

# RR ISPAT

(A Unit of Godawari Power and Ispat Limited)

**HIRA**  
GROWING STRONGER TOGETHER



**CONSUL**<sup>TM</sup>  
*connecting energy*

HIGH MAST | MONOPOLE | OCTAGONAL LIGHTING POLES



Precision with an unbeatable expertise

# PROLOGUE



RR ISPAT (A unit of Godawari Power and Ispat Limited), a group company of HIRA GROUP was established in 1999 with a vision of becoming the most trusted brand of steel in Central India. The founding leaders along with the dedicated and professional employees of this organisation displayed exemplary mix of business with ethical business values. This journey of excellence continued with product diversification, up gradation to latest technologies and valuing customer's satisfaction. Thus, with our holistic approach to product and people, within a span of just a decade, we became the most trusted brand across India.

Justifying the very essence of Group Tagline "GROWING STRONGER TOGETHER", our company is diversified into production of HB Wire, Electrical Engineering Product, Cable Tray, TLT-Rural Electrification-Railway and Solar Structures, Galvanising, M.S.Pipe, Metal Beam Crash Barrier, Swaged Tubular Pole, Mono Pole, Octagonal, Conical and High Mast Poles.

Quality of Product and commitment to deliver the consignments in time is embedded in the DNA of this organization and we imbibe the same in the total process cycle of our each product. Customer satisfaction and retention has been the focused work culture in our company offering them quality product at reasonable value with right services at desired time frame.

Along with the business, we equally value the overall prosperity of our employees. Promoting work life balance by ensuring a MEDITATION SESSION among employees is a major focus of the unit. This is also being resulted the positive outcome with higher efficiency of the employee with excellent retention rate.

We, being an ethical and responsible corporate, believe in giving back to the society. We are spearheading a numbers of Corporate Social Responsibility initiatives in the sector of Education, Health, Vocational Training, Livelihood and Environment. We are touching lives through our different community initiatives in our operational areas.



All Images Source : Admin Building, RR Ispat



# MISSION

To provide high quality products to consistently meet customer's specific requirements by using innovative technologies within an environment of motivated and dedicated employees who are determined to achieve perfection, highest business standards and work ethics.

To deliver world class products at competitive prices on demand as well as provide superior services to customers by developing leading edge solutions in technology and processes and opportunities for inclusive growth of the employees by nurturing human resource, so that all our partners can share the pride of success.

# VISION

To be a globally admired organization that manufactures innovative products through sustainable industrial and business development and delivering excellence with reliability.

To be an industry benchmark across all vertical, while becoming the supplier of choice, delivering premium products and services, creating value with our customers and demonstrating high ethical standards.

# VALUES

Business ethics and integrity  
Respect time and expectations of all associates  
Empowerment of human resources  
Agile work culture  
Building trustworthy relationship with customers, stakeholders and society.  
Spreading the mantra of harmony and wellbeing among employees.

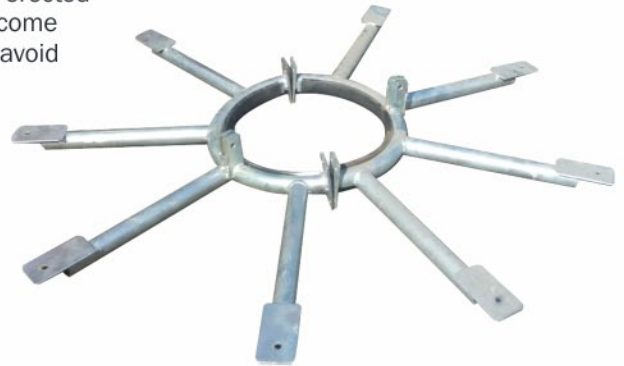


Image Source : GI Plant, RR Ispat

# Raising and lowering High Mast Details

## Lantern Carriage

Lantern Carriage is the important part of a high mast as it carry lighting system on it. It has 6, 8 & 12 arms which carry luminaries. It is made of ERW pipe, having a ring & straight arms with several holes for passing cables from it. Lantern carriage is made in two parts which make the assembly easy in erected condition of mast. It goes up to the top by help of winch & motor. It can come down to the height of door if any service or maintenance is required. To avoid scratch marks on surface of mast in case of un-down movement of mast, provide "Rubber Buffer" on the inner side of ring.



## Winch with Motor

Winches are the heart of a highmast placed inside the door & rotated by the help of motor. Winch are double drum with oil filled inside for the sake of lubrication. Winch is used for movement of lantern carriage on mast.



## Lighting Arrestor

Lighting arrestor is installed on top of headframe cover. Which work to transfer current to earth in case of thunder strike. A 12mm strip is provided below door which transfer current to earth & protects the luminaries & electrical panels from any damage



## Headframe

Headframe is the top most part of a highmast, holds the pully arrangement in it. The SS316/304 rope used for moving the lantern carriage passes through the headframe pulley.

There are two types of headframes manufactured by us.

1. Two way headframe
2. Three way headframe

Two way headframe contains set of pulley on either sides of it. In three way system, it has 3 wire ropes passing through it.



## Electrical System

Mast shall have the facilities for testing the luminaries at the bottom level. The cables used in a mast is EPR insulated, PCP sheathing & Cotton brading to get the required strength & Flexibility. These cables are connected the aluminum junction box on lantern carriage.

## Feeder Piller

It is the controller of highmast functions like, up-down motion, operation of luminaries etc. Feeder panel provides advantage of switching luminaries in one or more groups according to time or shift.





## Foundation bolt

Foundation bolts provide anchoring to the Pole / Highmasts as well as provides stability to the structure. The size & length of foundation bolt is decided according to the location, height of structure & wind speed zone. Quantity of Nut & washer also changes as per applied on the load structure. Sizes are available M16 to M39 & as per requirements manufactured in EN-8 grade. To increase resistance against corrosion we use Red oxide paint & hot dipped galvanizing.



## HIGH MAST - Technical Specification

Sr. No.	Mast Ht. (mtr/s)	Mast Code (mtr)	Mast Details			Anchor Bolt Details		
			Top dia.(mm)	Bottom dia(mm)	Thk.(mm)	Nos.	Dia.x length(mm)	PCD(mm)
1	12.0	RRHM 12A	100	310	3	4	M24x850	385
2	12.0	RRHM 12B	100	360	3	4	M24x850	445
3	12.5	RRHM 12.5A	100	310	3,3	4	M24x850	385
4	12.5	RRHM 12.5B	100	360	3,3	4	M24x850	445
5	12.5	RRHM 12.5C	150	360	3,3	4	M24x850	445
6	16	RRHM 16A	150	360	3,3	6	M24x850	445
7	16	RRHM 16B	150	360	3,4	6	M24x850	445
8	16	RRHM 16C	150	410	3,3	8	M30x850	490
9	16	RRHM 16D	150	410	3,4	8	M30x850	490
10	16	RRHM 16E	150	460	3,3	8	M30x850	590
11	16	RRHM 16F	150	460	3,4	8	M30x850	590
12	20	RRHM 20A	150	360	3,3	6	M24x850	445
13	20	RRHM 20B	150	360	3,4	6	M30x850	445
14	20	RRHM 20C	150	410	3,3	8	M30x850	490
15	20	RRHM 20D	150	410	3,4	8	M30x850	490
16	20	RRHM 20E	150	460	3,3	8	M30x850	590
17	20	RRHM 20F	150	460	3,4	8	M30x850	590
18	20	RRHM 20G	150	460	4,5	8	M30x850	590
19	25	RRHM 25A	150	460	3,4,4	12	M30x850	590
20	25	RRHM 25B	150	460	3,4,5	12	M30x850	590
21	25	RRHM 25C	150	460	4,4,5	12	M30x850	590
22	25	RRHM 25D	150	540	3,4,5	12	M30x850	650
23	25	RRHM 25E	150	540	4,4,5	12	M30x850	650
24	30	RRHM 30A	150	460	3,4,4	12	M30x850	590
25	30	RRHM 30B	150	460	3,4,5	12	M30x850	590
26	30	RRHM 30C	150	540	3,4,5	12	M30x850	650
27	30	RRHM 30D	150	540	4,4,5	12	M30x850	650
28	30	RRHM 30E	150	540	4,4,6	12	M30x850	50
29	30	RRHM 30F	150	540	4,5,6	12	M30x850	650
30	30	RRHM 30G	150	610	3,4,5	12	M30x850	740
31	30	RRHM 30H	150	610	4,4,5	12	M30x850	740
32	30	RRHM 30I	150	610	4,4,6	12	M30x850	740
33	30	RRHM 30J	150	610	4,5,6	12	M30x850	740

## Street structure

Designing is based on BSEN 40-3-3:2003 & tested for stability by using application softwares.

Location of installation terrain category & wind speed are important factors for stability check. All these factors are as per IS 875 or as per customer requirements.

Raw material is procured as per BSEN 10025 / IS 2062 & galvanized as per BSEN ISO 1461.

RR Ispat / Consoul produces hot dip galvanized as well as painted polygonal & conical poles which can be used for illumination, power distribution, signaling etc. The poles are provided with different types of brackets & customized accessories depending upon the application.

### Octagonal Street Light Poles - Technical Specifications

Pole Type	Description	Top Dia. (mm)	Bottom Dia. (mm)	Sheet Thickness (mm)	Base Plate Dimensions (LxBxT)
RROP-030	3M Octagonal Pole	70	130	3	200 x 200 x 12
RROP-040	4M Octagonal Pole	70	130	3	200 x 200 x 12
RROP-050	5M Octagonal Pole	70	130	3	200 x 200 x 12
RROP-060	6M Octagonal Pole	70	130	3	200 x 200 x 12
RROP-070	7M Octagonal Pole	70	130	3	200 x 200 x 12
RROP-081	8M Octagonal Pole	70	130	3	200 x 200 x 16
RROP-082	8M Octagonal Pole	70	155	3	250 x 250 x 16
RROP-091	9M Octagonal Pole	70	130	3	200 x 200 x 16
RROP-092	9M Octagonal Pole	70	155	3	250 x 250 x 16
RROP-093	9M Octagonal Pole	70	175	3	275 x 275 x 16
RROP-101	10M Octagonal Pole	70	130	3	200 x 200 x 16
RROP-102	10M Octagonal Pole	70	155	3	250 x 250 x 16
RROP-103	10M Octagonal Pole	70	175	3	275 x 275 x 16
RROP-111	11M Octagonal Pole	70	155	3	250 x 250 x 16
RROP-112	11M Octagonal Pole	70	175	3	275 x 275 x 16
RROP-113	11M Octagonal Pole	90	210	3	300 x 300 x 16
RROP-121	12M Octagonal Pole	70	175	3	275 x 275 x 16
RROP-122	12M Octagonal Pole	90	210	3	300 x 300 x 16



## Conical Street Light Poles - Technical Specifications

Pole Type	Description	Top Diameter (mm)	Bottom Diameter (mm)	Sheet Thickness (mm)	Base Plate Dimensions (LxBxT)
RRCP-030	3M Conical Pole	75	107	3	200 x 200 x 12
RRCP-040	4M Conical Pole	75	118	3	200 x 200 x 12
RRCP-050	5M Conical Pole	75	129	3	200 x 200 x 12
RRCP-060	6M Conical Pole	75	140	3	200 x 200 x 16
RRCP-070	7M Conical Pole	75	151	3	250 x 250 x 16
RRCP-080	8M Conical Pole	75	162	3	250 x 250 x 16
RRCP-090	9M Conical Pole	75	173	3	275 x 275 x 16
RRCP-100	10M Conical Pole	75	184	3	275 x 275 x 16
RRCP-112	11M Conical Pole	75	195	3	300 x 300 x 16
RRCP-122	12M Conical Pole	75	206	3	300 x 300 x 16

- ▶ Above all are standard sizes for octagonal / conical poles, Other than this we manufacture as per customer requirements.
- ▶ We can manufacture maximum height of 13mtrs octagonal pole in single section.
- ▶ All octagonal / conical poles are hot dip galvanised as per standard BSEN ISO 1461.
- ▶ Also providing painted structures as per requirement of customer.

## HIGH MAST - Customization Scope for Assets

Few examples given below.

Flag Mast



Signage Mast



Octagonal Lighting Pole



Antenna Mast



Painted Mast



Stadium Mast





**Unipole**



**Monopole**



**Smart city Structure**



**Gantry Type**



**Umbrella Mast**



**Conical Pole**



# Swaged Tubular Pole

Swaged Tubular Poles are specially used in Street Lighting purpose in NACs/ Municipal Corporations/ Housing Board Colonies / Residential areas. These kinds of poles are specially designed by swaging at the end to give more tensile strength and durability. Being galvanized, it bears rust and maintenance free feature. Thus it makes the first choice of many architects and professionals. Its light weight design makes it hassle free and easy in shipment and installation.

**Pole Height and Design** - Basically, the height of the swaged poles ranges from 5 mtrs. to 14 mtrs. with a thickness variation from 2.5mm to 7.2mm depending upon the area (locality) of usage. Usually it can be classified into two types based upon its design :

- 1) **Single Arm** : The pole consists of a unidirectional arm, bending from the swaged junction/ joint
- 2) **Dual Arm** : The pole consists of two arms, bending diametrically opposite to each other from the swaged junction/joint.

We customize order as per the requirement of client.

**Raw materials Used:**

We use the best quality Hot Rolled Coils, produced from the finest plant of India, as raw material to manufacture the perfect dimension swaged poles. We have in-house Galvanising plants with capacity of 7 mtrs. and 13 mtrs. To give the best Hot Dip Galvanised product, we use Zinc directly procured from Hindustan Zinc Limited, the only trusted Zinc manufacturer in India.

**Our Swaged Tubular Pole Features**

- Finest Grade Material (H.R. Coil IS:10748 grade I and above )
- Highly Resistant to Rust and Corrosion (Zinc coating of 550 gsm/sq.mtr)
- Minimal maintenance cost
- Lightweight and Durable
- Low Shipping Cost (Centrally located in India)

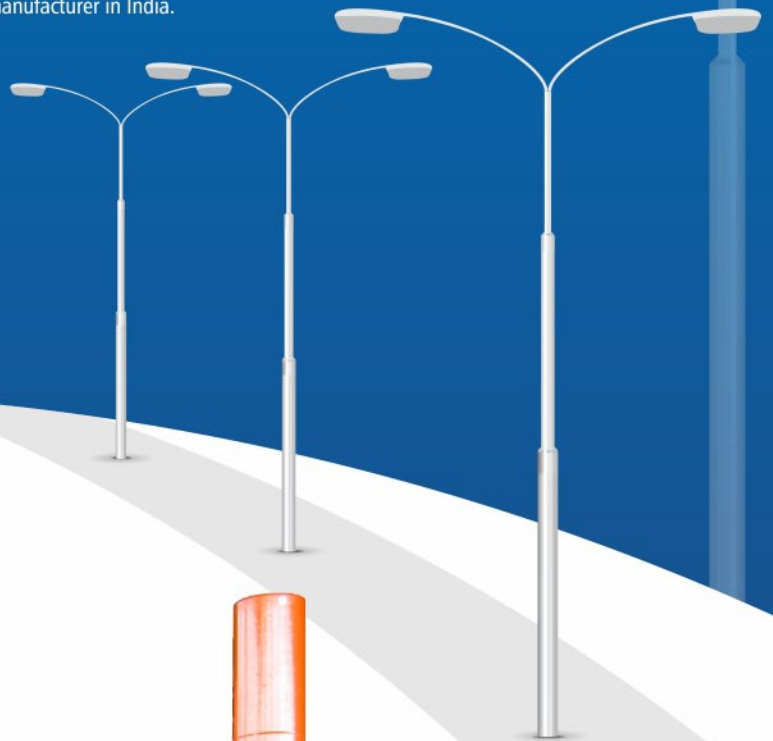


Image Source : Illustration by RR Ispat

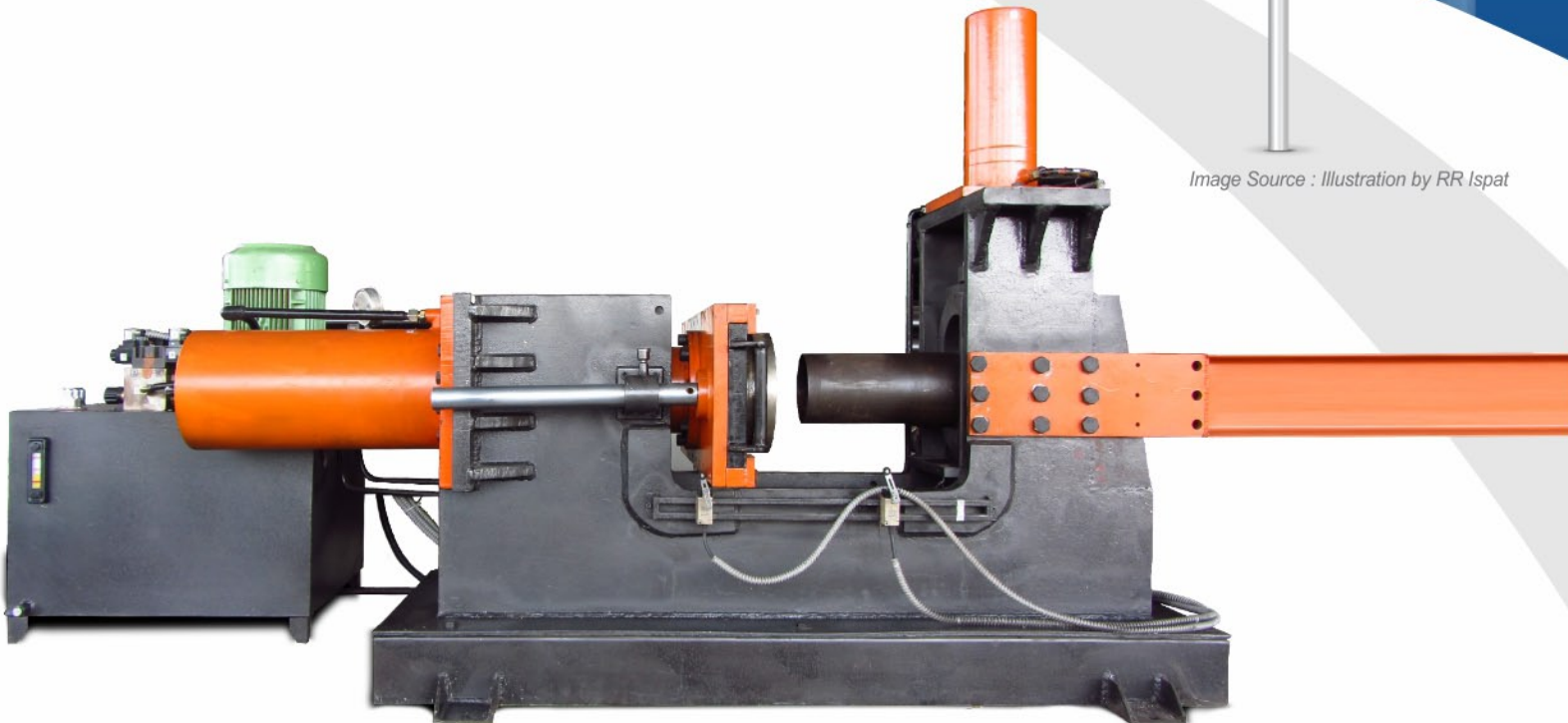


Image Source : Pipe Mill Division, RR Ispat





2014

Dedicated Meditation Hall for staff



2015

Amanaka Bus Depot, GE Road, Raipur



2016

Mechanised Make-in-India logo, Telibandha Chowk, Raipur



2016

Ashok Vatika, Inside Plant



2017

Hanging Water Tap, GE Road, Raipur



2017

Sea Hawk Square Developed & Maintained, Tatibandh Chowk



2018

100 acres 'Oxy-Zone' developed by Company, Near Siltara Chowk, Raipur



2019

Practicing Meditation





*Image Source : 100 acres 'Oxy-Zone' developed by Company,  
Near Siltara Chowk, Raipur*



HIGH MAST | MONOPOLE | OCTAGONAL LIGHTING POLES

Manufactured at :

**RR ISPAT** (A Unit of **Godawari** Power and Ispat Limited)

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