

CHAPTER –XXVII

PAINTING

27.1 SECTION A- EQUIPMENT TO BE PAINTED

27.1.1 Items of equipment requiring painting

- (a) The following are the main items of telecommunication equipment that need regular painting :
- (i) Antenna towers.
 - (ii) Emergency telephone socket posts and socket box.
 - (iii) Marking on OHE masts for the position of telecommunication cable joints.
 - (iv) Battery cupboards and shelves
 - (v) Selector cases
 - (vi) Telephone brackets
 - (vii) Train control telephone apparatus.
 - (viii) Trunk exchange and manual exchange boards.
 - (ix) Loudspeakers
 - (x) Electric clock casings.
 - (xi) CT box terminals on which the cable conductors are terminated.
- (b) The following are the main items of telecommunication equipment that need occasional painting.
- (i) Line repeaters.
 - (ii) Control room equipment.
 - (iii) Way station control equipment.
 - (iv) VF equipment bays.
 - (v) Transformer bays.
 - (vi) 4 wire- 2 wire and 2 wire- 4 wire junction equipment.

27.1.2 Colouring scheme

- (a) All wood work shall be finished with natural colour varnish.
- (b) As far as possible the original colour scheme adopted by the manufacturers may be followed in repainting. Where the same colours are not available, the repainting must be done with paints having colours near about the original.
- (c) Emergency telephone socket post shall be painted with alternatively black and white paints for 15 cms length each.
- (d) CT box terminals where cable conductors are terminated are to be painted red.

- (e) Marking on OHE masts for position of telecommunication cable joints is to be of red paint.

27.1.3 Interval of painting :

- (a) The general principle for fixing intervals has been based on the following:
 - (i) All wood work polished once in year.
 - (ii) All outdoor equipment painted once in 3 years.
 - (iii) All indoor equipment painted once in 6 years.
- (b) The above intervals may be suitably modified for any particular area after taking into account the corrosive effect of atmosphere and weather conditions.
- (c) The paintings on the emergency telephone socket posts and on OHE masts for cable joints shall be done once in a year.

27.1.4 Painting programme

- (a) Each SE/JE shall be responsible to see that the telecommunication equipment under his charge is painted regularly.
- (b) Each SE/JE shall draw out a schedule of painting for all the equipment under his charge. The quantities required shall be worked out on the basis of scale of paints to be fixed by the CSTE.

27.1.5 Requisitioning of paints – Each SE/JE must requisition of paints in accordance with the quantities worked out. To ensure timely supply, he must submit his requisition to the DSTE sufficiently in advance.

27.1.6 Programme for painters – Each SE/JE must draw out a programme of work for each painter under his charge and give him definite instructions about the painting work to be carried out. Each painter must be supplied with a diary for recording daily progress of work. His programme must ordinarily be so arranged that he works on the line from Monday to Friday and returns to the Headquarter on Saturday for instructions, to receive supply for the next week and to carry out odd jobs at the headquarters station.

27.1.7 Painting register – Each SE/JE must maintain a painting register, one page or more being allotted to each equipment on his section. Record of the painting work done with dates of commencing and completing the work must be regularly entered in this register.

27.1.8 Inspection

- (a) Each SE/JE must see that the painters are making satisfactory progress and that the painting work is in accordance with the instructions.

- (b) Each DSTE shall see that the painting programme is strictly adhered to and that it is completed in due time. He shall, during the course of his inspection, also see that all the equipment and apparatus is kept properly painted in accordance with the instructions.

27.2 **SECTION B- GENERAL INSTRUCTIONS**

27.2.1 **Precautions**

- (a) Paints shall be stored in a cool dry place away from flame or naked light.
- (b) All containers should be kept securely closed when not in use to avoid loss of material due to skinning and contamination. Paints, especially quick drying paints, shall not be left open to the atmosphere.

27.2.2 **Mixing of paints**

- (a) Paints from pigments and pastes must be prepared in accordance with standard specifications.
- (b) Linseed oil turpentine shall not be added to ready mixed paints. Mixing of kerosene with paints is forbidden.

27.2.3 **Painting of steel works**

- (a) The surface of metal should be clean and free from dirt, scale, deteriorated old paint and rust and should be preferably dry before application of paint. Painting should be done preferably during dry weather.
- (b) For a new steel work, 3 coats of paints shall be applied. After the first two coats of an approved primer, the third paint of the specific colour and quality shall be applied. When repainting a structure, if the old paint does not show any signs of blistering, scaling or cracking, it need not be scraped off. It may be used as a foundation for the new coat.
- (c) When there are patches of blistering, scaling or cracking, these patches should be cleaned down to the steel and treated in a manner as recommended for a new structure.
- (d) The surface of metal should be cleaned by scrapping, chipping or scrubbing with brickbats. No chemical of any kind must be used. Old paint may be burnt, if necessary, and then scrapped off.
- (e) Paint should be applied with brushes and spread evenly, smoothly and as thin as possible. Rags or waste cotton should not be used for the application of paint.

- (f) Brushes should be thoroughly cleaned in proper driers after use.

27.3 **SECTION -C PAINTING OF MICROWAVE TOWERS**

- (a) Microwave Towers are to be painted as per requirement of Civil Aviation Regulations.
- (b) Repainting of Towers should preferably be done every five years or earlier depending on the conditions of the paints and climatic condition of the place. Before repainting work is undertaken, previous paint are to be scrapped off taking care that galvanization of the members does not get affected.