

MORMUGAO PORT TRUST
ENGINEERING MECHANICAL DEPARTMENT

Quotation no.CME/XEN(E-H)/H1/004



An ISO 9001 : 2008 Port
ISPS CODE Compliant

QUOTATION
FOR
REFURBISHING OF 1 NO. 30 MTR. HIGHMAST

Due at **3.00PM** on **30.03.2017**

Website : www.mptqoa.com

MORMUGAO PORT TRUST
ENGINEERING MECHANICAL DEPARTMENT

Quotations are invited in a sealed cover in single cover system duly superscribed as
QUOTATION FOR “REFURBISHING OF 1 NO. 30 MTR. HIGHMAST”.

Details about Quotation:

Quotation invited by	CHIEF MECHANICAL ENGINEER, MORMUGAO PORT TRUST
Quotation No.	<u>CME/ XEN(E-H)/H1/004</u>
Name of Work	Refurbishing of 1 no. 30 Mtr. Highmast
Document Cost	Rs.500/- in the form of DD from Nationalized/Scheduled Banks in favour of the Financial Advisor & Chief Accounts Officer, MPT, payable at Vasco, Goa to be submitted along with the quotation, otherwise the offer <i>shall not be considered.</i> (<i>Quotation Document Fee is not refundable</i>)
Security Deposit	10 % of the contract value will be deducted from the final bill towards Security deposit.
Completion Period	The work should be completed within 3 WEEKS from the date of receipt of the work order.
Liquidated Damages	For delay in supply/work Liquidated Damages, equivalent to 1% of the total contract value/per week or part thereof subject to maximum 10% are liable to be deducted from any moneys due or become due to the Contractor
Payment terms	100% payment shall be made within 15 days after satisfactory completion of work on producing invoice complete in all respect. The contractor shall furnish their bank account number PAN card, MICR number Name of the Branch along with Bill for arranging payment made through E.C.S. by the Trust.
Bid Validity	60 Days from the date of opening of the quotation.
Guarantee Period	One year from the date of taking over of the work.
Date of submission of bids	30.03.2017 till 15:00 Hrs.
Date of Opening of bids	30.03.2017 at 15:30 Hrs
Address for communication and submission of bid:	Suptdg. Engineer (E-Hr), Engineering Mechanical Dept., Mormugao Port Trust, Electrical Section, 1 st Floor, Mormugao, Goa – 403804.
Contact Details	Phone :0832-2594215 : Email : melchior_teles@yahoo.co.in
Website	www.mptgoa.com

CHIEF MECHANICAL ENGINEER
MORMUGAO PORT TRUST

SCHEDULE – “A”

1. **General**

Mormugao Port Trust proposes to refurbish 1no. 30 Mtr. existing highmast accessories i.e. head frame, winch drum, lantern carriage and wire rope are deteriorated due to wear and tear, except the basic structure comprising of telescopic booms which is in good condition, therefore mast will be reused after refurbishing and installation of new accessories.

2. **Scope of Work**

The Scope of work involves

1. Dismantling of existing highmast with all accessories from the RCC foundation.
2. Removing of Head frame, winch drum, trailing cable, wire rope from the highmast.
3. Supply and installation of new Head frame, double lantern carriage, Double drum winch, 5 core X 4 sq.mm. trailing copper cable, SS wire rope 8 mm suitable for existing highmast.
Make : BP / PHILIPS / BAJAJ
4. Erection and commissioning of 30 Mtr. highmast on the existing RCC foundation with all new accessories and duly assembling on the mast including Luminaries, Control Gear, control wiring, etc. (Luminaries and control gear boxes will be supplied by the Port.)
5. The bidder shall inspect the site and assess the work involved in detail. The bidder shall take into account any fittings, accessories, apparatus, modifications or any other works not specifically indicated in the tender but otherwise essential for overall completion of the work before submitting his offer and the same shall be deemed to have been included in the scope of supply. All the work shall be carried out as directed by Engineer in charge. However, the work shall be executed as per IER ,relevant IS, Safety and prevailing statutory regulations

3. **TECHNICAL SPECIFICATION**

3.1. **Head Frame**

M.S. fabricated hot dip galvanized housing using IS2062 grade steel accommodating 6 CA pulleys with stainless steel pins for the suspension wire ropes and upto 3 such smaller pulleys for the electrical cables. Pulleys are grooved suitably to ensure that the wire ropes/cables do not get dislodged from their positions while raising / lowering. Self-lubricating bearings and stainless steel shaft shall be provided for smooth and maintenance free operation throughout the mast life.

The head-frame shall be made in three compartments placed 120 degree apart for most optimum balancing of lantern carriage. Head frame shall have top canopy in tripod shape to protect the mast from entry of water / solid particles etc from the top.

Top canopy shall have provision for fixing lightning arrestor of suitable design.

3.2. Lantern Carriage

A fabricated MS hot dip galvanized lantern carriage shall be provided for mounting of luminaire arm assemblies. The lantern carriage shall be made of specially designed square steel tube having a three-piece construction. The flanges shall be jointed at site by stainless steel bolts and nuts. Inner side of the lantern carriage shall be provided with a separate guide ring with rubber padding to protect the mast surface while raising and lowering of the lantern carriage. The diameter of the lantern carriage shall not be less than 1200mm.

3.3. Luminaire Arm Assembly

Luminaire arm assembly shall be fabricated MS hot dip galvanized to be fixed on the lantern carriage for mounting of luminaries and CG Boxes. Each arm shall be suitable for accommodating up to 2 nos suitable flood lighting luminaries and their CG boxes.

3.4. Suspension Wires

Three-wire suspension assembly to the lantern carriage shall be made of 8 mm dia stainless steel wire rope. No joints shall be allowed in any length of the wires as per grade of construction AISI316,7/19. The ends of the wire rope shall be suitably secured in the winch block with thimbles.

The wires from compensating disc to the double drum winch shall be made of 8 mm dia stainless steel wire rope of the same grade as above.

Breaking load capacity of each wire rope shall not be less than 2100kg with a factor of safety not less than 5.0. The Manufacturer Test certificate for the rope shall be produced.

3.5. Double Drum Winch

The double drum winch with double gear shall be completely self sustaining type without the need for brake shoe, springs and clutches. The winch shall have self lubrication mechanism by means of an oil bath. **The winch assembly shall have simultaneous and reversible operation of double drum winch with double gear.** The gear assembly shall be essentially made of phosphor bronze for optimum design life.

The gear ratio shall be 53:1 and safe working load capacity shall not be less than 750 kg. for masts of height 16m and above.

The winch drums shall be grooved to ensure perfect seat for stable and tidy rope lay with no chances of slipping of ropes. The rope termination in the winch shall be such that distortion or twisting is eliminated and at least 5 to 6 turns of rope remain on the drum even when the lantern carriage is at fully lowered position. It should be possible to operate the winch manually by a suitable handle or by an integral power tool. It shall be possible to remove the winch after dismantling it from its mounted position and re-fix it through the door opening.

Type test certificate for similar type of Winch manufactured be submitted by the successful bidder.

3.6. Electrical Hoist Cables

The electric cable shall be 2 x 5 C X 4.0 sq.mm. round type made of strands of plain copper wires ATC conductor, EPR insulated, Cotton braided and PCP outer sheathed black cable and flame retardant to get flexibility and endurance with Rodent proof coating, core identification in accordance with VDE 0293 or equivalent.

The cable shall be highly flexible for optimum design life and the bending radius shall be not more than 60mm and VDE (or equivalent) approved for hoist applications.

The trailing cable to the high mast shall be rodent proof.

3.7. Raising and Lowering Mechanism

The high-mast shall have an optimally balanced system for raising and lowering of the Luminaries and control gear boxes for regular maintenance work. The same shall be provided by means of a double drum winch **with double gear** fixed at the base, 3 wire suspension wire ropes and safety wires, a specially designed 6 pulley head frame assembly. The winch mechanism shall be suitably connected to “fixed 3 phase, 415 V Electric Motor” and is operated through forward and Reverse for raise/lower the lantern carriage.

4. INSTALLATION AND COMMISSIONING

Installation and commissioning of 30 Mtr. highmast on the existing RCC foundation with all new accessories and duly assembling on the mast including Luminaries, Control Gear boxes etc. (Luminaries and control gear boxes will be supplied by the Port.

All the materials required for the installation and commissioning at site including the material for civil works will be supplied by the Contractor.

Note:The supplier must quote strictly as per ‘schedule A1’.

5.0 GENERAL TERMS AND CONDITIONS

5.1. Validity:

The validity period for the offer shall be 60 days from the date of opening of the quotation.

5.2. Price:

The offered rates shall be inclusive of all taxes and duties. Service Tax shall be paid as applicable. If, any new tax will be imposed by State / Central Govt. and same will be reimbursed on producing documentary proof.

5.3. Security Deposit:

10 % of the contract value will be deducted from the final bill towards Security deposit. This Security Deposit shall be converted to Performance Guarantee during the guarantee period.

5.4. Completion Period:

The entire work shall be completed within **THREE WEEKS** from the date of receipt of work order.

5.5. Guarantee Period:

The Contractor shall give the guarantee for a period of one year from the date of taking over of the work. Any defect observed during the guarantee period, the same shall be replaced by the Contractor, free of cost. However, The Security Deposit shall be converted to Performance Guarantee during the guarantee period.

5.6. Payment Terms:

- i) 100% payment shall be made on within **15 days** after satisfactory completion of work on producing invoice complete in all respect.
- ii) The contractor shall furnish their bank account details for the payment through ECS by the Trust. A copy of the PAN card, Service Tax Registration no., EPF& ESI shall be furnished. MICR number Name of the Branch along with Bill for arranging payment made through E.C.S. by the Trust.

5.7. Liquidated Damages:

In the event of failure by the contractor to complete the execution of the work within the time stipulated in the contract or by the expiry of any period of extension granted by the Board's terms thereof, the contractor shall pay the Board as Liquidated Damages for delay to complete the work, a sum of 1% of contract price per week or part thereof subject to a maximum of 10% and the Board shall have the power to deduct this amount from the payment of the amounts due to the contractor or from his deposit.

5.8. Other terms and conditions

- i) All tools and tackles shall be arranged by the Contractor at their own cost.
- ii) The Bidders is advised to visit the site and get acquainted regarding the nature of the work involved at site conditions before quoting the rate.
- iii) The technical specification Schedule 'A' and Schedule of prices and quantities Schedule 'A1' to be read in conjunction to ensure the actual supply and works involved.

- iv) Necessary Entry passes shall be obtained by the Contractor at their own cost with the approval of Port Officials.
- v) Crane will be supplied by the Port free of cost based on prior request from the Contractor. However other logistics and labour is in the Contractor's scope.
- vi) The Trust will not be responsible for any loss or damage of the men/materials/tools/plants engaged by the firm during the work at site or transportation.
- vii) The Contractor shall take utmost care during the execution of the work, if any damage to Port property, the cost of the damage shall be deducted from the Contractor's bill. Also other unused/surplus materials after completion of work should be handed over to the Port. The debris after completion of work to be fully cleared and returned to MMs scrap yard or as instructed by Engineer in charge
- viii) The power supply shall be provided by the Port on free of cost for execution of the work, however, the Contractor shall take power supply from the nearest source by their own arrangement.
- ix) Address for communication and submission of bid: Suptdg Engineer (E-Hr), 2nd floor A.O. Bldg, Headland Sada, Engineering Mechanical Dept., Mormugao Port Trust, Mormugao, Goa – 403804. Phone: 0832-2594215 and Mobile: +919923461858
- x) Further amendments if any, visit our Website www.mptgoa.com

CHIEF MECHANICAL ENGINEER

SCHEDULE – “A1”

PRICE SCHEDULE

Sr No	Description	Unit	Qty	Unit Rate in (Rs.)		Amount in (Rs.)
				In fig.	In words	
1	Supply of Headframe for 3 wire rope system suitable for existing highmast.	No	1			
2	Supply of Double Lantern Carrier ring with 8 arms suitable for existing highmast.	No.	1			
3	Supply of SS wire rope 8mm dia 3 lengths for lantern carrier and 2 lengths for winch drum suitable for existing highmast	LS	1			
4	Supply of Double drum winch with mounting brackets and 2 HP motor operating tool. suitable for existing highmast	No.	1			
5.	Supply of 5C X 4 Sq.mm. copper flexible ERP cable suitable for existing highmast	LS.	1			
6	Dismantling Installation and commissioning of Highmast as per scope of work.	No.	1			
Total						

(In Words Rupees _____
 _____ only)

Date:

Signature:

Place:

Name:

Address:

Office Seal of firm

Note: The offered rates shall be inclusive of all taxes and duties. Service Tax shall be paid as applicable.