Dip Impregnation of Ballasts using Dobeckan F 2504/E + Hardener P + Diluent M System

Dobeckan F 2504/E is a white coloured unsaturated polyester resin and is ideally suitable for TW 130 and TW 155 open ballasts. The impregnation of ballasts should be done preferably by vacuum impregnation for best results. For some designs when only dip impregnation is adopted, the following process is suggested:

1.0 Preparation of activated resin mixture

Mixing proportion:
- Dobeckan F 2504/E : 100 parts by weight
- Hardener P : 1 part by weight
- Diluent M : 3 parts by weight

Stir the contents well and adjust the viscosity to 110 - 120 seconds at 23°C by IS 3944/ Cup 4 - 1966.

2.0 The ballast for impregnation should be free from oil, grease and rust mark. Clean ballasts, if necessary and dry in oven 1 h / 110°C.

3.0 Dip the ballasts slowly (5 - 10 mm/min) in the resin tank. Keep the ballasts immersed for 10 - 15 minutes or till all air bubbles cease to come up.

4.0 Remove the impregnated ballasts slowly (5 - 10 mm/min) and allow to drain for 10 - 15 minutes. Transfer to baking oven which is already at 150 - 160°C.

5.0 Cure impregnated ballasts for 1 h at 150 - 160°C. If the resin shows tacky surface, cured for longer time.

6.0 Remove the ballasts and check for finish and covering. If covering is too thick, work with lower viscosity of resin mixture by increasing Diluent M proportion.

Note: The above impregnation process is suggested typical cycle. It may be altered depending upon the experience and design of ballasts.