

FOG CHAMBER TESTING OF PORCELAIN INSULATORS

The report describes salt fog testing of a large range of porcelain insulators in a chamber at Derby. A comparison with wet test results is given, recommendations are made for new testing procedures and the best design of insulator currently available is identified.

Amongst the conclusions drawn are:

- Fog chamber testing has proved to be an effective way of distinguishing between different designs of insulator under representative conditions.
- Wet testing does not satisfactorily reproduce railway service conditions and the derived flashover voltages are not reproducible
- Most porcelains suffer a severe drop in withstand capability when inverted at 30° to the vertical, thus this arrangement should not be used.