



SYAMA PRASAD MOOKERJEE PORT, KOLKATA

**हल्दिया गोदी परिसर
HALDIA DOCK COMPLEX**

An ISO - 9001 : 2015 Organisation



**Office of Plant & Equipment (P&E) Division,
Operational Building, 1st Floor,
Chiranjibpur, Haldia, Dist.: Purba Medinipur,
West Bengal, India, PIN - 721 604.
E-mail:akkar.hdc@kolkataporttrust.gov.in**

No.: SDM(P&E)/105/ENQ/45

Dated: 25.08.2021

Dear Sir,

Subject : Budgetary Enquiry for "Drawing, manufacturing, supplying & delivering and guaranteeing of different types of drive and non-drive drums for Coal Handling Plant (CHP) of Haldia Dock Complex (HDC), Syama Prasad Mookerjee Port, Kolkata (SMP, Kolkata)."

The contractors are requested to submit **sealed budgetary offer**, for "Drawing, manufacturing, supplying & delivering and guaranteeing of different types of drive and non-drive drums for Coal Handling Plant (CHP) of Haldia Dock Complex (HDC), Syama Prasad Mookerjee Port, Kolkata (SMP, Kolkata)." as per the 'Technical Specification/ reference available drawing (enclosed)', 'Scope of Work' and the 'Bill of Quantities' (BoQ) furnished in Annex - "a" (enclosed). However, enclosed drawings, available with HDC, are for reference & understanding only. The contractors have to prepare actual drawings afresh as per site condition and get approved before commencement of manufacturing.

The contractor's offer should be based upon the following terms and conditions:

1. Price basis:

- 1.1 The quoted price for **BoQ Sl. No.1 to 16 shall be inclusive of all charges for Drawing, manufacturing, supplying, delivering (F.O.R. at Coal Handling Plant store of Haldia Dock Complex basis) & guaranteeing of different types of drive and non-drive drums (as per contractual conditions) and all other incidental charges for the execution of the contract except GST.**
- 1.2 The offerer shall fill in 'Unit Rate' and 'Amount' for the item, as described in the 'Bill of Quantities', as per the required break-up.
- 1.3 The prices quoted shall be exclusive of **GST** as well as any statutory levies and/or other charges levied by any Central/State/local authorities, which shall be paid extra, at applicable rates, at the time of execution of work. As such, details thereof, as applicable, are to be furnished clearly in the offer.
- 1.4 Any new statutory levies, taxes, duties, cess, etc. imposed by the Central/State/local authorities, by way of fresh notifications, subsequent to the issue of Work Order/Purchase Order, but within the stipulated delivery period, shall be paid extra.

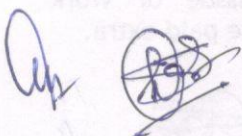
2. General terms & conditions related to GST:

- 2.1 Supplier to confirm that the GST amount charged in invoice is declared in its returns and payment of taxes is also made.
- 2.2 The Supplier agrees to comply with all applicable GST laws, including GST acts, rules, regulations, procedures, circulars & instructions hereunder applicable in India from time to time and to ensure that such compliance is done within the time prescribed under such laws. Supplier should ensure accurate transaction details, as required by GST laws, are timely uploaded in GSTN. In case there is any mismatch between the details so uploaded in GSTN by Supplier and details available with Syama Prasad Mookerjee Port, Kolkata, then payments to Supplier to the extent of GST relating to the invoice/s under mismatch may be retained from due payments till such time Syama Prasad Mookerjee Port, Kolkata is not sure that accurate tax amount is finally reflected in the GSTN to SMP, Kolkata's Account and is finally available to Syama Prasad Mookerjee Port, Kolkata in terms of GST laws and that the credit of GST so taken by Syama Prasad Mookerjee Port, Kolkata is not required to be reversed at a later date along with applicable interest.
- 2.3 Syama Prasad Mookerjee Port, Kolkata has the right to recover monetary loss including interest and penalty suffered by it due to any non-compliance of tax laws by the supplier. Any loss of input tax credit to Syama Prasad Mookerjee Port, Kolkata for the fault of supplier shall be recovered by Syama Prasad Mookerjee Port, Kolkata by way of adjustment in the consideration payable.
- 2.4 Supplementary invoices/debit note/credit note for price revisions to enable Syama Prasad Mookerjee Port, Kolkata to claim tax benefit on the same shall be issued by The contractor for a particular year before September of the succeeding Financial Year.
- 2.5 The purchase order/work order shall be void, if at any point of time The contractors are found to be a black listed dealer as per GSTN rating system and further no payment shall be entertained.

3. Technical Specification:

A. General:

1. The general construction and manufacturing tolerances of the Drums (Pulleys) shall conform to IS: 8531 - 1986, with its latest amendment, if any.
2. The Drum Shell of the Drums (Pulleys) shall be made from 20 mm thick MS plate.
3. The Drums (Pulleys) shall be crowned to a gradient of 1 in 150 for a length of 450 mm from each end.
4. The Drums (Pulleys) shall be properly stress relieved after welding.
5. All sharp corners to be rounded off.
6. The Shaft of the Drums (Pulleys) shall be coated with lacquer for rust prevention. The material of construction shall be 40Cr1Mo28 as per IS:1570 with its latest amendment, if any.
7. Each Drum (Pulleys) shall be provided with 2 (two) nos. Hub - 1 (one) no. with each end face. The Material of Construction (MOC) of all Hubs shall be C45 as per IS: 1570, with its latest amendment, if any.
8. Each Drum (Pulleys) shall be provided with 12 (twelve) nos. Rib - 6 (six) nos. on each end face and 1 (one) no. Centre Disc. The Material Of Construction (MOC) of all Ribs and Centre Discs shall be MS as per IS: 2062, with its latest amendment, if any.



9. All Keys, Key-way dimensions and their tolerances shall be as per IS: 2048, with its latest amendment, if any. The Material Of Construction (MOC) of all Keys shall be C55Mn75 as per IS: 1570, with its latest amendment, if any.
10. The Drums (Pulleys) shall be statically balanced. The balancing weight(s) shall be provided on the inner side of the Shell and not on the Diaphragm Plate. The weight(s) must not project out of the Rim.
11. The Drums (Pulleys) shall be marked with the manufacturer's name and / or recognized trademark, if any.
12. Wherever applicable, the latest amendment of the relevant Indian Standard shall be referred to.
13. The Shafts shall not have undercut at change of diameters.
14. Only 1 (one) longitudinal weld shall be provided in the Shell of the Pulley. The weld is to be ground smooth.
15. Centering shall be provided on both ends of the Shafts.
16. Length of the Ribs shall be less than or equal to the projected length of the Hubs on each side.
17. All Fasteners, as applicable, should be of UNBRAKO/TVS/LPS-make only, unless otherwise stated in the drawing(s) mentioned in the Bill of Quantities (BoQ). In the event of non-availability of such makes, specific approval shall have to be taken from HDC, SMP, Kolkata, for use of any other make of Fasteners.
18. All the aforesaid Drums (Pulleys) should be supplied with Bearings and Bearing Housings, as applicable.
19. All Bearings and Taper Sleeves (with Lock Nuts & Star Washers) [if applicable] shall be of SKF/FAG-make only.
20. Bearing Housings [including Metal Labyrinths (TSN or equivalent), Locating Rings and metal End Covers (ETS36 or equivalent), as applicable] shall be of such make as stated in the drawing(s) mentioned in the Bill of Quantities (BoQ) i.e. SKF/FAG. Where makes have not been mentioned in the drawing(s) or drawing have not been mentioned against items of the BoQ. Bearing Housings [including Labyrinths, Locating Rings and End Covers, as applicable] shall be of SKF/FAG-make only. In the event of non-availability of such makes or non-applicability of SKF/FAG-make due to technical reason(s), if any, specific approval shall have to be taken from HDC, SMP, Kolkata, for use of any other make of the same.
21. Pulley assembly shall be checked for eccentricity. The requisite geometrical accuracies to be furnished in the drawing(s) to be submitted by the contractor for approval of HDC, SMP, Kolkata.
22. All Drive Drums (Pulleys) shall be provided with 20 mm thick Rubber lagging. Rubber lagging shall be of Natural Rubber (Grade - M), hot vulcanized on the Shell. The Durometer Shore Hardness shall be 60 ± 5 on Shore "A" scale. Peel-off strength shall be 20 kg per 25 mm wide strip, as per IS: 4682 (Part-I). Diamond lagging shall be applicable (Minimum Tensile Strength -24 MPa and Minimum Elongation at Break - 450%).

B. PAINTING:

1. All the outer surface of the Drums (Pulleys) shall be properly cleaned and blasted.
2. Thereafter, painting [except for the outer circumference of the Drive Drums (Pulleys), which will be Rubber lagged] shall be carried out as follows:
 - a. First, Epoxy Zinc-rich Primer shall be applied to achieve a Dry Film Thickness [DFT] of 50 micron (minimum).

- b. Next, Micaceous Iron Oxide [MIO] shall be applied to achieve a DFT 50 micron (minimum)
- c. Finally, over coating shall be done by 2 (two) coats of Epoxy Paint to achieve a DFT of 200 micron (minimum).
- d. Total DFT, thus achieved, should be 300 micron (minimum).
- e. The outer circumference of each Non-drive Drum (Pulley) shall be painted in Black.
- f. The 2 (two) end faces of each Drum (Pulley) shall be painted in Red.
- g. The paints, which shall be used, shall be of any of the following makes: i) Berger Paints. ii) Shalimar Paints. iii) Jenson & Nicholson. iv) Asian Paints. v) ICI. vi) Goodlass Nerolac.
- h. Paint manufacturer's literature(s) and test certificate(s) have to be furnished against each kind of paint used.

4. **Payment terms:** Payment will be made on the basis of actual supply and delivery of materials in good condition and acceptance of the same at designated points and on submission of Bill accompanied with Inspection Certificate, if any, and challan duly signed by consignee or his authorized representative. The bills should be submitted in quadruplicate to Sr. Dy. Manager (P&E)'s Office with necessary documents e.g., receipted challan in duplicate, GST Invoice, test certificate, guarantee certificate, inspection report, approved drawings, approved QAP etc. Maximum 2(two) part payments may be allowed at the discretion of Sr. Dy. Manager(P&E). Payment will be made to Party's Bank Account through E C S within 30 (thirty) days of receipt of satisfactory acceptance note of supply and on submission of clear & unambiguous bill along with relevant documents. Payment will be made in Indian Rupees through the banker of the contractor i.e. through ECS. During submission of bill(s), the following information must be submitted by the Contractor regarding their banker:

- a) Savings/Current Account Number:
- b) Name of the Bank:
- c) Name of the Branch and address thereof:
- d) RTGS Code of the Branch

5. **Time of Completion & delivery:** The entire contractual obligations are to be completed in all respect within 120 days from the date of issuance of LOI/LOA or Work Order, whichever is earlier.

Materials shall be delivered by the supplier to HDC's Coal Handling Plant site/store at Haldia at their cost, risk and responsibility. Delivery period shall be binding on the supplier. If delivery of materials is not made within the time undertaken without sufficient reasons acceptable to the Trustees, the order may be cancelled without notice at the option of Trustees. In the event of failure to execute the order, Trustees will take penal action against the supplier and his name will be removed from the list of approved suppliers. In case of default in supply or, failure to deliver as per correct specification or, the approved quality within the time stipulated Trustees are entitled to purchase the Items from any other source at the risks, costs and expenses of the supplier. Such purchase may comprise the whole or, any portion of the supply remaining undelivered or, not approved. The successful Bidder must make their own arrangements for delivery of all materials, as well as for careful and proper unloading and stacking at HDC's Store/Site. The responsibility for preventing damage / deterioration to the materials during transit, delivery, unloading and stacking at the designated point shall rest with the Supplier. All transit risk will be to

supplier's account. The Bidder must send advance intimation to the concerned Officer as to the proposed dates of delivery of each and every installment of supply together with a list showing quantity and particulars of the material in the consignment. Materials will not be accepted if not accompanied by the authorized representative along with proper Delivery Challan, Inspection/Test Certificate, Guarantee Certificate and other related documents. Delivery of materials will not be accepted on Sundays and Holidays. No lorry shall be permitted into the protected area during night-time. Detention of lorries, if any, will be on supplier's account. The authorized representative of the Bidder should be present at the time of delivery.

6. **Dispatch Arrangement** : The supplier shall be fully responsible for any transit loss or damage to the materials.
7. **Inspection**: The authorized representative(s) of HDC, SMP, Kolkata, shall have access to the works of the manufacturer at all reasonable times for inspecting the test equipment and methods of examinations. The authorized representative(s) of HDC, SMP, Kolkata, on giving 7 (seven) days' notice in writing to the contractor, setting out any ground of objection(s), in respect of the work, shall be at liberty to reject all or any materials or workmanship in the subject of any of the said grounds of objection, which are not in accordance with the contract.

The contractor shall extend all necessary facilities and make all arrangements from their end for such inspection. The cost of all tests and / or analysis shall be borne by the contractor. Also, the contractor will be called upon to pay all expenses incurred by the Employer in respect of any work found to be defective, of inferior quality, adulterated or otherwise unacceptable.

A Third Party Inspection Agency - from any one of Lloyd's / DNV / ABS / BV / IRS - will be appointed by the HDC for inspection and appraisal of Quality Assurance Plan (QAP).

Inspection will be carried out in stages, as mentioned below, by the 3rd Party Inspection Agency. Dispatch of the Drum(s) [Pulley(s)] can only be made after the 4th stage inspection and clearance thereto by the 3rd Party Inspection Agency and HDC, SMP.

1st stage inspection: Component wise, in open condition of all the items, prior to assembly.

2nd stage inspection: Die Penetration (DP) Testing of all the welded joints, inaccessible after assembly of the Drum(s).

3rd stage inspection: In assembled condition, prior to Rubber lagging (as applicable) and painting.

4th stage inspection: After Rubber lagging (as applicable) and painting. No inspection shall be carried out by the 3rd Party Inspection Agency in absence of internal inspection clearance of the contractor, which has to be furnished to the inspecting authority at the time of inspection. Internal inspection reports should be checked and certified by the 3rd Party Inspection Agency.

All the Bearing, Taper Sleeves (with Lock Nuts & Star Washers, if applicable) and Bearing Housings {including Labyrinth, Locating Ring and End Cover, as applicable} [if SKF/FAG make], to be supplied, shall have to be inspected and cleared by a competent person of SKF India Limited or FAG Bearing India Limited, as the case may be. The contractor shall be responsible to ensure such inspection and clearance of the Bearings, Taper Sleeves {with Lock Nuts & Star Washers} and Bearing Housings {including Labyrinth, Locating Ring and End Cover} [if SKF/FAG-make] from SKF India Limited or FAG Bearing India Limited, as the case may be. The Bearings, Taper Sleeves {with Lock Nuts & Star Washers} and Bearing Housings {including Labyrinth, Locating Ring and End Cover}, [if SKF/FAG-make], so inspected and cleared, should be sealed with tamper proof packing and must be shown in such sealed condition to the 3rd Party Inspection Agency during 1st stage inspection.

All the Bearing Housings (including Labyrinth, Locating Ring and End Cover, as applicable) which will not be SKF/FAG-make, shall have to be inspected and cleared by the 3rd party inspection Agency.

During 1st stage inspection, the 3rd Party Inspection Agency will carry out and / or witness the following at the manufacturer's works:

- a. Review of Internal Inspection Report(s).
- b. Verification of Test Certificate(s) and suitable marking of the same thereafter.
- c. Visual Inspection.
- d. Dimensional Checking.
- e. Magnetic Particle Testing (by Fluorescent method) in accordance with "Standard Practice for Magnetic Particle Examination: SE - 709" [Identical with ASTM E 709 - 80 (1985)] - for all the shafts.
- f. Inspection of all the Bearing Housings [including Labyrinth, Locating Ring and End Cover, as applicable], which will not be SKF/FAG-make,

During 2nd stage inspection, the 3rd Party Inspection Agency will carry out and / or the witness the following at the manufacturer's works.

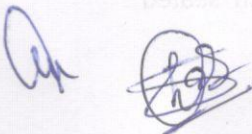
- a. Visual Inspection.
- b. Die Penetration (DP) Testing of all the welded joints, which will be inaccessible after assembly of the Drums (Pulleys).

After assembly of the Drums (Pulleys) but prior to Rubber lagging (as applicable) and painting i.e. during 3rd stage inspection, the 3rd Party Inspection Agency will carry out the following at the manufacturer's works.

- a. Review of Internal Inspection Report(s).
- b. Visual Inspection.
- c. Dimensional Checking.
- d. Die Penetration (DP) Testing of all the welded joints, which are accessible after assembly of the Drums.

After Rubber lagging (as applicable) and painting of the Drums (Pulleys) i.e. during 4th stage inspection, the 3rd Party Inspection Agency will carry out the following at the manufacturer's works.

- a. Review of Internal Inspection Report(s).
- b. Visual Inspection.
- c. Verification of Test Certificate(s) pertaining to Rubber lagging, as applicable and suitable marking of the same thereafter.
- d. Verification of Test Certificate(s) of the paint manufacturer(s) and suitable marking of the same thereafter.
- e. Visual Inspection.
- f. Checking of Shore Hardness of Rubber lagging.
- g. Checking of thickness of painting. Notwithstanding the fact that the materials - either in part or in full - have passed the inspection, the contractor is not relieved from his obligations to conform to the quality, workmanship, guaranteeing the performance, etc. as per the contract.

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The materials to be supplied by the supplier should strictly conform to the laid down specification of tender / order. If necessary, samples from the supplies may be drawn and the same will be tested by Trustees' authorized person either at the trustees own arrangement or by Government Test House and if found to be inferior to the laid down specifications of tender / order, the materials will be rejected in whole or in part and supplier shall be debited with the cost of test and rejected materials shall be replaced by the supplier at his own cost and arrangement.

Certificates: The following certificates, duly verified during inspection, must be submitted along with the supply:

- i. Certificate(s) for Chemical Analysis.
- ii. Certificate(s) for Mechanical (Physical) Properties.
- iii. Certificate(s) pertaining to Rubber Lagging, as applicable.
- iv. Inspection Certificate(s) for Bearing, Taper Sleeves (with Lock Nuts & Star Washers) [if applicable] and Bearing Housings (including Labyrinth, Locating Ring and End Cover as applicable)
- v. Certificate(s) for all hardware i.e. Bolt, Set Screw, Nut, Lock Nut, Spring Washer, etc.
- vi. Certificate(s) for Die Penetration (DP) Testing - after the 3rd Party Inspection Agency have witness the same.
- vii. Certificate(s) for Magnetic Particle Testing (by Fluorescent method) - after the 3rd Party Inspection Agency have witness the same.
- viii. Test Certificate(s) from the paint manufacturer(s).
- ix. The aforesaid Certificates must be from the manufacturer or any Government / Government approved laboratory, except those from SKF/FAG and paint manufacturer(s). Apart from the aforesaid certificates, Guarantee Certificate must be furnished along with the supply.

8. **Drawings:** Within 21 (twenty-one) days from the date of issuance of LOI/LOA or Order, whichever is earlier, the contractor (successful tenderer) shall submit 4 (four) sets of detailed drawing(s), incorporating all the critical dimensions, for approval of the Sr. Dy. Manager (P&E), HDC, SMP, Kolkata. The drawing(s), so submitted, shall bear the certification, stamp and signature of the contractor. The detailed drawings, so submitted, shall be approved by the Sr. Dy. Manager (P&E) or his authorized representative, after due appraisal of Third Party Inspection Agency (TPIA), within 21 (twenty-one) days from the date of receipt of the drawing(s) by HDC, SMP, Kolkata. Such approved drawing(s) shall bear the certification, stamp and signature of the Sr. Dy. Manager (P&E) or his authorized representative. The contractor shall proceed with the manufacture of the material(s) only after receipt of the approved drawing(s) from HDC, SMP, Kolkata. In addition to the same, the contractor shall prepare as built drawing(s), without any extra cost to HDC, SMP, Kolkata. Such drawing(s) shall contain Pulley Weights and GD^2 values. Such drawing(s) shall bear the certification, stamp and signature of the contractor and 3 (three) sets of the same shall be submitted along with delivery of the material(s).

9. **QAP:** Within 21 (twenty-one) days from the date of issuance of LOI/LOA or Order, whichever is earlier, the contractor (successful tenderer) shall submit 4 (four) sets of Quality Assurance Plans (QAP) to HDC, SMP, Kolkata, for approval. If the QAP, so submitted, is found to be in order, the same shall be approved by HDC, SMP, Kolkata after appraisal of Third party Inspection Agency (TPIA), within 7 (seven) working days of the Port from the date of receipt of the QAP by HDC, SMP, Kolkata.

10. **Rejection of Materials:** Notwithstanding the inspection and passing of materials by Trustees' authorized person (representative of P&E Division), any material found to be defective in quality and not conforming to the relevant specification, shall liable to be rejected and the supplier shall replace the same at his cost and arrangement at the earliest. The supplier shall at his own arrangement and cost replace within a period of 1 (one) month all such dispatched materials that have either been rejected by Trustees' authorized person (representative of Sr. Dy. Manager-P&E), or have been found in - defective/broken/damaged condition after unloading. Rejected materials shall be at Supplier's risk. They must be collected from the Trustees' Stores, H.D.C. within a fortnight from the date of rejection on observing usual procedure on the matter. If the contractor fails to remove such materials within a reasonable time, the Trustees shall have the right to dispose of the same and the supplier shall have no claim against the Trustees in respect of the said rejected materials.
11. **Transit Risk:** Transit risk will be on supplier's account since the delivery is to be made on F.O.R. Destination basis.
12. **Risk Purchase:** In case of supplier's failure and at the absolute discretion of the Sr. Dy. Manager (P&E), the work may be ordered to be completed by some other agency at the risk and expense of the supplier (successful tenderer) after a minimum three days' notice in writing has been given to the supplier by the Sr. Dy. Manager (P&E) or, his representative. In case of risk purchase extra cost will be borne by the supplier (successful tenderer).
13. **Guarantee:** The materials, with all accessories and attachments, shall have to be guaranteed by the supplier against the manufacturing defects or, poor performance for a period of 12 months from the date of commissioning or, 18 months from the date of delivery & acceptance, whichever is earlier. If any defect whatsoever develops during the Guarantee Period, the defective materials will have to be replaced/rectified, as the case may be, by the Bidder at their own cost.
14. **Security Deposit:** The contractor shall have to deposit 3% of the total value of order, within 15 (fifteen) days from the date of placement of order in the form Banker's Cheque or by Demand Draft of a Nationalized Bank of India drawn in favour of 'Syama Prasad Mookerjee Port, Kolkata, Haldia Dock Complex' and payable at Haldia - with Sr. Dy. Manager (Finance), HDC, SMP, Kolkata, which shall be retained as Security Deposit till successful expiry of the guarantee period.
- The Security Deposit may also be deposited in the form of an irrevocable and unconditional Bank Guarantee from a Nationalized Bank/Scheduled Bank of India, for an amount equivalent to 3% of the contract price. In all cases, any dispute regarding Bank Guarantee will be adjudicated under the jurisdiction of Kolkata High Court.
- The Security Deposit will be refunded, without interest, after the successful execution of the order and completion of the guarantee period and submission of 'No Claim Certificate'.
15. **Liquidated Damage clause:** In the event of The contractor's failure to execute the contract within the stipulated dates or such extension(s) thereof, as may be allowed by Sr. Dy. Manager (P&E) in writing, The contractor will be required to pay as compensation to the Trustees and not as penalty @ ½ % for every week or part thereof of the total value of work (contract price), provided always the entire amount of compensation to be paid under the provision of this clause shall not exceed 10% of the said value of work. The Trustees may, without prejudice to any other method of recovery, deduct the amount of such damages from any money which is due or which may become due to The contractor. The payment or deduction of such damages shall not relieve The contractor from The contractor's obligation to complete the supply of spare(s) or from any other of



The contractor's obligation or liabilities under the contract. GST will be applicable on L.D amount.

16. **Force Majeure:** In the event of either party being rendered unable by Force Majeure to perform any obligations required to be performed by them under the contract, the relative obligation of the party affected by such Force Majeure shall, upon notification to the other party, be suspended for the period during which such Force Majeure event lasts. The cost and loss sustained by either party shall be borne by the respective parties. The term 'FORCE MAJEURE', as employed herein, shall mean acts of God, Earthquake, Tsunami (caused by earthquake at the ocean bed), War, Revolt, Riot, Fire, Floods, Sabotage and Hurricane/Cyclone, Strike {excluding that of the contractor's supplier(s) or the sub-contractor's employees}. Upon the occurrence of such case and upon its termination, the party alleging that it has been rendered unable, as aforesaid, shall notify the other party in writing immediately, but not later than 48 (forty-eight) hours of the alleged beginning and ending thereof, giving full particulars and satisfactory evidence in support of its claim.
17. **Access to Site :**
The tenderer shall visit the site and get themselves acquainted with the existing facilities. Haldia is linked by road through National High Way 6 & 41 via Mechada and by rail from Howrah and Kharagpur via Panskura. The Coal Handling Plant is situated inside the Dock Area, 3 kilometres away from the main road.
18. In connection with execution of the order, necessary **Gate Pass(es)/Permit(s)** - for entering into the **Dock Area** - will be provided **on chargeable basis** at per with prevailing rate of HDC.

All other terms and conditions, not specifically mentioned above, will be as per the stipulations of the **General Conditions of Contract, May 1993** of **HDC, SMP, Kolkata** available at **SMP, Kolkata's** official website (www.kolkataporttrust.gov.in).

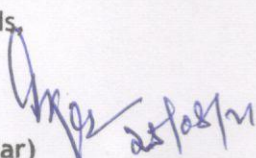
The contractors are requested to return a copy of the instant enquiry letter, duly signed and stamped on each page, along with The contractor's offer, as a token of The contractor's acceptance of the aforesaid terms and conditions.

The sealed envelope, containing The contractor's offer, must be superscribed with the following:

The contractor is requested to send the **sealed offer**, to the office of **Plant & Equipment (P&E) Division, HDC, SMP, Kolkata** at the **Operational & Administrative Building** at **Chiranjibpur**, within **1400 Hrs. of 17th September, 2021**.

The contractor's early action, in this regard, is solicited.

Regards,


(A.K. Kar)
Sr. Dy. Manager (P&E)
Haldia Dock Complex,
SMP, Kolkata

Encl. : As above.

BILL OF QUANTITIES (BoQ)

"Drawing, manufacturing, supplying & delivering and guaranteeing of different types of drive and non-drive drums for Coal Handling Plant (CHP) of Haldia Dock Complex (HDC), Syama Prasad Mookerjee Port, Kolkata (SMP, Kolkata)."

Preamble:

- 1) This 'Bill of Quantities (BoQ)' is to be read in conjunction with the terms and conditions of the referred enquiry.
- 2) The tenderer shall have to quote their rates as per this 'Bill of Quantities (BoQ)', both 'in figures' and 'in words'.
- 3) The priced 'Bill of Quantities (BoQ)' should not contain any extraneous condition whatsoever (like **CONDITIONAL REBATE**, etc.).
- 4) The prices should be quoted in **Indian Rupees (INR)** only.
- 5) The quoted price for **BoQ Sl. No. 1 to 16** shall be inclusive of all charges for Drawing, manufacturing, supplying, delivering (F.O.R. at Coal Handling Plant store of Haldia Dock Complex basis) & guaranteeing of different types of drive and non-drive drums (as per contractual conditions) and all other incidental charges for the execution of the contract except **GST**
- 6) The rate, submitted by the tenderer, shall be unit rate and must include all payments on account of royalties, etc. payable to the State of West Bengal or Government of India or any other authority or Body Corporate and all other incidental charges that the tenderer may have to bear for the execution of the contract.
- 7) The prices quoted shall be exclusive of **GST** as well as any statutory levies and/or other charges levied by any Central/State/local authorities, which shall be paid extra, at applicable rates, at the time of supply of goods. As such, details thereof, as applicable, are to be furnished clearly in the offer.
- 8) Any new statutory levies, taxes, duties, cess, etc. imposed by the Central/State/local authorities, by way of fresh notifications, subsequent to the issue of Work Order/Purchase Order, but within the stipulated delivery period, shall be paid extra.
- 9) Any additional cost or benefit impacting the contract price, resulting from introduction of any new law, towards leviable taxes, including eligible credits, in respect of goods and services to be supplied under the contract, then the parties agree to an adjustment to the contract price to reflect the financial impact of such "Change in law".

Name and signature of the witness:

Signature of the tenderer
(with name, designation, date and office seal)

Sl. No.	Item particulars.	Qty.	Unit rate [in Indian Rupees (INR)].	Amount for full quantity [in Indian Rupees (INR)].
01.	Non drive Drum Ø 630 x 1600 mm shell length with 02 (two) nos.21316 E bearing and corresponding THD type plummer block take up housing. Distance between center line of bearings:1925 mm. (Ref: drawing no.: SK376)	02 Nos.	INR (in figures) Indian Rupees (in words)	INR (in figures) Indian Rupees (in words)
02	Non drive Drum Ø 800 x 1600 mm shell length with 02 (two) nos.23136CCK/W33 bearing (along with adapter sleeve H-3136) and corresponding bearing housing. Distance between center line of bearings:1950 mm. (Ref: drawing no.: SK377)	01 No.	INR (in figures) Indian Rupees (in words)	INR (in figures) Indian Rupees (in words)
03	Non drive Drum Ø 215 x 1600 mm shell length with 02 (two) nos.21315CCK bearing (along with adapter sleeve H-315) and corresponding bearing housing. Distance between center line of bearings:1950 mm.	01 No.	INR (in figures) Indian Rupees (in words)	INR (in figures) Indian Rupees (in words)
04	Non drive Drum Ø 1250 x 1600 mm shell length with 02 (two) nos.23136CCK/W33 bearing (along with adapter sleeve H-3136) and corresponding bearing housing. Distance between center line of bearings:1950 mm.	04 Nos.	INR (in figures) Indian Rupees (in words)	INR (in figures) Indian Rupees (in words)

Sl. No.	Item particulars.	Qty.	Unit rate [in Indian Rupees (INR)].	Amount for full quantity [in Indian Rupees (INR)].
05	Non drive Drum Ø 630 x 1600 mm shell length with rubber lagging, bearings (23128CCK/W33), (along with adapter sleeve H-3128) plummer blocks (SNH528 TS) & plummer blocks fixing hardware etc. (Ref. drawing no.:SK378)	07 Nos.	INR (in figures) Indian Rupees..... (in words)	INR (in figures) Indian Rupees (in words)
06	Non drive Drum Ø 630 x 1600 mm shell length with rubber lagging, bearings (23228CCK/W33), (along with adapter sleeve H-2328) plummer blocks (SNA528 TS) & plummer blocks fixing hardware etc. (Ref. drawing no.:SK379)	10 Nos.	INR (in figures) Indian Rupees..... (in words)	INR (in figures) Indian Rupees (in words)
07	Non drive Drum Ø 400 x 1600 mm shell length, Fitted with 02 nos. plummer blocks (SNA 3024) & 02 nos. 23024 E1AKM bearings and 02 nos. taper sleeves H-3024 (Ref. drawing no.:230.046, Rev-A)	02 Nos.	INR (in figures) Indian Rupees..... (in words)	INR (in figures) Indian Rupees (in words)
08	Non drive Drum Ø 630 x 1600 mm shell length, Fitted with 02 nos. plummer blocks (SNA 552) & 02 nos. 22222 E1AKM bearings and 02 nos. taper sleeves H-322 (Ref. drawing no.:230.046, Rev-A)	06 Nos.	INR (in figures) Indian Rupees..... (in words)	INR (in figures) Indian Rupees (in words)
09	Non drive Drum Ø 800 x 1600 mm shell length, Fitted with 02 nos. plummer blocks (SNA 552) & 02 nos. 22222 E1AKM bearings and 02 nos. taper sleeves H-322 (Ref. drawing no.:230.046, Rev-A)	08 Nos.	INR (in figures) Indian Rupees..... (in words)	INR (in figures) Indian Rupees (in words)



Sl. No.	Item particulars.	Qty.	Unit rate [in Indian Rupees (INR)].	Amount for full quantity [in Indian Rupees (INR)].
10	Drive Drum Ø 630 x 1600 mm shell length with 02 nos.22224E bearings and along with corresponding bearing housing. Bearing center distance 1850 mm, GC-8 coupling halves on one side of the shaft (Female part) and another coupling halves (male part) will be pilot bore.	01 No.	INR (in figures) Indian Rupees..... (in words)	INR (in figures) Indian Rupees (in words)
11	Drive Drum Ø 630 x 1600 mm shell length with 02 nos.22236CK/W33 bearings along with adapter sleeve H-3136 and along with corresponding bearing housing. Bearing center distance 1950 mm.	01 No.	INR(in figures) Indian Rupees..... (in words)	INR (in figures) Indian Rupees (in words)
12	Drive Drum Ø 630 x 1600 mm shell length with 02 nos.22232 E1AKM bearings along with adapter sleeve H-3132 and corresponding bearing housing. Bearing center distance 2100 mm.	01 No.	INR (in figures) Indian Rupees..... (in words)	INR (in figures) Indian Rupees (in words)
13	Drive Drum Ø 800 x 1600 mm shell length with 02 nos.22228 E bearings and corresponding bearing housing. Bearing center distance 1885 mm, GC-8 coupling half on one side of the shaft (male part) and another coupling half (Female part) will be pilot bore.	02 Nos.	INR (in figures) Indian Rupees..... (in words)	INR (in figures) Indian Rupees (in words)
14	Drive Drum Ø 1000 x 1600 mm shell length with 02 nos.22240 E bearings and corresponding bearing housing(solid type cylindrical plummer block). Bearing center distance 2032 mm, GC-10 coupling halves (male part) at one end	01 No.	INR (in figures) Indian Rupees..... (in words)	INR (in figures) Indian Rupees (in words)

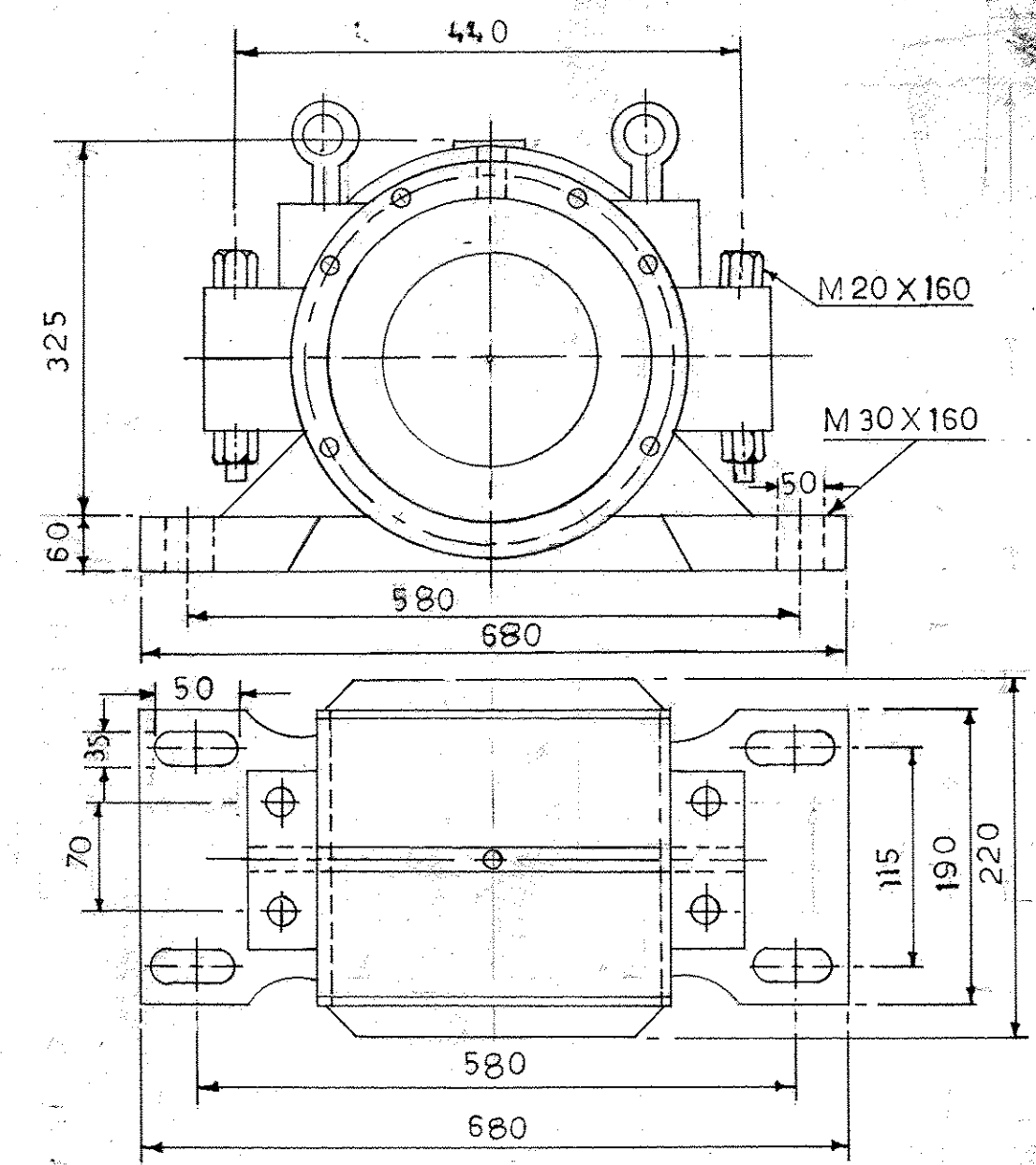
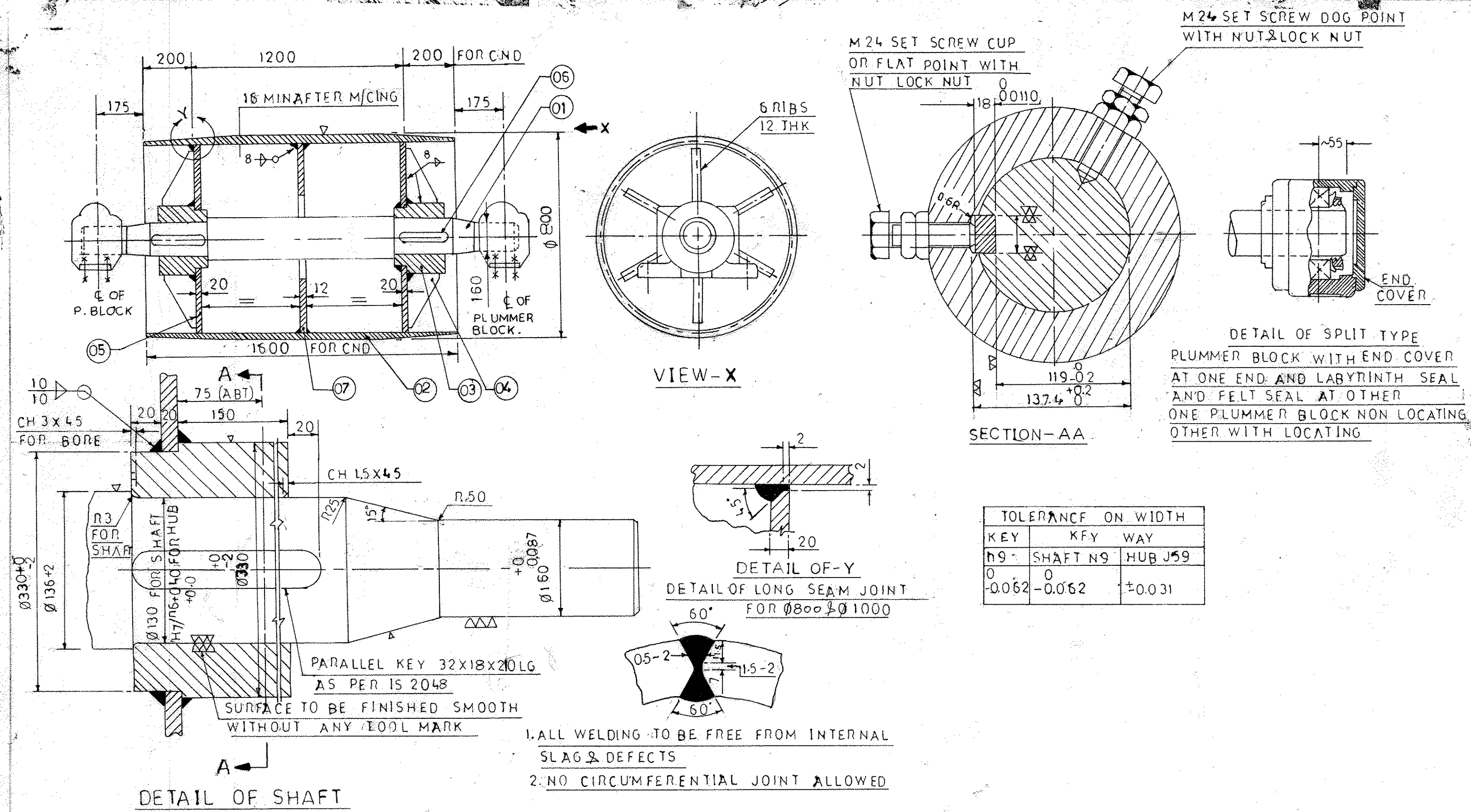


	and another coupling halves (female part) will be pilot bore.	01 No.	INR (in figures) Indian Rupees (in words)	INR (in figures) Indian Rupees (in words)
15	Drive Drum Ø 1000 x 1600 mm shell length with 02 nos.22228 E bearings and corresponding bearing housing(solid type cylindrical plummer block). Bearing center distance 1920 mm, GC-10 coupling halves (male part) at one end and another coupling halves (female part) will be pilot bore.	01 No.	INR (in figures) Indian Rupees (in words)	INR (in figures) Indian Rupees (in words)
16	Drive Drum Ø 1250 x 1600 mm shell length with 02 nos.23244 E bearings and corresponding bearing housing(solid type cylindrical plummer block). Bearing center distance 2080 mm, GC-12 coupling halves (male part) at both end and another coupling halves (female part) will be pilot bore.	01 No.	INR (in figures) Indian Rupees (in words)	INR (in figures) Indian Rupees (in words)
TOTAL			INR(in figures) Indian Rupees..... (in words)	INR(in figures) Indian Rupees..... (in words)

Note: GST for the above items will be applicable extra @.....%

Name and signature of the witness:

Signature of the offerer
(with name, designation, date and office seal)



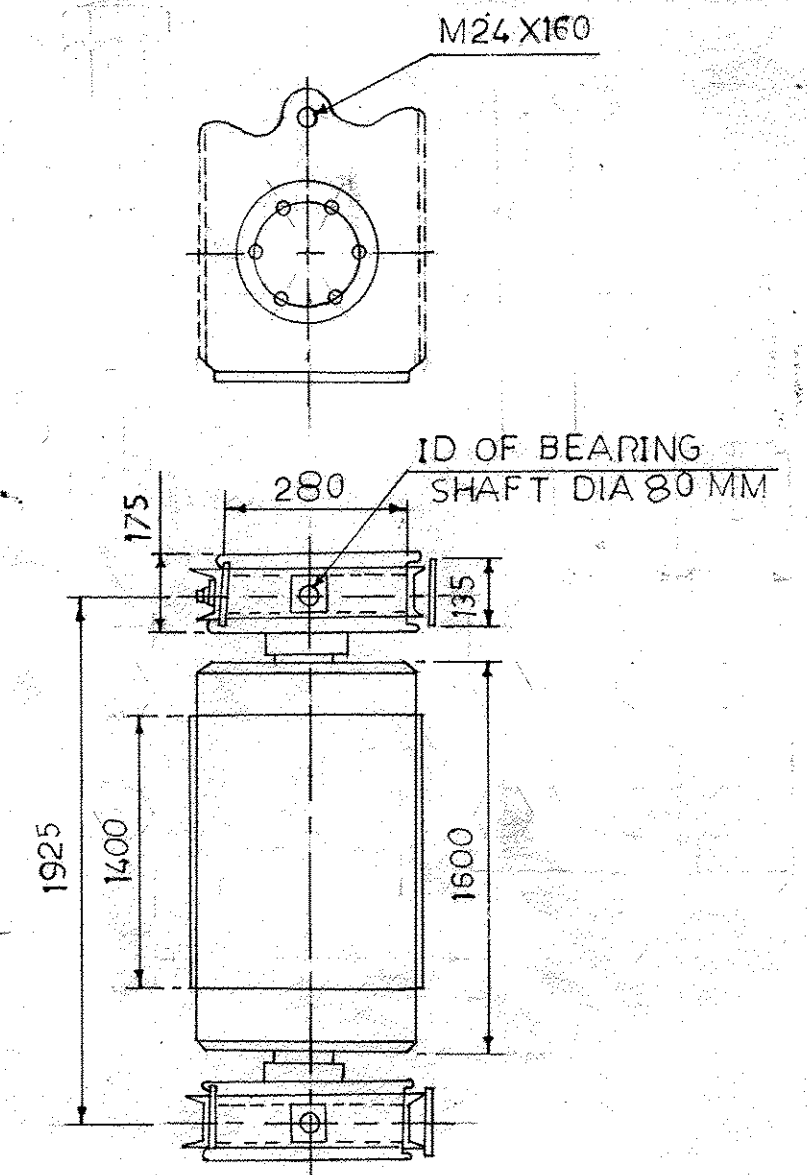
16	LOCK NUT + LOCK WASHER	
15	ADAPTER SLEEVE	M 3136
14	SPHERICAL ROLLER BEARING	23136 CCK
13	EYE BOLT	M 12-STD
12	GREASE NIPPLE	G 1/4" (BSPP)
11	WASHER	M 5-STD
10	SCREW SOCKET HD	M 5 X 25L
09	WASHER	M 12-STD
08	SCREW HEX HD	M 12 X 30L
07	CLAMPING RING	PSBD 125
06	LABYRINTH RING	MS CR C.I
05	LABYRINTH SEAL NON LOCATING	CAST STEEL CR 280 520W OF IS:1030
04	LABYRINTH SEAL LOCATING	
03	LABYRINTH SEAL NONLOCATING	
02	LABYRINTH SEAL LOCATING	
01	HOUSING	
SL NO	DESCRIPTION	QTY MATL SPECN

07	DISE	1	MS, IS:2062
06	PARALLEL KEY	2	C 55 Mn 75 IS:1570
05	DISE	2	MS, IS:2062
04	RIB	12	MS, IS:2062
03	HUB	2	C 45, IS:1570
02	DRUM SHELL	1	MS, IS:2062
01	SHAFT	1	40Cr1 MO 28 IS:1570
SL NO	DESCRIPTION	QTY	MATL SPECN

FOR TENDER PURPOSE ONLY

ALL DIMENSION ARE IN MM

KOLKATA PORT TRUST HALDIA DOCK COMPLEX P&E DRG OFFICE		NAME	DT
DRN	J. Banik	16.1.19	
CKD	H. Chandra	24/1/19	
TITLE - TYPICAL ASSEMBLY OF NON-DRIVE DRUMS		APVD	
DIA 800 SR-1 T/CAR DISCHARGE		DRG NO-	
N.T.S	DRUM	SK-377	

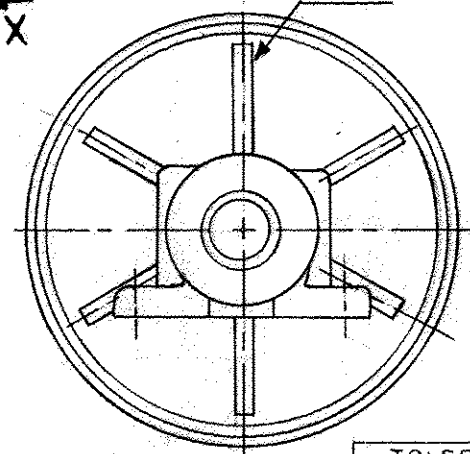
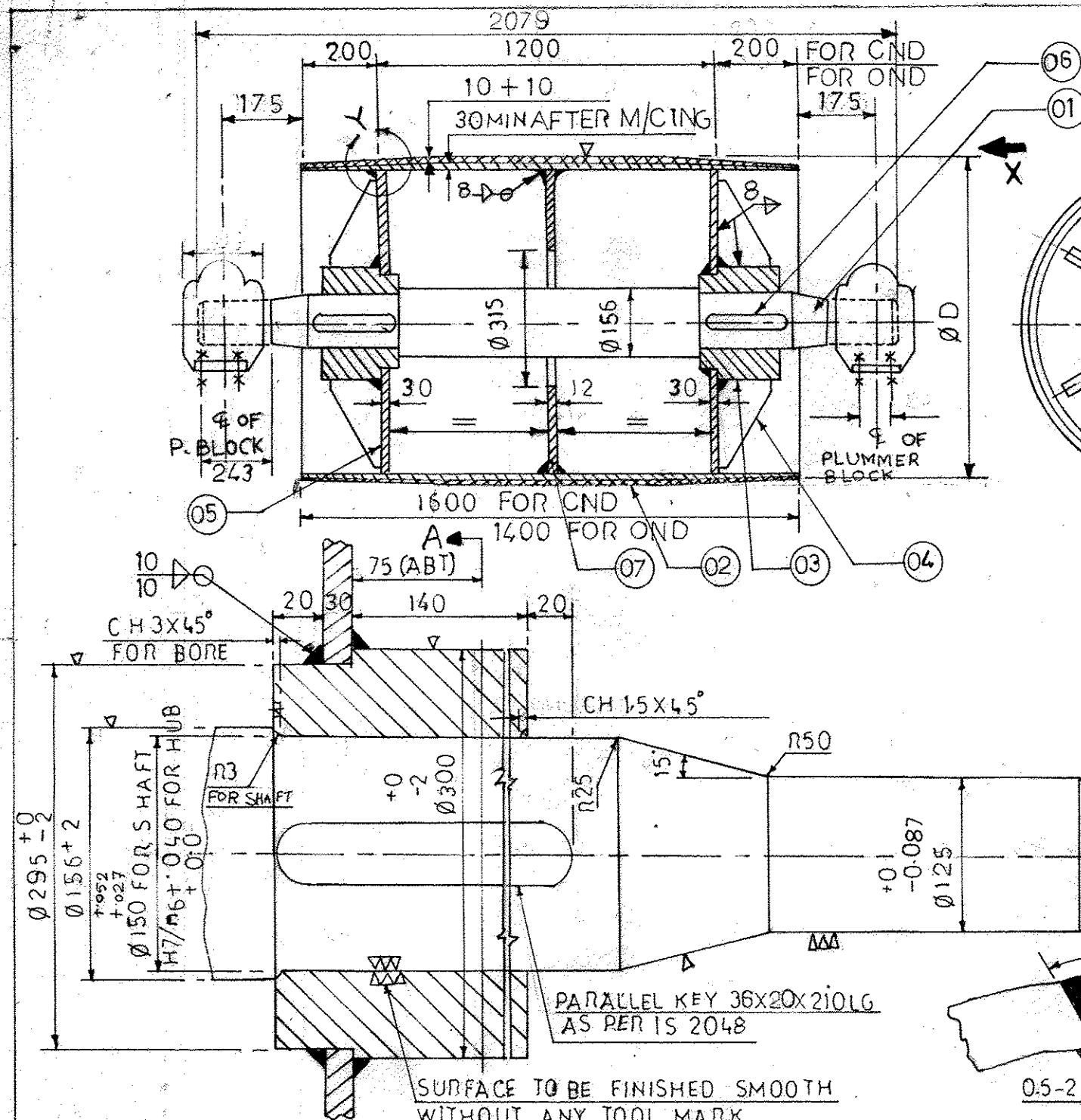


8	HEX HEAD BOLT WITH NUT & F/WASHER	2	M24 X 160
7	WASHER	4	M 16 STD
6	HEX HEAD BOLT	4	M16 X 40
5	SCREW HEX HEAD	24	M 12 X 30 L
4	GREASE NIPPLE	2	G 1/4" (BSPF)
3	SPHERICAL ROLLER BEARING	2	21316 E SKF/FAG
2	LOCK PLATE	2	MS IS 2062
1	HOUSING THD TYPE TAKE-UP HOUSING WITH SUITABLE SEAL	2	CAST STEEL CR280 520W OF IS 1030
SL NO	DESCRIPTION	QTY	MATL SPECN

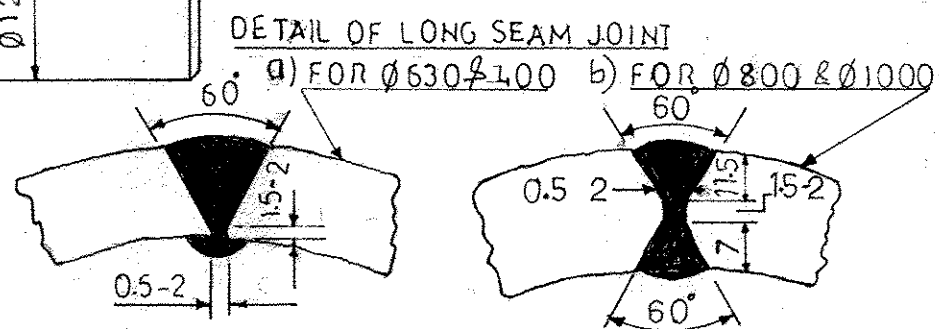
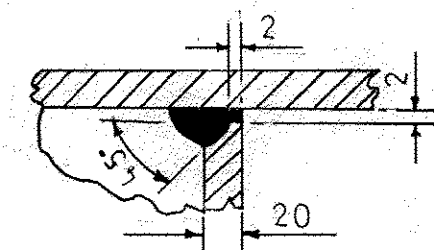
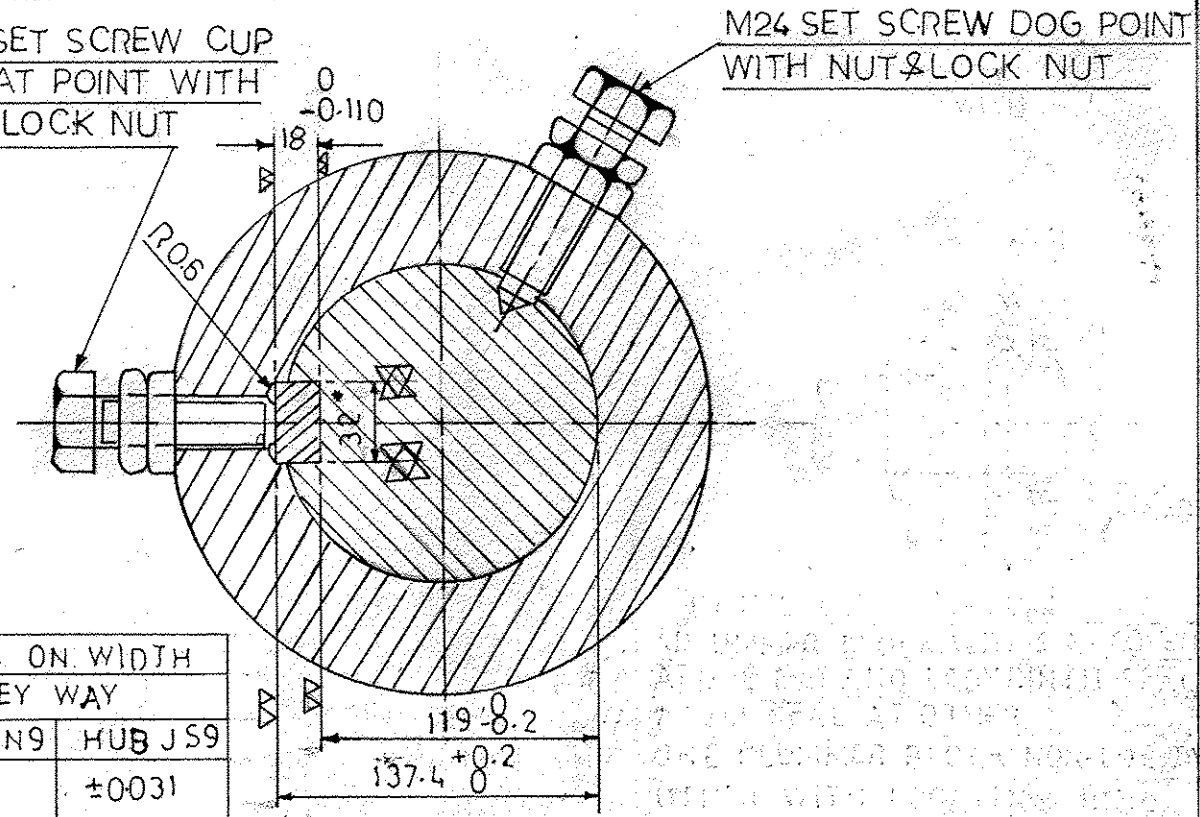
KOLKATA PORT TRUST		NAME	DT
HALDIA DOCK COMPLEX		DRN	16/1/9
P&E DRG OFFICE		CKD	24/1/9
TITLE - TYPICAL ASSEMBLY OF		APVD	
NON-DRIVE DRUMS-DIA 630		2-19 2004/10/19	
H20(E) & H20(W) TAKE-UP DRUM		DRG NO -	
N.T.S		SK-376	

FOR TENDER PURPOSE ONLY

ALL DIMENSION ARE IN MM



TOLERANCE ON WIDTH		
KEY	KEY WAY	
h9	SHAFT N9	HUB JS9
0	0	±0.031
-0.062	0.062	



DETAIL OF SHAFT

SL. NO.	DESCRIPTION	QTY.	MATL. SPECN.
01	SHAFT	1	Ø 60 M40 BIS 970 OR EQUIVALENT
02	DRUM SHELL 30mm T.	1	ST 37, IS: 2062, GR-B
03	HUB	2	C45, IS: 1570
04	RIB	12	MS, IS: 2062
05	DISC	2	MS, IS: 2062
06	PARALLEL KEY	2	Ø 60 M40 BIS 970 OR EQUIVALENT
07	DISC 30mm T.	1	ST 37, IS: 2062, GR-B
08	RUBBER LAGGING 10mm x 10mm		M 24

1. ALL WELDING TO BE FREE FROM INTERNAL SLAG & DEFECTS.
2. NO CIRCUMFERENTIAL JOINT ALLOWED

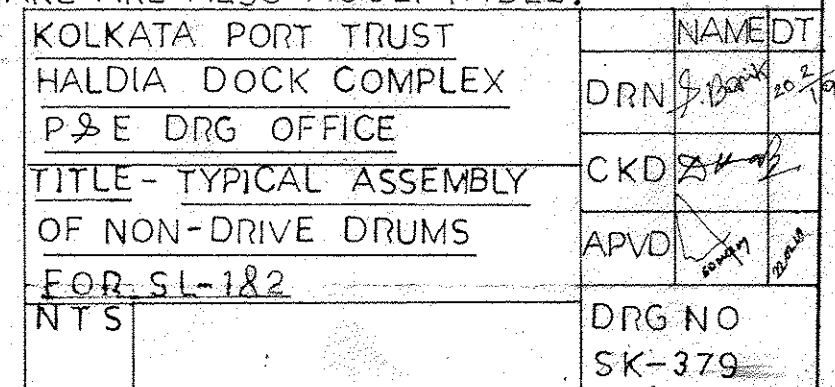
ITEM NO.	DESCRIPTION	Ø D
1	a OND 400	400
	b CND 400	
2	a OND 630	630
	b CND 630	
3	a OND 800	800
	b CND 800	
4	a OND 1000	1000
	b CND 1000	

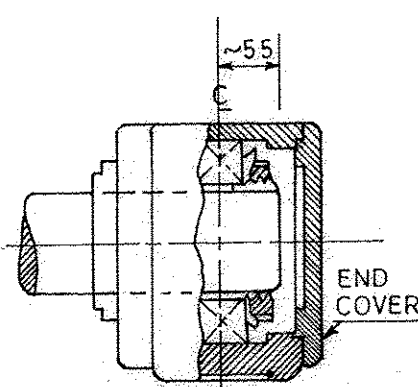
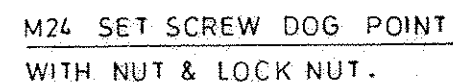
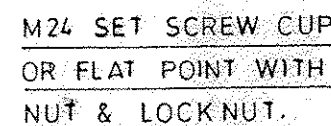
BEARING & BEARING HOUSING

SL. NO.	ITEM DESCRIPTION	QTY. PER DRUM NO.
1	BEARING NO. 23128 CCK/W33	2
2	TAPER SLEEVE H3128 (WITH LOCK NUT & STAR WASHER)	2
3	BEARING HOUSING NO. SNH 528TS	2
4	LABYRING	2
5	LOCATING RING	2
6	END COVER	2
7	BASE BOLT (H.T. Gr-109) M24X120mm. LENGTH WITH SINGLE NUT & SPRING WASHER SUITABLE FOR 220Nm TORQUE (UNBRAKO/TVS MAKE).	8

NOTE: THE MODEL NOS. MENTIONED AGAINST ITEM SL. NO. 1 TO 6 ARE OF SKF, HOWEVER, EQUIVALENT FAG-MAKE ARE ALSO ACCEPTABLE.

KOLKATA PORT TRUST HALDIA DOCK COMPLEX P&E DRG OFFICE		NAME	DT
		DRN	28/01/19
		CKD	28/01/19
TITLE- TYPICAL ASSEMBLY OF NON-DRIVE DRUMS FOR SL-122		APVD	28/01/19
N.T.S.		DRG NO- SK-378	



[illegible]

DETAIL OF SPLIT-TYPE
PLUMMER BLOCK WITH END COVER

AT ONE END AND LABYRINTH SEAL
& FELT SEAL AT OTHER.
ONE PLUMMER BLOCK NON-LOCATING.
OTHER WITH LOCATING RING.

SECTION A A

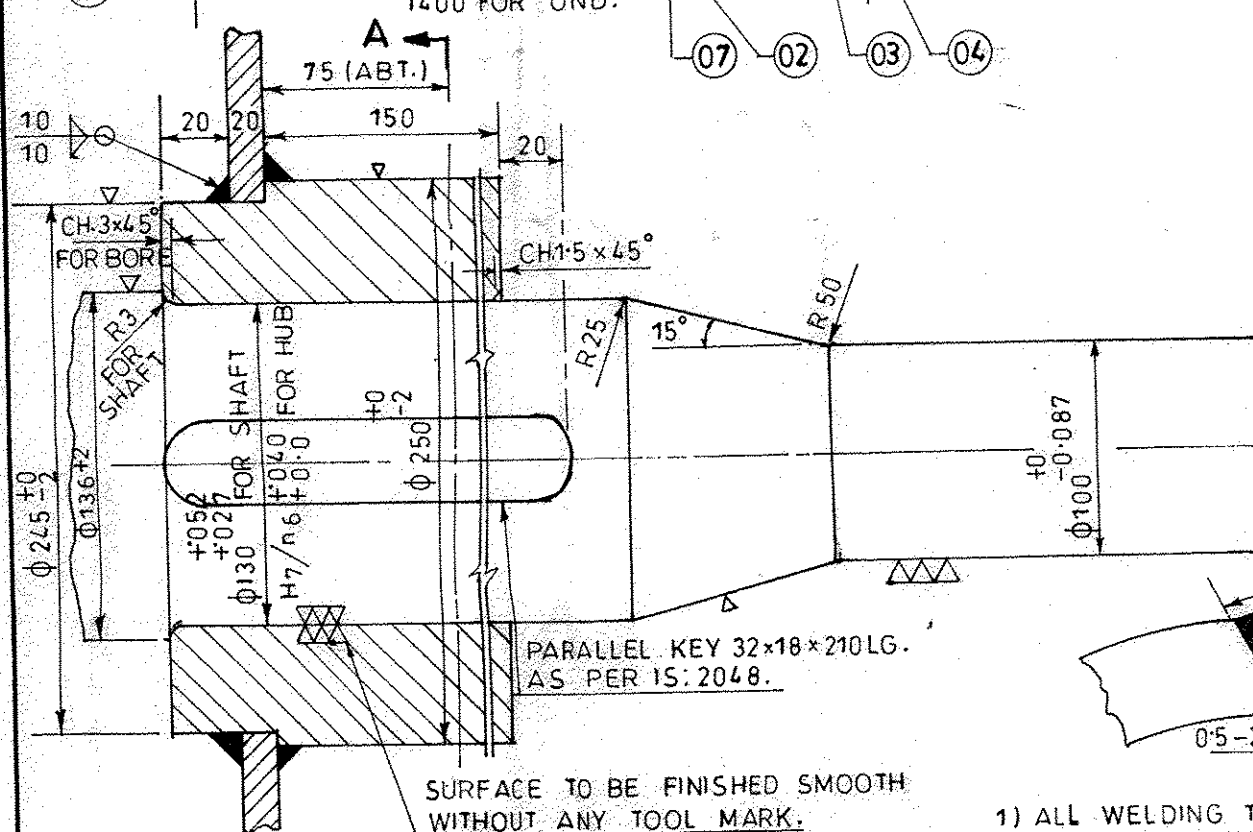
*TOLERANCE ON WIDTH		
KEY	KEY WAY	
hg	SHAFT N9	HUB JS9
0	0	± 0.031
-0.062	-0.062	

BEARING & BEARING HOUSING.

SL.NO.	ITEM DESCRIPTION.	QTY. PER DRUM (NO)
1	BEARING NO. 22222 EK.	2
2	TAPER SLEEVE H322 (WITH LOCK NUT & STAR WASHER.).	2
3	BEARING HOUSING NO. FSNL 522-619.	2
4	LABYRINTH NO. 2.TSN 522 S.	2
5	LOCATING RING NO. 2. FRB 13-5 / 200.	2
6	END COVER NO. ASNH 522-619.	2
7	BASE BOLT (H.T. Gr.-10-9) M16x100 mm. LENGTH WITH SINGLE NUT & SPRING WASHER SUITABLE FOR 220 Nm TORQUE (UNBRAKO / TVS MAKE.).	8

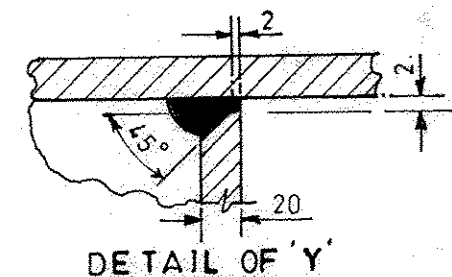
NOTE:- THE MODEL NOS., MENTIONED AGAINST ITEM SL. NOS. 1 TO 6, ARE OF SKF. HOWEVER, EQUIVALENT FAG-MAKE ARE ALSO ACCEPTABLE.

<u>KOLKATA PORT TRUST.</u> <u>HALDIA DOCK COMPLEX.</u> <u>MCP & E)'S DRG. OFFICE.</u>		NAME	DT.
		DGN.	—
		DRN.	<i>66-11-0</i>
<u>TYPICAL ASSEMBLY OF</u> <u>NON-DRIVE DRUMS.</u>		TCD.	—
		CKD.	<i>03/11/66</i>
		APVD.	<i>03/11/66</i>
SCALE - N.T.S.	DRG. NO. 230-046 REV. A.		



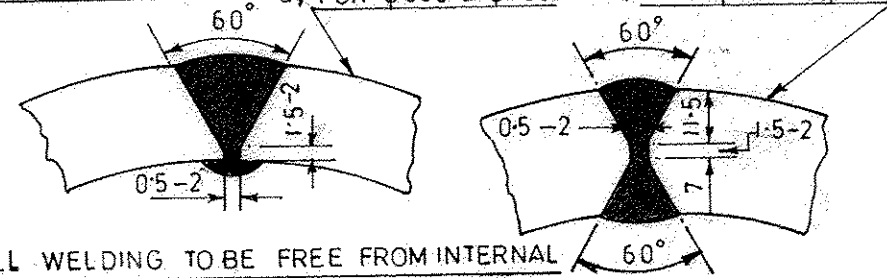
A ← DETAIL OF SHAFT.

SL. NO.	DESCRIPTION	QTY.	MATL. SPECN.
01.	SHAFT.	1	40 Cr1 Mo 28, IS: 1570.
02.	DRUM SHELL.	1	M.S., IS: 2062.
03.	HUB.	2	C45, IS: 1570.
04.	RIB.	12	M.S., IS: 2062.
05.	DISC.	2	M.S., IS: 2062.
06.	PARALLEL KEY.	2	C55 Mn 75, IS: 1570.
07.	DISC	1	M.S., IS: 2062.



DETAIL OF LONG SEAM JOINT

a) FOR $\phi 630$ & $\phi 400$ b) FOR $\phi 800$ & $\phi 1000$



- 1) ALL WELDING TO BE FREE FROM INTERNAL SLAG & DEFECTS.
- 2) NO CIRCUMFERENTIAL JOINT ALLOWED.

ITEM NO.		DESCRIPTION.	ΦD.
1	a	OND 400	400
	b	CND 400	
2	a	OND 630	630
	b	CND 630	
3	a	OND 800	800
	b	CND 800	
4	a	OND 1000	1000
	b	CND 1000	