



ODISHA POWER TRANSMISSION CORPORATION LIMITED

**OFFICE OF THE DEPUTY GENERAL MANAGER (ELECTRICAL)
E.H.T. (CONSTRUCTION) DIVISION, JHARSUGUDA**

**TENDER SPECIFICATION
FOR
TENDER CALL NOTICE No. 07/2021-22**

“Supply of 116 nos of Single Tension Hard ware fittings suitable for 120 KN Disc insulator (ACSR Panther Conductor) for Construction of 132 KV Hirakud LILO Line and 132 KV D/C Lapanga-Brajrajnagar line.”

COST OF TENDER PAPER: - Rs. 2000/- + 12% GST.



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ODISHA POWER TRANSMISSION CORPORATION LIMITED
(A Government of Odisha Undertaking)
E.H.T. (C) DIVISION, JHARSUGUDA
AT-Budhipadar, PO: H.Katapali, Dist-Jharsuguda-768202
E-mail: ehtc.div.jsg@optcl.co.in

TENDER CALL NOTICE No. 07/2021-22, DT. 22.09.2021

1. Name of the Work : **“Supply of 116 nos of Single Tension Hard ware fittings suitable for 120 KN Disc insulator (ACSR Panther Conductor) for Construction of 132 KV Hirakud LILO Line and 132 KV D/C Lapanga-Brajrajnagar line.”**
2. Period & Time of Sale of Tender paper: **From 24.09.2021 to 08.10.2021 (During Office Hours on working days)**
3. Last date & time of receipt of tender paper: **08.10.2021 up to 12.00 Noon**
4. Date & Time of Opening: **08.10.2021 at 3.00 PM.**

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AT-Budhipadar, PO: H.Katapali, Dist-Jharsuguda-768202
E-mail: ehtc.div.jsg@optcl.co.in

TENDER CALL NOTICE NO: 07/2021-22, dt. 22.09.2021

Sealed tenders are invited from reputed manufacturers / order suppliers having valid GST Registration, for SUPPLY OF 116 NOS OF SINGLE TENSION HARD WARE FITTINGS SUITABLE FOR 120 KN DISC INSULATOR (ACSR PANTHER CONDUCTOR) FOR CONSTRUCTION OF 132 KV HIRAKUD LILO LINE AND 132 KV D/C LAPANGA-BRAJRAJNAGAR LINE.

Sl. No.	Tender Call Notice No.	Consignee	Cost of Tender Paper	EMD
1	06/2021-22	SDO, EHT(C) Sub-Division, Jharsuguda.	Rs. 2000/- + GST @ 12%= Rs. 2240/-	NIL

The tender specification for the same shall be obtained from the Office of the undersigned on payment of requisite amount (non-refundable) in shape of cash / Demand Draft / Pay Order in favour of EHT CONSTRUCTION DIVISION OPTCL JHARSUGUDA & payable at Jharsuguda. The bid will be opened in presence of Bidders or their authorized representative (one person only) with original authorization letter, if present during opening of tender. **Incomplete Tenders shall be rejected.**

Date of Sale of Tender Paper: From 24.09.2021 to 08.10.2021 (During Office Hours)
Last Date of receipt of Tender Paper: 08.10.2021 up to 12.00 Noon.
Date of Opening of Tender Paper: 08.10.2021 at 3.00 PM.

If the last date of receipt/opening of Tender falls on a Holiday, then the tender paper will be received/ opened in the next working days.

The undersigned reserves the right to accept or reject any or all tenders without assigning any reason thereof.

Sd/
Dy. General Manager (Elec)
E.H.T. (Const) Division, OPTCL,
Jharsuguda

SECTION – II
INSTRUCTIONS TO TENDERERS

1. Sealed Tenders complete with all details with the declaration form duly signed by the tenderer are to be submitted in the office of the Dy. General Manager (Elec), EHT (Con) Division, OPTCL, Jharsuguda in sealed covers super scribed with the relevant tender number and due date of opening as indicated in the tender notice as well as on the cover page of this specification.
2. The Authority may alter the quantities of material at the time of placing purchase orders. Purchase Orders may also be split up among more than one bidder.
3. Tenders will be opened in the office of the **Dy. General Manager (Elec), EHT (Con) Division, OPTCL, At-Budhipadar, Po-H.Katapali, Dist-Jharsuguda - 768202 at 3.00 PM** on date prescribed in the Tender Call Notice in the presence of the tenderers or their authorized representatives who may be required to produce their letter of Authorization, failing which they may not be allowed.
4. Only those who have purchased the copy of relevant tender paper can only submit their tender. Tenders submitted by others will be rejected.
5. The Authority reserves the right to reject the lowest or any other tenders or all the tenders without assigning any reason what so-ever if it is considered expedient in the overall interest of OPTCL.
6. The tender should be submitted in person or by Registered post with A.D. Any other means of delivery shall not be accepted. When submitted by post, postal delay shall not be entertained. When delivered in person, the tenders shall be received by a responsible officer of the office of the tender issuing Authority who shall officially acknowledge the receipt of the same.
7. Tenders received after due date and time shall be returned un-opened. Telegraphic or Fax Tenders shall not be accepted under any circumstances.
8. **EARNEST MONEY DEPOSIT:-** NIL.
9. **VALIDITY OF OFFER :-** The offer should be firm and valid for a period of at least 180 days from the date of opening of tenders, unless the tender will be out rightly rejected.
10. The tenderer must fulfill the following requirements and submit copies of the documents in support of the same along with their Tender.
 - I. Valid GST & PAN No. in favour of the tenderer.
11. Bidders must quote their price in line with the specification and conditions. Any deviations from the above shall be considered as an alternate bid. Bids will be evaluated based on the main offer only.
12. **Corrections, Over-writings and illegibility:** Tender with over writing, erased, illegible rates or rates are not shown in figures and words in English will be liable for rejection. Total of item and grand total of whole tender be clearly written.
 - Correction in the tender, if un-avoidable, should be made by re-writing with dated initial of the tenderer after scoring out wrong entries, clerical and arithmetical mistakes may result in the rejection of the tender.
 - In the event of discrepancy or arithmetical error in the schedule of price the unit price shall prevail and the purchaser shall accordingly correct the total price. The above arithmetical correction shall be accepted but the decision of the OPTCL shall be final and binding on the tender.
 - For evaluation, the price mentioned in word shall be taken if there is any difference in figures and words in the price bid.

- The quoted price should be kept valid for 120 days from the date of opening of the tender. Bidders are requested to quote Firm price only.
- Each page of the tender document shall be signed and sealed with official rubber stamp by the tenderer.
- Price quoted should be inclusive of all taxes and duties.

SECTION- III

GENERAL CONDITIONS OF CONTRACT.

1. **Scope:** - The scope of the contract shall be to design, manufacture, supply of materials/ equipments as per the specification and drawing at the consignee's site and rendering services in accordance with the enclosed technical specification and bill of quantity. The Single Tension Hardware fittings should be suitable for 120 KN Disc insulator for ACSR Panther Conductor.
2. **Drawing & Descriptive Literatures:** -Out line drawings and descriptive literatures of materials should accompany the tender giving full details of the stores to be supplied.
3. **Standards:** - The materials should conform to the latest publications of relevant I.S.S.
4. **Guarantee:** - The materials should be guaranteed for satisfactory operation for a period of at least 18 months from the date of supply or 12 months from the date of use whichever is earlier. Any defect noticed during the period should be rectified by the supplier free of cost provided such defects are found to be due to faulty design, bad workmanship or bad materials used. Otherwise the security deposit shall be forfeited.

The tenders should guarantee the following among other things.

- i) Quality and strength of materials used.
- ii) Safe mechanical strength of all parts of materials as required under relevant I.S.S.
- iii) Satisfactory operation during guarantee period.

5. **Price:**

The price should be FIRM, for delivery of at **132/33 KV Grid Sub-Station, Brajrajnagar** including packing, forwarding, freight, insurance and taxes. The break-up of FOR destination price as per schedule of prices at Annexure-VI must be submitted along with the tender. Any price other than FOR destination price as mentioned above shall not be considered.

6. **Terms of Payment:**

The terms of payment for the stores covered by the specification are:- 100% of the total contract value of the material delivered with the GST shall be paid within one month subject to funds received from Hqrs. Office after receipt of materials with relevant documents at site in good condition after due approval of Guarantee Certificate and Test Certificates. TDS shall be deducted as applicable under GST laws.

7. **PRICE REDUCTION SCHEDULE:**

The price reduction schedule shall be imposed @0.5(Half)% of contract price for each calendar week of delay or part thereof subject to maximum of 5(Five)% of contract amount , if the materials are not delivered within the stipulated completion period in complete shape.

8. **Security Deposit:**

The successful tenderer shall be required to deposit a sum amounting to 3% of the contract value in any of the approved forms viz: Demand Draft / Bank Guarantee. Security Deposit offered in shape of Bank Draft should be made payable to the “**Dy. General Manager (Elec), EHT (Con) Division, OPTCL, Jharsuguda**” and Security Deposit offered in other forms of securities should be paid in favour of **EHT CONSTRUCTION DIVISION OPTCL JHARSUGUDA** and payable at Jharsuguda. The security deposit will be refunded only after completion of guarantee period and after adjustment of any dues. The security deposit not claimed for refund within a period of three years after completion

of the guarantee period will be forfeited. No interest shall be paid by OPTCL on the security deposit.

9. **Inspection:** -The stores will be inspected by the Inspecting Officer authorised by this office from time to time prior to their dispatch to destinations or the materials will be verified at the destination by OPTCL Authority. Intimation about readiness of materials for inspection and dispatch should be intimated at least 5 days in advance. The Supplier shall offer all facilities to the Inspecting Officer for such inspection at their works. If the Purchaser has reasons to doubt the adequacy of the Suppliers testing facilities, the tests may be conducted at any other test house approved by the Purchaser. Cost of such testing shall be borne by the Supplier.
10. **JURISDICTION OF THE HIGH COURT OF ODISHA:** Suits, if any, arising out of this contract shall be filed by either party in a Court of Law to which the jurisdiction of the High Court of Orissa extends.
11. **GST & PAN No:** - GST registration certificate & PAN No should be enclosed with the tender.
12. **Right to Reject / Accept any Tender:** - The purchaser reserves the right either to reject or accept any or all tenders. Orders may also be split up between different tenderers in individual merit of the tenders. The purchaser has exclusive right to alter the quantities of materials at the time of placing final purchase order. After placing of the order the purchaser may defer the delivery of the materials. It may be clearly understood by the tenderer, that the purchaser need not assign any reason for the above sections.
13. **Rejection of Materials:-**
- In the event any of the equipments/material supplied by the manufacturer is found defective due to faulty design, bad workmanship, bad materials used or otherwise not in conformity with the requirements of the Specification, the Purchaser shall either reject the equipment/material or ask the supplier in writing to rectify or replace the defective equipment/material free of cost to the purchaser. The Supplier on receipt of such notification shall either rectify or replace the defective equipment/material free of cost to the purchaser within 15 days from the date of issue of such notification by the purchaser. If the supplier fails to do so, the Purchaser may:-
- a) At its option replace or rectify such defective equipments/materials and recover the extra costs so involved from the supplier plus fifteen percent and/or.
 - b) Terminate the contract for balance work/supplies, with enforcement of penalty Clause as per contract for the un-delivered goods and with forfeiture of Performance Guarantee/ Composite Bank guarantee.
 - c) Acquire the defective equipment/materials at reduced price, considered equitable under the circumstances.
14. **Contractors/Suppliers responsibility:** Non-withstanding anything mentioned in the specification or subsequent approval or acceptance of the purchase, the ultimate responsibility of the design, materials used and satisfactory performance shall rest with the tenderer.

15. **Cancellation**: In case the supply is delayed partly or fully by more than 3 (three) weeks, the purchaser shall have the right to cancel the purchase order without further notice to the supplier and the supplier shall have no claim to compensation in any ground.
16. **Free Replacement**: Free replacement of materials lost/damaged due to transit shall be made immediately on receipt of the intimation from the consignee/Paying Officer without awaiting for settlement of the claim of bidders with Railway/Lorry/Insurance Company.
17. **SUBMISSION OF PROOF REGARDING MANUFACTURER'S CERTIFICATE / AUTHORISED DEALERSHIP CERTIFICATE, PRICE LIST OF THE MANUFACTURER, PAST EXPERIENCE OF EXECUTION OF ORDER PERFORMANCE CERTIFICATE, TECHNICAL LITERATURE AND DRAWING:**
- Legible Xerox copies of necessary Manufacturer's certificate, valid authorized dealer certificate, Manufacturer's Price list and technical literature etc. should be furnished along with the tender. If required, the firms may be requested to produce such original certificates for verification. The tender shall be accompanied with dimensional drawing and technical literature, leaflets, manuals if any.
18. **Consignee**: -SDO, EHT(Const) Sub-Division, Jharsuguda.
19. **Despatch Instruction**: - The materials shall be dispatched to consignee only with proper packing as per I.S.S. as per despatch instruction mentioned in the purchase order.
20. **Paying Officer**: - Bills in triplicate clearly marked as “**Original**”, “**Duplicate**”, “**Triplicate**”, shall be furnished to the paying officer i.e. DGM (EI), EHT(C) Division, Jharsuguda. The name of the Paying Officer shall be confirmed through Purchase Order.

SECTION - IV

TECHNICAL SPECIFICATION FOR CLAMPS AND CONNECTORS.

- 1) **SCOPE:** This Specification covers design, manufacture, testing at manufacturer's Works, supply and delivery of hardware fittings and other accessories suitable for use in diversion work of **Construction of 132 KV HIRAKUD LILO Line and 132 KV D/C Lapanga-Brajrajnagar line**. The materials to be supplied shall be **CONFIRMING TO ISS AND IEC**. The firm shall submit the samples and test report of standard laboratory along with the drawing of the materials mentioning the details dimensions of different items as mentioned in schedule of quantity. The hardware and accessories offered shall be complete with all components, which are necessary or usual for the efficient performance and satisfactory maintenance. Such part shall be deemed to be within the scope of contract. The AGS type clamps shall have inbuilt AGS clamps/PA Rods.
- 2) **STANDARDS:** The materials covered under this Specification shall comply with the requirement of the latest version of the following standards as amended up to date, except where specified otherwise.

i)	IS:5561 - 1970	Aluminium Clamps and Connectors
ii)	IS:2633	Method of testing of uniformity of coating on zinc coated articles
iii)	IS:2486 Part-II & III	Insulator fitting for overhead power lines with a nominal voltage greater than 1,000 volts
iv)	IS:2121 Part I & II	Conductor accessories for overhead power lines
v)	IS:209	Specification for Zinc.
vi)	BS:916	Specification for Hexagonal bolts and nuts

- 3) **MATERIALS AND DESIGN:** Aluminium and aluminum alloys, malleable iron and forged steel, having required mechanical strength, corrosion resistance and machinability depending on the types of application for which accessories / fittings are needed, shall be employed. In manufacturer of the accessories / fittings, the composition of the aluminum alloys used shall be made available to Employer if required for verification. The materials offered shall be of first class quality, workmanship, well finished and approved design. All castings shall be free from blow-holes, flaws, cracks of other defects and shall be smooth, close grained and true forms and dimensions. All machined surfaces should be free, smooth and well finished.

Metal fittings of specified material for conductor and earth wire accessories and string insulator fittings are required to have excellent mechanical properties such as strength, toughness and high resistance against corrosion. All current carrying parts shall be so designed and manufactured that contact resistance is reduced to the minimum.

Resistance against corrosion even in case of high level of atmosphere pollution.

All hooks, eyes, pins, bolts, suspension clamps and other fittings for attaching to the tower or to the line conductor or to the earth wire shall be so designed that the effects of vibration, both on the conductor and the fittings itself, are minimized.

Special attention must be given to ensure smooth finished surface throughout. Adequate bearing area between fittings shall be provided and point or line contacts shall be avoided.

All accessories and hardwares shall be free from cracks, shrinks, slender air holes, burrs or rough edges.

The design of the accessories and hardwares shall be such as to avoid local corona formation or discharge likely to cause interference to tele-transmission signals of any kind.

- 4) **GALVANISING:** All ferrous parts of conductor and ground wire accessories and insulator hardwares shall be galvanized in accordance with IS:2629-Recommended Practice for hot dip galvanizing of iron and steel or any other equivalent authoritative standards. The weight of zinc coating shall be determined as per method stipulated in IS:2633 for testing weights, thickness and uniformity of coating of hot dip galvanized articles or as per any other equivalent authoritative standards. The zinc used or galvanization shall conform to grade Zn 98 of IS: 209. The galvanized parts shall withstand four (4) dips of 1 minute each time while testing uniformity of zinc coating as per IS:2633.

Spring washers shall be electro galvanized.

5) CLAMPS CONNECTORS

- a) **SCOPE:** This specification covers the design, manufacture, assembly, inspection, testing, packing and delivery of tower accessories, power conductor accessories, earth wire accessories and hardware fittings, suitable for 132 KV line. The material offered shall be complete with all components that are necessary for efficient operation. Such parts shall be deemed to be within scope of the supply whether specifically mentioned or not. Fittings shall conform in all respect to the highest standard of engineering, design, and workmanship and shall be capable of performing trouble free continuous operation.
- b) **CLIMATIC CONDITIONS:** The overall climate is moderate hot, humid, tropical, highly polluted and conducive to rust and fungus growth. The clamps/connector shall be given tropical and fungicidal treatment and shall be capable of satisfactory operation under the hot and humid climatic conditions that would prevail at sites. The climatic conditions are prone to wide range of variation in ambient conditions. The materials offered shall be suitable for installation at any of the switchyards in Odisha.
- c) All casting shall be free from shrinking, blow holes, surface blisters, cavities, cracks, other defects and quality of product shall be uniform throughout. All sharp edges and corners shall be blurred and rounded off.
- d) Assembly shall be designed and manufactured in such a way so as to have minimum contact resistance.
- e) The fittings offered shall be inherently resistive to atmospheric corrosion or be suitable to protect against corrosion both during storage as well as in service.
- f) The clamps/connector shall not cause any damage to the conductor in any way.
- g) All bolts, clamps, etc. shall have suitable locking arrangements to safe guard against vibration and loosening.
- h) No part of a clamp shall be less than 15 mm thick for fittings suitable for ACSR Panther/ Zebra/ Moose conductor.
- i) All ferrous parts shall be hot dip galvanized conforming to IS:2633.
- j) For bimetallic connectors, copper alloy liner of minimum thickness of 2 mm shall be cast integral with aluminum body.
- k) Connectors shall be designed to be corona free in accordance with the requirements stipulated in IS: 5561.
- l) The required bolts and nuts for terminal connector must be hot dip galvanized/stainless steel with suitable check nut.

6) MATERIAL:

The clamps and connectors shall be made of materials listed below:

- a) For connecting ACSR conductor aluminum alloy casting conforming to designation A6 of IS: 617.
- b) Bolts, nuts, plain washers and spring washers for all items: Hot dip galvanized mild steel/stainless steel.
- c) Split pin shall be made of stainless steel.
- d) The clamps shall be designed to withstand the flow of continuous current as follows:
 - ACSR Moose/Zebra/ Panther Conductor- 2000 Amp
 - The temperature rise when carrying full load current shall not exceed 45°C above site ambient temperature of 40°C. The rated current for which the clamp connectors are designed with respect to the specified ambient temperature shall be marked on each component of clamps and connectors.

7) Hardware Fittings:

I. The Single Tension Set consists of the following items:-

- a) Anchor Shackle.
- b) Ball Eye
- c) Tower side arcing horn.
- d) Socket Clevis with R-Type security clip.
- e) Line side arcing horn
- f) Compression type dead end clamp. clip ó 2 Nos.
- g) Line side arcing horns.
- h) Compression type dead end clamps.

II. CLAMP:-

TENSION CLAMPS

- a) The Tension Clamps shall be made out of aluminium alloy and of compression type suitable for ACSR Panther conductor.
- b) The tension clamps shall not permit slipping or damage to failure of the complete conductor or any part thereof at a load less than 90% of the ultimate strength of conductor. The mechanical efficiency of tension / clamps shall not be affected by method of erection involving come / along or similar clamps or tension stringing operation during or after assembly and erection of tension clamp itself. The tension clamp shall be of a design that will ensure unrestricted flow of current without use of parallel groove clamps. The clamps shall be as light as possible.

III. ARCING HORNS:-

- a) Each hardware assembly shall have provision for attaching arcing horns of both adjustable and non/adjustable type across the suspension and tension strings or tower side. However each hardware assembly shall be provided with arching horn of fixed type on line side only.

IV. TESTING OF HARDWARE FITTINGS:

- On Tension hardware fittings only:-

Electrical resistance test for IS 2486 (Part-I) 1971

Dead end assembly.

- a) Heating cycle test for ódo dead end assembly.
- b) Slip strength test for IS 2486 (Part-I) dead end assembly.
- c) Mechanical strength test.

- On tension hardware fittings only:-

- a) Slip strength test for dead end assembly. IS-2121 (Part-I)

All the acceptance tests stated at clause shall also be carried out on composite insulator unit, except the eccentricity test at clause. In addition to these, all the acceptance tests indicated in IEC 1109 shall also be carried out without any extra cost to the employer.

- For hardware fittings:-

- a) Visual examination. IS-2121 (Part-I)
- b) Proof & test.

8) DESIGNS: Responsibility of satisfactory design of the clamps/connectors to safely withstand the specified mechanical stresses and carry the rated current without exceeding the temperature rise specified, shall solely rest with the bidder. For this purpose, a minimum factor of safety 2 (two) shall be taken into account.

9) INTERCHANGEABILITY: All fittings shall be of standard design and made to gauge or jig and shall be interchangeable in all respects with similar items.

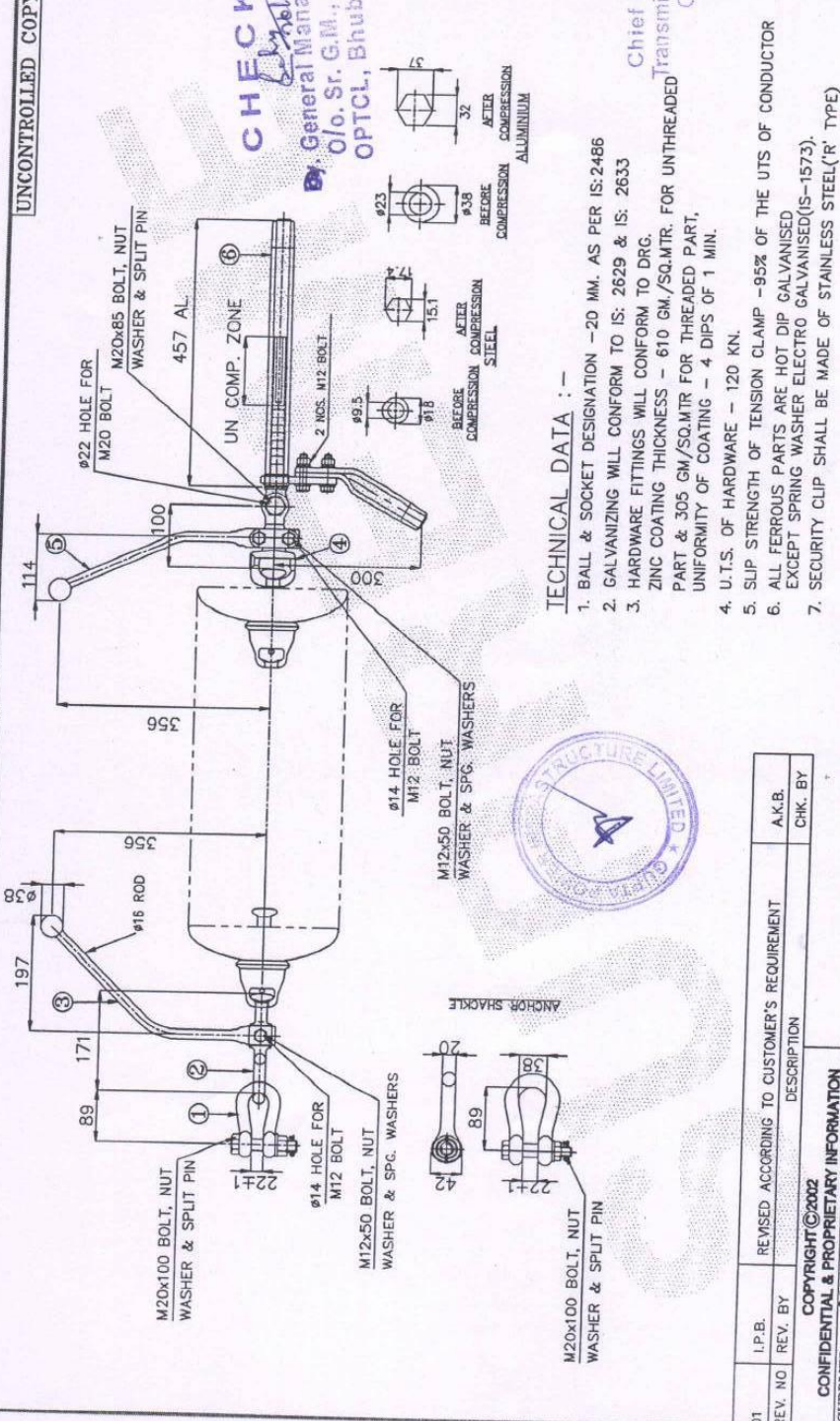
- a) True copies of all the Type Test Certificates of Govt. recognized Laboratory in respect of the offered items only shall be furnished.
- b) Descriptive literature, dimensional drawings catalogues, etc. shall be submitted for the offered items.
- c) Offers without samples and type tests reports will be out rightly rejected.

10) GENERAL:

1. All ferrous parts including fasteners shall be hot dip galvanized, after all machining has been completed. Nuts may however be tapped (threaded) after galvanizing and the threads oiled. Spring washers shall be electro-galvanized. The bolt threads shall be undercut to take care of the increase in diameter due to galvanizing. Galvanizing shall be done in accordance with IS-2629-1985 and shall satisfy the tests mentioned in IS 2633-1986. Fasteners shall withstand four dips while spring washers shall withstand three dips of one-minute duration in the standard Preece test. Other galvanized materials shall be guaranteed to withstand at least six successive dips each lasting one minute under the Standard Preece test for galvanizing.
2. The zinc coating shall be perfectly adherent of uniform thickness, smooth, reasonably bright, continuous and free from imperfections such as flux, ash, rust stains, bulky white deposits and blisters. The zinc used for galvanizing shall be of grade Zn 99.95 as per IS 209-1979.
3. Pin balls shall be checked with the applicable ϕG gauges in at least two directions, one of which shall be across the line of die flashing and the other 90 deg. to this line. $\phi NO GO$ gauges shall not pass in any direction.
4. Socket ends, before galvanizing shall be of uniform contour. The bearing surface of socket ends shall be uniform about the entire circumference without depressions or high spots. The internal contours of socket ends shall be concentric with the axis of the fittings as per IS 2486/IEC-120. The axis of the bearing surfaces of socket ends shall be coaxial with the axis of the fittings. There shall be no noticeable tilting of the bearing surfaces with the axis of the fittings.
5. All current carrying parts shall be so designed and manufactured that contact resistance is reduced to minimum.
6. Welding of aluminum shall be by inert gas shielded tungsten arc or inert gas, shielded metal arc process. Welds shall be clean, sound, smooth, and uniform without overlaps, properly fused and completely sealed. There shall be no cracks, voids incomplete penetration, incomplete fusion, under-cutting or inclusions Porosity shall be minimized so that mechanical properties of the aluminum alloys are not affected. All welds shall be properly finished as per good engineering practices.

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TECHNICAL DATA :-

1. BALL & SOCKET DESIGNATION - 20 MM. AS PER IS:2486
2. GALVANIZING WILL CONFORM TO IS: 2629 & IS: 2633
3. HARDWARE FITTINGS WILL CONFORM TO DRG. ZINC COATING THICKNESS - 610 GM./SQ.MTR. FOR UNTHREADED TRANSMISSION PART, PART & 305 GM./SQ.MTR FOR THREADED PART, UNIFORMITY OF COATING - 4 DIPS OF 1 MIN.
4. U.T.S. OF HARDWARE - 120 KN.
5. SLIP STRENGTH OF TENSION CLAMP - 95% OF THE UTS OF CONDUCTOR
6. ALL FERROUS PARTS ARE HOT DIP GALVANISED EXCEPT SPRING WASHER ELECTRO GALVANISED (IS-1573).
7. SECURITY CLIP SHALL BE MADE OF STAINLESS STEEL ('R' TYPE)

CHECKED
 General Manager (Elect.)
 & C)
 O/o. Sr. G.M., (E)
 OPTCL, Bhubaneswar

APPROVED
 General Manager (Elect.)
 Project & Construction
 CL, Bhubaneswar



01	I.P.B.	REVISED ACCORDING TO CUSTOMER'S REQUIREMENT	A.K.B.
REV. NO	REV. BY	DESCRIPTION	CHK. BY

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 SUPPLIER :- **SUPREME & CO. PVT. LTD.**

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CONTRACTOR: M/s Gupta Power Infrastructure Ltd., Bhubaneswar.
 CLIENT: M/s Orissa Power Transmission Corporation Ltd.
 TITLE: 132 KV SINGLE TENSION SET
 FOR ACSR PANTHER CONDUCTOR

PROJ. NO. SCPL/2012/ST-P-182
 SHEET NO. 01
 SCALE: NTS DRG. NO.:- STP/2012/ST-P-182
 REV. NO.:- 01
 TOLERANCE:- ±0.2

SL.NO.	DESCRIPTION	MATERIAL	QTY.
6	TENSION CLAMP WITH JUMPER EXT. AL. ALLOY & STEEL SLEEVE COMP. TYPE & STEEL H.D.G.	AL. ALLOY & STEEL H.D.G.	1 SET
5	ARCING HORN (L.S.)	STEEL ROD, H.D.G.	1 SET
4	SOCKET CLEVIS	FORGED STEEL-H.D.G.	1
3	ARCING HORN (T.S.)	FORGED STEEL-H.D.G.	1
2	H.H. BALL LINK	FORGED STEEL-H.D.G.	1
1	ANCHOR SHACKLE	FORGED STEEL-H.D.G.	1

Electrical Design:

The heavy duty suspension, and heavy duty tension insulator sets shall all comply with the technical requirements of schedule C and ISS and IEC and satisfy the test requirements stated in Section-7.

Mechanical design:

The mechanical strength of the insulators and insulator fittings shall be as stated in Schedule-C

The design shall be such that stresses due to expansion and contraction in any part of the insulator shall not lead to the development of defects.

Insulating material shall not engage directly with hard metal. All fixing materials shall be of approved quality, shall be applied in an approved manner and shall not enter into chemical action with the metal parts or cause fracture by expansion in service. Where cement is used as a fixing medium, cement thickness shall be as small and even as possible and proper care shall be taken to correctly centre and locate the individual parts during cementing. Besides the above the following points should be incorporated.

1. All ferrous parts are to be electro galvanized.
2. Contact surface are to be machine finished.
3. All nuts & bolts should be electro galvanized passivated with zinc chromate solution.

Note: Besides the above specification, the tenderer are requested to follow the corrected instruction/specification provided with the sample drawing. The IS provided with the drawing should be strictly followed. In case of any deviation of the above specification and the sample drawing, the specification of sample drawing will be prevailed.

Sd/
Dy. General Manager (Elec)
E.H.T. (Const) Division, OPTCL,
Jharsuguda

ANNEXURE 6 V

EXPERIENCE RECORD

The bidder shall furnish details of Work Order for similar nature of work received during last three years and already completed and under execution.

Sl. No.	Work Order No. & Date	Name & address of the authority placing order.	Value of contract	Scheduled date of completion of work	Actual date of completion of work	Remarks
1	2	3	4	5	6	7

SIGNATURE OF TENDERER:

NAME :

DESIGNATION (SEAL):

SECTION – VII

DECLARATION FORM

(TO BE SUBMITTED WITH THE TENDER PAPER)

To

The Deputy General Manager (Elect.),
E.H.T. (C) Division,
OPTCL, Jharsuguda.

Sub: Tender Notice No. 07/2021-22, dt. 22.09.2021.

Sir,

1. Having examined the above specification together with terms & conditions referred to therein * I/We the undersigned hereby offer to supply the materials/equipment covered therein complete in all respects as per the specification and General conditions, at the rates, entered in the attached contract schedule of prices in the Tender.
2. * I/We hereby undertake to have the materials/equipment delivered within the time specified in the Tender.
3. * I/We hereby guarantee the technical particulars given in the Tender supported with necessary reports from concerned authorities.
4. * I/We certify to have purchased a copy of tender paper remitting Rs.....by Cash/ Bank Draft and this has been acknowledged by you in your receipt No..... Dated..... .

In the event of Tender, being decided in *my/our favour, * I/We agree to furnish the Security Deposit, in the manner, acceptable to ORISSA POWER TRANSMISSION CORPORATION LTD., and for the sum as applicable to *me/us as per clause-8 of section-III of this specification within 15 days of issue of letter of intent/purchase order failing which *I/We clearly understand that the said letter of Intent/Purchase order will be liable to be withdrawn by the purchaser.

5. Bid Security Declaration

*I/We further declare that, we will not modify/withdraw the bid after opening of the bid during its validity period and in such an event I/We agree that OPTCL would be free to debar us from participating in the tenders floated by OPTCL for a period of three years .

Yours faithfully,

Encl: Tender in duplicate.

Signature of Tenderer
(with Seal)

SECTION – VIII

NO RELATION CERTIFICATE

THIS IS TO CERTIFY THAT I / WE HAVE NO RELATIONSHIP WITH ANY OF THE EMPLOYEES IN THE RANK OF ASST. MANAGER AND ABOVE SERVING UNDER OPTCL, ODISHA. IN CASE THE ABOVE STATEMENT IS FOUND TO BE FALSE, I / WE MAY BE DEBARRED FROM ANY PAYMENT DUE ON ACCOUNT OF THIS CONTRACT.

SIGNATURE OF THE TENDERER