

Our Ref: 3/2018-

Date:

**Messrs.**

Dear Sir,

**TENDER No. (3/2018)**  
**Galvanized Steel Tubular Poles**

You are kindly requested to quote for the supply and delivery of hot dip Galvanized Steel Tubular Poles in the attached specifications and schedules **D.D.P** to our stores in Shufat.

IEC recommendation for workmanship, equipment and materials has been selected in this specifications as a base of reference standards and specifications of other countries.

Our company does not bind itself to accept the lowest or any tender nor to assign any reason for the rejection of any tender, nor to purchase the whole of the equipment and materials specified.

All correspondences in connection with this tender and all matters accompanying the tender who is relevant to its examinations shall be in English language and expressed in metric units.

**Essential Bidding Requirements:**

- A bank certified check or a bank guarantee of 5% of the total tender valid for 90 days, to be submitted as a bid bond, otherwise, quotation will be neglected.
- Quotation should be enclosed in a sealed envelope or package and handed over to the "Tender Committee" by the representative of the bidder or their agent not later than **February 15<sup>th</sup> 2018, at 11:00 AM.**
- TENDER DOCUMENTS FEES: 1000 US\$. A proof of payment should be sent by email to : [rnashashibi@jdeco.net](mailto:rnashashibi@jdeco.net).
- The main offer envelope or package should include three separate envelopes as follow :
  - a. The financial offer in a separate sealed envelope.
  - b. The technical offer & catalogues placed in a separate sealed envelope.
  - c. Your bid bond in a separate envelope.
- Technical offer will be studied separately from the financial offer. The financial offers for bidders whose technical offers do not meet JDECO's technical requirements will not be opened.

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- In case offers are submitted by an agent on behalf of a certain supplier, a copy of the agreement between the agent and the supplier must also be submitted. Such copy has to be authenticated and certified by the chamber of commerce at the supplier's country of origin.
  - Offers have to be attached with a letter confirming the authorized persons signing on behalf of the bidder.

*Any bid package not according to the above will not be considered.*

**Payment method:**

**30 days after delivery of goods through cash against documents.**

*Yours faithfully*

*Hisham Omari  
Managing Director*

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## **TECHNICAL SPECIFICATION FOR HOT DIP GALVANIZED STEEL TUBULAR POLES FOR OVERHEAD POWER LINES**

### **1. SCOPE :**

This specification covers the general requirements towards design, manufacture, testing at manufacturer's works, supply and delivery for galvanized tubular steel poles of circular cross section for overhead power lines.

### **2. Topography and Climatic Condition**

The materials offered, shall be suitable for operation in tropical climate and will be subjected to the sun and inclement weather and shall be able to withstand wide range of temperature variation. For the purpose of design, atmospheric temperature may vary from -5 to 40 °C with humidity nearing saturation.

### **3. Materials**

The materials used in construction of tubular steel poles shall be of the tested quality of steels of minimum tensile strength of 410 MPa.

Swaged poles shall be made of seamless or welded tubes of suitable lengths swaged and joined together. No circumferential joints shall be permitted in the individual tube lengths of the poles. If welded tubes are used they shall have one longitudinal weld seam only; and the longitudinal welds shall be staggered at the each swaged joint.

Swaging may be done by the mechanical process. The upper edge of each joint shall be chamfered off at an angle of about 45°.

### **4.FREEDOM FROM DEFECTS**

Poles shall be well finished, clean and free from harmful surface defects. Ends of the pole shall be cut square. Poles shall be straight, smooth and cylindrical.

### **5. TOLERANCES**

**5.1 Outside diameter:** The poles shall be as nearly circular as possible and their outside diameter shall not vary from the appropriate value, except at the joint or step, by more than  $\pm 1.0$  percent.

### 5.2 Thickness

- In the case of welded tubes, its thickness shall not fall below the thickness specified by more than 10 percent.

### 5.3 Length

- the tolerance on the length shall be as follow :  
On the length of any section :  $\pm 40\text{mm}$   
On the overall length of poles :  $\pm 25\text{mm}$

### 5.4 Weight

- The mean weight for bulk supplies shall be not more than 5 percent below the calculated value. The weight of any single pole shall not fall below the calculated weight by more than 10 percent.

### 5.5 Straightness

- The finished pole shall not be out of straightness by more than 1/600 of its length.

## 6. PROTECTION AGAINST CORROSION

- The pole shall be Hot Dip Galvanized (inside & outside) having minimum mass of zinc coating 400 gms per m<sup>2</sup> as per IS: 2633/1972.

## 7. Earthing Arrangements & Holes

- For earthing arrangement a through hole of 14mm diameter shall be provided in each pole at a height of 300mm above the planting depth. An MS nut suitable for a bolt of 5/8" is to be welded in the hole.
- Another 4 holes 16mm diameter shall be provided in each pole, the first two holes 100mm from the top of the pole, the other two holes 220mm from the top of the pole, each two holes shall be counteractive. The first two holes shall perform a cross with the other two holes.
- The required holes for galvanizing purpose shall be provided in each pole.

## 8. PRINCIPAL PARAMETERS

NO.	Item Description	Item 1	Item 2
1	Type of Pole	6" tubular Pole	8" tubular Pole
2	Overall length (m)	10	10

3	Planting Depth (m)	1.5	1.5
4	Load Applied from top at a distance of (m)	0.6	0.6
5	Height above ground (m)	8.5	8.5
6	Length of sections (m)		
	Bottom	5.5	5.5
	Middle	2.5	2.5
	Top	2.5	2.5
7	Joint overlapping length (mm)	250mm	250mm
8	Outside Diameter		
	Bottom	168	228
	Middle	140	168
	Top	114	140
9	Thickness of section (mm)		
	Bottom	4.76	4.76
	Middle	3.96	4.76
	Top	2.96	3.65
10	Approx. Wt. of pole(KG)	160	225
11	Galvanizing	The complete pole shall be Galvanized as per IS: 6745/1972.	The complete pole shall be galvanized as per IS: 6745/1972.
12	Max load – KGF	250-DAN	500-DAN

**Note:** Any Other suggested design for the above poles can be submitted as alternative design remaining two fixed parameters (Length & max load).

### 9. Price & Quantity

Item No.	Description	Quantity	Unit Price – DDP	Total Price-DDP
1	6" –Steel Galvanized tubular Poles	2000		
2	8" –Steel Galvanized tubular Poles	700		
			Total Price - DDP	

**Delivery time:** \_\_\_\_\_ weeks

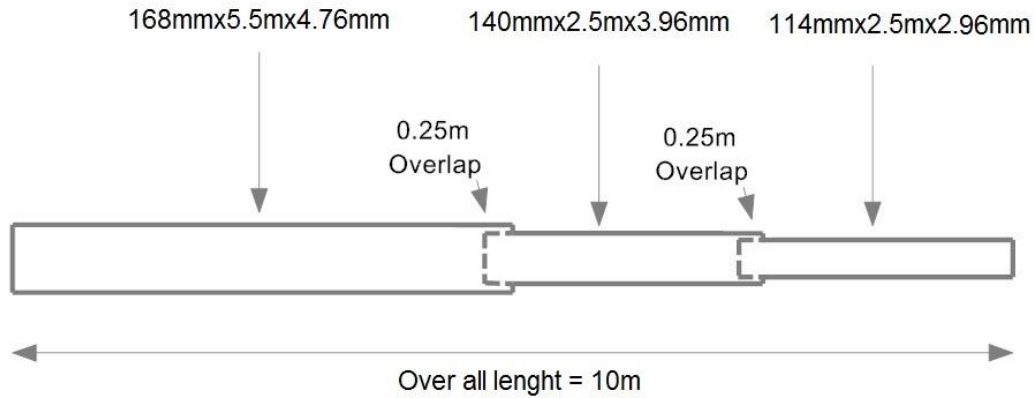
## **10. Tests and Test Certificates :**

- The following tests shall be conducted on finished poles :
  - A. Tensile test and chemical analysis for sulphur and phosphorous ,
  - B. Temporary Deflection test.
  - C. Permanent set test.
  - D. Drop test.
- In addition to above, verification of pole's dimensions as per IS: 2713 (Part-III): 1980 shall be carried out during acceptance of lots.
- Tests shall be carried out before supply of each consignment at the Manufacture.
- Works and test certificates should be submitted to the purchaser for approval prior to delivery.
- Purchaser reserves the right to inspect during manufacturing and depute his representative to inspect/test at the works.
- If any extra cost is required for carrying out the above specified tests, it should be mentioned by the tenderer.

## 11.0 drawings

### Item 1:

#### 6" - Pole -250DAN



### Item 2:

#### 8" - Pole - 500DAN

