

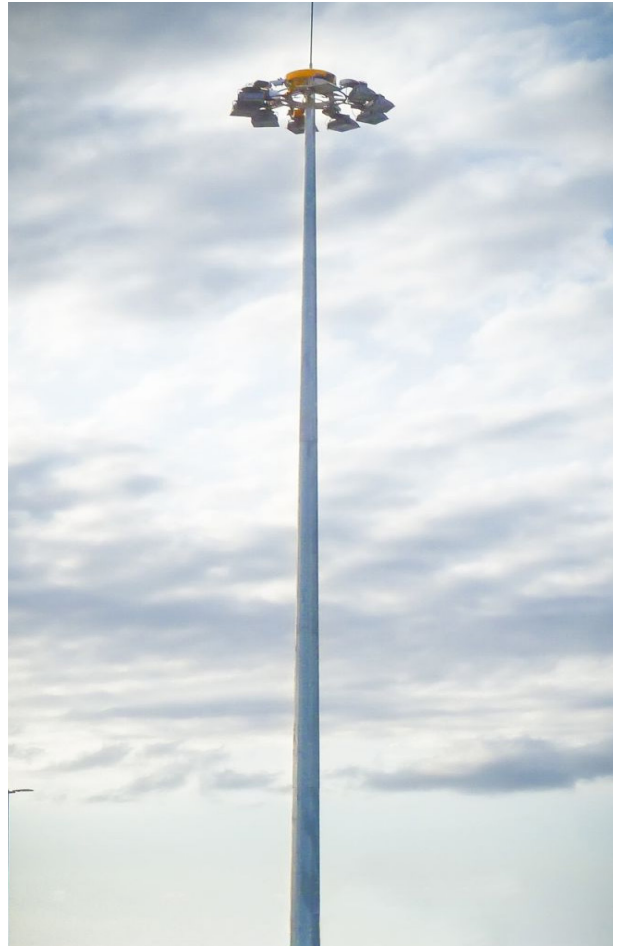
**SHAFFER ENERGY PRIVATE LIMITED**

Conical, Octagonal & High Mast

**Product Catalogue 2017-18**

## About Us

Shaffer Energy, an ISO 9001:2015, 14001:2015 company and MNRE Channel Partner, is a leading brand in LED Lighting, Solar and Poles. Shaffer designs and manufacture swaged poles, High Mast Poles and Octagonal Poles for Streets, Road, Traffic Signal, Signage and Highways. We at Shaffer energy are a Lighting Design, Consultancy, Customization and manufacturing company of LED Lighting Products with its own R&D and testing facility. Shaffer Energy is recognized by many industries, companies and govt. for their contribution to LED Lighting, and Solar projects. Shaffer's main focus is to provide Design & Lighting Solutions to Architectural, Industrial, Commercial and Government Market. We have expertise in architectural, landscaping, beautification and specific area lighting.



## Polygonal High Mast

### Features:

- Surface mounted, continuously tapered GI (Hot Dip) Polygonal Cross Section.
- Typically Winch system for motorised and manual operation.
- Suitable for Operation at 440V, 50Hz 3-Phase Power Supply.
- Luminaire Carriage is suspended through 2/3 6mm stainless steel wire ropes.
- Mounting option of Flood Lights on Head Frame (6/9/12 Luminaries).
- Maximum Efficiency & Low Glare
- Safe dependable raise and lower system for ground level maintenance.

## High Mast Poles

### Mast Structure

Mast shafts are hot dip galvanized, continuously tapered of polygonal cross section presenting a good and pleasing appearance.

### Construction

High Mast is fabricated from High Tensile Steel plates folded to form a polygonal structure and welded longitudinally. Mast of 12.5, 16, 20 meters length are in two sections and 20, 25, 30 are in three sections.

### Door

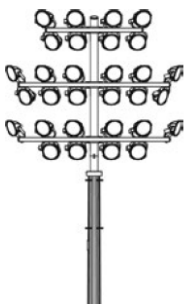
Door opening in the base of mast is large enough to get access to accessories viz. winch, cable, stainless steel wire rope power tool etc.

### Dynamic Loading

Wind speed varies throughout the country. As the dynamic load depends on wind speed, we request to customers to provide details of either region where mast are going to be installed or wind speed in m/sec or km/hr and the head number or number and type of flood lights to be mounted on lantern carriage.

### Accessories

Mandatory accessories which are winch, mechanical torque limiter, motor, 6mm dia stainless steel ropes, trailing cable, power tool, lantern carriage, pulleys, head frame, lightening protection finial & buffer. Additional accessories are Panel, feeder pillar, manual cranking handle, aviation obstruction light & automatic switching control.



## Signage Mast Poles

Signage Mast Systems are required for identification of utility premises. This has three options with light, without lights and retro reflective sheets. We manufacture Signage Mast Poles range from 16m to 40m.

### Application:

Oil Refineries  
Gas Stations  
Petrol Pumps  
Highways

## Sports Mast Poles

Sports lighting systems are required to illuminate stadiums and playgrounds. It has tall lighting pole which rest on platform and have a ladder for maintenance purpose.

### Application:

Stadiums  
Golf Courses  
Sports Centres/Club  
Colleges/Schools Playgrounds

Mast Structure (Mtrs.)	12/12.5 Mtrs	12/12.5 Mtrs	16 Mtrs	16 Mtrs
Mast Ref Code:	SH-HM-12.5M	SH-HM-12.5M-1	SH-HM-16M	SH-HM-16M-1
Material Construction	BSEN 10025	BSEN 10025	BSEN 10025	BSEN 10025
Length in longer section	6500 mm	6500 mm	8375 mm	8375 mm
Top Section				
Middle Section	6500 mm	6500 mm	8375 mm	8375 mm
No. of section of mast	2 Nos.	2 Nos.	2 Nos.	2 Nos.
Base Dia & Top Dia (QAF)	3/3 mm	3/3 mm	3/3 mm	3/3 mm
Bottom Diameter	360 mm	360 mm	360 mm	410 mm
Top Diameter	100 mm	150 mm	150 mm	150 mm
Thickness of Galvanization	86 Microns	86 Microns	86 Microns	86 Microns
Size of Opening door at base	300x1000 mm	300x1000 mm	300x1000 mm	300x1000 mm
Size of base plate diameter	530 mm	530 mm	530 mm	590 mm
Size of Base plate thickness	25 mm	25 mm	25 mm	25 mm
<b>Winch</b>				
Number drums/winch	Double Drum	Double Drum	Double Drum	Double Drum
Capacity(Kg)	SWL 375Kg	SWL 375Kg	SWL 375Kg	SWL 375Kg
<b>Foundation Accessories</b>				
No. of Foundation Bolts	4 Nos.	4 Nos.	6 Nos.	8 Nos.
PCD of Foundation Bolts	445 mm	445 mm	445 mm	490 mm
Type of Foundation Bolts	Tor Steel	Tor Steel	Tor Steel	Tor Steel
Bolt Diameter	M24	M24	M24	M30
<b>Lantern Carriage</b>				
Number of Fittings	4/6/8 Nos.	4/6/8 Nos.	6/8/9 Nos.	6/8/9 Nos.
<b>Wire Rope</b>				
No. of ropes of 6mm thickness				
Per Lantern Carriage	3 Nos.	3 Nos.	3 Nos.	3 Nos.
Per Double Drum Winch	2 Nos.	2 Nos.	2 Nos.	2 Nos.
Lowering Speed	3 Meters/Min	3 Meters/Min	3 Meters/Min	3 Meters/Min
<b>Cable</b>				
	EPR Coated PCP sheathed multicore flexible cable			
<b>Power Tool Reversible</b>				
Input Supply	415 Volts Integral or External			

Mast Structure (Mtrs.)	20 Mtrs	25 Mtrs	30 Mtrs	30 Mtrs
Mast Ref Code:	SH-HM-20M	SH-HM-25M	SH-HM-30M	SH-HM-30M-1
Material Construction	BSEN 10025	BSEN 10025	BSEN 10025	BSEN 10025
Length in longer section	10375 mm	8750 mm	10500 mm	10500 mm
Top Section		8750 mm	10500 mm	10500 mm
Middle Section	10375 mm	8750 mm	10500 mm	10500 mm
No. of section of mast	2 Nos.	3 Nos.	3 Nos.	3 Nos.
Base Dia & Top Dia (QAF)	4/3 mm	4 /4/3 mm	4/4/4 mm	5/4/4 mm
Bottom Diameter	410 mm	460 mm	510 mm	540 mm
Top Diameter	150 mm	150 mm	150 mm	150 mm
Thickness of Galvanization	86 Microns	86 Microns	86 Microns	86 Microns
Size of Opening door at base	300x1000 mm	300x1000 mm	300x1000 mm	300x1000 mm
Size of base plate diameter	590 mm	670 mm	740 mm	740 mm
Size of Base plate thickness	25 mm	25 mm	30 mm	30 mm
<b>Winch</b>				
Number drums/winch	Double Drum	Double Drum	Double Drum	Double Drum
Capacity(Kg)	SWL 740Kg	SWL 740Kg	SWL 740Kg	SWL 740Kg
<b>Foundation Accessories</b>				
No. of Foundation Bolts	8 Nos.	12 Nos.	12 Nos,	12 Nos.
PCD of Foundation Bolts	490 mm	590 mm	650 mm	650 mm
Type of Foundation Bolts	Tor Steel	Tor Steel	Tor Steel	Tor Steel
Bolt Diameter	M30	M30	M30	M30
<b>Lantern Carriage</b>				
Number of Fittings	8/12 Nos.	8/12 Nos.	8/12 Nos.	8/12 Nos.
<b>Wire Rope</b>				
No. of ropes of 6mm thickness				
Per Lantern Carriage	3 Nos.	3 Nos.	3 Nos.	3 Nos.
Per Double Drum Winch	2 Nos.	2 Nos.	2 Nos.	2 Nos.
Lowering Speed	3 Meters/Min	3 Meters/Min	3 Meters/Min	3 Meters/Min
<b>Cable</b>				
	EPR Coated PCP sheathed multicore flexible cable			
<b>Power Tool Reversible</b>				
Input Supply	415 Volts Integral or External			

## Octagonal, Tubular and Conical Poles

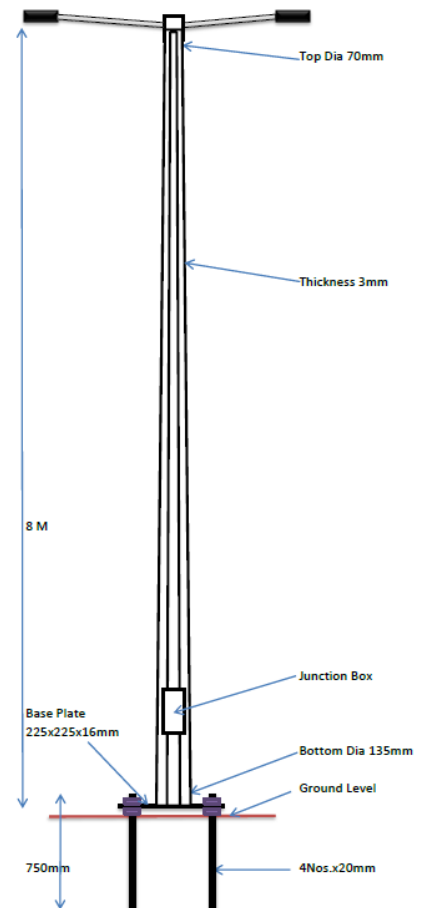
Octagonal and conical poles are required for outdoor lighting of streets, roads & highways. we manufacture single piece octagonal poles that ranges from 5m to 12m using high tensile steel.

Octagonal Poles have following features:

- Inbuilt Junction Box
- Rust Proof (Hot Dip Galvanized)
- Good Asthetic Look
- Easy Replacement.

### Application:

- Residential Roads
- Malls, Commercial Centres
- Highways & Expressways
- Area Lighting





## Octagonal Poles

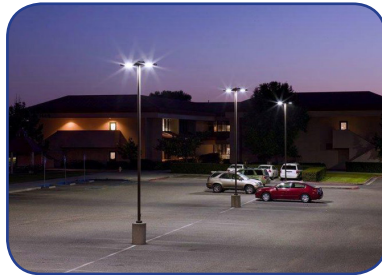
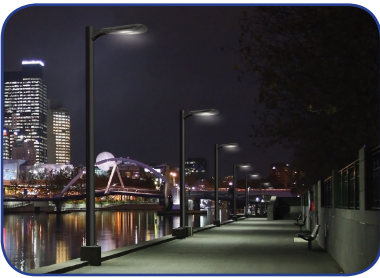
Pole Type	Height	Sheet Thickness	Top Dia	Bottom Dia	Base Plate (LXWXT)	Foundation Bolts (No.X DiaX Length)	PCD
SH-1105 OP	5M	3 mm	70 mm	130 mm	200X200X12 mm	4 X M16 X 450 mm	200 mm
SH-1106 OP	6M	3 mm	70 mm	130 mm	200X200X12 mm	4 X M20 X 600 mm	200 mm
SH-1107 OP	7M	3 mm	70 mm	130 mm	200X200X12 mm	4 X M20 X 600 mm	200 mm
SH-1108 OP	8M	3 mm	70 mm	130 mm	200X200X16 mm	4 X M20 X 600 mm	200 mm
SH-1109 OP	9M	3 mm	70 mm	130 mm	200X200X16 mm	4 X M20 X 600 mm	200 mm
SH-1209 OP	9M	3 mm	70 mm	155 mm	250X250X16 mm	4 X M24X 750 mm	250 mm
SH-1110 OP	10M	3 mm	70 mm	155mm	250X250X16 mm	4 X M24X 750 mm	250 mm
SH-1210 OP	10M	3 mm	70 mm	175 mm	275X275X16 mm	4 X M24X 750 mm	275 mm
SH-1111 OP	11M	3 mm	90 mm	210 mm	300X300X16 mm	4 X M24X 750 mm	300 mm
SH-1112 OP	12M	3 mm	90 mm	210 mm	300X300X16 mm	4 X M24X 750 mm	300 mm
SH-1212 OP	12M	3 mm	90 mm	240 mm	320X320X16 mm	4 X M24X 750 mm	320 mm

## Conical Poles

Pole Type	Height	Sheet Thickness	Top Dia	Bottom Dia	Base Plate (LXWXT)	Foundation Bolts (No.X DiaX Length)	PCD
SH-1105 CP	5M	3 mm	75 mm	130 mm	200X200X12 mm	4 X M16 X 600 mm	200 mm
SH-1106 CP	6M	3 mm	75 mm	140 mm	200X200X12 mm	4 X M20 X 600 mm	210 mm
SH-1107 CP	7M	3 mm	75 mm	150 mm	250X250X12 mm	4 X M20 X 700 mm	235 mm
SH-1108 CP	8M	3 mm	75 mm	160 mm	250X250X16 mm	4 X M20 X 750 mm	235 mm
SH-1109 CP	9M	3 mm	75 mm	173 mm	275X275X16 mm	4 X M24 X 750 mm	270 mm
SH-1110 CP	10M	3 mm	75 mm	185 mm	275X275X16 mm	4 X M24X 750 mm	270 mm
SH-1211 CP	11M	3 mm	75 mm	195 mm	300X300X16 mm	4 X M24X 750 mm	300 mm
SH-1111 CP	11M	3 mm	85 mm	206 mm	300X300X16 mm	4 X M24X 750 mm	300 mm
SH-1112 CP	12M	3 mm	75 mm	206 mm	300X300X16 mm	4 X M24X 750 mm	320 mm
SH-1212 CP	12M	3 mm	96 mm	228 mm	320X320X16 mm	4 X M24X 850 mm	320 mm



**Shaffer**  
ENERGIZING TOMORROW



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