ACCC® Conductor

ACCC® Conductor consists of a hybrid carbon and glass fiber core which is wrapped with trapezoidal shaped aluminum strands. The high strength structural core carries most of the conductor's mechanical load, while the fully annealed aluminum strands carry all of the conductor's electrical current. ACCC® Conductor's composite core is much lighter and stronger than conventional or high-strength steel core.

APPLICATION

Ideal for Reconductoring

- Increase capacity while improving line clearance and losses.
- Reduce strain on structures, increasing life.

Reduced Line Losses in New Lines

- Under equal load conditions reduces line losses by 25%-40% or more compared to conductors of the same diameter and weight.
- 100% more capacity building towards future demands.

BENEFITS

- With 28% more annealed aluminum in a trapezoidal configuration, the ACCC® Conductor of the same diameter as ACSR, can double the current (ampacity) rating; Higher operating efficiency reduces line losses and associated emissions by 25-40% or more, resulting in more power delivered and lower power generation costs.
- ACCC® Conductors use a patented carbon/glass/thermoset resin core that provides high strength and reduces high temperature sag.
- Can re-conductor existing pathway without structural modification and reduce capital expenses on new lines.
- Uses conventional installation methods, tools and mostly conventional hardware. Requires no special tools and limited special training.
- Resists environmental degradation—will not rust, corrode, or cause electrolysis with aluminum conductors and components.
Assumptions: Ampacity is calculated based on, 45°C (113°F) ambient temperature, 0.6 m/s wind velocity, 0.5 as coefficient of solar absorption, 0.6 as coefficient of emissivity and 1200 wt/sqm coefficient for solar radiation, at sea level.