Brassmasters

Scale Models

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GWR 28xx 2-8-0 Coupling and connecting rods

First drill out all the crankpin holes to a convenient size which is well undersize for the crankpins and the fork joint holes 1mm so that the 1mm nickel silver wire is a tight fit. Remove all burrs caused by the drilling. Now drill the drill used for the crankpin holes into a small block of wood and leave the drill in the wood with its shank projecting. This projecting shank is used as a mandrill to accurately align the laminations of each rod.

Tin well the front face of the inner laminates and the rear face of the outer laminates and place them over the mandrill. Using plenty of solder and flux solder the two laminates together. You will now have rods with the crankpin and fork joint holes aligned. The rods have been deliberately etched too large so that the thin etched edges can be carefully filed so that the 'laminated' effect is lost and the rods appear to be made from one piece of metal.

The crankpin holes now need carefully opening out until they just fit, with no free play, the ends of the hornblock alignment jigs (available from London Road Models or Markits).

The fork joints are now pinned using 1mm nickel silver wire. Retain the pins, which should be a tight fit, by lightly soldering on the inner face of the rods. The correctly assembled rods should now have a completely flush inner face.

Solder together the connecting rod laminations (parts 139 & 140) and add the rod boss laminations (part 141) to the big end back and front. Drill the big end to fit the crankpins and the small end 0.7mm. Fit the connecting rod to the crosshead using 0.7mm wire for the pin. Carefully solder the pin from the rear and file flush.

ETCHED COMPONENTS - 0.020" nickel silver

133	Coupling rod - front - (2)	147	Crosshead back - (2)
134	Coupling rod - front - fork joint - (2)	148	Crosshead front - early pattern - (2)
135	Coupling rod - centre - inner lamination - (2)	149	Crosshead front - later pattern - (2)
136	Coupling rod - centre - outer lamination - (2)	150	Crosshead - vacuum pump rod bracket detail
137	Coupling rod - rear - inner lamination - (2)	151	Valve rod - (2)
138	Coupling rod - rear - outer lamination - (2)	152	Cylinder cover - front - (2)
139	Connecting rod - inner lamination - (2)	153	Cylinder cover - rear - (2)
140	Connecting rod - outer lamination - (2)	154	Cylinder cover - rear overlay - (2)
141	Connecting rod boss lamination - (4) I	155	Piston rod gland - (2)
142	Slide bar - lower - (2)	156	Reversing rod
143	Slide bar - lower - lamination - (2)	157	Reversing rod fork joint
144	Slide bar - upper -(2)	158	Reversing rod support bracket - (2)
145	Slide bar - upper - lamination - (2)	159	Reversing shaft arm - mid gear setting
146	Crosshead slippers - (2)	160	Reversing shaft arm - fore gear setting

