



SPECIFICATION NO. 1073

DATED : April 2001

SPECIFICATION

To govern manufacture and supply of
HAND CERTAINTY FOG SIGNALS

1. Size

52.4mm to 55.6mm diameter by 9.5mm to 11.1mm in depth

2. Case

The outer case of each signal shall consist of two parts, a base plate and upper flat topped dome, both made from cold reduced tinplate thickness 0.432mm plus or minus 0.025mm and joined at the rim.

3. Construction of Rim Joint and Fragmentation

The rim joint shall consist of a single fold. It shall be made by bending the edge of the upper part of the case underneath the base plate and sealed to prevent entry of moisture. It shall be strong enough to ensure a satisfactory report but no signal under any condition of explosion, properly placed, shall eject fragments of metal in quantity or size likely to cause injury to personnel.

4. Percussion caps and Anvils

Each railway fog signal shall contain five percussion caps fitted on an anvil made of tinned malleable iron, sufficiently soft not to indent the rail. The anvil assembly shall be held securely in a central position on the base be held securely in a central position on the base plate by a perforated tinplate disc or other suitable means.

5. Explosive

Each railway fog signal shall be charged with 7.13 grams to 8.42 grams weight of gunpowder, all of which shall pass through a No 14 BS Sieve.

6. Binding Strip

Railway Fog Signals for placing by hand shall have a lead strip, not less than 177.8mm long by 6.4mm wide and 0.8mm thick firmly soldered or otherwise securely attached to the base plate.

7. Marking & Painting

The word SINGLE and figures to show the month and year of manufacture shall be clearly stamped on the dome plates of each Railway Fog Signals, 5 years after this date they should be removed from service and disposed of. Railway Fog Signals shall be painted externally with a non-brittle protective yellow (BS 3810 Colour BSC309) coating. Figures showing the month and year of manufacture shall be stamped on the label outside of each packet of signals.

8. Immersion Test

24 signals from each 14,400 or part of 14,400 in each consignment to be immersed in 9.1 litres of water heated to 48.9°C in a bucket and allowed to cool down in the water to the temperature of an ordinary storeroom. The total time of the immersion to be 48hours and the Railway Fog Signals shall afterwards be tested as shown below. If two or more of those so tested fail to explode with a full report the consignment shall be rejected, but if one only fails to explode with a full report then a further 24 shall be similarly tested and if any of these fail to explode satisfactorily the consignment shall be rejected.

9. Running Test

Each Railway Fog Signals to explode with a report not inferior to that given by an approved standard Railway Fog Signal when run over by an empty four-wheeled wagon of tare weight between 6.6 and 7.6 tonnes moving at a speed of 5 to 7 mph.No internal metal parts shall be ejected from railway fog signals in this test.

