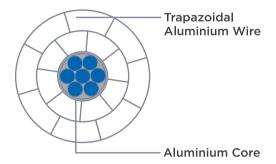


STER-ECO™

Eco Series conductors consists of trapezoidal shaped special aluminium alloy containing magnesium, silicon and copper stranded with round core. The trapezoidal shape provides upto 96% compactness.



APPLICATION

Eco Series conductors are innovative, efficient, low loss & most importantly an economical solution for re-conductoring power lines and constructing new lines. The higher efficiency of Eco Series conductors enables significant saving when substituted in grid systems for normal ACSR or AAAC conductors. Also, for delivery of same power to the customers, Eco Series conductors enable power generators to reduce the amount of power they must generate and hence lower emissions.

BENEFITS

- Upto 30% less I²R losses for same sized conductor.
- For same output runs cooler by 5-10°C (41-50°F), hence lower carbon emissions.
- Contributes to lowering emission of greenhouse gases.
- · Can be deployed with existing structural designs.

TECHNICAL SPECIFICATIONS

PROPERTIES	ECO PANTHER	
Typical factors	2.37 mm	0.0933 in
Reference specifications	SS42408013, 14	
Total cross section area	314.11mm²	0.9161 in ²
Conductive wire	Al59 wire	
Core wire	Al59 wire	
Conductor diameter	20.50 mm	0.8071 in
Weight	866 kg/km	581.9 lbs/mile
Ultimate tensile strength	7430 kg	16379.55 lbs
DC resistance at 20°C temperature	0.10 Ω/km	0.15 Ω/mile
Maximum operating temperature	95°C	203°F
Current carrying capacity at maximum operating temperature	750 Amp	

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 emmisivity and 1200 wt/sqm coefficient for solar radiation, at sea level.



Overhead T&D Aluminium Conductors

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