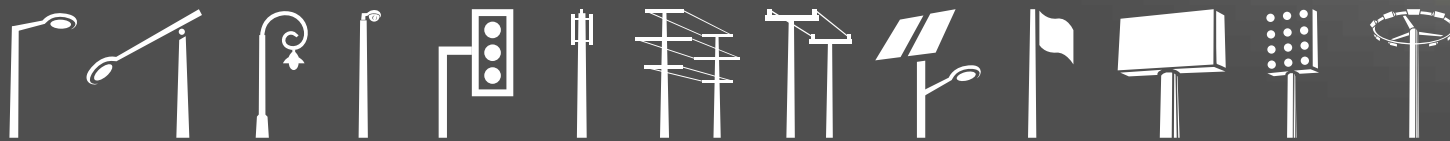


# POLES & HIGH MASTS

## C A T A L O G U E





# INTRODUCTION

El Sewedy Industries Group, stands as one of the most diversified and leading industrial group in Egypt and throughout the Middle East since 1938.

ASF joined the steel market, in July 1997 as another successful venture within El Sewedy Industries Group.

ASF continues working on research and development to provide all what is best for our clients and to fulfill their requirements.

Customer satisfaction is one of our top priorities; therefore, ASF carries out the principles of continuous improvement of quality control and customer service system.

ASF is committed to provide excellent after sales experience.

Our business extends to more than 26 countries around the world; our aim is to be one of the pioneers in the global steel market.

Our thanks and gratitude is extended to all our valuable clients we have served over the years and add a welcome to new clients and sectors.

# INDEX

POWER OF PRODUCTION & MACHINERY .....	3
POWER OF GALVANIZED STEEL .....	4
QUALITY & SAFETY.....	5
WHY STEEL POLES?.....	6
OVERVIEW & GUIDELINES .....	7
<b>POLES</b>	
LIGHTING POLES.....	9
SOLAR CELL POLES.....	13
TRAFFIC SIGNAL POLES.....	15
ADVERTISING POLES.....	17
CAMERA POLES.....	18
HINGED POLES.....	19
FLAG POLES.....	21
DISTRIBUTION POLES.....	22
DECORATIVE POLES.....	23
TELECOM MONOPOLES .....	33
TRANSMISSION MONOPOLES.....	34
TECHNICAL INFORMATION FOR LIGHTING POLES .....	35
LIGHTING POLE COMPONENTS.....	36
<b>HIGH MASTS</b>	
FIXED HIGH MASTS.....	39
FIXED HIGH MAST LADDER TYPES.....	41
MOTORIZED HIGH MASTS.....	45
MOTORIZED HIGH MASTS BREAKING SYSTEM & CANOPY .....	47
TECHNICAL INFORMATION FOR MOTORIZED HIGH MASTS .....	49
MOTORIZED HIGH MAST COMPONENTS.....	50



WORLDWIDE PROJECTS COVERAGE

YOUR PROJECT...OUR PASSION



# POWER OF PRODUCTION & MACHINERY

## PRODUCTION CAPACITY

- **Poles:** 60,000 poles / year
- **Fixed & motorized high masts:** 200 high masts / year
- **Telecom monopoles:** 200 monopoles / year
- **OHTL & Telecom towers:** 30,000 Ton / year
- **Steel structure:** 50,000 Ton / year
- **Plate work:** 7,000 Ton / year
- **Grating:** 36,000 square meters / year
- **Galvanization:** 48,000 Ton / year

## MACHINERY

- Cut to length machine (STAM - Italy)
- Plasma cutting under water with CNC system (ESAB - Germany)
- Trapezoidal shear (NOBAG - Switzerland)
- Tandem hydraulic press break length 16 m force 2000 ton conical & polygon (LVD - Belgium)
- Tandem hydraulic press break length 12 m force 1280 ton conical & polygon (YSD - China)
- Continuous welding machine (UNIWELD - Germany)
- YSD machine - submerged arc welding
- Full automated galvanization line made by: (KOERNER - STAHL)
- Drying oven, kettle & furnace (HASCO - England)





# POWER OF GALVANIZED STEEL



Hot dip galvanizing is the best solution to protect steel materials against corrosion.

In the hot-dip galvanizing process, steel poles are submerged in a bath of molten zinc. This creates a tough, uniform barrier coating both inside and out. Also, if the steel becomes exposed, zinc will corrode first, maintaining the strength and integrity of the steel pole.

The company has one of the biggest hot dip galvanizing units with length 16m, width 1.90m and depth 2.75m, using Zink with high purity 99.95% in the galvanization process to get the highest quality standards.

# QUALITY



Quality control is present from the moment of order entry until it is fully fulfilled, we work directly with our clients so that our products meet the highest quality standards with personal attention to delivery time, specifications and after sales support.

# SAFETY



Safety is always one of our top priorities, we recognize that our people are the reason behind ASF success and we are proud of our safety programs. We follow recommended safety standards and we ensure applying them at all levels.



# WHY STEEL POLES

?

**EASY TO HANDLE**

**LIGHT WEIGHT**

**LONG LIFE**

**COST EFFECTIVE**

**LOW MAINTENANCE**

**SUSTAINABLE**

**AESTHETICS**

**SAFE**

**ENGINEERED FOR  
STRENGTH**

**ENVIRONMENTALLY  
FRIENDLY**

**FIRE RESISTANT**

Steel have been tested and proven to withstand fire temperature of more than 1000°C

## OVERVIEW

The purpose of this catalogue is to identify the different kinds of poles & high masts, help customers understand standard options for lighting poles and high masts.

ASF operates in several different axes represented in: design, fabrication, galvanization, packaging & shipping, installation and maintenance.

The various types of poles & high masts are designed and manufactured according to the international standards to meet different requirements.

ASF has successfully covered the increasing demand of steel poles & high masts for the local and global market.

## GUIDE LINES

ASF use steel grades that are in compliance with the European EN standards and other international standards.

Lighting poles & high masts are designed according to standard specifications for structural supports for highway signs, luminaires and traffic signals (AASHTO).

Telecommunication monopoles & palm trees are designed according to structural standard for antenna supporting structures and antennas ANSI/TIA-222-G, the wind speed is based on client's requirements and the geographical location.

Distribution poles & transmission monopoles are designed according to ASCE/SEI48.

Welding in performance according to the American welding society AWS D1.1.

Hot dip galvanizing according to BS 729, BS EN ISO 1461 & ASTM A123.



# POLES



# LIGHTING POLES

Street lighting poles is a vital part of any community; street lighting can reduce automobile collisions, deter crime, and foster a sense of safety.











# SOLAR CELL POLES

- Solar PV (photovoltaic) is environmentally friendly
- Solar energy is an affordable, inexhaustible and clean
- Solar cells systems are silent, not producing no noise at all; consequently, they are a perfect solution for urban and residential areas
- Solar cells last a longer time with low running cost





# TRAFFIC SIGNAL POLES

Poles that hold Traffic signals which are electrically operated traffic control devices that alternately direct traffic to stop and to proceed.









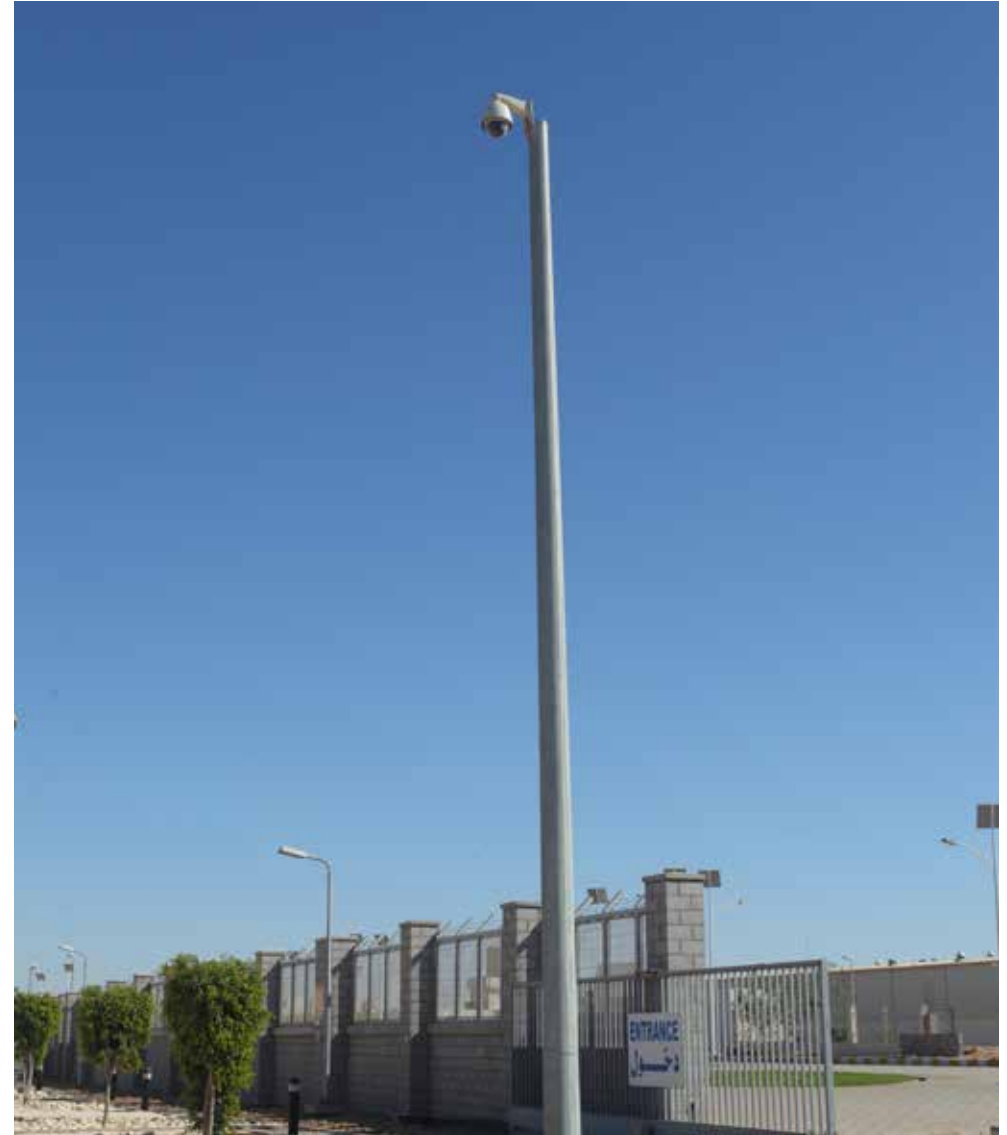
# ADVERTISING POLES

Advertising poles Used to display advertisements in the form of posters. Used to generate ultimate brand awareness; Offering unparalleled outdoor coverage and influencing purchase decisions.



# CAMERA POLES

Poles that holds cameras to Monitor Scenarios and Activities, Deter Crimes and to Maintain Records.



# HINGED POLES

The lighting pole with hinge mechanism is a perfect solution for inaccessible areas for aerial lift trucks, such as tractions, slopes, narrow roads, etc. This mechanism helps with the assembly and disassembly of a luminaire and the changing of a light bulb, so it is easy to maintenance.

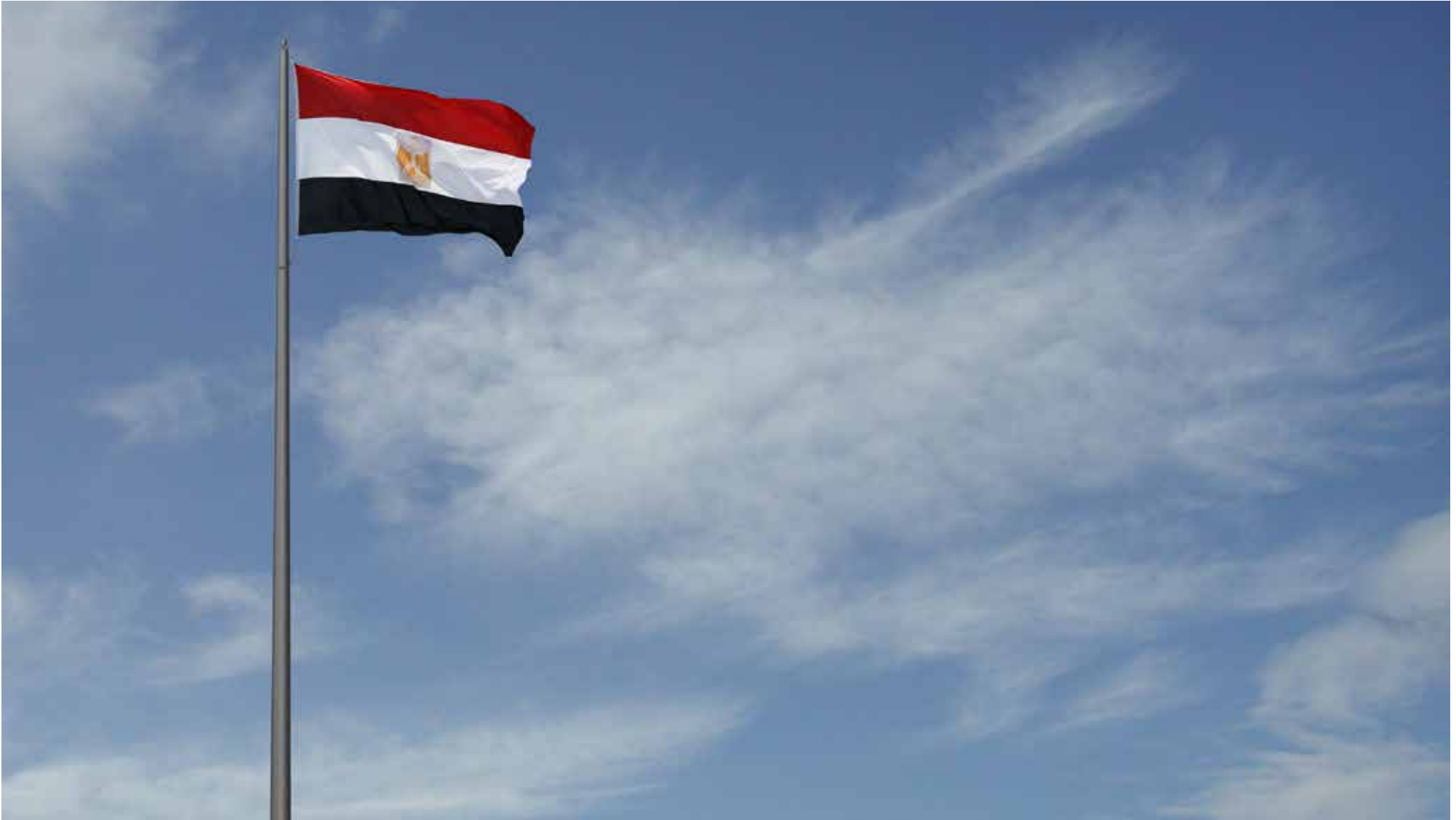






# FLAG POLES

Flag poles offer many benefits to individuals and companies alike. They do not only show the pride of our country; but also can be used as a landmark when a building is hard to find and they can be also used as a signage.



# DISTRIBUTION POLES

Distribution poles are used in the transportation of electricity over short distances to consumers.



# DECORATIVE POLES

Decorative lighting poles are used to facilitate urban redevelopment, create a distinctive sense of beauty in any community, and add an aesthetic touch on toll roads and bridges.













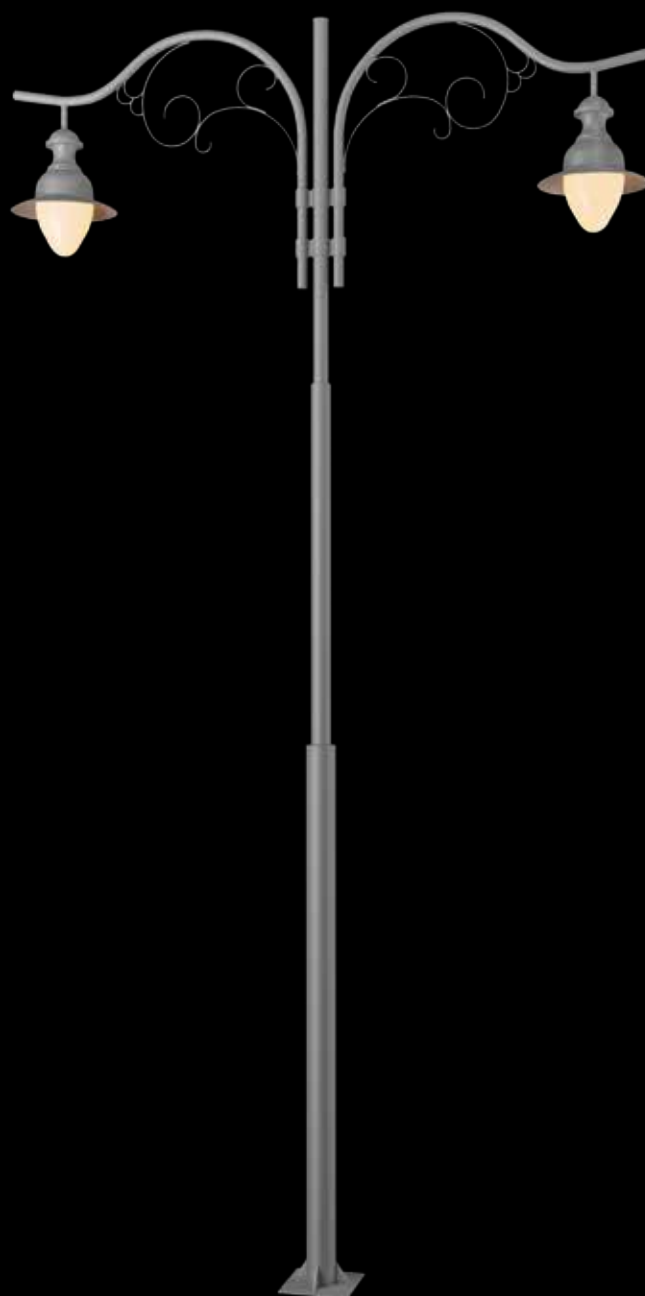
PROJECT: MERCURE HOTEL-HURGHADA



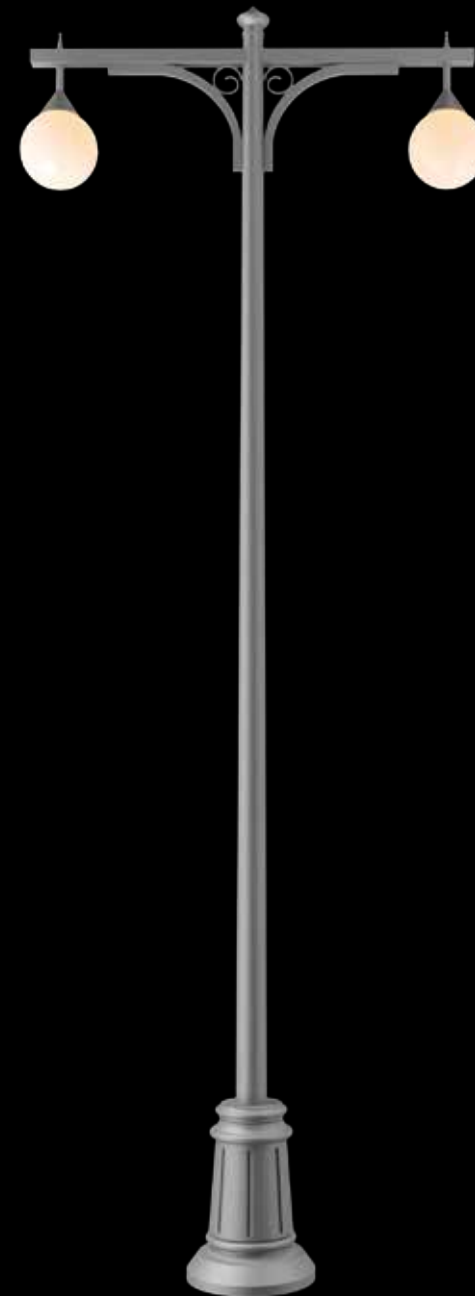
PROJECT: GERA COMPOUND



DP1

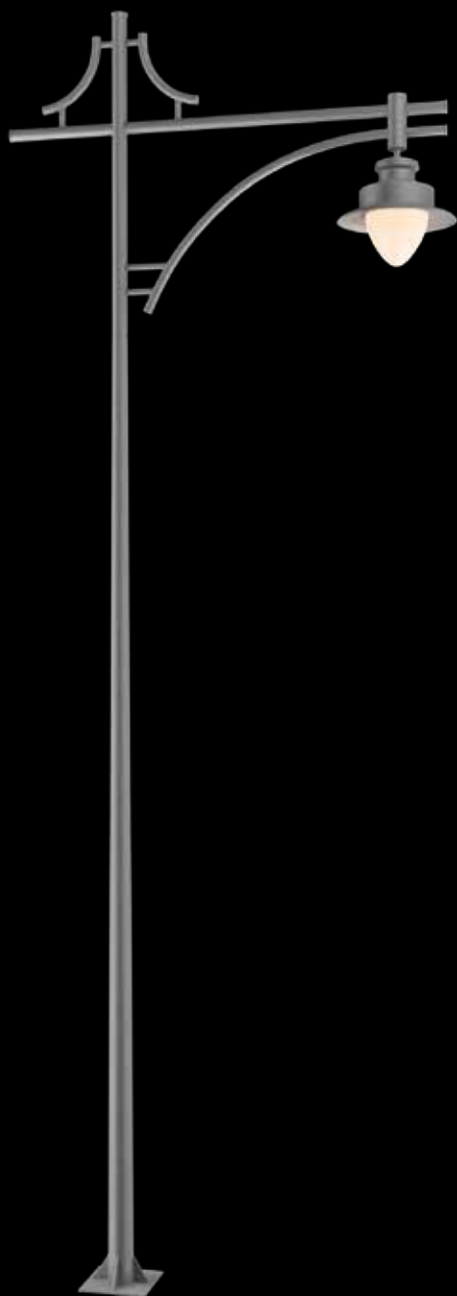


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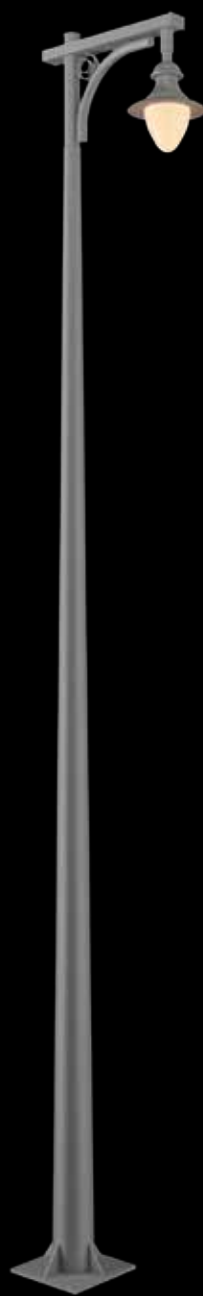


DP3

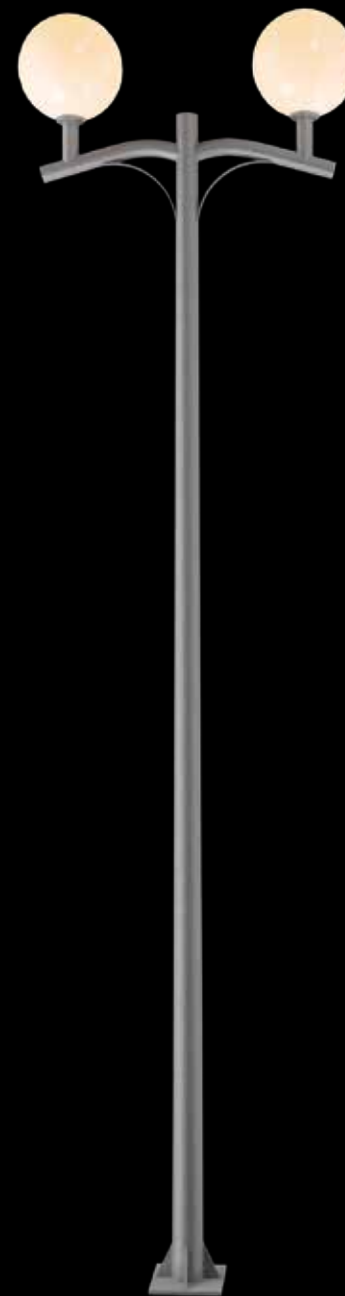




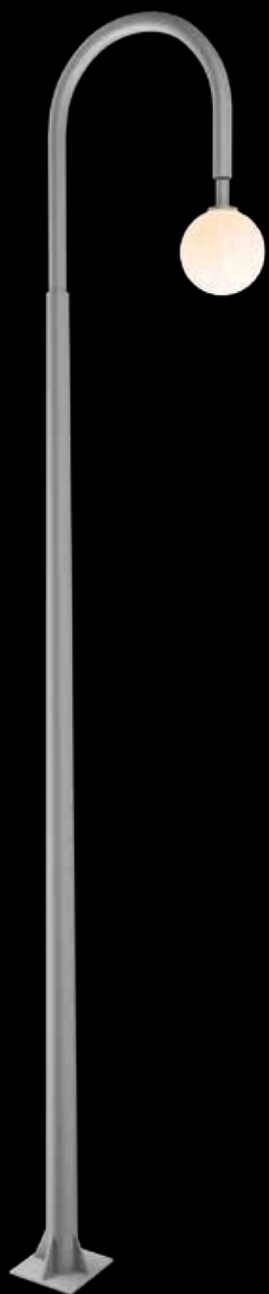
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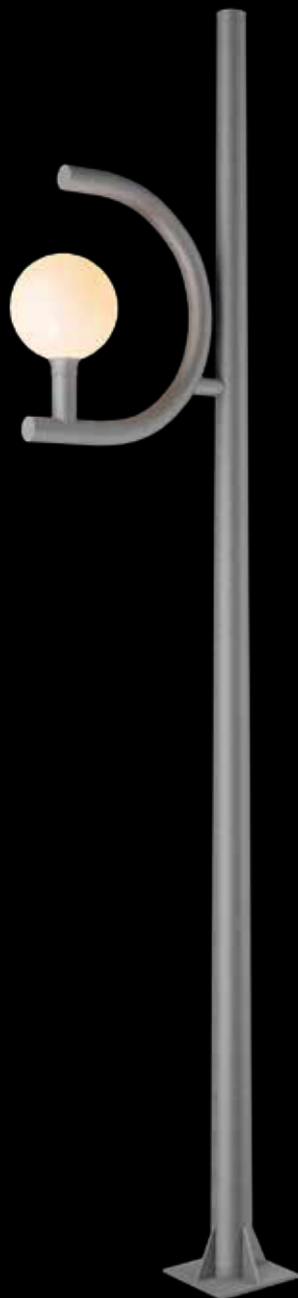
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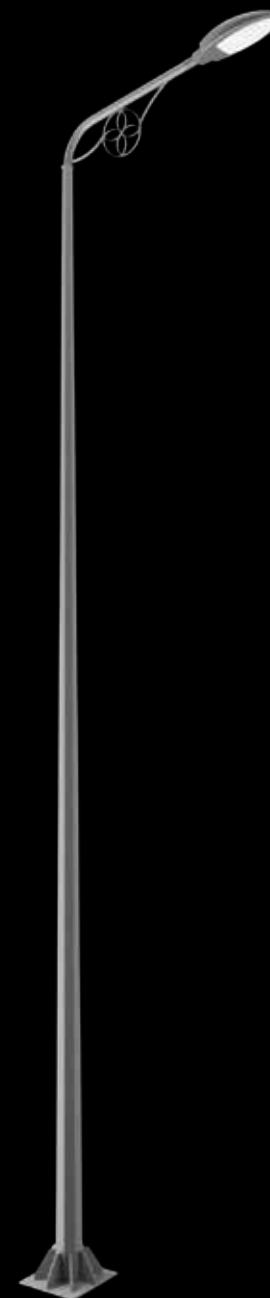
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DP7



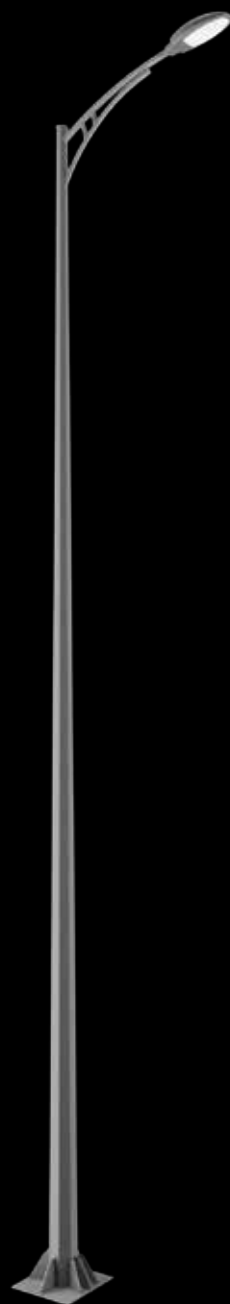
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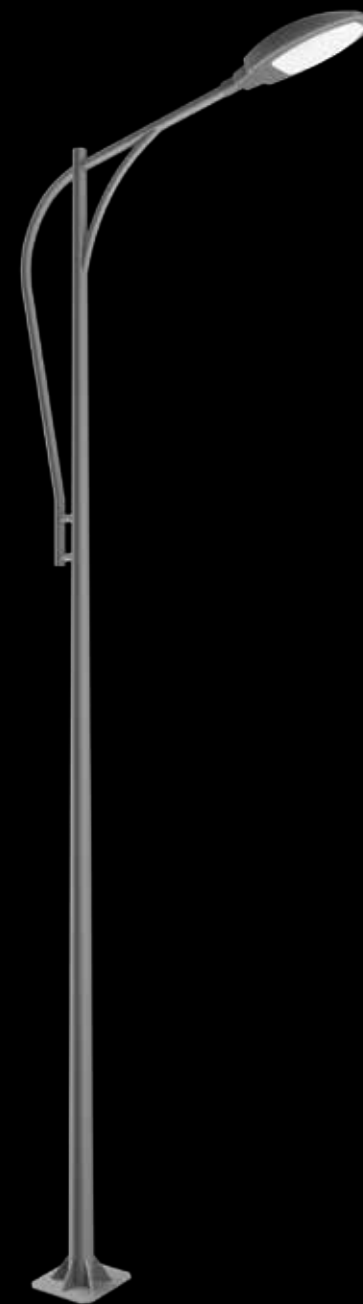
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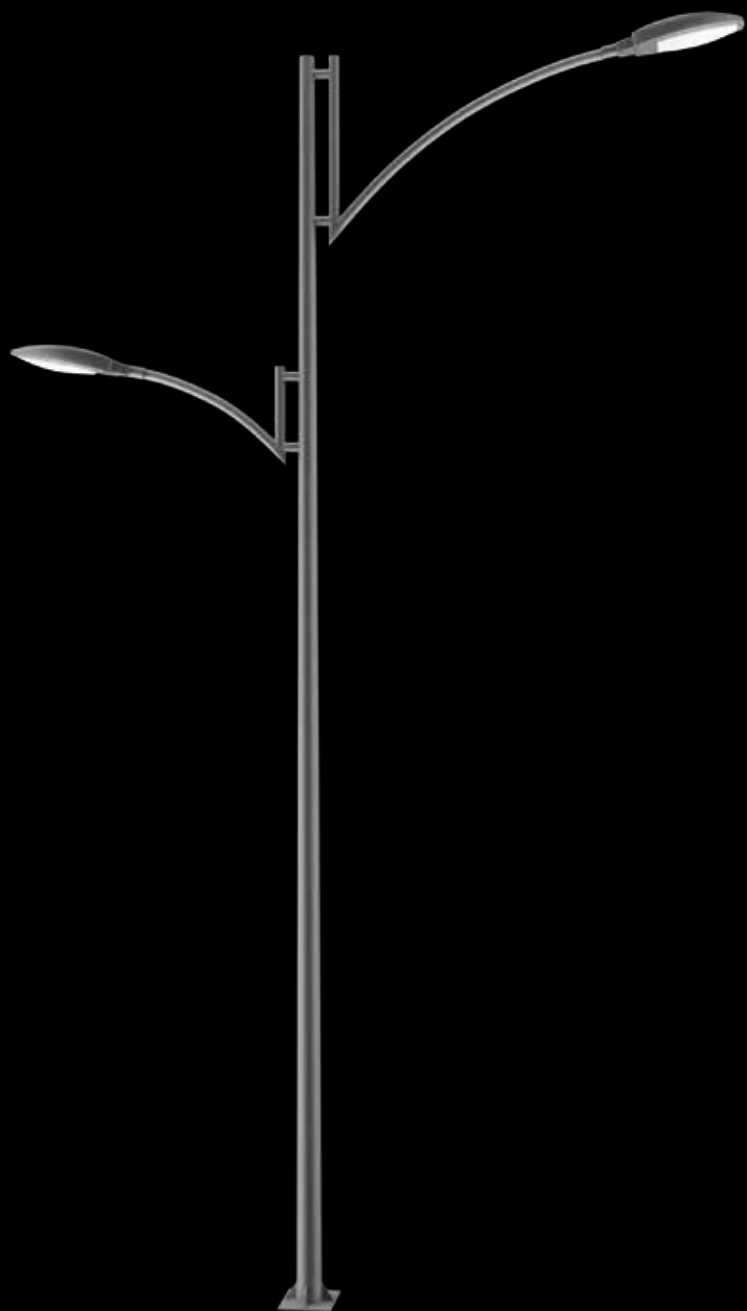
DP10



DP11



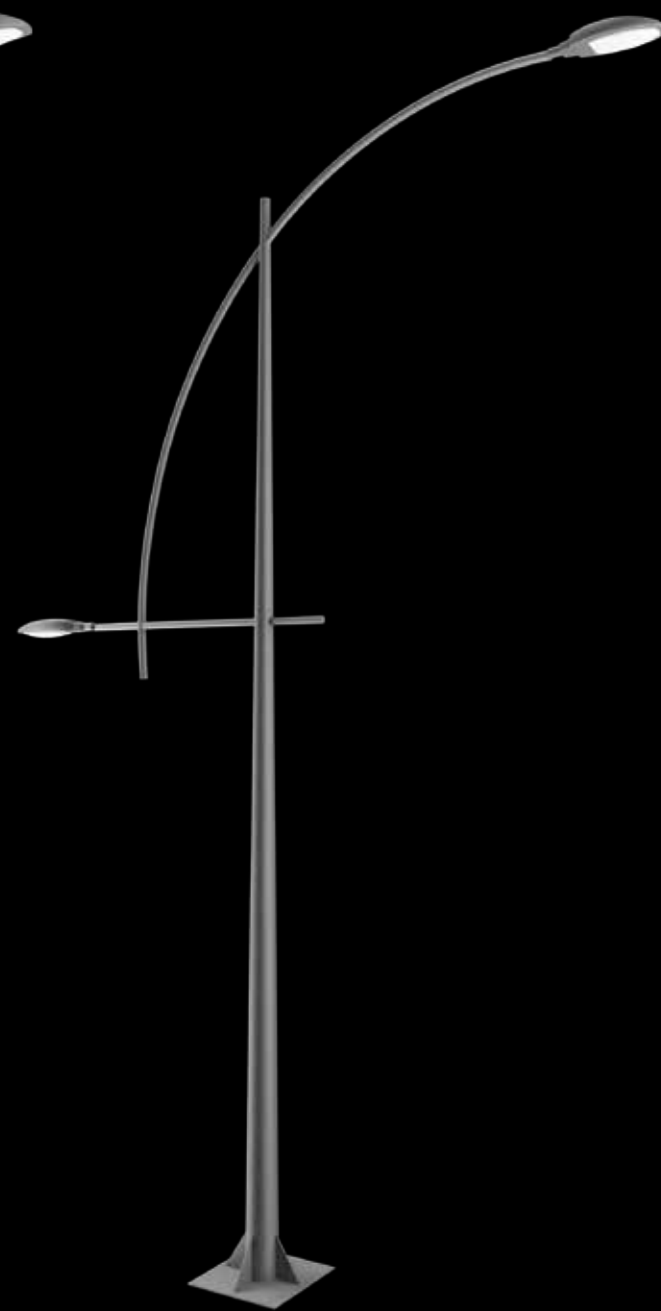
DP12



DP13

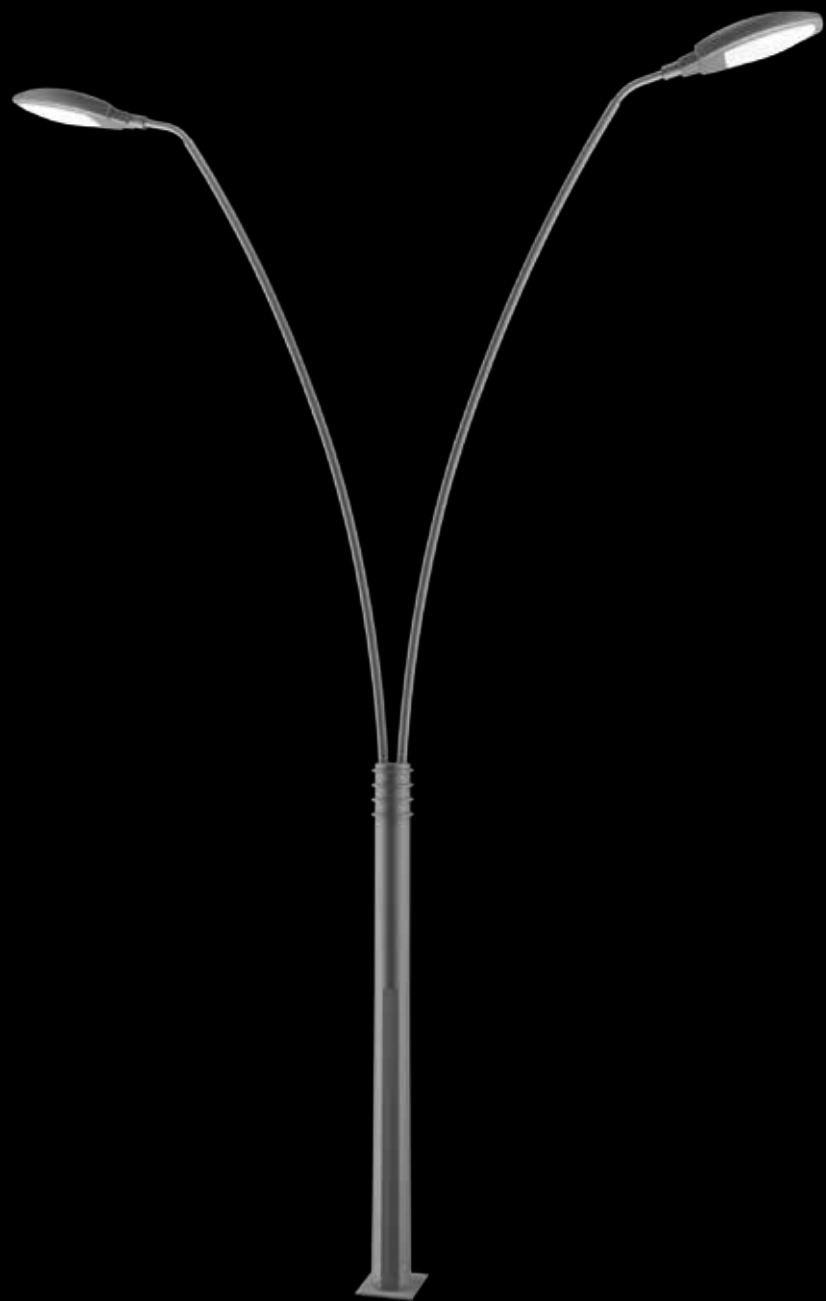


DP14

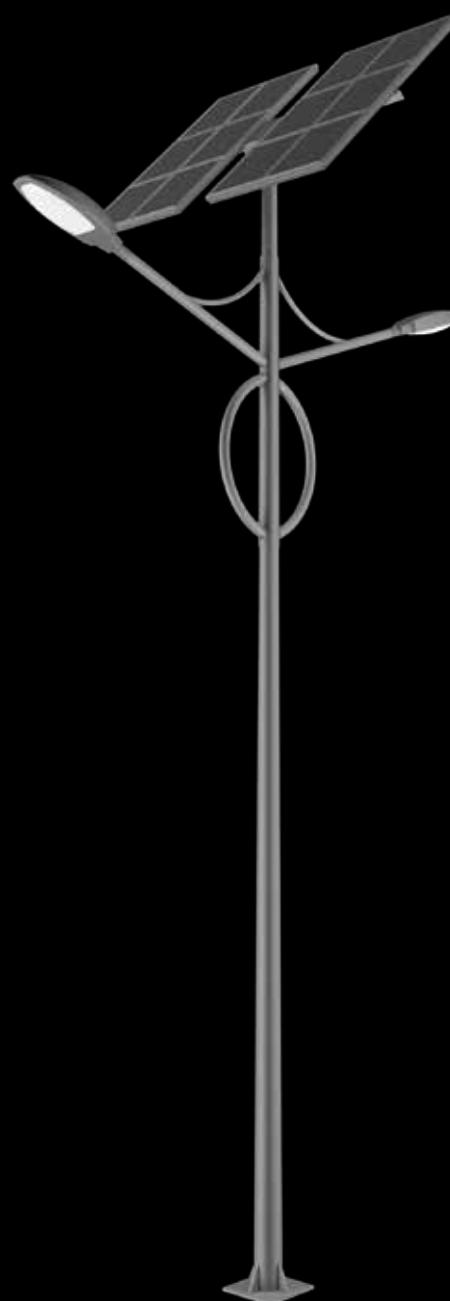


DP15





DP16



DP17

# TELECOM MONOPOLES

Telecom Monopoles are designed to support antennas & dishes for telecommunication and broadcasting including television.



Palm trees monopoles, submitted with a camouflage & branches to hide antennas & dishes



Standard monopoles are used to support antennas & dishes.

# TRANSMISSION MONOPOLES

Transmission monopoles are used in the transportation of electricity over long distances to consumers.



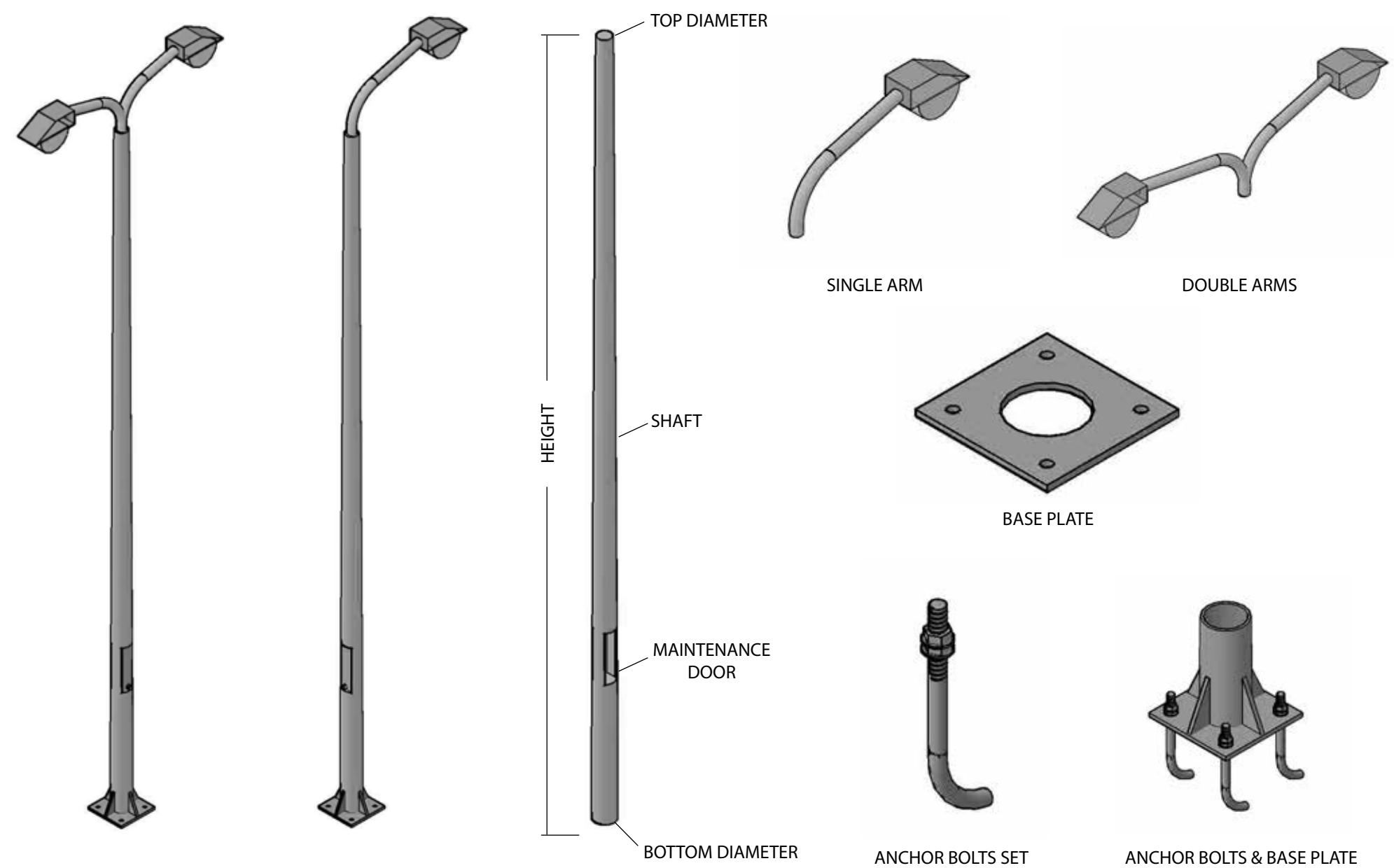
# TECHNICAL INFORMATION FOR LIGHTING POLES

## STREET LIGHTING POLES STANDARD

Serial Number	Total Height (m)	Main Shaft				Cross Arms		Base Plate Dimensions			Anchor Bolts Dimensions		
		Height (m)	Thickness (mm)	Top Diameter (mm)	Bottom Diameter (mm)	Number of Arms	Length (m)	Length (mm)	Width (mm)	Thickness (mm)	Number of Anchors	Diameter (mm)	Length (mm)
1	3	2.6	3	76	110	1 2	0.5	250	250	10	4	16	300
2	4	3.6	3	76	111	1 2	0.5	250	250	10	4	16	300
3	5	4.6	3	76	120	1 2	0.5	250	250	10	4	16	300
4	6	5.6	3	76	130	1 2	0.5	250	250	10	4	16	300
5	7	6.6	3	76	139	1 2	0.5	330	330	10	4	16	300
6	8	7.6	4	76	149	1 2	0.5	330	330	10	4	16	300 400
7	9	8.6	4	76	159	1 2	0.5	400	400	10	4	16	300 400
8	10	9.6	4	76	168	1 2	0.5	400	400	10 12	4	16	400
9	11	10.6	4	76	178	1 2	0.5	400	400	12	4	16	400 500
10	12	11.6	4	76	188	1 2	0.5	400	400	12 14	4	16 20	500



# LIGHTING POLE COMPONENTS



# HIGH MASTS



## High masts are used for illumination at:

Ports, airports, playgrounds, gardens, industries, stadiums, fountains, bridges and open yards.



PROJECT: DUBAI INTERNATIONAL PORTS-AIN SOKHNA

# FIXED HIGH MAST

## Fixed High Mast Main features:

- Height of a fixed high mast is up to 50 meters
- The ability of carrying a large number of floodlights
- Accessing floodlights via fixed ladders to an upper platform for maintenance

## Fixed High Mast Heights Range:

- Stadium range: up to 50 meters
- Playground range: up to 30 meters







# FIXED HIGH MAST LADDER TYPES



LADDER WITHOUT SAFETY CAGE



LADDER WITH SAFETY CAGE











# MOTORIZED HIGH MAST

## Motorized High Mast Main features:

- Height of a motorized high mast is up to 50 meters
- The latching system in the head frame provides more safety and security
- The mobile crown moves down to the mast base to provide easy maintenance and more safety
- High masts offer a great powerful source of illumination that covering large spaces with minimum number of masts instead of using a large number of poles
- The high mast is made of hot dip galvanized steel
- The head frame is made of steel or aluminum according to customer requirements
- The crown is moving by a built-in electrical winch located at the shaft base or an optional mobile winch

### MOTORIZED HIGH MAST ELECTRICAL WINCH





## Motorized High Mast Heights Range:

- Road range up to 25 meters
- Airports range up to 30 meters
- Industry range up to 35 meters
- Railway range up to 30 meters
- Ports range up to 50 meters

# MOTORIZED HIGH MAST BREAKING SYSTEM & CANOPY

We developed our motorized high mast with breaking system (parachuting) that locks the crown against the mast body in case of unlikely event of a wire ropes failure. This safety measure allows the high mast to be installed in areas where people are present & ensures the safety of the maintenance team.

The head frame mechanical latching system relieves strain on wire ropes when the high mast is in operating position.

The canopy is an optional cover protection for the high mast against rainy weather conditions.





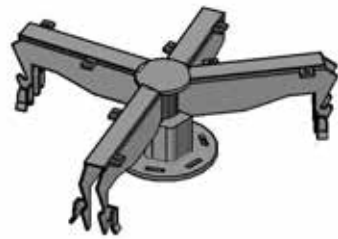
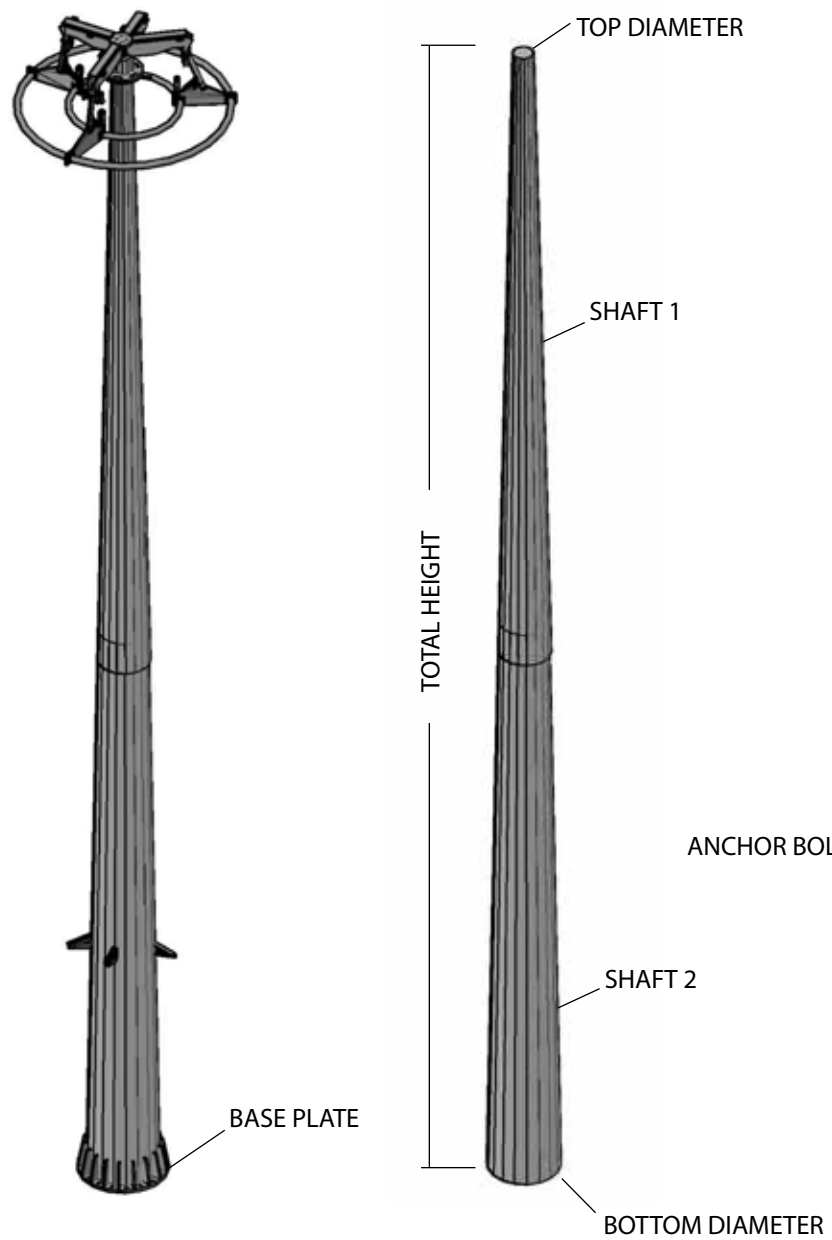
- The mobile crown moves down to the mast base to provide easy maintenance and more safety.
- The head frame mechanical latching system relieves strain on wire ropes when the high mast is in operating position.

# TECHNICAL INFORMATION FOR MOTORIZED HIGH MASTS

Standard Motorized High Masts ( Up to 12 Flood light )												
Serial Number	Total Height (m)							Base Plate Dimensions		Anchor Bolt Dimensions		
	Total Height (m)	Number of Sides	No. of Segments / Thickness (mm)			Top Diameter (mm)	Bottom Diameter (mm)	Diameter (m)	Thickness (mm)	No.	Diameter (mm)	Length (mm)
			1	2	3							
1	12	12	4			200	500	600	20	12	25	1150
2	15	12	4	4		200	500	700	20	12	28	1200
3	18	16	4	4		200	500	800	20	16	28	1100
4	20	16	4	4		200	550	800	20	16	28	1150
5	22	16	4	4		200	590	850	20	16	28	1250
6	25	16	4	4		200	660	900	25	16	30	1300
7	28	16	4	4	5	200	720	970	25	16	33	1350
8	30	24	4	5	5	200	730	1000	30	24	30	1300



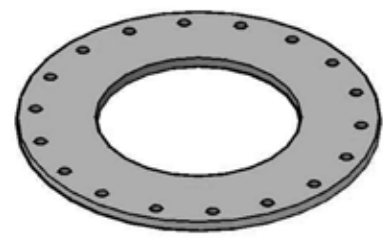
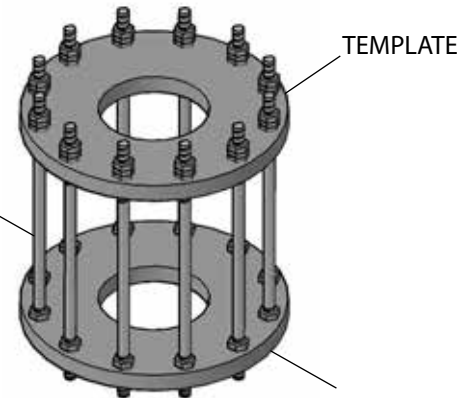
# MOTORIZED HIGH MAST COMPONENTS



FIXED HEAD FRAME



MOVABLE MOBILE CROWN



BASE PLATE