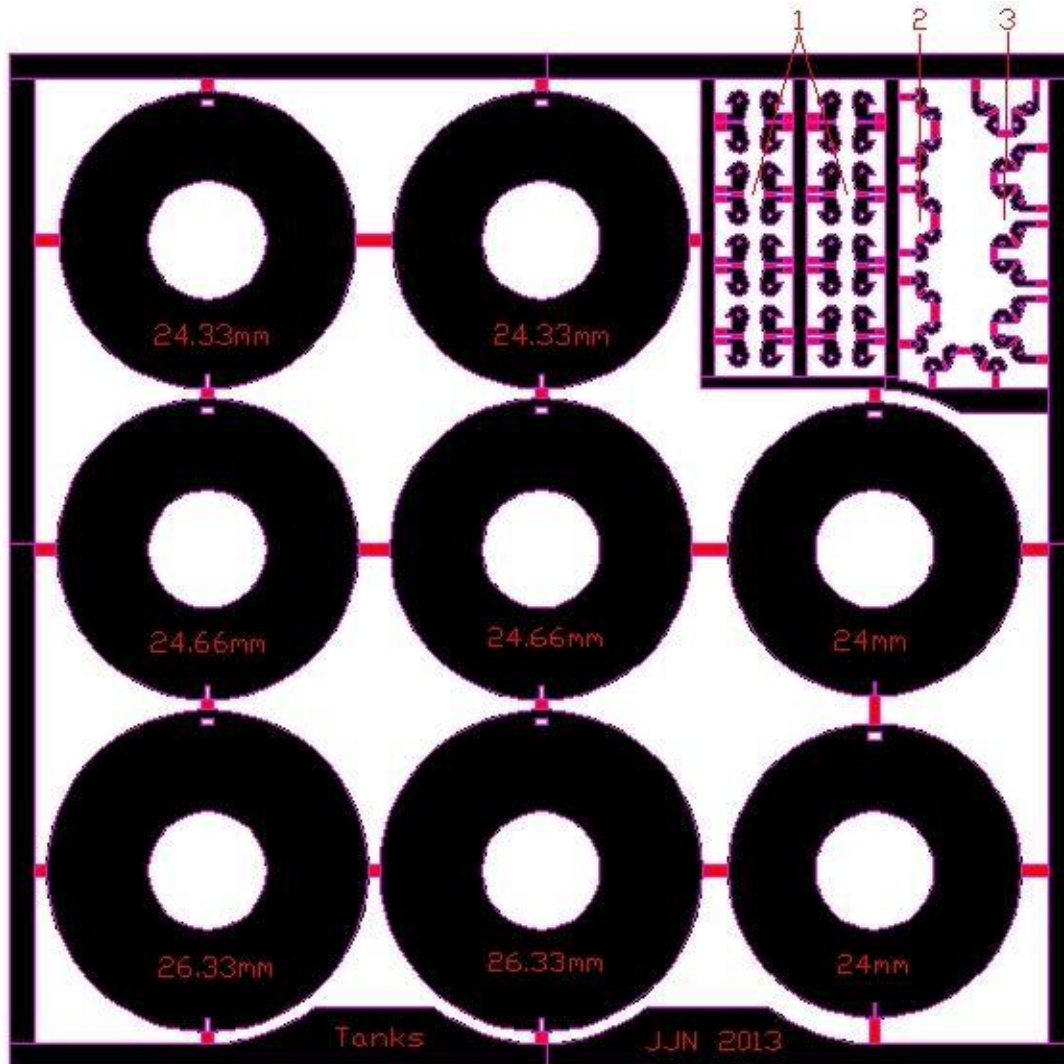
## Rumney Models - Milk Tank Former Instructions

This etch is designed to allow different sizes of milk tank to that contained in the David Geen kit to be constructed. Most milk tanks were around 6'5" in diameter over the lagging that was used around the tank but not all. They are essentially just circles that can be used with 0.005" brass or nickel silver sheet to construct a tank in the same way that you would construct an etched steam locomotive boiler. There are four pairs of formers included which cover GWR diagrams O.53 and O.58, LMS D.1991, LMS D.1993 and unlagged tanks. New lifting brackets are also provided with locating points on the formers.

### Component List

- 1 – Standard corner lifting brackets
- 2 – End lifting brackets
- 3 – Top lifting brackets

The dimensions etched on the formers are for the overall diameter of the finished tank.



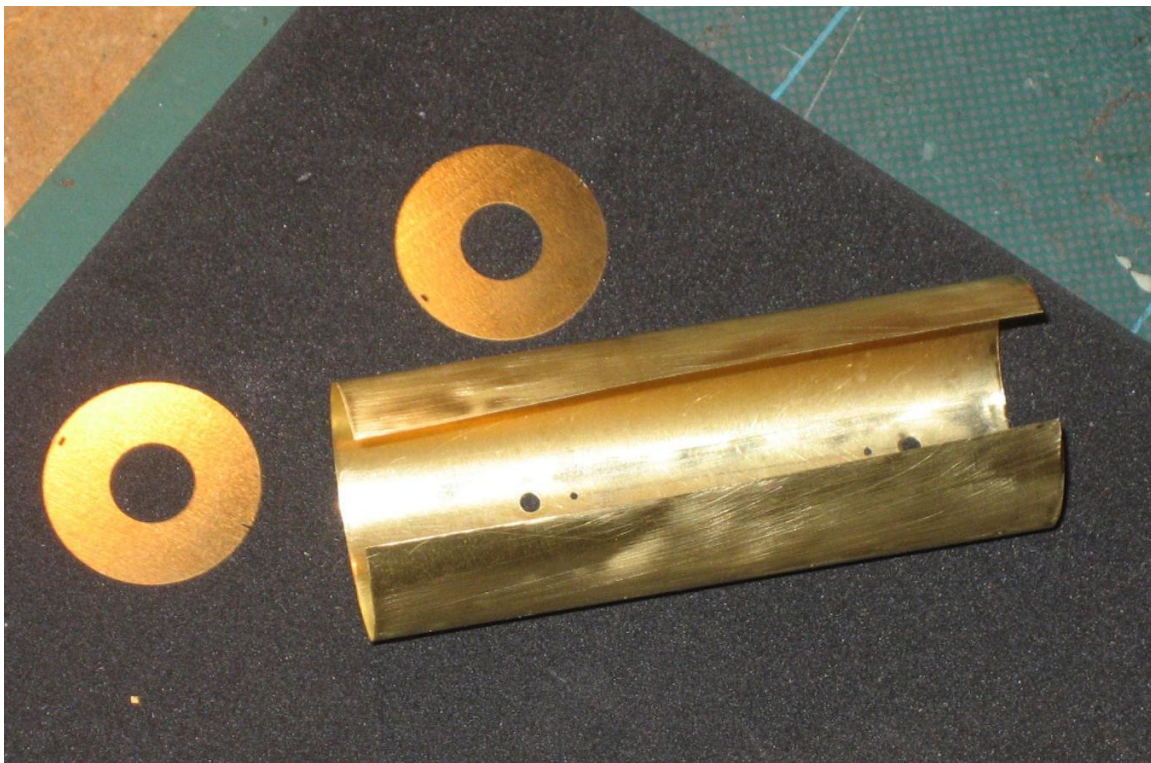
## Tank Construction

The following table tells you which formers to use with which diagram and also gives the length of the rolled section of the tank and the width required for the rectangular metal sheet to wrap around the formers. Tanks ends will then be added which need to be 2.75mm thick in order to give the correct overall tank length. The ends will be covered later.

Diameter	Diagram	Length	Width
24mm	GWR O.53 (21'6" chassis)		74.5mm
24.33mm	Unlagged standard tanks	68mm	75.5mm
24.66mm	GWR O.58 (21'6" chassis)	76mm	76.5mm
26.33mm	LMS D.1991	64.5mm	81.75mm
	LMS D.1993	61.5mm	81.75mm

When I did the tank for my O.58 I found it easier to mark out and drill any holes for manholes etc in the tank before rolling it up.

I find that the best way to roll the tanks is using a solid 1/2" brass rod and an old mouse mat. It requires a bit of elbow grease but I haven't found it necessary to anneal the metal before rolling. Once you are happy with the shape of the tank you can use the formers and solder everything together. There are slots etched in the formers that should be aligned with the bottom of tank. This will in turn align the slots for the tank lifting brackets to the top of the tank.



There are holes etched in the centre of the formers which will accept 3/8" outside diameter tubing (K&S 135). This can be used to add weight to the tank to bring the whole vehicle up to the 75g required if you are using my sprung chassis. I used lead flashing cut to weight, rolled up and then fitted in the tubing. Make sure any added weight is positioned centrally in the vehicle.

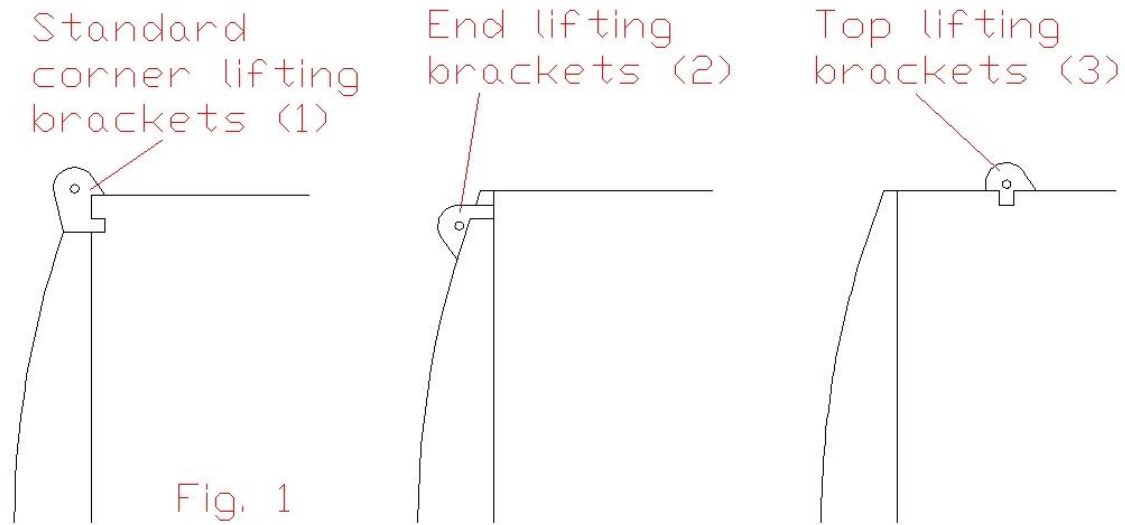


### **Lifting Brackets**

There are three types of lifting brackets included. Standard corner lifting brackets (1) which was the most common type, end lifting brackets (2) which seemed to have been most common on end platform fitted tanks (GWR O.57 and O.60 and LMS D.2173) and top lifting brackets (3) also found mostly on GWR end platform fitted types. A number of tanks had no lifting brackets. Refer to Fig. 1 for an illustration of the types.

These are arranged in pairs with connecting tabs on the fret but you will need two pairs for each bracket giving a total thickness of 1mm. The holes etched in them are 0.31mm in diameter so you can use a 0.3mm drill to align them and solder them together. The end lifting brackets and top lifting brackets need to be arranged so that the locating tails are both in the centre. This will mean you can simply drill a 0.7mm hole in the tank to locate them in place.

The standard corner lifting brackets can be soldered into the slot in the top of the formers. The ends will need a slot filing in them to fit around the lifting bracket. The end lifting brackets can be fitted by drilling a 0.7mm hole in the tank ends and the top lifting brackets by drilling a similar hole in the top of the tank.



### **Tank Ends**

I used the David Geen whitemetal castings on my O.58 with the corners rounded off and the formers recessed in the tank. For the other tanks you will probably need to construct new tank ends. The easiest way to do this is with circles of plasticard suitably filled and sanded to shape. The tank ends should be 2.75mm thick so several layers would almost certainly be needed. If using the standard corner lifting brackets then a slot will need to be filled in the top of the ends to get them to fit.

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