

# Ultra-High Performance Concrete Poles for Power Transmission

Ultra-high performance concrete (UHPC) poles offer a strong and durable solution for power transmission and distribution. These poles provide superior resistance to environmental factors, ensuring long-term reliability and reduced maintenance costs.



## ADDITIONAL IMAGES



## Product Overview

### Ultra-High Performance Concrete (UHPC) Transmission Poles

Engineered with proprietary UHPC materials, these high-strength poles offer superior structural performance compared to traditional concrete, steel, or lattice towers. They provide exceptional durability with a minimum 50-year service life, even in highly corrosive environments like coastal regions or industrial zones. By combining high load-bearing capacity with a significantly reduced weight profile, these poles facilitate lower logistics costs and simplified installation procedures.

## Performance Metrics

### Performance Efficiency

**50 %**

Weight Reduction vs Conventional Concrete

**250 %**

Average Load Capacity Increase

**50 Years**

Minimum Service Life

## Technical Features

### Connection Methods

- Direct burial
- Metal flange connection
- Integrated concrete flange discs with bolted interface

### Core Advantages

High Durability, Corrosion Resistant, Low Maintenance, Frost-Thaw Resistant, Impact Resistant, Eco-friendly

## Applications

### Environmental Suitability

- Coastal regions with salt exposure
- Inland saline-alkali soil areas
- Industrial zones and acid rain prone areas
- High-salinity highway zones
- Marshlands and swampy terrain
- Cold climates requiring frost resistance

## Economic Impact

### Economic Analysis

Comparison Metric	Benefit vs Steel Towers
Direct Material Cost	Approximately 60% of galvanized steel
Maintenance Requirement	Maintenance-free or low-maintenance
Environmental Resilience	Superior resistance to salt and alkali corrosion