Expanding to Global Expectations

Born in India, Utkarsh India Ltd., is a fast-growing enterprise that spreads soaring wings to respond to the global demands of life. The company is now operating in six verticals, namely:

- High Mast, Polygonal/Conical Poles & Steel Tubular Poles
- Polymer Products
- Steel Tubes, Pipes & Poles
- Metal Beam Crash Barrier
- Railway Electrification Structures
- Transmission Line Towers & Substation Structures

Deeply imbued with the Indian philosophy, “Customer is the king,” it’s all set to mortgage itself to conquer the confidence of global customers, thus making its dream of emerging as a major global company come true.

Making the Future of Light Really Bright...

Utkarsh offers turnkey solutions for following type of Steel Towers & Structures in the field of outdoor illumination.

- **Lighting Mast** - Manufacturing range from 10m to 40m
- **Street Lighting Pole** - Manufacturing range starts from 3m and can be manufactured as required by the customer and locations
- **Decorative Lighting Pole** - The manufacturing range starts from 3m and can be manufactured as per customers’ requirement
- **Camera Pole** - Can be manufactured as per customers’ requirement
- **Transmission pole** - Can be manufactured as per customers’ requirement
- **Flag Mast** - Manufactured as per customers’ requirement
- **Smart Pole** - Can be designed as per technological requirement with arrangements for fixing all types of electrical and electronic devices

Sold

25,000 Lighting Mast & 500,000 Lighting Poles
Mission
To deliver world class products at competitive prices, on demand as well as provide superior service to customers by developing leading-edge solutions in technology and processes, providing opportunities for inclusive growth for our employees, by nurturing human resource, so that all our partners can share the pride of success.

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

The Identity
Utkarsh, as the name suggests, is a responsive business house serving the basic demands of life and committed to making the quality of life better. The brand statement ‘Life demands, we deliver’ conveys its corporate identity an excited image reflecting dynamism, capability, commitment, empathy, consistency and continuity. The embedded philosophy is the responsiveness to the ever-changing demands of life.

The new logo of Utkarsh, with a bold font represents strength and growth. The dynamic vision of growth with which we have been striding ahead towards the challenges of life is captured in the swastik. It reflects a more youthful and futuristic image of ours and our strong, sturdy and bold attitude in delivering the best. The green represents life and its newer demands, while the blue reflects technology and corporate commitment. The coming together of these two elements is symbolic of the effective way in which we have been responding to the several requirements of life and with an arsenal of technology and collective corporate dedication.
Dear Friends,

“Growth is the only evidence of life,” a quote by John Henry Newman is something our ideals completely correspond with. Hence, we have transitioned into becoming Utkarsh India Limited from Utkarsh Tubes and Pipes Ltd., widening our horizons into providing infrastructural solutions. And I firmly believe that a nation grows when its infrastructures grow, hence it is a noble step in that direction.

We have been making our way into more lives by providing our services and products at good value. We, at Utkarsh, have branched out to different infrastructural arenas like telecom towers, transmission line towers, substation structures, poles and masts for lighting and distribution, road crash barriers, railway electrification structures and polymer products. Empowered with this diversification, Utkarsh India Limited has taken a step further and gone global, acting as infrastructural development across several countries. This is a distinctly proud step for us as our expertise is helping not only add pace to the infrastructural enhancement of the country, but also contributing to the growth of foreign nations.

In the 40 years of our presence, Utkarsh has been scaling the mountains of success which could not have been achieved without a team of the excellent trekkers, who are our employees. This group of innovative, talented and passionate young people has brought a modern vision into the organization. A strong, experienced management ensures a smooth flow of the innovatorings quite like our pipes do for our customers. This perfect balance between management and coworkers is what gives Utkarsh its efficiency.

Sticking to our corporate ethos, “Life demands, We deliver,” we bring the strong promise of consistency and reliability ensuring optimum consumer satisfaction. “Consumer First” is the motto that drives us to bring you quality.

We could have never reached out to the world with our products without the worthy associations of our suppliers, distributors and dealers and my gratitude extends to all of them. I firmly believe that Utkarsh, along with all its associates, will emerge as the first infrastructural brand in the recent future.

Regards,

Sudhir Tharani
CEO
Captive High Mast Plant

- We are equipped with CNC operated machines and qualified technical manpower.
- We have the in-house facility for the process of pre-galvanization and post-galvanization for better metal protection with 12.5m long GI bath for single dipping facility which gives better finish to the products.
- We have in-house testing facilities with well-equipped physical & chemical laboratories.

Design Engineering

We have vetted design software to design the mast structure. We use check design stability both for Lighting Mast as well as Lighting Pole using design software developed by us considering the standards.

Reference Codes of Practice:

- IS-450-2007
- IS-875 Part 3
- IS-4533 Part 2, 1989
- IS-5649-1985
Material Specification & Manufacturing Process

Material Specification
- **Main & Pole Shaft**: BS EN 10025 or equivalent to UTS=410 to 630 MPa & YS=250 (Min.)
- **Base Plate**: IS: 2062 to be UTS=410 (Min.) & YS=240 (Min.)
- **Foundation Bolts**: Special High Tenacity MS round confirms to IS: 2545. The bolts are threaded by threading machine with the help of chaser and threading head
- **Galvanization**: IS: 4798/1300 (46)

Manufacturing Process

- **Cut to Length**: Disc scaling process width 2200mm, shearing capacity 8mm, coil loading capacity 30°
- **Trapezoidal Cutting**: Taper cutting on using CNC plasma cutting Mc (Capacity 14mm X 3.5mm X 30mm thick by plasma & 150mm thick by oxy flame)
- **CNC Press Break**: Bending to polygonal capacity 13mm Long & 8mm Thick
- **Welding**: Longitudinal butt welding on using CNC.Pole closing machine
- **Grinding**: The grinding work is done to give better surface finish
- **Base Plate Fitting**: Base Plates are welded at the bottom of the Pole Shaft to convert them into pole
- **Door Fitting**: Doors are fitted generally at 500mm projection of the Base Plates to place all the electrical accessories inside the Pole Shaft
- **Galvanization**: Galvanization done by seven tank process in single hot dipping method. Our Zinc bath of 12.25m (L) X 1.50m (W) X 1.25m (D) is capable of single hot dip galvanizing which ultimately gives better finish
- **Straightening & Finishing**: Straightening of pole done after galvanization with the help of straightening machine. Final finishing and fittings of electrical accessories done after the completion of straightening of the poles
- **Loading and Dispatch**: The loading is done by EOT cranes with trained person for loading. The materials are dispatched after proper loading and complete documentation
Product Range and Application

- **Lighting Mast** - Manufacturing range from 10m to 40m. The Lighting Mast are generally used for outdoor illumination like area lighting, yard lighting etc.
- **Street Lighting Pole** - Manufacturing range starts from 3m and can be manufactured according the customer and location. The Street Lighting poles are generally used for road and street illumination purposes.
- **Decorative Lighting Pole** - The manufacturing range starts from 3m and can be manufactured as per customer's requirement. This type of poles are used for decorative illumination in gardens, monuments, shopping complexes etc.
- **Camera Pole** - Can be manufactured as per customer's requirement. This type of poles are used for CCTV surveillance, toll plaza etc.
- **Irrigation Pole** - Can be manufactured as per customer's requirement. This type of poles are used for distribution of electricity.
- **Flag Mast** - Manufactured as per customers' requirement.
- **Bamboo Pole** - Can be designed as per technological requirement with arrangement for hanging of all types of electrical and electronic devices.
## Technical Data & Drawings

**Design & Detailed Engineering**
- Design, Structural and civil
- Drawing, Structural Diesel and electrical
- In-house capability for designing the mast structure and its electrical accessories
- Project planning and execution

### Dimension of Standard Polygonal Lighting Mast

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<th>Srl. No.</th>
<th>Mast Height (m)</th>
<th>Section Details</th>
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<th>Sheet Thickness</th>
<th>Base Plate Details</th>
<th>Foundation Bolt Details</th>
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*Note: Dimensions are subject to change based on the location of mast installation, Luminary Type, Number, Distribution, Soil Condition, Design Life etc.*
### Dimension of Standard Polygonal Lighting Pole

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Pole Height</th>
<th>Section Details</th>
<th>Base Plate Details</th>
<th>Foundation Bolt Details</th>
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Note: Dimensions are subject to changes based on the location of pole installation, conformity to site, materials, and local conditions. Design, Art etc.
In our extensive range of products, we also offer our esteemed clients a broad array of Conical Poles. These poles are manufactured with the help of the latest technology. Our offered poles are provided with hollow polygonal poles having closely circular cross section at both ends and mainly used for street, roadways, pedestrian lighting purposes. Further, these Conical Poles are available in following specifications as per our clients’ requirement at market-leading prices.
### Dimensions of Conical Poles

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<th>SL</th>
<th>Ht (cm)</th>
<th>Thk (mm)</th>
<th>Top Aft (mm)</th>
<th>Bot Aft (mm)</th>
<th>Base Plate</th>
<th>Pcd</th>
<th>Foundation Bolt</th>
<th>Door Length (Opening)</th>
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**Note:** Dimensions are subject to change based on the location of net installation, Luminary Type, Number, Distribution, Soil Condition, Design Life etc.
Quality Benchmarking

Quality Objectives:
Increase customer satisfaction, reduce quality complaint
Increase productivity, maximum utilisation of existing
resources, increase sales turnover.

In-house Testing:
Raw material testing:
- Hardness: By hardness tester
- Mechanical properties: By Universal Testing Machine
  (200 KN & 500 KN)
- Chemical composition: By Spectrometer
- Grain Structure: By Metallographic Microscope
- Dimensions test: With Steel tape, vernier, Micrometer
- Galvanizing Coating uniformity & adhesion: With digital
  salt meter, CuSO₄ solution, uninetc,
- Winch (gear box) load and alignment test: On load
  testing bed
- Wire rope: On load testing bed
- Cables continuity test: By Multi-meter & Megger
- Fatigue test: By physical test at works only
  before dispatch
- Motor test: Reverse/forward test on testing bed
- Feeder/filer & Control Panel testing: On/Off
  through timer, reverse/forward, load test on test bed

Quality Objective
- Increase in Customers’ Satisfaction
- Reduce Quality Complaint (both internal & external)
- Quick delivery of products
- Increase in sales turnover
- Increase in productivity
- Improvement in competence of personnel
- Maximum utilisation of existing resources
- To establish a brand image in the market
Corporate Social Responsibility

We, at Utkalsh are to engage in the continual improvement of the occupational health, safety and environment to achieve this the forerunners of the company comply by certain policies,

- Endeavouring to develop the culture of resource conservation and pollution prevention
- Providing expert training and programmes to the concerned personnel who are directly associated with the manufacturing process in the company
- Respecting the mother nature and controlling environmental health hazards
- Work as a team in our effort to achieve the objectives of the company

Esteemed Clientele

Utkalsh could win its customers’ confidence and achieve steady growth due to certain inherent strengths and special precautions which enabled the company to take timely corrective actions whenever any hurdle arises and the situation warranted.

- INDIAN RAILWAY
- PORT TRUST
- REFINERIES AND OIL SECTOR
- STEEL PLANTS
- NATIONAL HIGHWAY
- MUNICIPAL CORPORATIONS & DEVELOPMENT AUTHORITIES
- POWER PLANTS AND POWER DISTRIBUTION AUTHORITIES
- MILITARY ENGINEERING SERVICES
- CPWD & PWD
- DEVELOPERS & CONSULTANTS
- CORPORATES AND ELECTRICAL CONTRACTORS
Some Important Projects

- SFC of High Mast Lighting at NTPC Project at NTPC Ltd., Ranchi and NTPC Ltd., Karimaka
- SFC of High Mast Lighting for South East Central Railway at Bhatakara, Dug and Raipur
- SFC of High Mast Lighting for Southern Railway at Chennai and Thrissur
- SFC of High Mast Lighting for North Western Railway at Patiala
- SFC of High Mast Lighting at Chennai Trade Centre, Chennai for CPWD
- SFC of High Mast Lighting at Noonmati, Guwahati for Indian Oil Corporation Ltd.
- SFC of High Mast Lighting at Tupi, New Delhi for NCOC Ltd.
- SFC of High Mast Lighting at Vidyanagar University, Medipally, West Bengal
- SFC of High Mast Lighting at KRIBCO, Surat

Some Major Supply

- Supply of Lighting Mast and Polygonal Lighting Poles to CMR Projects Ltd., in New Delhi for the extension and modernization project of Delhi International Airport
- Supply of High Mast for the CPWD Project of Indo-Pak Border Lighting at Wagah Border, Amritsar, Punjab
- Supply of Street Lighting Poles for the project of FIFA World Cup 2016 at Vivekananda Yuba Bhawan, Kharagpur, Kolkata under WB PWD
- Supply of High Mast at Pathway School, Gurgaon
- Supply of High Mast and Street Lighting Poles to the different NIDCO projects at Kolkata, Kanpur, Bhopal, Sambalpur, Jharsuguda, Osmanabadd and Amritsar
- Supply of Lighting Mast & Polygonal Street Lighting Poles to Delhi Metro Railway project
- Supply of Lighting Mast to the projects of Municipal Corporation of Delhi and Delhi Development Agency
- Supply of Lighting Mast & Polygonal Street Lighting Poles to JDA & MCDA Projects at Rajasthan
- Supply of Lighting Mast & Polygonal Street Lighting Poles to different projects under MIBC at Maharashtra
- Supply of Lighting Mast & Street Lighting Pole to WSB IDCO projects & PWD projects in West Bengal