

# **Ourjatech Aluminium Conductors**

# **All Aluminium Conductors (AAC)**

Made of one or more strands of hard drawn 1350 aluminum. It's manufactured from electrolytically refined aluminum with a minimum purity of 99.7%. Ideal for short to medium distance transmission lines

#### **Features**

- · Lightweight and easy to handle for efficient installation.
- Resistant to corrosion, ensuring long-lasting performance.



# **Aluminium Conductor Steel Reinforced (ACSR)**

Feature a concentrically stranded design, consisting of one or more layers of hard-drawn aluminum wires surrounding a galvanized steel wire core. The core, coated with Class A zinc, may be either a single wire or stranded, depending on the conductor size.

#### **Features**

- · Aluminum for conductivity & steel for strenath.
- Durable & reliable for long-distance use.
- Ideal for high-strength applications & large
- · Corrosion-resistant for varied environments



## All Aluminium Alloy Conductors (AAAC)

Made from a high-strength Aluminum Magnesium-Silicon alloy. Compared to conventional ACSR, AAAC offers a lighter weight, similar strength and current-carrying capacity, lower electrical losses, & enhanced corrosion resistance. These advantages have led to its widespread use in distribution and transmission lines. The conductor has a minimum conductivity of 52.5% IACS.

#### **Features**

- Aluminum for conductivity & steel for strenath
- Durable & reliable for long-distance use.
- Ideal for high-strength applications & large spans.
- Corrosion-resistant for varied environments



## **Aluminium Conductor Steel Supported (ACSS)**

Made from fully annealed aluminum wires, either round or trapezoidal, stranded around a steel core with seven or more wires, as per ASTM B-856 and ASTM B-857. ACSS and ACSS/TW can be designed with equal area or equal diameter compared to conventional round stranded conductors, allowing for optimized line design options.

#### **Features**

- Aluminum for conductivity & steel for
- Durable & reliable for long-distance use.
- Ideal for high-strength applications & large
- . Corrosion-resistant for varied environments



#### **AL-59 CONDUCTOR**

A159 alloy conductors are widely used in power transmission and distribution across various voltage levels, from low to ultra-high voltage. Made from a homogeneous Aluminum-Magnesium-Silicon alloy, they offer 59% conductivity, resulting in lower DC resistance and higher current-carrying capacity. Comparved to ACSR of the same size, A159 conductors provide 26%-31% more current capacity while maintaining the same maximum sag and lower working tension. Their resistivity is significantly

#### **Features**

- · Superior conductivity and strength for efficient transmission.
- Lightweight with reduced sag for better performance.
- · Excellent corrosion resistance for harsh environments.
- · Cost-effective with lower maintenance needs





# Urjatech Aluminium Conductors

# **Aluminium Conductor Composite Core (ACCC)**

Enhancing capacity while improving line clearance and reducing losses, these conductors minimize strain on structures, extending their lifespan. Under equal load conditions, they reduce line losses by 25% to 40% or more compared to conductors of the same diameter and weight. Additionally, they offer 100% increased capacity, ensuring readiness for future demands.

#### **Features**

- Greater current carrying capacity and lower line losses.
- · Lightweight for easy installation and reduced tower load.
- · Stronger than traditional conductors, minimizing sag.
- · Corrosion resistant for long-lasting performance in harsh environments







### **XLPE Insulated Power Cable**

High-quality cross-linked polyethylene insulated cables for reliable power distribution. This cable is suitable for undergrounnd power distribution, commercial buildings, and industrial facilities.

#### **Features**

- Cross-linked polyethylene insulation
- Voltage grades: 0.6/1kV to 33kV
- Temperature rating up to 90°C



#### **Aerial Bundled Cable**

Self-supporting insulated overhead cables for reliable Features distribution in challenging environments. Used for overhead distribution in urban areas, forested regions and coastal areas with high salt spray.

- Insulated phase conductors
- Bare or insulated neutral
- · UV resistant outer sheath



