

Cutting Edge Features of VCV Technology



VCV Line at UCL, Satna



UniSTAR EHV XLPE Cables

The main cutting edge features of this technology are:

1. **True simultaneous triple extrusion** with single (common) cross head - conductor screen, insulation and insulation shield applied in single process. This provides perfect bonding of insulation and semicon layers with smooth boundary and free of protrusions.

Insulation extruder operates with tight screen of 400 mesh for filtering.

2. **Dry cure dry cooled process** - Prevents formation of micro voids and eliminates moisture contents in the XLPE insulation - Prevents electro-chemical tree formation in the insulation and capable to withstand higher stress voltage.

3. **Dimensional accuracy** - perfect geometry with Zero eccentricity/ovality of the insulation. This enables uniform stress distribution over the insulation.

4. **Class 1000 cleanliness** level in manufacturing with completely closed material handling system - prevents insulation contamination which is an imperative for Extra High Voltage Cables enabling high impulse and breakdown voltage levels.



High speed X-Ray Scanner for on line measurement of wall thickness and detecting eccentricity of all three insulation layers

5. **Cables of longer lengths** and larger sizes can be offered to economize the system cost.

Other special features include:

- **Online X-Ray monitoring** system with a fully computerized control system including Programmable Logic Control.



- **Direct gravitational feeding** of XLPE compound to the extrusion system without conveying pipes – by eliminating conveying pipes and air suction methods, chances of contamination by metallic fine particles and ultra fine dust particles from conveyor pipe and air respectively are dispensed with.
- **Control & Monitoring System using SCADA**

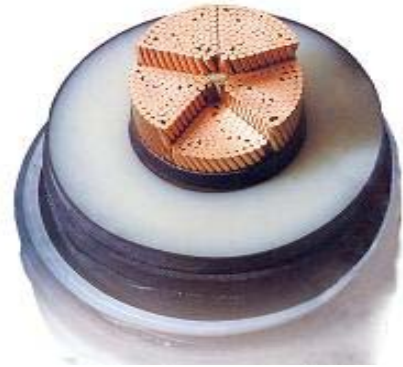
All the above special features ensure zero defects and thus redefines a new standard for reliability and performance

Special facilities

6. **Milliken (Segmented) Conductor**
(Prevention of Current Displacement)

We have exclusive facilities for manufacturing conductor sizes above 1000 Sq.mm with Milliken (Segmented) Copper / Aluminium conductor

Complete Type Testing facilities as per IEC –60840 & IEC-62067 are available in house.



Milliken or Segmental Conductor