

**LIGHTING POLES  
ENERGY TRANSMISSION LINE TOWERS &  
OTHER STEEL STRUCTURES**



- **LIGHTING POLES**
- **ENERGY TRANSMISSION LINE TOWERS**
- **TRAFFIC LIGHT and SIGN POLES**
- **CAMERA and CCTV POLES**
- **GUARDRAIL STRUCTURE SYSTEMS**
- **CATENARY(RAILWAY) STRUCTURE SYSTEMS**
- **STEEL SUPPORTING STRUCTURES**

## LIGHTING POLES



### INTRODUCTION

DEMKA can provide high-quality poles with long term corrosion protection, wind and vibration protection, a variety of cross-sectional options, installation and bracket options, armature options upon related standards or customer's projects.

Lighting poles can be used almost everywhere such as Boulevards, Streets, and Highways, Bridges and Pedestrian Crossings, Parking lots and Shopping Centers, Parks and Gardens, Airports, Ports, Shipyards, Factories, Heavy-industry Zones, Concert, and Rally Areas, Stations, and Terminals, Historical and Tourism Areas, Stadiums, and other Sports Facilities Special Areas requiring High Security

### TYPES

- Park/Garden Lighting Poles
- Street Lighting Poles
- Area Lighting Poles / High Masts
- Stadium Lighting Poles
- Lighting Poles with Solar System
- Hinged Type Poles
- Decorative Lighting Poles

### OPTIONS

#### Pole Material:

- Aluminium
- Hot Dipped Galvanized Steel

#### Pole Shape:

- Polygonal or Octagonal Poles
- Round Poles

#### Bracket and Arm Types:

- Single or Multi Arm Brackets
- Dislocated Arm Brackets
- Cobra Type Arm
- Basket Type Brackets

#### Installation Types:

- Anchor Bolt with Base Plate
- Anchor Bolt with High Base
- Direct Embedded

## STREET LIGHTING POLES

### INTRODUCTION

Street lighting poles are produced in accordance with all kinds of weather and light sources for the continuity and safety of use of roads and streets. These poles are functional poles resistant to wind-induced vibration and bad weather conditions.

Street Lighting Systems have light-sensitive photocells that activate the lamp automatically when needed, at times when there is little to no ambient light.

### APPLICATION

- Streets
- Boulevards
- Pedestrian Crossings
- Highways



## AREA LIGHTING POLES / HIGH MAST



### INTRODUCTION

High masts are the lighting systems that must possess the strength and resistance required for the bad weather conditions and other factors for storage, transportation, and pedestrian use and safety. High masts are combined with multiple luminaires and that makes the most efficient and effective way of illuminating large areas.

### TYPES

- High Mast With Elevator System
- High Mast Without Elevator System
- High Mast With Cage Ladder and Platform
- High Mast With Portable Ladder

### APPLICATION

- Airports
- Shipping Ports
- Heavy-industry Zones
- Highways
- Concert and Rally Areas
- Stadium and Sport Facilities



## PARK/GARDEN LIGHTING POLES

### INTRODUCTION

Park and garden lighting poles refer to the use of outdoor illumination for the enhancement and purposes of pedestrian safety, nighttime aesthetics, accessibility, security, sports and social and event uses.

### APPLICATION

- Playgrounds
- Residential Landscapes
- Garden
- Parks
- Public Landscapes
- Parking Lots



## HINGED TYPE POLES

### INTRODUCTION

Hinged lighting poles are used for hard-to-reach areas, where there's no access for vehicles with a lift. A composite pole contains a hinge mechanism to facilitate the replacement and repair of the light source, assembly and disassembly of the illuminate, and other operating jobs.

### APPLICATION

- Boulevards and Streets
- Bridges and Pedestrian Crossings
- Parking lots and Shopping Centers
- Parks and Gardens
- Factories
- Heavy-industry Areas(Construction, Mining)



## STADIUM LIGHTING POLES

### INTRODUCTION

Stadium Lighting Poles are high-qualified, wind and vibration resistant poles with a standard production or a lift systems, portable ladder or cage ladder and platform for stadiums and other sport facilities that require high light.

### APPLICATION

- Stadium
- Sport Facilities
- Concert Areas



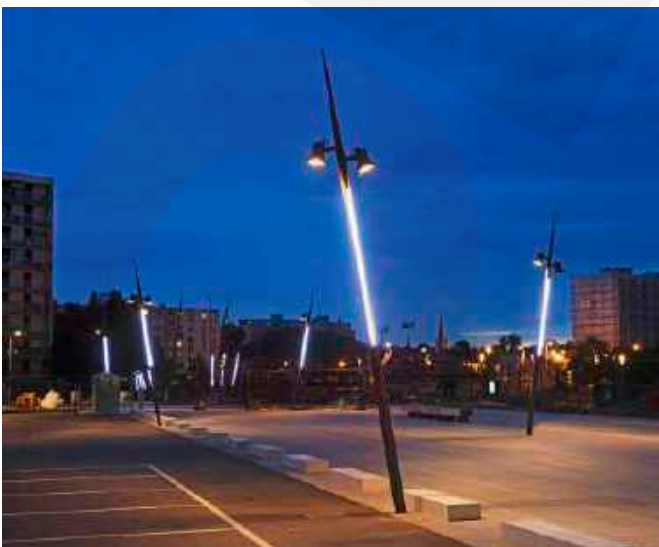
## DECORATIVE LIGHTING POLES

### INTRODUCTION

Decorative lighting poles have an important place in modern city planning. These poles offer lighting in dark weather and nights besides an aesthetic and contemporary appearance.

### APPLICATION

- Residential Landscapes
- Garden and Parks
- Public Landscapes
- Playgrounds
- Streets and Boulevards
- City Squares





## LIGHTING POLES with SOLAR PANEL

### INTRODUCTION

Lighting poles with solar panels are a system that provides ambient lighting by converting solar energy into electricity where there is no cable infrastructure or industrial zone. Since there is no electrical damage, it does not require regular maintenance and it costs less. It can continue to illuminate for up to three days in a place where there is no light.

### APPLICATION

- Residential Landscapes
- Garden and Parks
- Public Landscapes
- Streets and Boulevards



## 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.

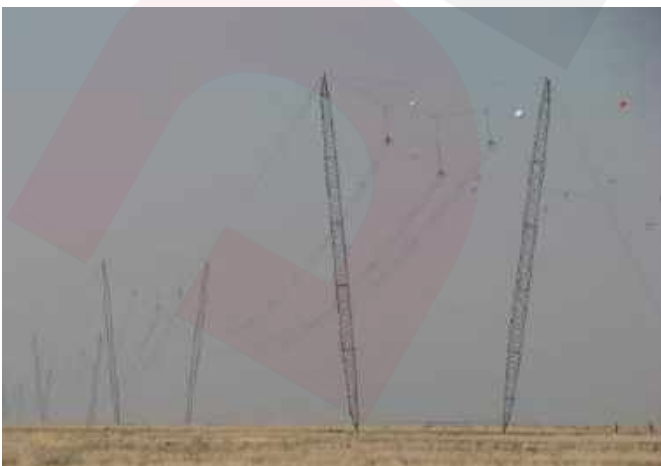


## GUYED CROSS-ROPE SUSPENSION TOWERS

### 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.



## TRAFFIC LIGHTS & SIGN POLES

### INTRODUCTION

Traffic and sign poles, inform and warn the traffic in urban areas, on rural roads, and on highways.

Depending on the size and the weight of the signs and the according to strength calculation, these poles have a single or multi-legged configuration. Traffic poles are a vital part of communicating road signals to drivers and helping to maintain the flow of traffic itself. These poles can include traffic cameras, pedestrian signs, speed warning signs, and cross-walk cantilevers, extensions, and vehicle sensors.

### TYPES

- Pedestrian Signs Poles
- Speed Warning signs Poles
- Cross-walk Cantilevers Poles
- Extensions Poles
- Vehicle Sensors Poles





## CAMERA & CCTV POLES

### INTRODUCTION

Camera poles are important as security cameras to provide the view right. Camera poles can be used almost everywhere such as cities and highways to provide security and public safety.

### TYPES

- Standard Camera Poles
- Hinged Type Camera Poles
- Decorative Camera Poles



## GUARDRAIL STRUCTURE SYSTEMS

### INTRODUCTION

Guardrails keep vehicles within their roadway and prevent them from colliding with dangerous obstacles such as boulders, sign supports, trees, bridge abutments, buildings, walls, and large storm drains, or from non-recoverable slopes. They are also installed within medians of divided highways to prevent errant vehicles from entering the opposing carriageway of traffic and help to reduce head-on collisions. Guardrails can also be used to protect vulnerable areas like school areas, pedestrian zones, and fuel tanks from errant vehicles. DEMKA can provide traffic and sign poles according to the customer's request.

### TYPES

- Highway Guardrail and Barrier System
- Steel Wire Guardrail
- Heavy Duty Type Guard
- Pedestrian Guardrail



## CATENARY(RAILWAY) STRUCTURE SYSTEMS



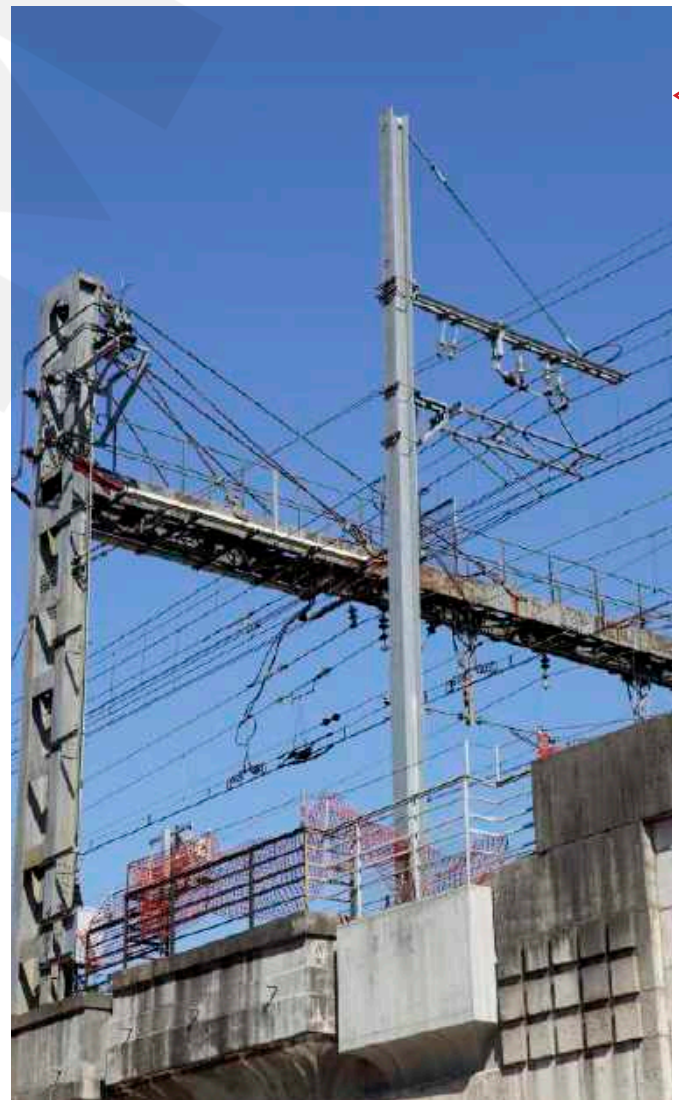
### INTRODUCTION

Catenary(Railway) structure systems are a set of carrying cables and conductive wires intended for supplying electrical means of transport with current collection by the aerial device. Railway catenaries and portals carry the overhead line system through which the electric energy necessary to operate the catenary system that trains used is transmitted. The catenary is used to run most trains and trams, but also trolleybuses.

DEMKA can provide catenary structures according to the customer's request.

### TYPES

- H Section Profile Catenary Structure
- Pipe Section Profile Catenary Structure
- Welded Angle Catenary Structure



## STEEL SUPPORTING STRUCTURES

### INTRODUCTION

DEMKA can provide supporting structures for many application areas such as renewable energy plants(solar plants, wind turbines, etc.), residential estates, schools, hospitals, factories, shopping malls industrial constructions according to the customer's projects and requests.

