5 ins. gauge Ivatt Atlantic 3279 Update:

In my last update I said that I was about to start work on the cab. The cab for No. 3279 is simpler than on some locos and comprises only two main pieces of 18 gauge brass sheet. One piece is the front spectacle plate and the other is the cab roof with wrap around sides which is all one piece. The initial problem with the cab was determining what size it should be. The cab on No. 3279 is one of a kind after being modified during two rebuilds of the engine. The only reliable data for the changes are hand written notes which Nigel Gresley appended to a copy of the works drawing for the cab of the normal large boiler Atlantic. I converted these notes to 5 ins. gauge. Essentially the cab is slightly taller but much wider. It is also much longer and required an extension to the locomotive frames. The rear edges of cab sides were also curved inwards to give the driver more protection from the weather, the spectacle plate windows were reduced from four in number to two and there are other detailed changes such as the addition of side screen deflectors.

The cab sheets were cut out using the small bandsaw and filed to size. The spectacle windows were 'chain drilled' and cut out using an Abrafile saw. The Abrafile blade is the most amazing cutting blade ever made being only about 1/16 ins. diameter and has an Abrium hardened helical cutting edge. Unfortunately, they are no longer made and old stock blades command a high price on eBay. I think that the design originated in France and a few decades ago they were made in the UK by Abrasive Tools Ltd., Twickenham and perhaps ten years ago by Sykes Pickavant Ltd., of Lytham St. Annes. If you find any let me know!

The cab roof and sides need bending into shape and this needs care since the top edge of the cut out, where the driver leans out, is on the curve which forms the start of the roof. The perfectionist would make a wooden former to do this but I just bent the brass over a piece of steel bar. The cab is held together with ¼ ins. brass angle and 6 BA countersunk screws. Back in the day, brass angle could be relied upon to be 90 degrees, but not these days when it always seems to be less than a right angle. So, the first job is to skim the brass angle to 90 degrees in the milling machine vice before attempting any assembly. The window frames were cut out in the same way and these are fastened to the spectacle plate with 12 BA round headed screws. Incidentally, the windows and side screens need glazing. The best way of doing this is go and find a CD that your good lady doesn't play very often and remove the front cover from the case. Its pretty hard plastic and 1mm thick, just the job! In case of complaint just claim that there is a need to move with the times and…….download!

Once the cab is assembled you need to fill the heads of the countersunk screws before spraying with etch primer. There are lots of fillers available including Milliput, Holt's Knifing Putty, Humbrol Model Filler and others. What I find is a real advantage, given that several applications are usually needed to get the surface really flat, is using a filler which dries very quickly and can be sanded within minutes. The fastest drying one I've found is Squadron Products Putty, made in Texas, USA. You can tell its good stuff by reading the disclaimer on the back of the tube which reads 'known to the State of California to contain a substance known to cause birth defects or other reproductive harm, may cause liver, kidney and/or brain damage'. In case you want to rush to get some you can find it in good model shops and also at Boyes stores! Perhaps your wife will then claim that you also are 'losing the plot' or queries why you come out of the workshop 'with a smile on your face'.

Looking closely at photos of the actual No.3279 there is half round beading around the front edge of the cab. There is also what appears to be round bar or tube welded to the rear edge of the cab sides and up onto the roof. For the front edge I soft soldered half round brass beading around the cab. For the rear edge I stuck some 1/8 ins. thin wall copper tube to the bench with double sided carpet tape and slit it along lengthways with a thin cutting disc in the Dremel. I then annealed the tube, filled it with Araldite and formed it around the rear edge of the cab. Then it's a case of etch primer, hand rails, windows, sliding cab roof opening, side deflector brackets and a dummy whistle.

I'm now working on the ash pan and grate. This is not easy. I'm making the pan from 18 gauge stainless steel which is difficult to work with. The only drawing I have of the grate and pan is for the standard large boiler Atlantic produced by Harry Clarkson. His pan is fixed and the grate has to be removed in several pieces via the fire hole door. I don't like that so I'm redesigning the brake gear and making a pan with a one piece grate which can be 'dropped' from under the locomotive. Not easy, because this engine has double frames at the rear which taper inwards and the wide firebox extends over the inner pair of frames!


SAFETY VALVES
INSIDE