

## ENERGY TRANSMISSION LINE TOWERS



### INTRODUCTION

Energy transmission line are used for transmission of electric energy from the power plants to the transformer stations in proximity of the electric consumption areas or the distribution thereof from these stations to end-users.

These towers are designed and manufactured considering the parameters such as routes of the energy transmission lines, geographical, land, and atmospheric conditions, line voltages, carrying capacity, and intended use. A transmission tower is a tall structure, usually, a steel lattice tower used to support an overhead power line. Energy transmission lines are used for the transmission of electric energy from the power plants to the transformer stations in proximity of the electric consumption areas or the distribution thereof from these stations to end-users. Energy transmission line towers are manufactured in the lattice and polygonal types up to 1200 kV and, delivered as galvanized and/or painted for atmospheric corrosion resistance.

DEMKA can provide any kind of energy transmission towers upon the customer's request.

### TYPES

- Waist Type Tower
- Double-Circuit Tower
- Guyed-V Tower
- Tubular Steel Pole
- Guyed Cross-Rope Suspension Tower
- Crossing Tower

### APPLICATION

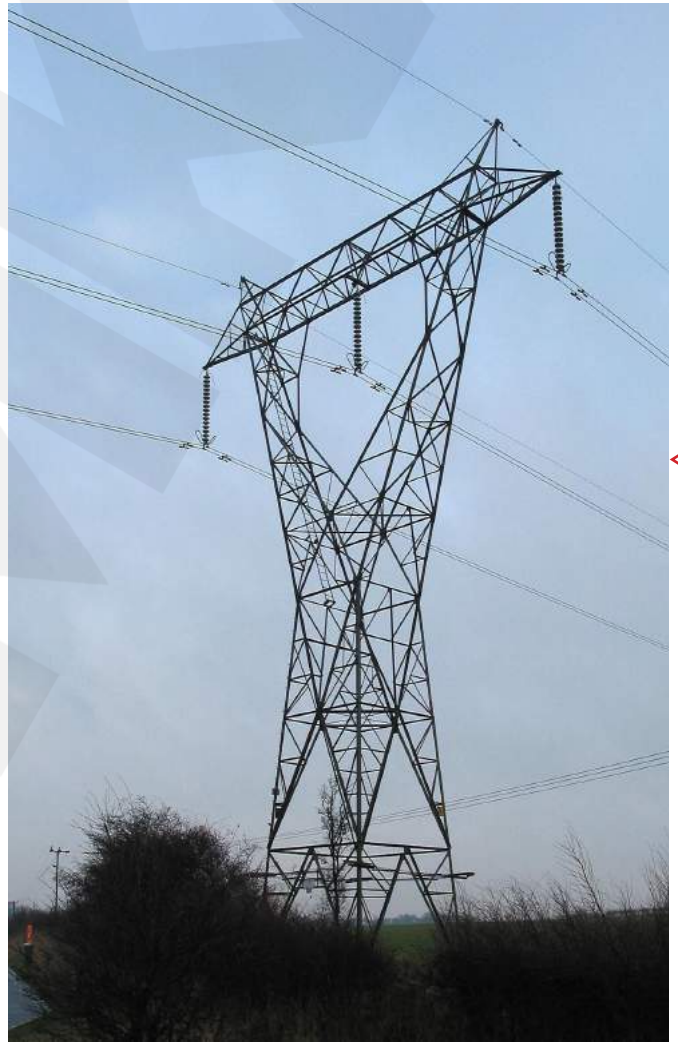
- Overhead Power Lines
- Urban Areas



## WAIST TYPE TOWER

### INTRODUCTION

Waist type tower is the most common type of transmission tower. It's used for voltages ranging up to 1200kV. Because they're easily assembled, these towers are suitable for power lines that cross very uneven terrain.



## DOUBLE-CIRCUIT TOWER



### INTRODUCTION

Double-circuit towers are small-footprint towers is used for voltages ranging from 110 to 315 kV. For three-phase systems, each tower supports and insulates six conductors. Single-phase AC-power lines as used for traction current have four conductors for two circuits. Usually, both circuits operate at the same voltage. The average height ranges from 25 to 60 meters.



## GUYED-V TOWER

### INTRODUCTION

Guyed-V tower is more economical than the double-circuit and waist-type towers. Commonly seen in the tower industry, guyed towers are designed to provide maximum strength, efficiency and versatility with easy installation.

They are supported by one or more levels of braided or stranded steel guy cables that anchor to the ground.



## TUBULAR STEEL TOWER

### INTRODUCTION

Tubular Steel Tower(also known as Monopole towers) work well when space is limited, zoning is difficult or harsh weather conditions need to be considered. Featuring a streamlined, aesthetic shape, this structure is less massive than other towers, allowing it to blend easily into the environment. For this reason, it's being used more in urban centres.



## GUYED CROSS-ROPE SUSPENSION TOWERS

### INTRODUCTION

Guyed Cross-rope Suspension (also known as Chainette Towers) has a simple design and this tower is easy to assemble. It supports up to 735kV conductors.

Guyed Cross-rope Suspension Tower requires less galvanized steel than the Guyed-V tower, making it lighter and less costly.

