

### **OFC Specifications**

- 1) RDSO Specification of Railway OFC Cable is IRS/TC-55.
- 2) No. of Fibres in Railway OFC Cable is 24
- 3) Single Mode Step Index is used in Railway OFC Cable.
- 4) Diameter of Core is 8 Micro Meter.
- 5) Diameter of Cladding is 125 Micro Meter.
- 6) Refractive index of Core is 1.48 – 1.50.
- 7) Refractive index of Cladding is 1.46 – 1.48.
- 8) Each loose tube consist of 4 fibres.
- 9) 1310 Nano meter wavelength is used in short haul fibre.
- 10) 1550 Nano meter wavelength is used in long haul fibre.
- 11) Transmission loss of fibre is 0.25 dB/KM (1550 Nm) and 0.35 dB/Km(1310 Km)
- 12) Corrugated steel armor is separated at every 1.6 km.
- 13) Drum length of OFC cable is 3 Km.
- 14) LASER is used as light Transmitter.
- 15) Avalanche Photo Diode (APD) is used as light Receiver.
- 16) Cortal life of OFC cable is 25 Years.
- 17) The Fibre Losses are Splice Loss, Connector Loss, Cable Attenuation Loss.
- 18) The advantages of OFC are Large Bandwidth, Less Prone to theft, No Electromagnetic interference, No cross talk, No Noise, Less weight.