	<b>HEAVY ENGINEERING CORPORATION LIMITED</b>
	<b>PROJECT DIVISION</b>

**HEAVY ENGINEERING CORPORATION LIMITED  
PROJECT DIVISION  
PURCHASE DEPTT.**

**Open Tender**

Tender Enquiry No. : HEC/PROJ/PUR/MADHUBAND-120

Dated 27.04.2021

Dear Sir,

We request you to submit your most competitive offer for the following items as per the given schedule.

**Enquiry Schedule:**

SI No.	Description	Unit of Measure	Qty	Remarks
1.	Supervision of dismantling /Assembling of deck panel , refurbishing /manufacturing , inspection ,testing , packing, loading/unloading, to & fro transportation , supply at site, Performance Guarantee for the Six No.s SCREEN PU DECK PANELS & RUBBER GROMMET for Madhuband NLW Coal Washery Project of BCCL.	Set	As per NIT TS	Specification shall be exactly in line with Enclosure-II (Technical specification )

**Schedule of tender receipt of Offer: : 13.05.2021 up to 3.00 PM**

**Schedule of tender opening of**

**Techno-commercial bid: : 14.05.2021 at 3.00 PM**

**Price Bid opening date : Will be intimated later through E-tender Portal only.**

Tender is available on our website in e-procurement section i.e. <https://etenders.gov.in/e procure/app> . Approved Bidders may go through the tender document. Bidders are required to upload the bid along with all supporting documents including priced part (BoQ) only on the e-tendering website (<https://etenders.gov.in/e procure/app>), on or before the due date and time for submission of bid.

**EMD/Tender fee to be submitted and sealed in separate envelop superscribed Tender No. & Due date of offer submission.**

Thanking you,

(C.S.Prasad)  
DGM I/c /Purchase/PROJECT DIVISION  
Heavy Engineering Corporation Limited HMBP ADM. BUILDING  
(ANNEXE) DHURWA, RANCHI 834004  
Ph.06512401266/240056 Fax. : 0651 – 2401533  
E-mail: [projectpurchase@hecltd.com](mailto:projectpurchase@hecltd.com)



# HEAVY ENGINEERING CORPORATION LIMITED

## PROJECT DIVISION

### INSTRUCTIONS TO TENDERER (ITT)

**All bidders are requested to go through the all parts of Tender Document very carefully in detail before submitting the offer.**

**1.0 Offer has to be submitted only online at E-tender Portal: [www.etenders.gov.in](http://www.etenders.gov.in). Offers submitted in Hard copy shall not be considered, however tender Cost, Earnest Money Deposit (Original Demand Draft/bank Guarantee) may be submitted to us in hard copy. Scan copy of tender Cost & EMD to be uploaded in part-1 of offer i.e technocommercial bid.**

2.0 Prospective Tenderers are advised to get register themselves only on at NIC e-tender portal i.e. <https://etenders.gov.in/eprocure/app>, obtain 'User ID' & 'Password' and go through the 'Self Help files' available in the Home Page after log in to the portal <http://etenders.gov.in>. They should also obtain Class III Digital Signature Certificate (DSC) in parallel which is essentially required for submission of their application. Detailed instructions for online bid submission are attached in **annexure-3**. No registration fee would be charged from the bidders.

#### NOTE:

- i. Please note that there is no provision to take out the list of parties downloading the tender document from the above referred web site. As such, tenderers are requested to see the website once again before due date of tender opening to ensure that they have not missed any corrigendum uploaded against the said tender after downloading the tender document. The responsibility of downloading the related corrigenda, if any, will be that of the downloading parties.
- ii. No separate intimation in respect of corrigendum to this NIT( if any ) will be sent to tenderers who have down loaded the documents from website. Please see website i.e., <http://www.hecltd.com> or <http://www.etenders.gov.in>
- iii. HEC reserves the right to extend / change the schedule of any activity by intimating the bidders through a notification on the e-tender portal only.

The Following two covers shall be submitted through online CPP - portal by the bidders. Last date and time of submission of bids (cover I, II) is as per given dates. **No other modes of bid submission is acceptable.**

Cover – I: - Containing techno-commercial bid and Technical Specification ( As per ITT, Enclosure-I (Commercial terms & Conditions) and Enclosure-II (Technical Specification ))

Scan copy of documents to be uploaded required as per Annex- 1 – Proof of Tender Fee submission document (DD/BG/NEFT/RTGS), SSI/NSIC/MSME certificate (for exemption of tender fee) and other relevant documentary evidence (PO copy, performance certificate etc.)

#### **3.0 Cover - II: Price Bid (BoQ)**

The tenderer shall upload the digitally signed Schedule of price bid in the form of BOQ.xls *Bidders may please note, the schedule of quantities is attached in the portal. The same (BOQ) shall be downloaded and be filled in the editable (un protected) cells only and they should necessarily submit their financial bids in the format provided after entering the financial quotes, name of the bidder etc.*

#### **4.0 Bid Opening Process is as below:-**

Cover-I: Technical bid opening date will be as per given dates. If any clarification is needed from the bidder about the deficiency in his uploaded documents in Cover-I, the bidder will be asked to provide it through Short fall documents folder in e-tendering portal. The bidder



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

shall upload the requisite clarification / documents within time specified by HEC, failing which tender will be liable for rejection. Cover-II: The financial bids of the contractors / firms found to be meeting the qualifying requirements and technical criteria shall be intimated through portal. (Depending on Cover-I evaluation any changes in the date shall be intimated through e-tendering portal).

**5.0 Earnest Money Deposit** – The offers submitted shall be considered valid only when scan copy of EMD document .The scan copy of EMD document in form of DD/BG/Receipt of NEFT/RTGS have to be uploaded with the Techno- Commercial bid (Part 1) only.

Exemption of EMD shall be applicable on submission of valid SSI/NSIC/MSME certificate and as per prevailing govt guidelines. SSI/NSIC/MSME Certificate to be uploaded in Techno Commercial Part 1 . EMD detail as per the details mentioned below

- a. The Bidder shall submit EMD of **Rs. 70,000/-** in the form of Bank Guarantee (in prescribed enclosed Proforma at *annexure-4*) / Bank Draft in favour of Heavy Engineering Corporation Limited, Ranchi from a Nationalised Bank / Scheduled Indian Bank.
- b. The validity of the Bank Guarantee shall be for a period of 120 days beyond the validity of the Bid.
- c. Tenders not accompanied with EMD shall be liable for rejection

**The original EMD in form of DD/BG/Receipt of NEFT/RTGS should be reached us though courier or in person before the opening date of tender to following address:**

To , I/C /Purchase  
PROJECT DIVISION  
HMBP ADM. BUILDING (ANNEXE)  
DHURWA, RANCHI- 834004  
Fax. No. 0651-24015  
Ph. No. 0651-2401266 / 2400562

**Refund of EMD:** The Earnest Money will be retained in the case of successful tenderer. The Earnest Money deposited by the successful bidder will be refunded on receipt of required Security Deposit from the bidder. EMD of the unsuccessful tenderers shall be refunded immediately after finalization of the tender. EMD shall be forfeited if any tenderer withdraw their offer before finalization of the tender.

**6.0 Tender Fee of Rs. 500/-** in the form of Demand Draft in favour of Heavy Engineering Corporation Ltd., payable at Ranchi.

- a) Tenders not accompanied with Tender Fee shall be liable for rejection.

Exemption of Tender Fee shall be applicable on submission of valid SSI/NSIC/MSME certificate and as per prevailing govt guidelines. SSI/NSIC/MSME Certificate to be uploaded in Techno Commercial Part 1.

**The tender fee and EMD exemption is applicable to MSMEs subject to conditions given below:**

- i. MSMEs participating in the tender must submit valid & authorized copy of certificate of registration with any one of the above agencies. In case of bidders submitting DIC registration certificate shall attach original notarized copy of the DIC certificate. The MSME's Bidder to note and ensure that nature of services and goods/items manufactured mentioned in MSME's certificate matches with the nature of the services and goods /items to be supplied as per Tender.



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

- ii. Traders / resellers / distributors / authorized agents will not be considered for availing benefits under Public Procurement policy 2012 for MSMEs as per MSME guidelines issued by MoMSME.
- iii. The registration certificate issued from any one of the above agencies must be valid as on Bid closing date of the tender. Bidder shall ensure validity of registration certificate in case bid closing date is extended.
- iv. The MSMEs who have applied for registration or renewal of registration with any of the above agencies / bodies, but have not obtained the valid certificate as on close date of the tender, are not eligible for exemption / preference.
- v. Where any aggregator has been appointed by the Ministry of MSME, themselves quote on behalf of some MSE units, such offers will be considered as offer from MSE units and all such facilities would be extended to these aggregators also.

### 7.0 Examination of Terms & Conditions- Technical Evaluation

Any bidder seeking benefit/preference under MSME / Make in India or any other policy/scheme of the Government of India, which is currently in force MUST at the time of bidding itself enclose all relevant documents / certificates etc. for claiming such benefits. The bidder must also clearly highlight the provisions of the policy and the kind of benefit being sought by it for which it meets the conditions for claiming such benefits. It may be noted that no other benefit / preference / concessions which is beyond the scope of the policy or the bidder's entitlement under the policy shall be given / considered by us. If the bidder fails to claim such benefit and/or fail to submit necessary documents/certificates in support of its claim at the time of bidding itself, its claim shall not be entertained at a later stage in the bidding process and no opportunity shall be provided to it to submit any document / certificate.

### 7.1 Evaluation and comparison of bids

The bids shall be evaluated on the basis of final landed cost which shall be arrived as under and as per format given in BOQ of e-Tender:

#### For Goods manufactured within India

i)	The price of the goods quoted Ex-works
ii)	GST which will be payable on the goods if the contract is awarded.
iii)	The charges for inland transportation, insurance and other local services required for delivering the goods at the desired destination as specified in the BOQ.
iv)	The installation, commissioning and training charges including any incidental services, if any as given in Scope of Works of NIT
v)	Deviation to NIT payment terms.

The comparison between the offers shall be made on FOR destination on Landed cost basis.

**Price preference to Local suppliers as per Make in India procurement policy of Govt. of India and Department for Promotion of Industry and Internal Trade (DPIIT) order No. P-45021/2/2017-PP (BE-II) dated 04th June, 2020**

#### **A. Eligibility of 'Class-I local supplier', 'Class-II local supplier' and 'Non-local supplier'**

- i. Only Class-I local suppliers are eligible to participate in tender if there is sufficient local capacity and local competition irrespective of the purchase value. L1 bidder amongst Class-I local suppliers shall be awarded contract subject meeting other requirements as per tender.



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

- ii. In procurement of all goods or services not covered above, with the estimated value of purchases less than Rs. 200 Crore, only 'Class-I local supplier' and 'Class-II local supplier', shall be eligible to bid.

**B. Estimated value of procurement of tendered goods is below Rs. 200 Crore and it is not a Global Tender:**

**i. Tendered goods are not divisible in nature, the following procedure shall be followed to evaluate L1 and award of contract:**

- a. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a Class-I local supplier, the contract will be awarded to L1.
- b. If L1 is not from a Class-I local supplier, the lowest bidder among the Class-I local suppliers, will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price.
- c. In case such lowest eligible Class-I local supplier fails to match the L1 price, the Class-I local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the Class-I local suppliers within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder.

**For more clarity in this regard, following table is furnished:**

Quantity of Tendered goods	Price quoted by Local suppliers	Finalization of tender
Cannot be Split	L1 is Class-I local supplier	Full Order on Class-I Local supplier
Cannot be Split	Not L1 but Class-I local supplier within L1+20%	Full Order on Class-I Local supplier subject to matching L1 price

Definitions of terms applicable to this clause

'Local content ' means the amount of value added in India which shall be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

'Class-I Local supplier' means a supplier or service provider whose goods or services offered for procurement, has local content equal to or more than 50% .

'Class-II local supplier' means a supplier or service provider, whose goods or services offered for procurement, has local content equal to or more than 20% but less than 50%.

'Non-Local supplier' means a supplier or service provider, whose goods or services offered for procurement, has local content less than or equal to 20%.

'L1' means the lowest tender or lowest bid or the lowest quotation received in this tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation .

'Margin of purchase preference' means the maximum extent to which the price quoted by a Class-I local supplier may be above the L1 for the purpose of purchase preference.

**C. Verification of local content**



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

- i. The 'Class-I local supplier'/ 'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to provide self certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made. (Annexure-5)
- ii. In cases of procurement for a value in excess of 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
- iii. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Finance Rules along with such other actions as may be permissible under law.
- iv. A supplier who has been debarred by any procuring entity for violation of the order of the Department for Promotion of Industry and Internal Trade (DPIIT) order No. P-45021/2/2017- PP (BE-II) dated 04th June, 2020 shall not be eligible for preference under the said order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed in the order of the Department for Promotion of Industry and Internal Trade (DPIIT) order No. P- 45021/2/2017-PP (BE-II) dated 04th June, 2020.

**D. "Class-II local supplier" will NOT get purchase preference in any procurement.**

#### **8.0 PERIOD OF VALIDITY OF TENDER**

Unless otherwise specified, the Tenderer shall keep his tender valid initially for a period of 120 days from the due date of opening of the tender.

#### **9.0 LANGUAGE**

The Tender shall be submitted in English language.

#### **10.0 NO CLAIM OR COMPENSATION FOR SUBMISSION OF TENDER**

The Tenderer whose Tender is not accepted shall not be entitled to claim any costs, charges, expenses of and incidental to or incurred by him through or in connection with his submission of Tenders, even though HEC Ltd may decide to withdraw the Invitation of Tender.

#### **11.0 INCOME TAX / SALES TAX CLEARANCE CERTIFICATE / PAN**

The Tenderer shall furnish the Income Tax Clearance Certificate, Sales Tax Clearance Certificate and copy of PAN with the tender duly countersigned by the respective officer under the seal of the office. Failure to produce the requisite certificate with tender, their quotation is liable to be rejected.

#### **12.0 CONFIDENTIALITY**

Tenderer shall note that all data/drawings/specifications enclosed with Tender document is confidential. Tenderer shall keep all data/drawings in strict confidence and shall not copy or pass on any of the Tender papers etc. to any third party. Tenderer shall return the Tender documents along with the Tender.

#### **13.0 NOTICES ON BEHALF OF HEC LTD**

Notice and Certificate on behalf of HEC LTD in connection with the Purchase Order may be given by duly authorised officers of HEC LTD. Any modification which may become necessary in the interim



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

period will be intimated to you as soon as possible.

#### **14.0 PURCHASER's RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS**

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.

**15.0 Tenderer to note that procurement shall be done on PACKAGE BASIS i.e L-1 firm will be decided based on combined lowest landed value for all tendered items by adding individual quoted values for all respective items and purchase order will be awarded to overall L-1 firm on Package basis .In case there is deviation against NIT Payment term, loading as mentioned at note of clause 6.0 of commercial term will be applicable to arrive at L-1 firm.**

#### **16.0 PRE QUALIFYING CRITERIA**

**Bidder must produce 2 no.s Purchase order /Work Order copy along with completion/performance certificate for the work related to vibrating screen Panel PU line repair or reconditioning along with Technical Bid (Part-I) .**


**For verification of credentials , Bidder has to provide Complete Contact Details(Name, address, Email id, Mobile No. Etc) of concerned authority of their respective clients/customers.**

#### **17.0 General conditions of the contract :**

**Unless otherwise specified in the Terms & Conditions above, this order shall be governed by General conditions of contract of purchase of HEC Ltd, which is available in the web site of HEC.(www.hecltd.com):**

#### **Note:-**

- 1. As per the govt. Guidelines it is to be specified clearly in your offer whether your firm is registered with SSI/NSIC/MSME and also confirm whether the firm is owned by SC/ST WOMEN Entrepreneurs or not.**
- 2. Pl. provide UAM no to avail Facilities of MSME.**
- 3. Please get registered your firm with HEC Ltd.**

	<b>HEAVY ENGINEERING CORPORATION LIMITED</b>
	<b>PROJECT DIVISION</b>

Annexure – 1  
PART – I


(To be filled by the bidder and to be uploaded alongwith techno-commercial bid)

Quotation No.....

SI No.	Requisite	Remark
1	Submission of stamped & signed credentials as per Clause No. 16 of ITT (Pre-qualifying Criteria).	
2	Submission of the offer with signed and stamped copy of annexure-A,B & C of commercial Terms & conditions and Enclosure-2 of <b>Technical specification</b> .	Upload the relevant documents
3	All NIT Items must be quoted otherwise offer shall not be considered as procurement is on <b>Package Basis</b> .	YES/NO
4	Class of the bidder (Class-I / Class-II/ Non-Local supplier ) must be specified in line with procurement policy of Govt. of India and Department for Promotion of Industry and Internal Trade (DPIIT) order No. P-45021/2/2017-PP (BE-II) dated 04th June, 2020	Class-I / Class-II/ Non-Local supplier
5	Declaration of local content as per annexure -5 (Mandatorily to be enclosed)	Enclosed/ Not Enclosed.
6	Whether SSI/NSIC/MSME	Yes / No (In case yes, then upload certificate)
7	Whether SSI/NSIC/MSME owned by SC/ST/WOMEN Entrepreneurs	
8	Tender fee (Rs 500/- ) / EMD(Rs.70,000/- )	Yes / No (In case yes, then upload scan copy of DD/BG/Online receipt )
9	F.O.R. Madhuband NLW Washery Site , BCCL , Dhanbad (As per clause 1 of Terms & condition)	Yes / No
10	Payment Term (As per clause 6 of Terms & condition)	Yes / No (In case your answer is No, then please mention your term)
11	Delivery Term (As per clause 5 of Terms & condition)	Yes / No (In case your answer is No, then please mention your term)
12	Validity ( one hundred and twenty (120) days from the due date of opening of the tender.)	Yes / No
13	L.D. Clause (As per clause 9 of Terms & conditions)	Yes / No
14	Guarantee Clause (As per clause 7 of Terms & conditions)	Yes / No
15	Performance Bank Guarantee (As per clause 8 of Terms & conditions)	Yes / No
16	Security Deposit (As per clause 8 of Terms & conditions)	Yes / No
17	GST	Yes / No, Applicable GST (%).....
18	Inspection (As per clause 4 of Terms & conditions)	Yes / No
19	Whether Terms & Condition/Note etc. mentioned in the tender enquiry is acceptable to the tenderer	Yes / No
20	GCC of HEC to be Accepted	Yes / No

(Signature of Tenderer with seal)



	<b>HEAVY ENGINEERING CORPORATION LIMITED</b>
	<b>PROJECT DIVISION</b>

**Annexure - 2  
PART-II (Price Bid)**

1. The tenderer shall upload the digitally signed Schedule of price bid in the form of BOQ.xls
2. Bidders may please note, the schedule of quantities is attached in the portal. The same (BOQ) shall be downloaded and to be filled in the editable (un protected) cells only and they should necessarily submit their financial bids in the format provided after entering the financial quotes, name of the bidder etc.
3. Bidders to note that the price as per the offer is strictly to be mentioned under Part-II of Price bid and not to be disclosed in any manner under techno-commercial bid Part-I ,In case price of the bidder is disclosed under techno-commercial bid Part-I , the offer of the firm will be summarily rejected.
4. If any item of BOQ is not quoted then offer of the firm **shall not be considered** as procurement is on **PACKAGE BASIS**.



**Annexure 3**  
**Instructions for Online Bid Submission**

*The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.*

*More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.*

**REGISTRATION**

- (i) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://etenders.gov.in/eprocure/app>) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- (ii) In case of any clarification please contact M/s NIC, before the schedule time of the submission of bid. Contact Person:- **Shri Kushal Kumar: 09852923855/ 7903884318**
- (iii) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- (iv) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- (v) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- (vi) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to *ensure that they do not lend their DSC's to others which may lead to misuse.*
- (vii) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

**SEARCHING FOR TENDER DOCUMENTS**

- i) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- ii) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- iii) The bidder should make a note of the unique Tender ID assigned to each tender, in



case they want to obtain any clarification / help from the Helpdesk.

### PREPARATION OF BIDS

- i) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- ii) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- iii) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- iv) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

**Note:** My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

### SUBMISSION OF BIDS

- i) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- ii) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- iii) Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- iv) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by as specified in the tender documents. The details of the DD / any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- v) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

- vi) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- vii) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- viii) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- ix) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- x) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

#### ASSISTANCE TO BIDDERS

Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 **CPP Portal** Helpdesk.

Note: For any query related to registration and processing on the Portal please visit FAQ available at <https://etenders.gov.in/eprocure/app?page=FAQFrontEnd&service=page>

You may call the Helpdesk. The 24 x 7 Help Desk Numbers are 0120-4200462, 0120-4001002, 0120-4001005, 0120-6277787

E-Mail: [support-eproc@nic.in](mailto:support-eproc@nic.in)

Or

You may call to our service provider, :06512400562,06512401266

E-Mail: : [projectpurchase@hecltd.com](mailto:projectpurchase@hecltd.com)



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

**Annexure 4**

**BANK GUARANTEE PROFORMA FOR  
EARNEST MONEY DEPOSIT**

**(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT)  
(TO BE ISSUED BY ANY NATIONALISED/SCHEDULED BANK  
AUTHORISED BY RBI TO ISSUE A BANK GUARANTEE)**

To:

Heavy Engineering Corporation Limited  
Ranchi-834004

WHEREAS \_\_\_\_\_ [name and address of Tenderer] (hereinafter called "the Tenderer")

shall be submitting its Tender dated \_\_\_\_\_ [date of the Tender] for the work. [name of the work] (hereinafter called "the Tender").

KNOW ALL MEN by these present that we, \_\_\_\_\_ [name of the bank] of [name of the country] \_\_\_\_\_ having our registered office at [address of the bank] (hereinafter called "the bank"), are bound unto the Heavy Engineering Corporation Limited, P.O. Dhurwa, Dist. Ranchi (Jharkhand) (hereinafter called "the Purchaser") for the sum of [amount of the Guarantee in words and figures] for which payment well and truly to be made to the said Purchaser the Bank binds itself, his successors and assigns by these presents. SEALED with the Common Seal of the said bank this \_\_\_\_\_ day of 200\_.

THE CONDITION of this obligation are :


1. If the Tenderer withdraws its Tender during the period of Tender Validity specified by the Purchaser on the Tender form ; or
2. If the Tenderer withdraws having been notified of the acceptance of its Tender by the Purchaser during the period of Tender Validity :
  - (a) Fails or refuses to execute the Contract Agreement when required ; or
  - (b) Fails or refuses to furnish the Security-cum-Performance Guarantee Security (if any) in accordance with the Tender conditions.

We, \_\_\_\_\_ [name of the bank] undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it owing the occurrence of 1 or both of the 2 (a) or (b) specifying the occurred condition or conditions.

This guarantee will remain in full force up to and including the date and any demand in respect thereof should reach the Bank not later than the date of expiry of this guarantee.

For and on behalf of the Bank.

Signature  
Name  
Designation  
Common Seal of Bank

	<b>HEAVY ENGINEERING CORPORATION LIMITED</b>
	<b>PROJECT DIVISION</b>

**Annexure – 5**

**Local Content Declaration**

**Date:**

To,

M/s HEC Ltd ,  
Plant Plaza Road  
Ranchi-834004

**Sub:** Certificate as per clause 9 (a) of Revised Public Procurement (Preference to Make in India Order, 2017 of DPIIT dated 04/06/2020 and 16/09/2020.

**Ref:** HEC Tender / RFQ / NIT Number :HEC/PROJ/PUR/MADHUBAND/120 Dated 27.04.21

I (authorized signatory for M/s .....)  
declare the local content for the items of the tender with their location details in the below mentioned table :

Sl. No.	Description	Local Content (in %)	Location details at which local value addition is made (Factory address)
1	Items covered under scope of supply & service of Enclosure-II (Technical Specification )		

We also certify that the above details are true & correct and if found to be false then it shall be a breach of the Code of Integrity and our bid will be liable to be rejected and we will have no objection against rejection of bid.

For M/s .....

Authorized Signatory  
(with company seal & Name)

**Note :**

1. In case the value of offer (Excluding Taxes) is more than 10 Crores INR , the above declaration will be required to be certified by Practicing CA with MRN & FRN of CA.
2. The Local Content Declaration must be submitted by the bidder during submission of offer along with Techno-commercial Bid. No change in Local Content of declaration will be allowed once the bid is submitted.



# HEAVY ENGINEERING CORPORATION LIMITED

## PROJECT DIVISION

### ENCLOSURE - I

### COMMERCIAL TERMS AND CONDITIONS

#### DEFINITIONS :

EMPLOYER	Madhuband NLW Washery / Bharat Coking Coal Ltd. (BCCL)
PURCHASER	Heavy Engineering Corporation Limited
SUPPLIER	Successful Bidder
ITT	Instructions to Tenderer
Start-up	Refer Technical Specification (Enclosure- II)
Trial Operation	Refer Technical Specification (Enclosure- II)
Performance & Guarantee Test	Refer Technical Specification (Enclosure- II)
Site Engineer	Engineer In charge of Employer
Store/Site	Store/Site shall be the Store/Site of the Employer at Madhuband NLW Washery / Bharat Coking Coal Ltd. (BCCL), Dhanbad

#### **1.0 SCOPE OF SUPPLY / WORK & SERVICES :**

**1.1** The scope of supply is to manufacture and deliver the total equipment / items in full and good condition as given in technical specification (enclosed at "Enclosure-II") FOR Site basis within Madhuband NLW Washery / Bharat Coking Coal Ltd. (BCCL) located in Madhuband, Distt. : Dhanbad (Jharkhand)

The scope includes, inter alia, all auxiliary and ancillary related activities such as procurement of all inputs, raw materials, bought-out components and consumables including testing and inspection, painting, safe & secure packing, handling and transportation of finished equipment duly inspected and accepted by PURCHASER/representative of Employer/Consultant till safe delivery in Purchaser's Store at Project Site

Any scope of supplies which is not specifically mentioned in this order but materially required for the completion of the supplies and/or for safe, trouble free normal operation shall be supplied free of cost to the Purchaser/Employer unless, expressly excluded in this order.

**1.2** Complete Supervision of dismantling /Assembling of deck panel & Performance Guarantee Test ( P.G. Test ) and any other item/service essential for fixing and installation of screen PU deck panel and rubber grommet shall be in the scope of work of Supplier.

**1.3** The approval by the Purchaser at any stage for any supplies by the supplier/supplier's sub-suppliers shall not relieve the supplier of his obligations under this order.

#### **2.0 PRICE BASIS**

##### **2.1 FOR SUPPLIES :**

**2.1.1** Prices shall be firm till execution of order in full. No escalation will be admissible and granted on any account under any circumstances. Price schedule is enclosed at Annexure-D

**2.1.2** The Prices are for the entire Scope of the Facilities including Commissioning spares, oils, grease, lubricants, flushing liquor, chemicals for pickling & Special Tools & Tackles if any etc., required till commissioning of the facilities.



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

2.1.3 The Prices are inclusive of all Taxes, Duties and freight upto site store. Price shall comprise of Basic Price, GST, freight, as may be applicable and prevailing on Base Date of the Purchase order.

2.1.4 The payment of duties, taxes, levies, etc., will be reimbursed (on actual) against documentary evidence to be produced by the Supplier, subject to a ceiling indicated in Price Schedule of the P.O. In no case the reimbursement towards duties and taxes, etc., shall exceed the amount indicated in price schedule of the P.O. towards duties, taxes, levies, etc. except on account of variation in Taxes & Duties.

**2.2 PRICE BASIS FOR SUPERVISION OF includes supervision of dismantling /assembling of deck panel & PG TEST etc.**

- i) Scope of supervision shall be as per Technical Specification i.e Enclosure-II.
- ii) Complete, final and fixed price for complete service part shall have to be quoted and all applicable GST.
- iii) Prices shall be firm till execution of order in full. No escalation will be admissible and granted on any account under any circumstances. Price schedule is enclosed at Annexure-D
- iv) GST for supervision of erection and commissioning if applicable shall be reimbursed against documentary evidence by PURCHASER. The price also includes all charges towards to and fro travel, boarding, local transportation, medical etc.
- v) Price shall remain firm and binding and shall not be subject to any variation whatsoever on any account except for statutory variation on GST.
- vi) Purchaser will not entertain any additional visit charges under following circumstances :
  - a) In case of delay in erection/commissioning due to delay by supplier's engineer.
  - b) Due to lack of proper documents / knowledge to be possessed by supplier's engineer.
  - c) In case of additional visit necessitated due to fault / repair in the supplier's supplied equipment, because of design / manufacturing / workmanship fault.
  - d) In case of delays / loss of time beyond purchaser's control.
  - e) In case of short supplies by the supplier.

### **3.0 TAXES & DUTIES**

#### **3.1 FOR SUPPLY**

- a) GST on finished items are included in the purchase order price. GST on finished items shall be paid at the rates prevailing at the time of delivery period or purchase order delivery period, whichever is earlier and will be limited to taxes actually paid by the Supplier subject to a maximum value declared in their Bid. GST shall not be paid on the intermediate products, components, assemblies, raw materials etc. purchased by the Supplier.
- b) Any revised imposition of taxes/duties on the finished items within the purchase order delivery period will be reimbursed by PURCHASER against documentary evidence. Similarly, if any of existing taxes are reduced or abolished, PURCHASER shall be entitled to get the resultant benefit in full.
- c) Original copy of the GST Invoice as duty paying document (i.e., Buyer's Copy of GST Invoice) shall be furnished by Supplier for claiming GST on the finished items. In addition to the above, the Supplier shall furnish a certificate to the effect that no refund of





## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

GST has been obtained or claimed except credit under GST Rule . In case any refund is obtained in future by the Supplier, the same shall be immediately passed on to PURCHASER in full.

- d) Duplicate copy of the GST Invoice (i.e., Transporter's Copy) shall be sent along with Transporter and it should be ensured that the transporter's copy of GST invoice is handed over to Site/Stores of EMPLOYER/PURCHASER, along with the consignment. Documentary evidence shall be furnished by the Supplier regarding receipt of Transporter Copy of invoice at site stores of EMPLOYER/PURCHASER.
- e) GST Invoice should be Drawn in favor of EMPLOYER as per the details indicated in the dispatch instructions. PURCHASER shall not reimburse GST in case GST Invoice is not drawn as stated in the dispatch instruction. GST Invoice should contain all the particulars as per Latest Notification issued by Central Board of Excise and Customs / other concerned authorities.
- f) GST No. of HEC: 20AAACH4534P3ZL

#### **3.2 Way Bills ( If Required)**

Road permit will be required in Jharkhand State for transportation of equipment & accessories from outside of Jharkhand. for construction of Madhuband NLW Washery. Employer shall issue the way bill which will be given to the supplier on written request submitting all detail required for issue of Way Bills.

**4.0 INSPECTION:** As per instruction in Technical Specification.

#### **5.0 DELIVERY**

Total scope of Work has to be executed with 45 days from the date of issue of Purchase Order.

#### **6.0 TERMS OF PAYMENT**

Subject to any deduction, which PURCHASER may be authorized to make under the Purchase order, the Purchase order Price shall be payable as follows :

##### **A) FOR SUPPLY**

90% of the basic price including P&F charges along with full taxes and freight within 60 days from date of receipt of materials at site and submission of following complete and correct documents in eight (1 original + 7 copies) Sets at HEC, Ranchi after receipt of items at Site Stores of EMPLOYER/PURCHASER. Supplier ensure that dispatches are made and Invoices are raised strictly as per the order.

- i) Five (5) copies (1 original + 4 copies)of GST invoice duly signed by the Supplier.
- ii) Challan/Lorry Receipt received by Employer's Material Receiving Department/ Stores/ Site.
- iii) Packing list duly signed by the Supplier.
- iv) Copy of E-way bill/s .
- v) Copy of intimation to Insurance Company for Transit Insurance as per Clause no.10.0
- vi) Original of the transporter's freight payment certificate.
- vii) Test certificates for bought-out items
- viii) Inspection certificates/Dispatch Clearance, issued by the Engineer of HEC/ Consultant for manufactured items.



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

- ix) Certificate from the Supplier to the effect that contents in each case are neither more nor less than those entered in the invoice and packing list and quality of the goods is guaranteed and as per the relevant specification.
- x) Guarantee Certificate as per clause no 7.
- xi) GST-R1 (GST Return Copy)

**B)** Balance 10% of the basic price shall be paid at the end of guarantee period (24 months from the date of last receipt) or within **360 days** from the date of receipt of last consignment at Site Store whichever is earlier on submission of performance Bank Guarantee of equivalent amount valid till guarantee period.

**Note:**

1. In case there is deviation in payment terms against NIT Payment terms , credit for no. of days will be taken into consideration, while arriving at Landed cost of material to decide L-1 firm. Interest @ 12.05% per annum will be loaded while calculating the Landed cost.
2. For payment all the processing charges by the bank shall be on account of the firm.
3. Payment as mentioned above will be made after receipt of material , by I/c(Fin), Project division, HEC Ltd., Ranchi – 834004 through RTGS on submission of Mandate Form duly signed by Bank.

**C) FOR SUPERVISION OF SUPERVISION OF DISMANTLING /ASSEMBLING OF DECK PANEL :**

Total payment including GST shall be made within 30 days from the date of completion of Supervision work and upon receipt of the following documents:-

- a) GST Invoice in triplicate
- b) Supervision (Full) completion certificate duly signed by PURCHASER/EMPLOYER.
- c) GST-R1 Copy

**7.0 GUARANTEE:**

The equipment/materials must carry a guarantee against faulty materials, faulty design, defective and bad workmanship for a period of 12 months from the date of Performance and Guarantee Test or 24 months from the date of receipt of last consignment at site store whichever is earlier. Any defects noticed during the guarantee period will have to be replaced by the supplier free of cost and replacement of parts/materials will also have a similar guarantee. A Guarantee Certificate must be provided at the time of delivery.

**8.0 BANK GUARANTEES**

**8.1 Security Bank Guarantee & Performance Bank Guarantee (as per Annexure – E )**

The Supplier shall, within 15 (fifteen) days after the date of Purchase Order as specified, provide a Security Bank Guarantee (as per Annexure-E hereof) for the due performance of the contract an amount equivalent to 10% of the Total basic Price as indicated in the



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

Price Schedule in the same currency or currencies valid till completion of supply which will be converted into performance Bank Guarantee valid till guarantee period.

#### **8.2 Claims under Security (Bank Guarantee)**

If the Purchaser considers itself entitled to any claim under any Bank Guarantee, it shall so notify the Supplier by registered/speed post, specifying the default of the Supplier upon which claim is based and it shall require the Supplier to remedy the same. If the Supplier fails to remedy or to take steps to remedy the same within fourteen days of receipt of such notice, then the Purchaser shall be entitled to invoke Security BG/PBG.

#### **9.0 LIQUIDATED DAMAGES FOR DELAY IN COMPLETION**

Time and date stipulated in the Purchase Order for completion of delivery of equipment/item shall be deemed to be the essence of the Purchase order. The Supplier shall complete the delivery of the equipment/item in accordance with the schedule stipulated in the Purchase Order. If, however, the supplier fails to fulfill the delivery in accordance with the time schedule, or within such extended time schedule as may be further granted to the supplier, the supplier shall be liable to pay as liquidated damages, a sum of 1/2% of the final purchase order basic price (as defined under clause 2) per week of delay or part thereof, and such liquidated damages shall be limited to a maximum ceiling of 10 % of the final total basic price (as defined under clause 2)

For the purpose of this clause delivery date shall mean the date on which the said goods are delivered to Site Stores of EMPLOYER/PURCHASER. Delivery at site shall be completed within 15 days from the date of issue of despatch clearance/inspection certificate/way bill whichever is applicable. The supplier shall provide the necessary proof as to the delivery of equipment/item concerned for this purpose.

PURCHASER may recover the liquidated damages payable by the supplier from any amount due to him or which may subsequently become due to him under this or any other purchase order.

#### **10.0 TRANSIT INSURANCE**

Shall be covered under Marine-cum-Erection & Commissioning(MCE) policy taken by us. The policy No. and detail address of the Insurance Company will be intimated to the supplier before despatch. Supplier shall have to furnish full despatch details to the Insurance Company with the copy to this office immediately after despatching the materials.

#### **11.0 MODE OF DESPATCH**

For the consignments to be dispatched by Road, the supplier shall ensure that the following are observed by them :

- i) All dispatches must be effected only on receipt of written despatch clearance from PURCHASER.
- ii) Supplier shall despatch all the materials **consigned to Project Officer, Madhuband NLW Washery, P.O. Nudkhurkee, Distt: Dhanbad (Jharkhand) Account : HEAVY ENGINEERING CORPORATION LIMITED**
- iii) Identify and obtain the correct type of trucks/trailers, keeping in view the nature of consignments to be dispatched.
- iv) Care shall be taken to avoid damages during transit to ensure that all packages are firmly secured.
- vii) All consignments dispatched by truck/trailor shall be consigned on door delivery basis (Full or part lorry load). No. transshipment is allowed.
- vi) The transporter must be approved by Bank Association.
- viii) In case any other mode of transport has to be restored other than that mentioned



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

in the Purchase Order, the same should be done only after obtaining prior approval in writing from the Purchaser. By allowing such transportation no increase in freight charges shall be allowed and in case there is decrease, the actual shall be payable to the supplier

#### **12.0 PACKING, FORWARDING AND SHIPMENT**

- a) The Supplier, wherever applicable, shall after proper painting, pack and crate all equipment in such a manner as to protect them from deterioration and damage during rail and road transportation to the site and storage at the site till the time of erection. The Supplier shall be held responsible for all damages due to improper packing. The supplier shall be liable to deliver the material at the destination as per specification. Any damage during transit shall be sole responsibility of the supplier. In case of damage, the material shall be liable to be rejected and supplier shall replace the same and lift the rejected material within time at their risk and cost.
- b) The Supplier shall notify the Purchaser of the date of each shipment from his works, and the expected date of arrival at the site for the information.
- c) The Supplier shall also give all shipping information concerning the weight, size and content of each packing including any other information the Purchaser may require.
- d) The Supplier shall prepare detailed packing list of all packages and containers, bundles and loose material forming each and every consignment despatched to site. The Supplier shall further be responsible for making all necessary arrangements for loading, unloading and other handling right from his works upto the safe delivery at site store,

#### **13.0 DEMURRAGE, WHARF-AGE, ETC.**

All demurrage, wharf-age and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the Supplier.

#### **14.0 FORCE MAJEURE**

- A)** Force majeure is herein defined as any cause which is beyond the control of the Supplier or Purchaser as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the purchase order, such as:
- (a) natural phenomena, including but not limited to floods, draughts, earthquakes and epidemics:
  - (b) acts of any government, including but not limited to war, declared or undeclared, priorities, quarantines, embargoes,

Provided either party shall within fifteen (15) days from the date of occurrence of such a cause notify the other in writing of such causes.

- B)** The bidding document will clearly state that
- (a) The Supplier will advise, in the event of his having resort to this clause by a registered letter duly certified by the local chamber of commerce or statutory authorities, the beginning and end of the cause of delay, within fifteen days of the occurrence and cessation of such force majeure condition. In the event of delay lasting over two months, arising out of force majeure, the purchase order may be terminated at the discretion of the purchaser.



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

- (b) For delays arising out of Force Majeure, the Supplier will not claim extension in completion date for a period exceeding the period of delay attributed to causes of Force Majeure and neither EMPLOYER nor PURCHASER shall be liable to pay extra costs (like increase in rates, remobilization advance, idle charges for labour, machinery etc.).
- (c) If any of the Force Majeure conditions exists in the place of operation of the Supplier even at the time of submission of the bid he will categorically specify them in the bid and state whether they have been taken into consideration in their quotations.

**C)** The Supplier or the Purchaser shall not be liable for delays in performing his obligations resulting from any force majeure cause as referred to and/or defined above. The date of completion will, subject to hereinafter provided, be extended by a reasonable time even though such cause may occur after Supplier's performance of his obligations has been delayed for other causes.

#### **15.0 LONG TERM AVAILABILITY OF SPARES**

15.1 The Supplier shall guarantee the long term availability of spares to the Employer for the full life of the equipments covered under the purchase order. The Supplier shall guarantee that before going out of production of spare parts of the equipment covered under the purchase order, he shall give the Employer at least twelve (12) months advance notice so that the later may order his bulk requirement of spares, if he so desires. The same provision will also be applicable to sub-Supplier. Further, in case of discontinuance of manufacture of any spares by the Supplier or his sub-Suppliers, the Supplier will provide the Employer two years in advance, with full manufacturing drawings, material specifications and technical information required by the Employer for the purpose of manufacture of such items.

15.2 Further, in case of discontinuance of supply of spares by the Supplier or his sub-Suppliers, the Supplier will provide the Employer with full information for replacement of such spares with other equivalent makes, if so required by the Employer.

#### **16.0 MARKING OF EQUIPMENT :**

The materials must be marked/stenciled of Equipment No.

#### **17.0 NOTIFICATION OF DESPATCH :**

Each and every despatch should be notified immediately after despatch giving the relevant particulars like Truck No., Challan No. with date, C/Note No., Name of the transporter with their full address, date of despatch etc. to the following through telex/telegram/fax :

a)	Project Manager(I/c) HEC Ltd., Madhuband NLW Washery, HEC Ltd.,Ranchi- 834004
b)	Sr.DGM(Purchase), Project Division HMBP Adm. Bldg. Annexe, HEC Ltd.,Ranchi- 834004

#### **18.0 PAYING AUTHORITY**

Payment as mentioned above will be made by Sr.Manager (I/C,Finance), **Project Division, HEC Ltd., Ranchi 834 004.**

#### **19.0 PROGRESS REPORT:**



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

Progress of delivery/inspection must be given to the officer who has signed the purchase order, on the 15<sup>th</sup> and 30<sup>th</sup> of each month during currency of delivery period. Where delivery period is crossed by the supplier, he has to take approval of buyer in writing before despatch.

#### **20.0 SUBLETTING AND ASSIGNMENT :**

The supplier shall not, have without the previous consent in writing of the purchasers, sublet, transfer or assign the purchase order or any part thereof or interest therein or benefit or advantage thereof in any manner whatsoever. Provided nevertheless that any such consent shall not relieve the supplier from any obligation, duty or responsibility under the purchase order.

#### **21.0 CHANGE IN A FIRM :**

Where the supplier is a partnership firm, a new partner shall not be introduced in the firm except with the previous consent in writing of the purchaser (which may be granted only as an exception) of a written undertaking by the new partner to perform the purchase order and accept all liabilities incurred by the firm under the purchase order prior to the date of such undertaking.

#### **22.0 CONSEQUENCE OF BREACH :**

Should the supplier or a partner in the supplier firm commit breach of either of the clauses (20) and (21) of this commercial terms and conditions, it shall be lawful for the purchaser to cancel the purchase order and purchase or authorize the purchase of the stores at the risk and cost of the supplier firm and that even the provisions of Clause (9) shall, as far as applicable, apply.

The decision of Heavy Engineering Corporation Limited as to any matter or thing concerning or arising out of this clause or any question whether the supplier or any partner of the supplier firm has committed a breach of any of the conditions in this clause contained shall be final and binding on the supplier.

#### **23.0 CONSIGNEE :**

**Site in charge, Madhuband NLW Washery, HEC Ltd , PO Nudkharkee, Distt. Dhanbad, State: Jharkhand, PIN: 828307**  
GST No. of HEC: 20AAACH4534P3ZL

**And bill to HEC Ltd , Project Division , Ranchi ,Jharkhand , GST No. of HEC: 20AAACH4534P3ZL**

#### **25.0 TRAINING OF PERSONNEL :**

Supplier shall provide free of cost training of personnel from PURCHASER/NCL for 1 (one) man month at his works. However, boarding, lodging and fare etc shall be borne by the purchaser/employer.

#### **26.0 Q.A. PLAN :** Approved QAP and inspection procedure by Project Officer/Madhuband NLW Washery/BCCL shall apply.

#### **27.0 WEIGHT OF EQUIPMENT**

Weight of equipment must be intimated to the purchaser before effecting delivery.



# HEAVY ENGINEERING CORPORATION LIMITED

## PROJECT DIVISION

**28.0 COMMISSIONING SPARES:** Will be supplied free of cost as required.

**29.0 FORMAT AND NAME PLATE**

All the drawings should be prepared in the format and nameplates with drawing No. out of allotted drawing Nos. to be given to the supplier at the time of placement of order.

**30.0 DRAWING, DOCUMENTS & MANUALS**

Will be furnished as per Technical Specification(Refer Enclosure-II).

**32.0 UNIT RATES**

Unit rates of various supply item which may be required during execution of this package will remain firm till execution of the order.

**33.0 BOUGHT-OUT ITEMS:**

Un-priced purchase order of supplier's bought-out items will be submitted to us within a week after issue of your order.

**34.0 PAINTING**

Painting will be done as per Technical Speciation (Refer Enclosure-II).

**35.0 REJECTION**

If the stores supplied are not to specifications/samples or in accordance with order and are rejected, the same will be removed by supplier at supplier's own risk and cost within 21 days of the date of intimation of rejection by Inspection Deptt/Stores Deptt/Purchase Deptt. If no instruction are received from supplier with regard to mode of despatch, purchaser/employer shall be free and reserve the right to return the rejected materials at supplier's risk and cost and to recover entire freight and other incidentals incurred by PURCHASER. Such rejected stores will be kept in our go down/site for 21 days from the date of intimation to supplier and thereafter those remain at supplier's risk and cost. The purchaser shall also be entitled to recover ground rent/demurrage charges on the rejected stores after expiry of free time mentioned above.

**36.0 SPECIAL INSTRUCTION (DESPATCH MARK/IDENTIFICATION MARK)**

The following markings are to be done on each package

a)	From	
b)	For	<b>Project Officer, Madhuband NLW Washery, P.O. Nudkhurkee, Distt: Dhanbad (Jharkhand) Account : HEAVY ENGINEERING CORPORATION LIMITED</b>
c)	Case No.	The case no. shall be written in the form of a fraction the numerator of which shall be serial number of the case and the denominator representing the total number of cases.
d)	Order No.	
e)	Net Weight	
f)	Gross Weight	

**37.0 LEGALITY AND DISPUTE SETTLEMENT :**

a) This order/purchase order shall be governed by and interpreted according to the relevant laws of India with jurisdiction of courts at Ranchi.



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

- b) Any dispute that may arise between the parties out of or in-connection with this order/purchase order or for the breach thereof, shall be settled amicably and in good faith by negotiations between the designated executives of the parties, at the first instance.
- c) In the event, the parties fail to resolve the disputes or differences arising out of or in connection with the order/purchase order or execution thereof through amicable settlement, the same shall be referred to settlement through “adjudication” of the same by the Sole Arbitrator appointed by PURCHASER. Such arbitration shall proceed as per the provisions of Arbitration and Conciliation Act, 1996 and /or amended from time to time.
- d) The arbitration shall be governed by and in accordance with the Arbitration and Conciliation Act, 1996 for adjudication of the disputes and differences including claims and counter-claims of the parties. The award rendered shall be final and binding upon both the parties.
- e) The venue of arbitration shall be normally at Ranchi only, unless and until agreed otherwise by the parties.
- f) The courts at Ranchi in the State of Jharkhand shall have the exclusive jurisdiction in respect of all the disputes arising out of this contract.

#### **38.0 OTHER TERMS AND CONDITIONS**

Other terms and conditions which are not mentioned above shall be as per General Terms and Conditions of Contract of the Corporation which can be downloaded from our website <https://etenders.gov.in/eprocure/app>,

#### **Enclosures:**

1. Form of Tender (Annexure-A)
2. No Dispute Certificate (Annexure –B)
3. Check List for acceptance/ confirmation of commercial terms & conditions (Annexure-C)
4. Proforma for Security / Performance Bank Guarantee (Annexure-E)





HEAVY ENGINEERING CORPORATION LIMITED

PROJECT DIVISION

Annexure-A

FORMS OF TENDER

Sub : TENDER No. \_\_\_\_\_

To,

DGM/I/C/PURCHASE  
PROJECT DIVISION, HEC LTD RANCHI-4

Dear Sir,

We offer to execute the Works described above in accordance with the Conditions of Contract accompanying the Tender Document issued to us.

This tender and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any tender you received.

We hereby confirm that this tender complies with the tender validity and tender security required by the tender documents.

Yours faithfully

Authorised Signature :

Name and Title of the Signatory :

Name of Tenderer :

Address :

Date :

(To be filled by the tenderer )



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

**Annexure-B**

**NO DISPUTE CERTIFICATE**

Sub : TENDER for the Work \_\_\_\_\_

To,

The DGM/I/C /Purchase I  
Project Division/HEC  
HMBP Adm. Building(Annexe)  
Dhurwa, Ranchi -834 004, Jharkhand

Dear Sir,

We hereby declare that there is no dispute with Heavy Engineering Ltd., Ranchi on date.

Yours faithfully

Authorised Signature :

Name and Title of the Signatory :

Name of Tenderer :

Address :

Date :

(To be filled by the tenderer )



# HEAVY ENGINEERING CORPORATION LIMITED

## PROJECT DIVISION

ANNEXURE – C

Sh 1 of 2

### **CHECK LIST FOR ACCEPTANCE / CONFIRMATION OF COMMERCIAL TERMS & CONDITIONS**

Please confirm your acceptance of following Clauses of Commercial Terms & Conditions :-

CLAUSE No.	PARTICULARS	ACCEPTANCE / CONFIRMATION OF TENDERER ( YES / NO )	REMARKS
1.0	SCOPE OF SUPPLY / WORK & SERVICES		
2.0	PRICE BASIS		
3.0	TAXES & DUTIES		
4.0	INSPECTION		
5.0	DELIVERY		
6.0	TERMS OF PAYMENT		
7.0	GUARANTEE		
8.0	BANK GUARANTEES		
9.0	LIQUIDATED DAMAGES DUE TO DELAY IN COMPLETION		
10.0	TRANSIT INSURANCE		
11.0	MODE OF DESPATCH		
12.0	PACKING, FORWARDING AND SHIPMENT		
13.0	DEMURRAGE, WHARF-AGE, ETC.		
14.0	FORCE MAJEURE		
15.0	LONG TERM AVAILABILITY OF SPARES		
16.0	MARKING OF EQUIPMENT		
17.0	NOTIFICATION OF DESPATCH		
18.0	PAYING AUTHORITY		
19.0	PROGRESS REPORT		
20.0	SUBLETTING AND ASSIGNMENT		
21.0	CHANGE IN A FIRM		
22.0	CONSEQUENCE OF BREACH		
23.0	CONSIGNEE		
24.0	FIRST FILL OF CONSUMABLES, OILS AND LUBRICANTS		
25.0	TRAINING OF PERSONNEL		
26.0	Q.A. PLAN		
27.0	WEIGHT OF EQUIPMENT		
28.0	COMMISSIONING SPARES		
29.0	FORMAT AND NAME PLATE		
30.0	DRAWING, DOCUMENTS & MANUALS		
31.0	ONE YEAR OPERATIONAL SPARES AND TOOL & TACKLES		
32.0	UNIT RATES		

**HEAVY ENGINEERING CORPORATION LIMITED****PROJECT DIVISION****ANNEXURE – C**  
**Sh 2 of 2****CHECK LIST FOR ACCEPTANCE / CONFIRMATION OF COMMERCIAL TERMS & CONDITIONS**

Please confirm your acceptance of following Clauses of Commercial Terms &amp; Conditions :-

<b>CLAUSE No.</b>	<b>PARTICULARS</b>	<b>ACCEPTANCE / CONFIRMATION OF TENDERER ( YES / NO )</b>	<b>REMARKS</b>
33.0	BOUGHT-OUT ITEMS		
34.0	PAINTING		
35.0	REJECTION		
36.0	SPECIAL INSTRUCTION (DESPATCH MARK / IDENTIFICATION MARK)		
37.0	LEGALITY AND DISPUTE SETTLEMENT		
38.0	OTHER TERMS AND CONDITIONS		



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

**ANNEXURE - E**

**SECURITY / PERFORMANCE BANK GUARANTEE**  
**(To be executed on Non-Judicial Stamp Paper of appropriate value)**  
**(TO BE ISSUED BY ANY NATIONALISED/ SCHEDULED BANK**  
**AUTHORISED BY RBI TO ISSUE A BANK GUARANTEE)**

..... **(Name of the Bank)**

Address.....

Guarantee No. ....

A/c Messrs ..... **(Name of Contractor)**

Date of Expiry .....

Limit to liability (**currency & amount**) .

Contract No. ....

For ..... **(Name of Facilities)**

**Subject:**..... **Performance Bank Guarantee.**

Date ..... 201.

**To**  
**Heavy Engineering Corporation Limited**  
**P.O. Dhurwa, Dist. Ranchi, Pin - 834 004, (Jharkhand)**

Dear Sir,

We refer to the Contract Agreement / Purchase Order (hereinafter called the "Contract") Reference No..... Dated ..... between you and M/s. **(Name of the Contractor)** (hereinafter called the "Contractor") for the design, civil, manufacture, supply of plant & equipment, refractories and structures, storage, insurance & handling, erection, testing, commissioning and performance guarantee tests of .. . **(Name of the Facilities)** (~~whichever is not applicable~~).

In consideration of the Heavy Engineering Corporation Limited, having its Registered office at Plant Plaza Road, P.O. Dhurwa, Ranchi - 834004 (hereinafter called to as the "Purchaser" which expression shall unless repugnant to the context or meaning thereof, include all successors, administrators and assigns) having awarded to \_\_\_\_\_ [*Name & Address of the supplier*] (hereinafter called to as "Contractor" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors and assigns) the work \_\_\_\_\_ [*Name of the Work*] by issue of Letter of Award No. \_\_\_\_\_ [*Letter of Intent No.*] and the same having been unequivocally accepted by the Contractor resulting into a Purchase Order No. \_\_\_\_\_ dated \_\_\_\_\_



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

valued at \_\_\_\_\_ [*value of P. O.*] (hereinafter called 'the Contract') and the Purchaser having agreed to accept Performance Bank Guarantee of \_\_\_\_ [*indicate figure*]% of the Contract Sum \_\_\_\_\_ [*amount in figures and words*) from a Nationalized/Scheduled Bank for due performance of the work executed by the Contractor as per the terms & conditions contained in the said Contract.

We, \_\_\_\_\_ [*name of the Bank*], of \_\_\_\_\_ [*address of the Bank*] (hereinafter called to as "Bank" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Purchaser immediately on demand and or, all money payable by the Contractor to the extent of \_\_\_\_\_ [*amount of guarantee in figures and words* ], at any time from \_\_\_\_\_ to \_\_\_\_\_ without any demur, reservation, recourse, contest or protest and/or without any reference to the Contractor. Any such demand made by the Purchaser on the Bank shall be conclusive and binding notwithstanding any difference between the Purchaser and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrevocable and shall continue to be enforceable as per the terms & conditions contained in the said Contract.

The Purchaser shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee, from time to time, to extend the validity of time of Performance of the Contract by the Contractor. The Purchaser shall have the fullest liberty without affecting this Guarantee, to postpone, from time to time, the exercise of any powers vested in them or of any right which they might have against the Contractor, and to exercise the same at any time in any manner, and either to enforce or to forebear or to enforce any covenants contained or implied in the Contract, between the Purchaser and the Contractor or any other course or remedy or security available to the Purchaser. The Bank shall not be released of its obligations under these presents by any exercise by the Purchaser of its liberty with reference to matter aforesaid or any of them or by reason of any other act of forbearance or other acts of omission or commission on the part of the Purchaser or any other indulgence shown by the Purchaser or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank. The Bank also agrees that the Purchaser at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor in first instance, without proceeding against the Contractor and notwithstanding any security or other Guarantee that the Purchaser may have in relation to the Contractor's liabilities.

This Bank Guarantee shall be operable at State Bank of India, Commercial Branch, MECON Campus, Doranda, Ranchi.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_

For and on behalf of the Bank.

Signature \_\_\_\_\_

Name \_\_\_\_\_

Designation \_\_\_\_\_

Common Seal of Bank \_\_\_\_\_

**HEAVY ENGINEERING CORPORATION LIMITED****PROJECT DIVISION****TECHNICAL SPECIFICATION FOR**  
**REFURBISHMENT/ MANUFACTURING OF PU DECK PANEL AND SUPPLY OF RUBBER GROMMET FOR**  
**SCREEN****INDEX**

<b>Sl. No.</b>	<b>Description</b>	<b>Page No.</b>
1.	Scope of Work.	2 of 4
2.	Technical Specification	2 of 4
3.	Quantities	3 of 4
4.	Codes & Standards.	3 of 4
5.	Painting	3 of 4
6.	Inspection and Quality control before Dispatch	3 of 4
7.	Drawings/Documents/catalogue to be submitted	4 of 4
	ANNEXURE i) Annexure-1 :- Reference Drawing	



**1.0 SCOPE OF WORK**

The scope of work includes supervision of dismantling /assembling of deck panel, refurbishing/ manufacturing, inspection, testing, packing , loading /unloading, to & fro transportation, supply at site, Performance Guarantee of the **Six (06) nos. Screen PU deck panels & Rubber grommet** for Madhuband NLW Coal Washery Project of BCCL.

**1.1** The scope of bidder shall consists of but not limited to the following:-

- i) To have a better idea about existing PU liner system and Rubber Grommet, locking mechanism and existing condition in screen vendor should visit our site.
- ii) PU liner replacement of all perforated and blind panel of the water rinsing screen by new PU Liner.
- iii) Old existing panel to be dismantled and taken to successful bidder's factory.
- iv) After refurbishment of PU liner, it has to be fixed at site (Supervision only).
- v) PU liner locking mechanism to be re- established, which includes fixing of locking strip on metal frame.
- vi) Supply and fixing of DAM panel at site as per requirement.
- vii) For dismantling and assembly at site supervision shall be assisted by the successful bidder supervisor and labour work for dismantling and assembly at site shall be provided by HEC.
- viii) Screen should be made available in good working condition after assembly of deck panel.
- ix) Anything not specifically mentioned but essential for fixing and installation of screen PU deck panel and rubber grommet is in the scope of work.
- x) Issues related to screen deck panels and rubber grommet during trial run /commissioning shall be taken care by the successful bidder.
- xi) Drawings & documents.
- xii) For any Technical query kindly contact site in-charge Mr. T. Siva Kumar (Contact No.- 7547889186)

**Exclusion:-**

- i) Erection of Screen
- ii) Civil/Structure/Electrical Works

**2.0 TECHNICAL SPECIFICATION**

Screen deck panels have following parts :-

**i) Blind panel**

Blind panel are made of PU(Polyurethane) impact panel of size 305mmX610mm and thickness 45 mm .

**ii) Perforated panel**

Perforated panel are made of PU(Polyurethane) Welded type(Modular) wedge wire panel .The size of panel are 305mm X 610mm and thickness 45mm.

**iii) DAM panel**

DAM panel are made of PU(Polyurethane) Welded type(Modular) wedge wire panel .The size of panel are 50mm X 50mm.

**iv) Fixing Strip**

PU embedded fixing strip to fix Blind /Perforated /DAM Panel.





# HEAVY ENGINEERING CORPORATION LIMITED

## PROJECT DIVISION

### 3.0 QUANTITIES

Tentative quantities of the PU deck panel and Rubber Grommet are as give below:-

S.No.	Drawing no.	Blind Panel (No.)	Perforated Panel (No.)	DAM (50X50)mm running meter	Fixing Strip Running Meter	Rubber Grommet (No.)
1	HEC/SP-MW/BCCL-02-2166	21	168	21.41	66.05	18
2	HEC/SP-MW/BCCL-02-2178	18	120	14.68	49.11	0
3	HEC/SP-MW/BCCL-02-2184	12	80	9.80	35.08	0
4	HEC/SP-MW/BCCL-02-2181	15	120	15.25	49.41	20
5	HEC/SP-MW/BCCL-02-2176	18	192	24.42	74.12	28
6	HEC/SP-MW/BCCL-02-2164	18	144	14.64	57.65	0
<b>Total Quantity</b>		<b>102</b>	<b>824</b>	<b>100.20</b>	<b>331.42</b>	<b>66</b>

#### **NOTE:-**

- i) Total quantities of panels are 926 nos. Considering 10% extra total quantities are 1018.6 nos. ( say 1000 nos.)
- ii) Actual quantities of PU deck panel and Rubber Grommet shall be checked by the bidder as per site requirement.
- iii) Size and other parameter of rubber grommet shall be checked by the bidder as per site requirement.
- iv) Detail of other parameters of the screen shall be as per the attached Reference drawings (Annexure-1)

### 4.0 CODES & STANDARDS

The equipment & accessories offered shall be Designed, Manufactured & Tested in accordance with the Latest Standards & Codes of Practices by the Bureau of Indian Standards/ International Standards. Hierarchy of Specification will be as under:

- i) Technical Specification.
- ii) Bureau of Indian Standard.
- iii) Indian Electricity Rules & statutory requirements of Central Govt. and State Govt.

### 5.0 PAINTING

Painting shall be as per manufacturer's standard in line with relevant IS.

### 6.0 INSPECTION & QUALITY CONTROL BEFORE DESPATCH

Inspection & Testing to be carried out: As per approved Quality Assurance Plan (QAP).  
Inspecting Authority: Purchaser and/ or client and/ or their Authorized Representative/ Agency.



The supplier shall prepare detailed Quality Assurance Plan (QAP) and submit in relevant sets for approval of the purchaser/ client/ client's consultant.

The QAP should cover all necessary checks, in addition to the following minimum requirement, related to receiving inspection of raw materials/ bought out items, in-process & final inspections including painting, marking and packing etc.

- Dimensional checking of all items.
- Functional, Operational.
- Test Certificates of components.

The following documents shall be furnished during inspection/dispatch of the equipment:

- Test certificates
- Operation, maintenance and service manual
- Complete spare parts lists with ordering information

The lists of equivalent and alternative makes for those spare parts which are not of manufacturer's own product shall also be furnished

#### **7.0 DRAWINGS/ DOCUMENTS/CATALOGUES TO BE SUBMITTED**

Drawings/Documents/catalogues shall be furnished by the Manufacturer/ Supplier within 01 week from the date of LOI, for approval to the purchaser/ client/ client's consultant.

- i) General Arrangement Drawings of the Items providing Specifications, Major dimensions, clearance dimensions, parts/ component list, etc where ever applicable
- ii) Quality Assurance Plan and Inspection/ Test Certificates and Guarantee Certificate, as applicable- during/ after Inspection.
- iii) Inspection/ Test Certificates and Guarantee Certificate, as applicable during/ after Inspection.
- iv) Operational & Maintenance Manual.

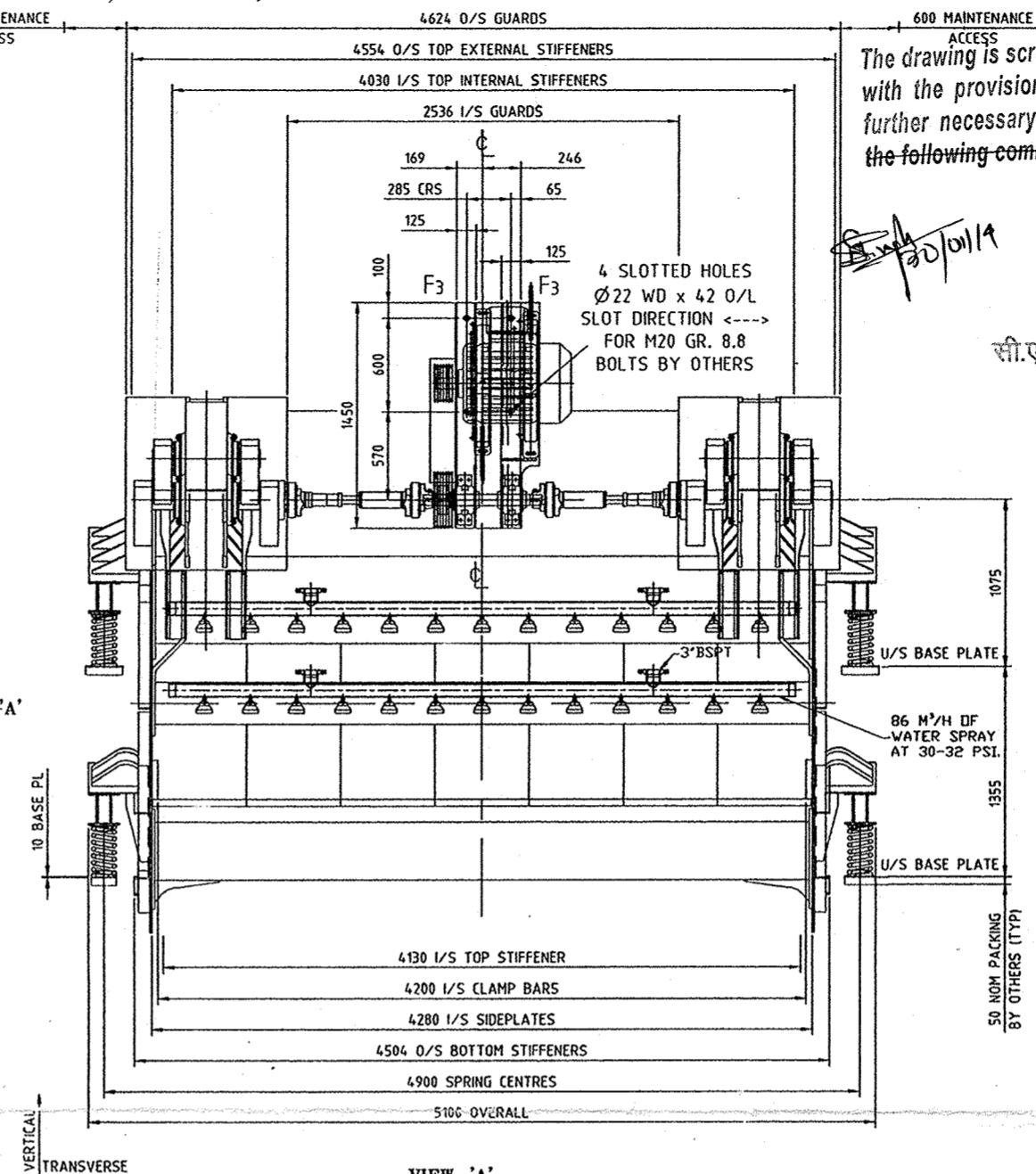
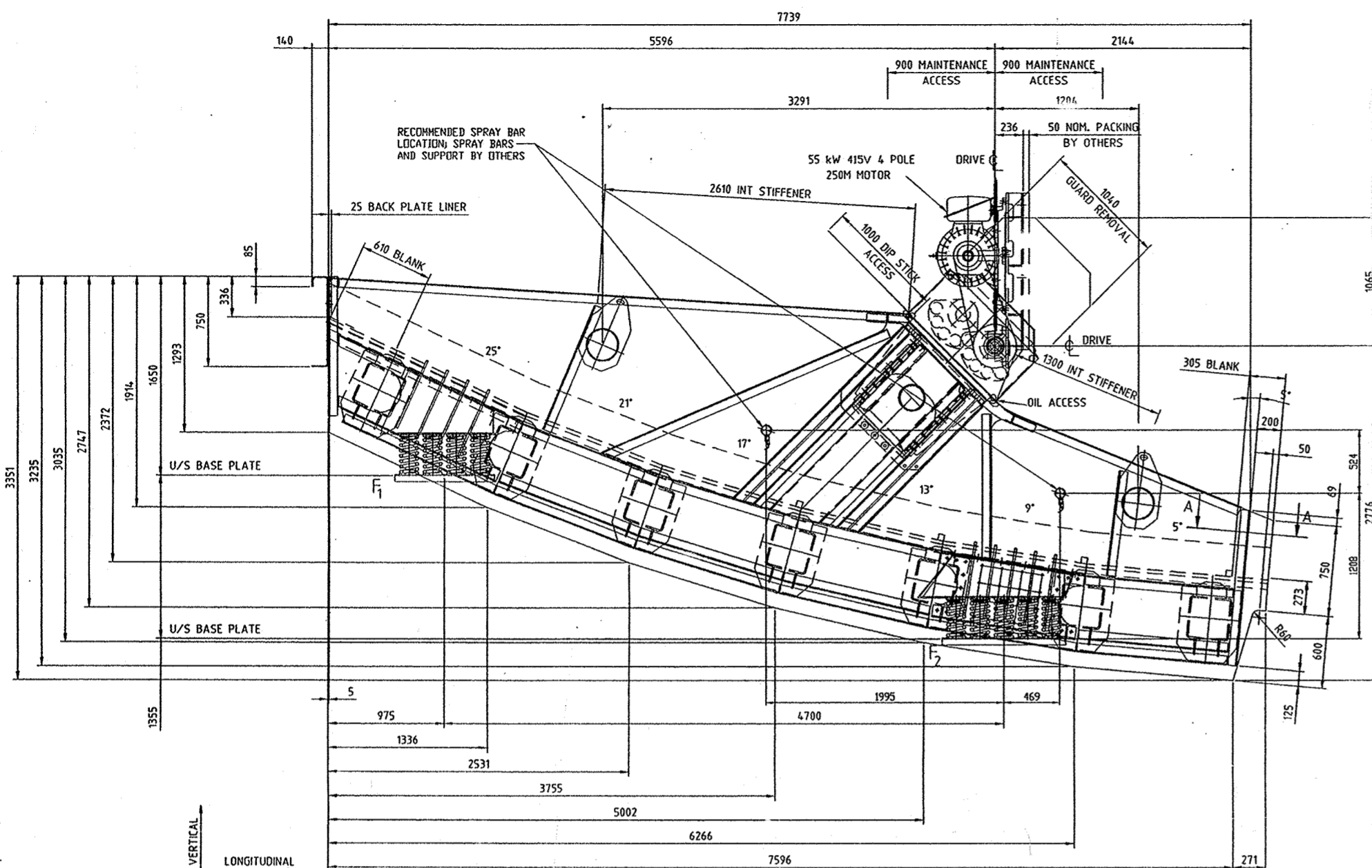


**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

# **ANNEXURE-1**

**(Reference Drawing)**



The drawing is scrutinised in accordance with the provisions of the contract for further necessary action by BCCL with the following comments.

31/10/14

महाप्रबन्धक (सी.ए.पी.)  
सी.ए.पी., सी. एम. पी. डी. आई. सी.  
General Manager (CMP)  
CMP, CMPDI, Ranchi

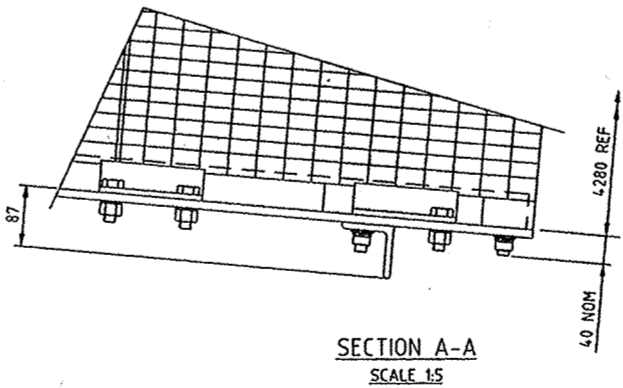
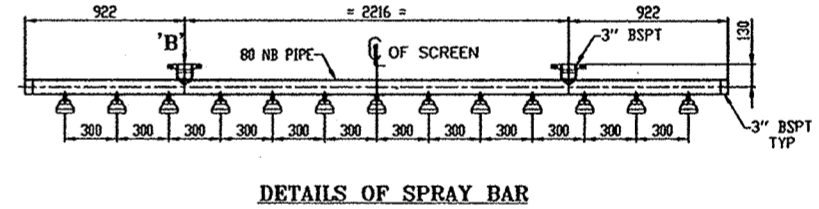
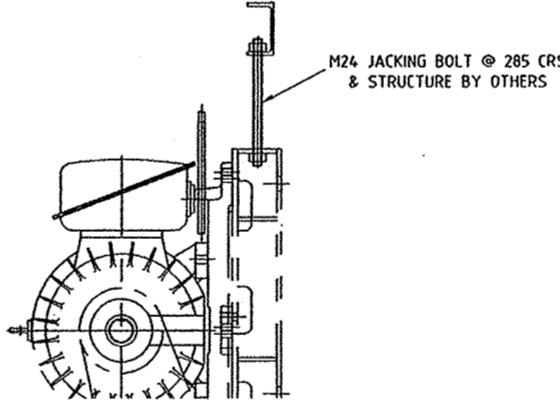
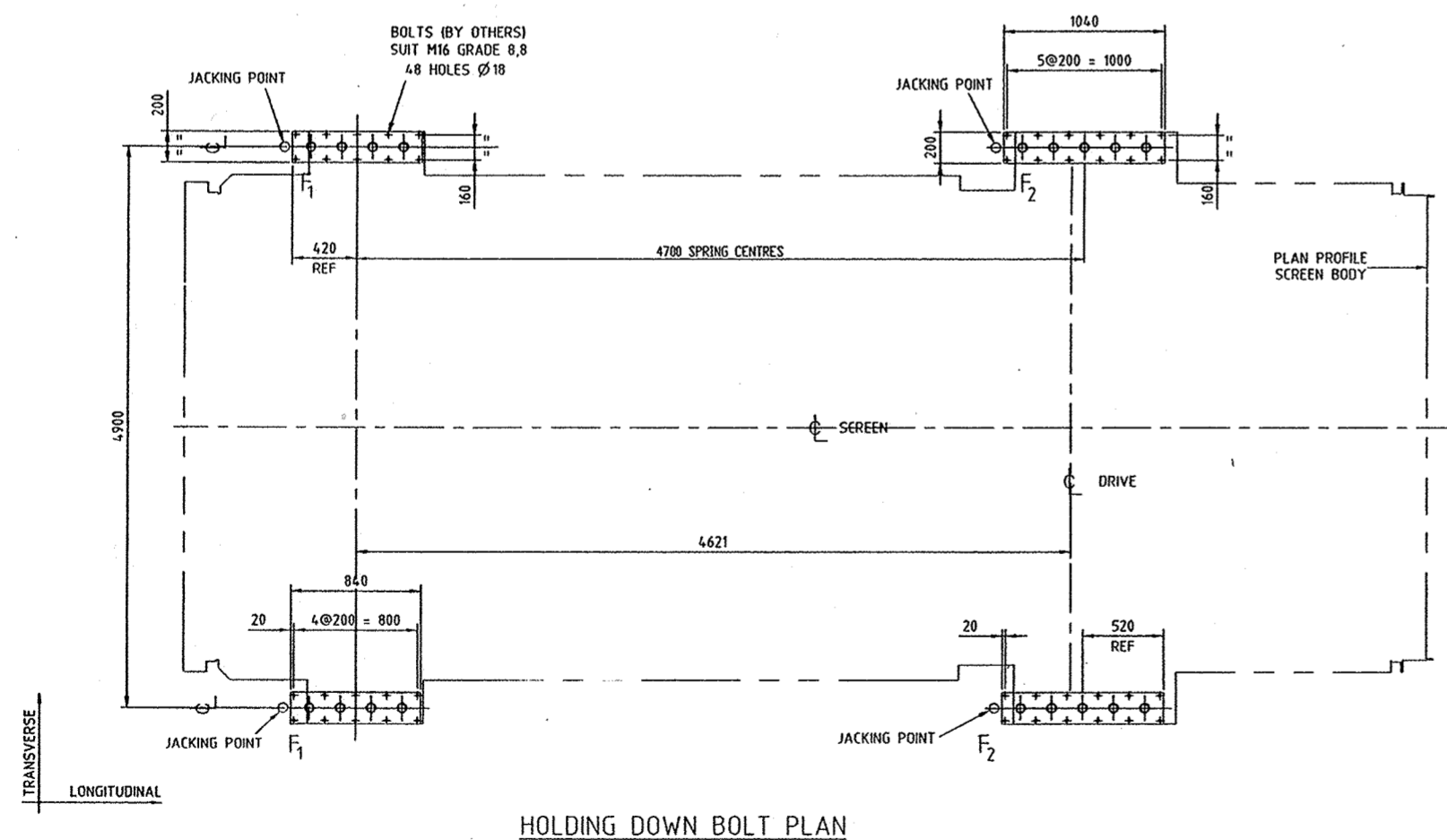
LOADS AT EACH SUPPORT POINT IN NEWTONS, WITHOUT MATERIAL INCLUDES FACTOR OF SAFETY			
STATIC		DYNAMIC	
VERTICAL	LONGITUDINAL	VERTICAL	LONGITUDINAL
FEED END F1 = 44468	FEED END F1 = 4931	FEED END F1 = 1976	FEED END F1 = 404
DISCHARGE END F2 = 59514	DISCHARGE END F2 = 6164	DISCHARGE END F2 = 2469	DISCHARGE END F2 = 617
DRIVE F3 = 4130	DRIVE F3 = 404	DRIVE F3 = 404	DRIVE F3 = 69

MAINTENANCE WEIGHTS IN KILOGRAMS WITHOUT FACTOR OF SAFETY	
EXCITER	1290
EXCITER GUARD	35
DRIVE SHAFT	21
SCREEN ASSEMBLY	21260
SPRING	15
MOTOR	485
DRIVE ASSY	850

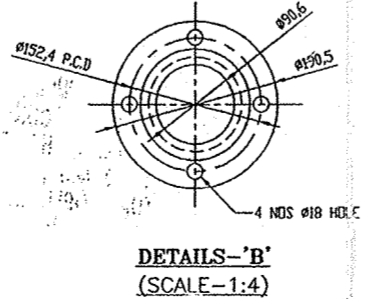
SCREEN MINIMUM STATIC CLEARANCES	
VERTICAL	: 75
LONGITUDINAL	: 75
TRANSVERSE	: 50

NOTE: 120 VERTICAL REQUIRED TO CHANGE SPRINGS WITHOUT COMPRESSING SPRINGS

NAME	: SMALL COAL DESLIMING SCREEN
EQUIPMENT NO.	: 3021
CAPACITY	: 709 TPH
MATERIAL	: COAL
PARTICLE SIZE	: 13-0mm
BULK DENSITY	: 0.95 g/cm <sup>3</sup>
DECK APERTURE	: 1.0 MM
MEDIUM	: 763 M <sup>3</sup> /H WATER.
SIZE ANALYSIS	: 13-6 mm 45.10%
	: 6-3 mm 19.30%
	: 3-0.5 mm 17.50%
	: 0.5-0 mm 18.10%

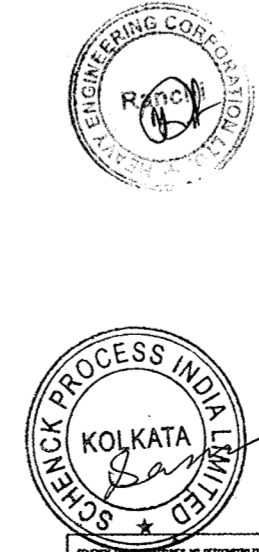


- NOTES:-**
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
  - SHIM UNDER SPRING BASEPLATES TO ACHIEVE EQUAL SPRING LENGTHS EACH SIDE WITHIN 4mm WITH SCREEN DECK LEVEL WITHIN 2mm.
  - EXCITER GUARDS, DRIVE SHAFT GUARD AND BELT GUARDS SUPPLIED.
  - TRANSPORT BRACKETS TO BE REMOVED BEFORE OPERATING.
  - EXCITER SPEED AND PULG WEIGHT SETTINGS TO BE CONFIRMED AFTER WORKSHOP TESTING.
  - CENTRE DRIVE MAY BE LOCATED AS SHOWN OR 90° CW. CLIENT TO NOMINATE.
  - SCREEN TO BE TRANSPORTED WITH EXCITERS MOUNTED.



ACCEPTED IN ACCORDANCE WITH THE CONDITIONS OF THE CONTRACT. THIS ACCEPTANCE HOWEVER DOES NOT RELIEVE M/s. HEC LTD & M/S SCENCK PROCESS FROM THEIR CONTRACTUAL OBLIGATION.

Project Officer  
Madhuband NLW Washery  
Bharat Coking Coal Limited



NO	DATE	REVISION	MG	SM
01	18.12.13	REVISED AS PER CLIENT'S COMMENT.	MG	SM

REVISION				
CATEGORY OF DRG.	APPROVAL	INFORMATION	REFERENCE	RECORD
CLIENT :	BHARAT COKING COAL LIMITED, DHANBAD.			
CONTRACTOR:	CONSORTIUM OF HEC & SCENCK PROCESS			
LEAD MEMBER:	HEAVY ENGINEERING CORPORATION LTD. RANCHI			
ASSOCIATE-1:	SCENCK PROCESS	DRAWING NO. PIN2423-011018-01		

PROJECT:- MADHUBAND NLW COAL WASHERY OF BCCL (5.0MTPA)

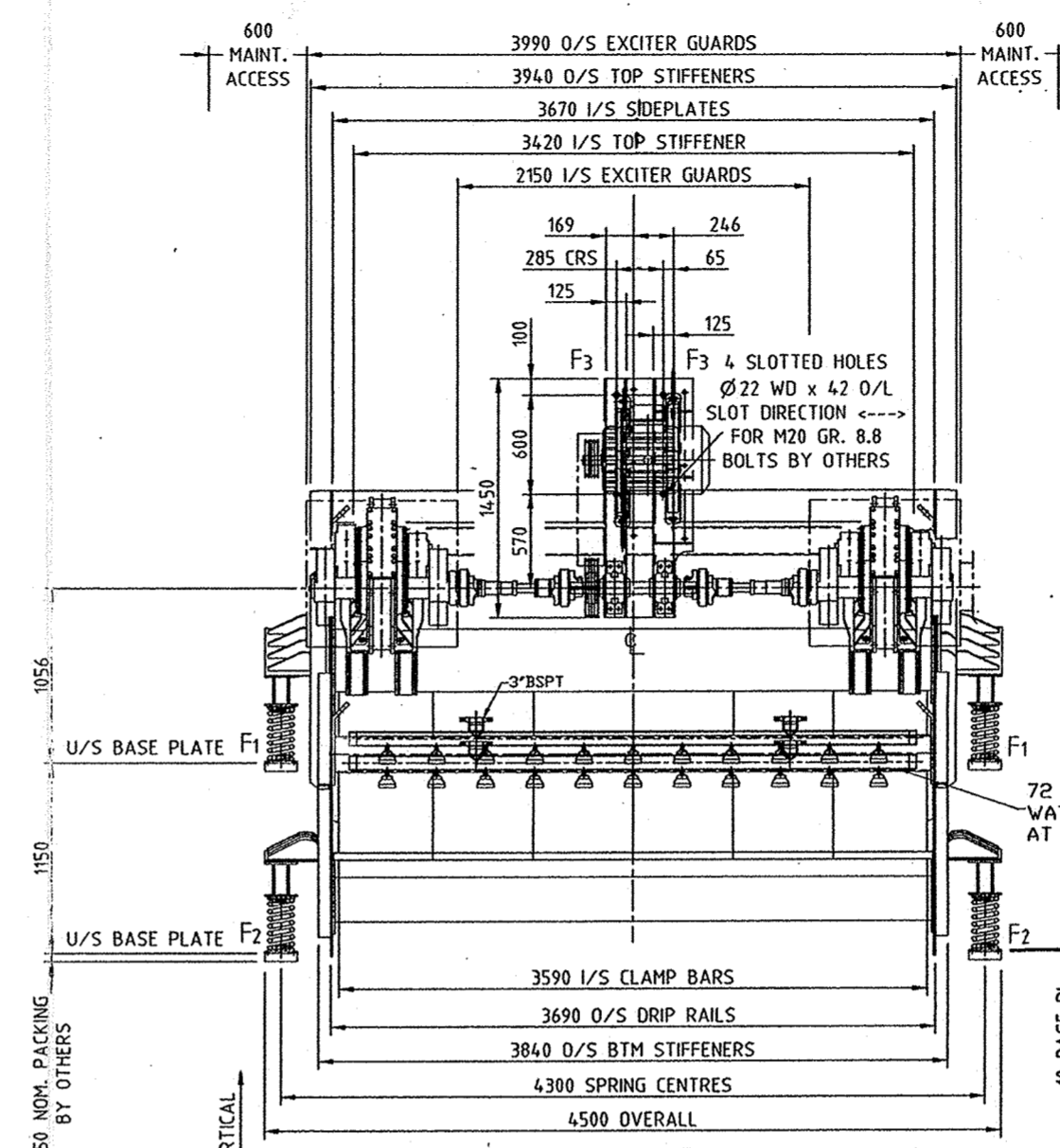
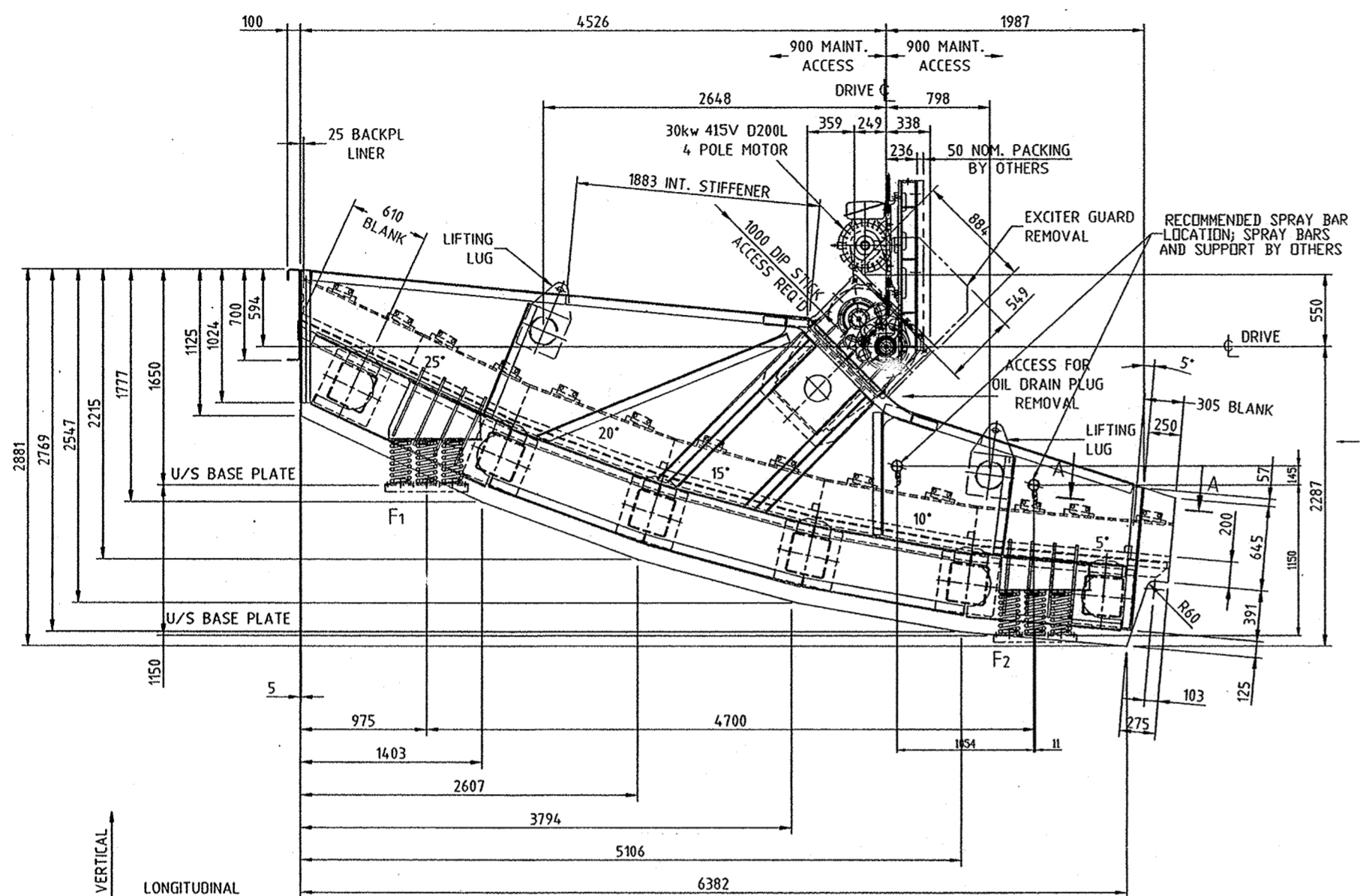
DESIGN.	A.B	TITLE :-
DRAWN.	S.M	GA OF SMALL COAL DESLIMING SCREEN
CHKD.	M.G	SCALE :- 1:20
APD.	A.B	PROJECT DRAWING NO.
DATE	04.02.13	HEC/SP-MW/BCCL-02-2166

REV. 01

Project Officer  
 Madhuband NLW Washery  
 Bharat Coking Coal Limited

HEC/SP-MW/BCCL-02-2178

DRAWING IS HEREBY ACCEPTED FOR THE TERMS & CONDITIONS OF THE CONTRACT AS ACCEPTED BY THE CLIENT. THE CONTRACTOR'S OBLIGATION IS TO COMPLY WITH THE TERMS & CONDITIONS OF THE CONTRACT AS ACCEPTED BY THE CLIENT. THE CONTRACTOR'S OBLIGATION IS TO COMPLY WITH THE TERMS & CONDITIONS OF THE CONTRACT AS ACCEPTED BY THE CLIENT.



LOADS AT EACH SUPPORT POINT IN NEWTONS, WITHOUT MATERIAL INCLUDES FACTOR OF SAFETY			
STATIC		DYNAMIC	
VERTICAL	LONGITUDINAL	FEED END	TRANSVERSE
FEED END F1 = 30465	FEED END F1 = 3477	FEED END F1 = 1393	FEED END F1 = 140
DISCHARGE END F2 = 30164	DISCHARGE END F2 = 3477	DISCHARGE END F2 = 1393	DISCHARGE END F2 = 140
DRIVE F3 = 2480	DRIVE F3 = 280	DRIVE F3 = 280	DRIVE F3 = 480

START-UP OVERTURNING MOMENT AT F3: 480 Nm  
 EXCITER MODEL: DF501S  
 SETTING: 0X0X0  
 OPERATING SPEED: 950 RPM ± 5%

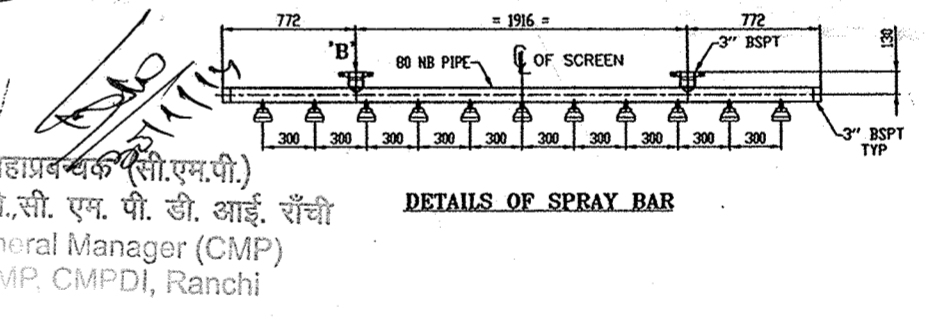
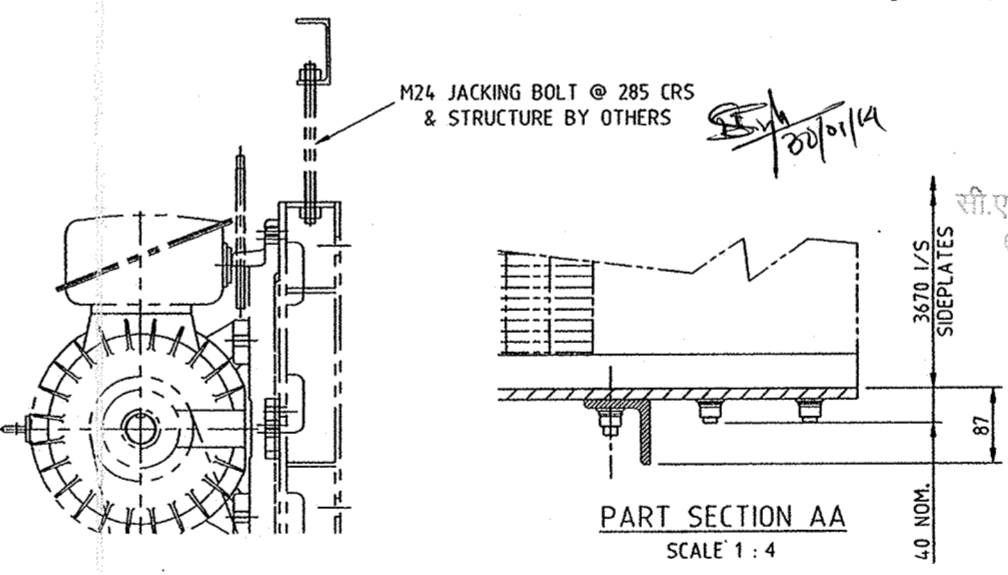
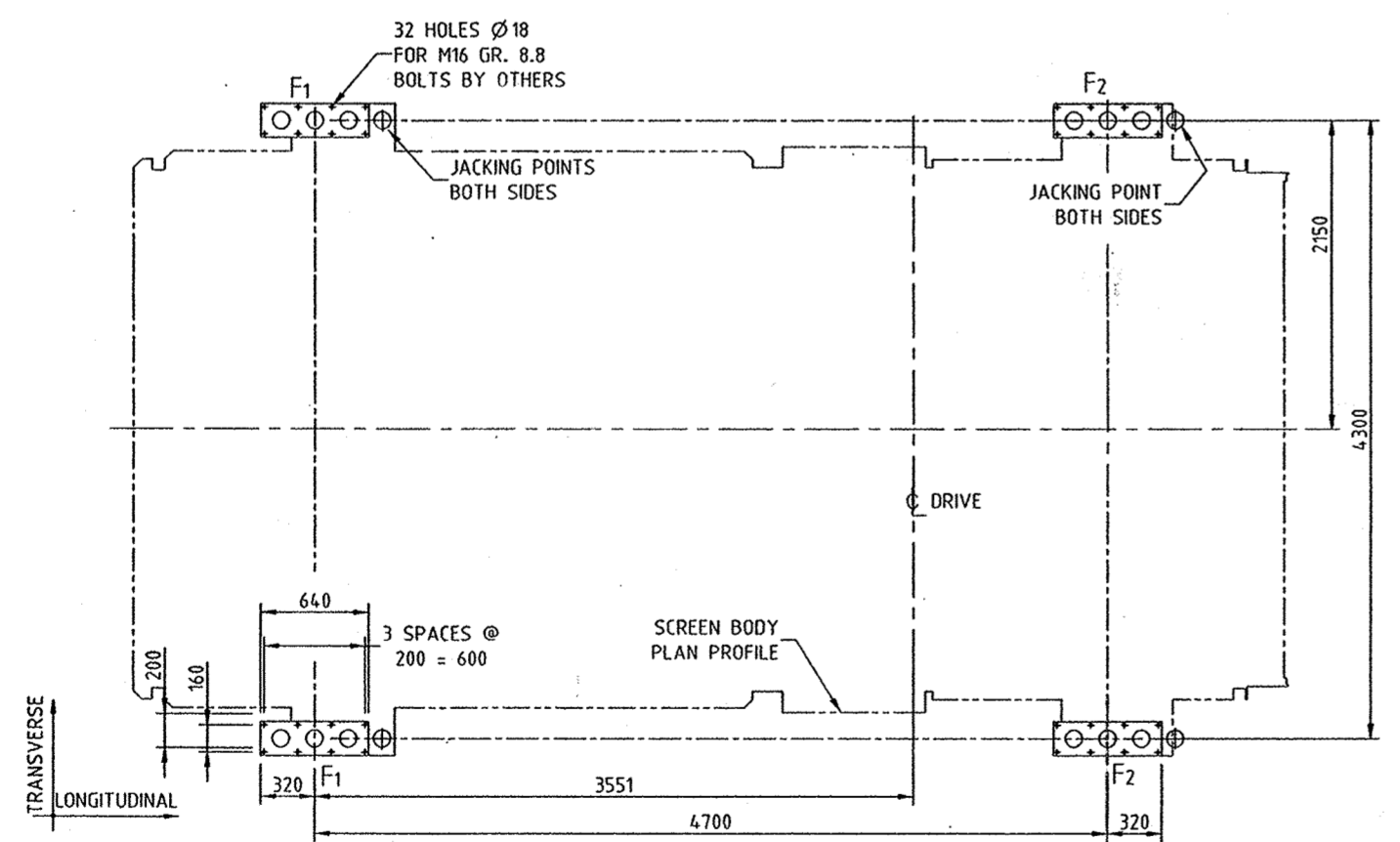
MAINTENANCE WEIGHTS IN KILOGRAMS WITHOUT FACTOR OF SAFETY	
EXCITER	915
EXCITER GUARD	25
DRIVE SHAFT	20
SCREEN ASSEMBLY	10230
SPRING	14
MOTOR	280

SCREEN MINIMUM OPERATING CLEARANCES	
VERTICAL	75
LONGITUDINAL	75
TRANSVERSE	50

NOTE: 120 VERTICAL REQUIRED TO CHANGE SPRINGS WITHOUT COMPRESSING SPRINGS

NAME	: PRIMARY MIDDLEINGS D&R SCREEN
EQUIPMENT NO.	: 3059
CAPACITY	: 244 TPH
MATERIAL	: COAL
PARTICLE SIZE	: 13-0mm
BULK DENSITY	: 1.5 g/cm <sup>3</sup>
DECK APERTURE	: 1.0 MM
MEDIUM	: 225 M <sup>3</sup> /H MAGNETITE AND WATER.

The drawing is scrutinised in accordance with the provisions of the contract for further necessary action by BCCL with the following comments:



- NOTES:-
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
  2. SHIM UNDER SPRING BASEPLATES TO ACHIEVE EQUAL SPRING LENGTHS EACH SIDE WITHIN 4mm WITH SCREEN DECK LEVEL WITHIN 2mm.
  3. EXCITER GUARDS, DRIVE SHAFT GUARD AND BELT GUARDS SUPPLIED.
  4. TRANSPORT BRACKETS TO BE REMOVED BEFORE OPERATING.
  5. EXCITER SPEED AND PLUG WEIGHT SETTINGS TO BE CONFIRMED AFTER WORKSHOP TESTING.
  6. CENTRE DRIVE MAY BE LOCATED AS SHOWN OR 90° CW, CLIENT TO NOMINATE.
  7. SCREEN TO BE TRANSPORTED WITH EXCITERS MOUNTED.

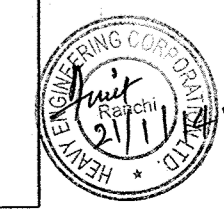
NO	DATE	DESCRIPTION	BY	APPD.
01	18.12.13	REVISED AS PER CLIENT'S COMMENT.	MG	SM

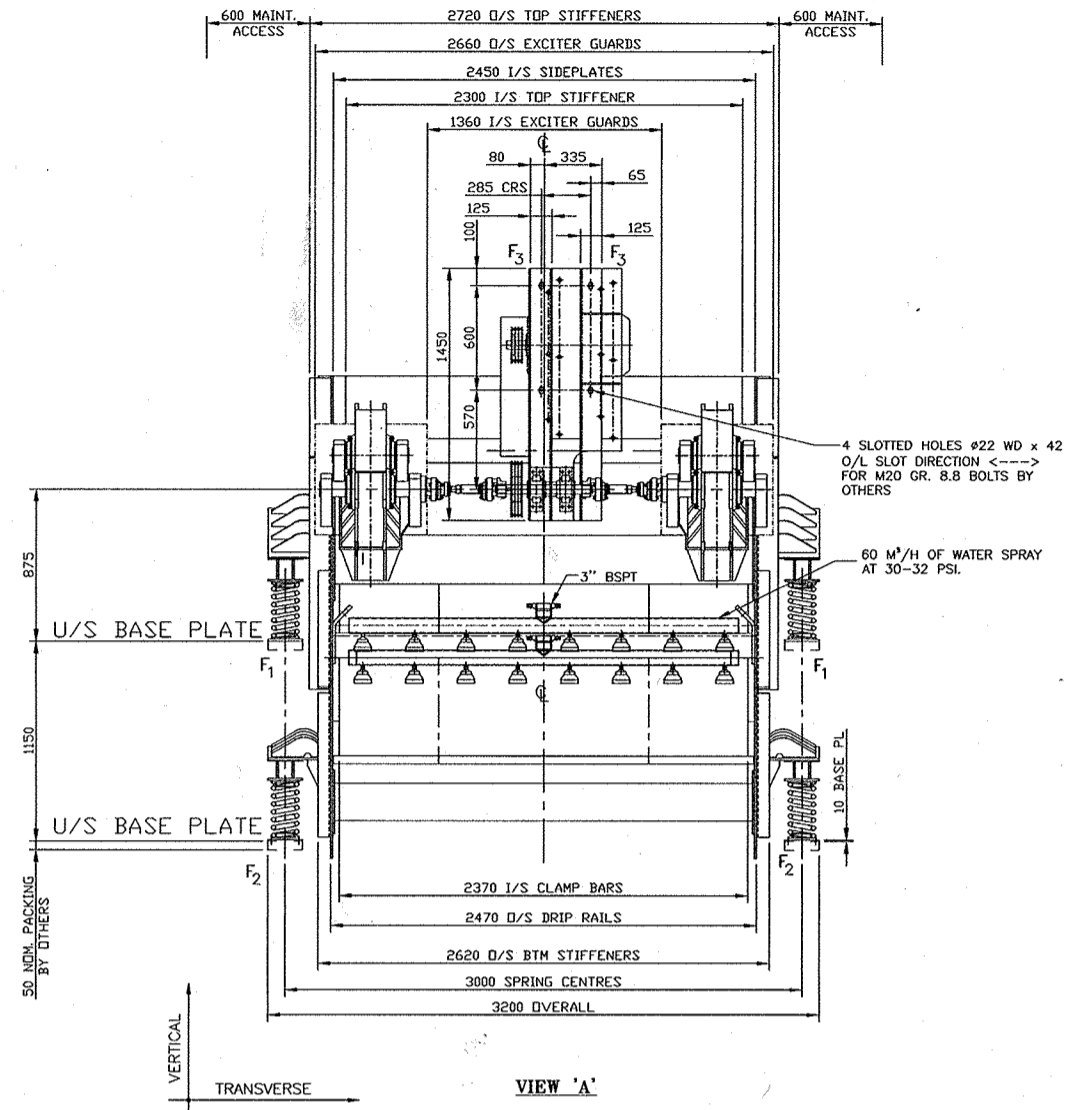
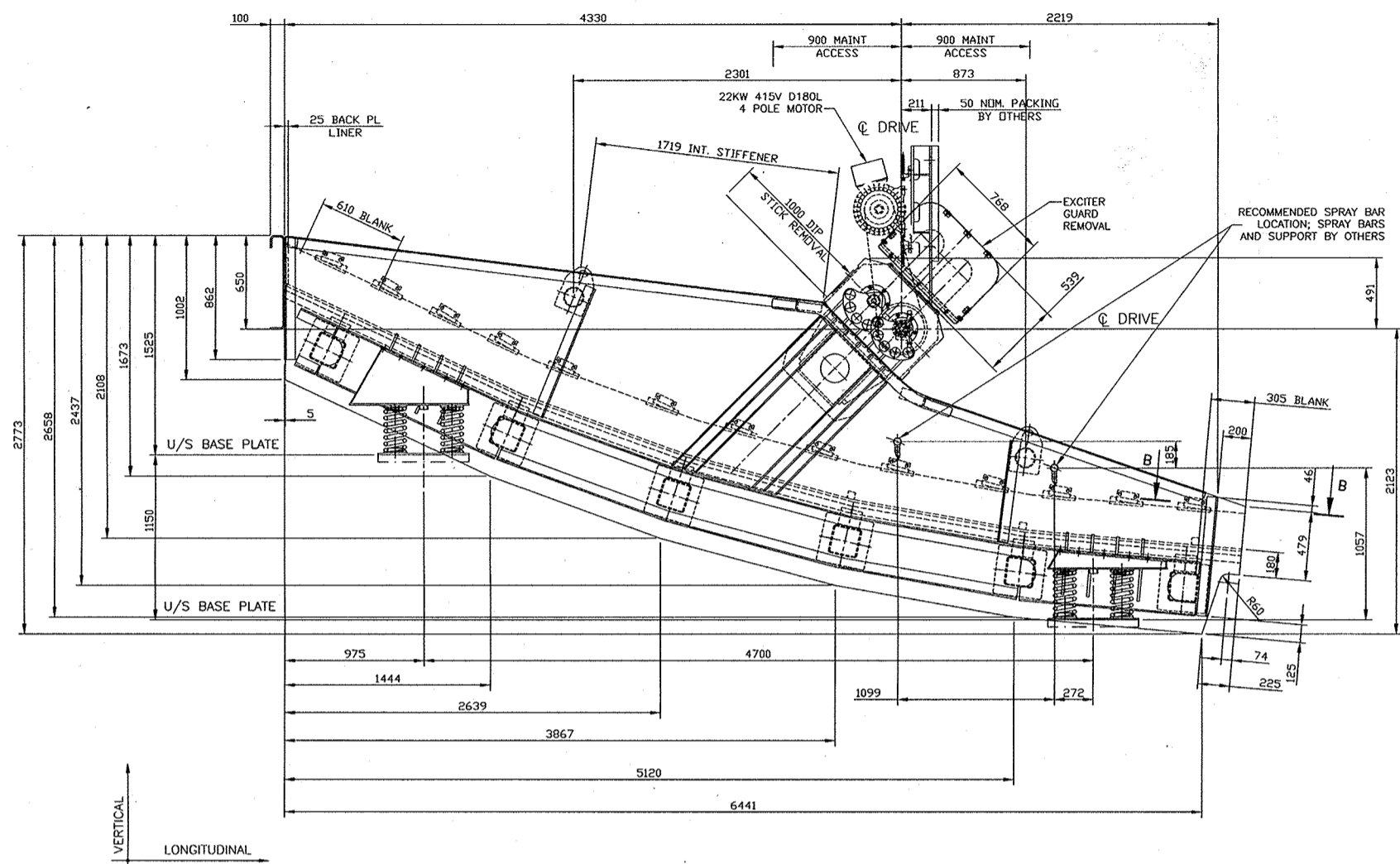
CATEGORY OF DRG.	APPROVAL	INFORMATION	REFERENCE	RECORD	CONSTRUCTION
CLIENT:	BHARAT COKING COAL LIMITED, DHANBAD				
CONTRACTOR:	CONSORTIUM OF HEC & SCHENCK PROCESS				
LEAD MEMBER:	HEAVY ENGINEERING CORPORATION LTD. RANCHI				
ASSOCIATE-1:	SCHENCK PROCESS	DRAWING NO. PIN2423-011020-01			

PROJECT:- MADHUBAND NLW COAL WASHERY OF BCCL (5.0MTPA)

DESIGN.	A.B	TITLE :-
DRAWN.	S.M	GA OF PRIMARY MIDDLEINGS D&R SCREEN
CHKD.	M.G	SCALE :- 1:20
APD.	A.B	PROJECT DRAWING NO.
DATE	04.02.13	HEC/SP-MW/BCCL-02-2178

SHEET 1 OF 1





LOADS AT EACH SUPPORT POINT IN NEWTONS, WITHOUT MATERIAL INCLUDES FACTOR OF SAFETY

STATIC		DYNAMIC	
VERTICAL	LONGITUDINAL	VERTICAL	TRANSVERSE
FEED END F1 = 19846	FEED END F1 = 2449	FEED END F1 = 981	FEED END F1 = 140
DISCHARGE END F2 = 18047	DISCHARGE END F2 = 2449	DISCHARGE END F2 = 981	DISCHARGE END F2 = 140
DRIVE F3 = 2480	DRIVE F3 = 280	DRIVE F3 = 280	DRIVE F3 = 70

START-UP OVERTURNING MOMENT AT F3 : 350 Nm

SCREEN MINIMUM OPERATING CLEARANCES

CLEARANCE	VALUE
VERTICAL	75
LONGITUDINAL	75
TRANSVERSE	50

NOTE: 120 VERTICAL REQUIRED TO CHANGE SPRINGS WITHOUT COMPRESSING SPRINGS

MAINTENANCE WEIGHTS IN KILOGRAMS WITHOUT FACTOR OF SAFETY

EXCITER	520
EXCITER GUARD	25
DRIVE SHAFT	20
SCREEN ASSEMBLY	7725
SPRING	15
MOTOR	180

NAME : REJECT D&R SCREEN.

EQUIPMENT NO. : 3078

CAPACITY : 87TPH

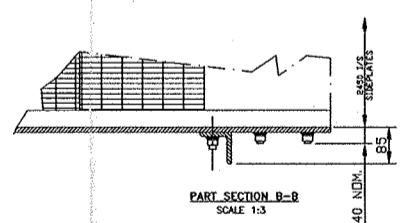
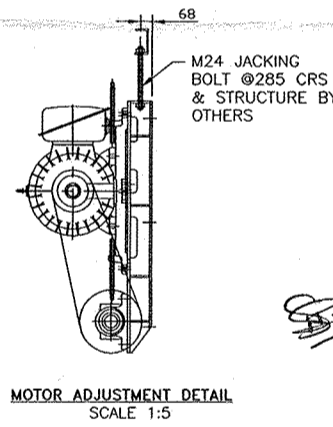
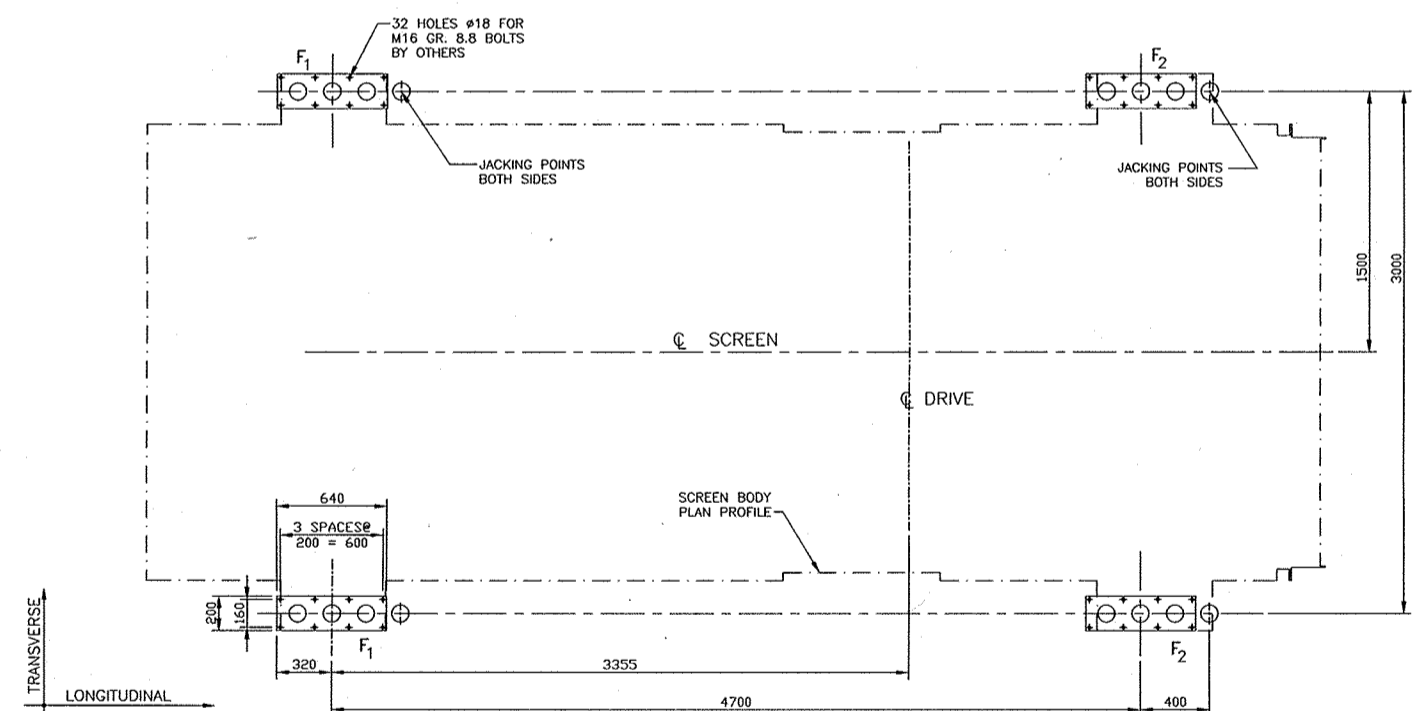
MATERIAL : COAL

PARTICLE SIZE : 13~0 MM

BULK DENSITY : 1.6 g/cm<sup>3</sup>

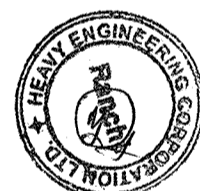
DECK APERTURE : 1.0 MM

MEDIUM : 141 M<sup>3</sup>/H MAGNETITE AND WATER.



The drawing is scrutinised in accordance with the provisions of the contract for further necessary action by BCCL with the following comments.

महाप्रबन्धक (र.म.पी.)  
 सौ.एम.पी.सी. एम. पी. डी. आर्. राँची  
 General Manager (CMP)  
 CMP, CMPDI, Ranchi



NO.	DATE	REVISION	MG	SM
01	18.12.13	REVISED AS PER CLIENT'S COMMENT.		

CATEGORY OF DRG. APPROVAL INFORMATION REFERENCE RECORD CONSTRUCTION

CLIENT : BHARAT COKING COAL LIMITED, DHANBAD

CONTRACTOR: CONSORTIUM OF HEC & SCHENCK PROCESS  
 LEAD MEMBER: HEAVY ENGINEERING CORPORATION LTD. RANCHI

ASSOCIATE-1: SCHENCK PROCESS DRAWING NO. PIN2423-011021-01

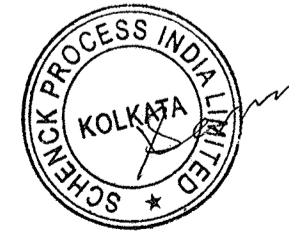
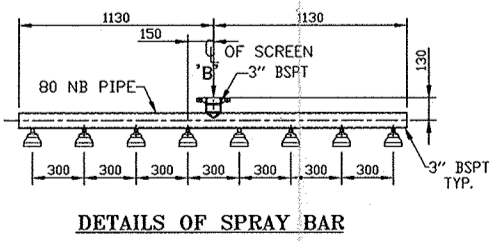
PROJECT:- MADHUBAND NLW COAL WASHERY OF BCCL (5.0MTPA)

DESIGN.	A.B	TITLE :-	GA OF REJECT D&R SCREEN
DRAWN.	S.M	SCALE :-	1:20
CHKD.	M.G	PROJECT DRAWING NO.	HEC/SP-MW/BCCL-02-2184
APD.	A.B	REV.	01
DATE	04.02.13	SHEET 1 OF 1	

- NOTES:-
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
  - SHIM UNDER SPRING BASEPLATES TO ACHIEVE EQUAL SPRING LENGTHS EACH SIDE WITHIN 4mm WITH SCREEN DECK LEVEL WITHIN 2mm.
  - EXCITER GUARDS, DRIVE SHAFT GUARD AND BELT GUARDS SUPPLIED.
  - TRANSPORT BRACKETS TO BE REMOVED BEFORE OPERATING.
  - EXCITER SPEED AND PLUG WEIGHT SETTINGS TO BE CONFIRMED AFTER WORKSHOP TESTING.
  - CENTRE DRIVE MAY BE LOCATED AS SHOWN OR 90° CW. CLIENT TO NOMINATE.
  - SCREEN TO BE TRANSPORTED WITH EXCITERS MOUNTED.

DRAWING IS HEREBY ACCEPTED IN ACCORDANCE WITH THE TERMS & CONDITIONS OF THE CONTRACT THIS ACCEPTANCE HOWEVER DOES NOT RELIEVE HEC/SP-MW/BCCL FROM THEIR OBLIGATIONS TO THE SCHENCK PROCESS FROM THEIR CONTRACT.

Project Officer  
 Madhuband NLW Washery  
 Bharat Coking Coal Limited

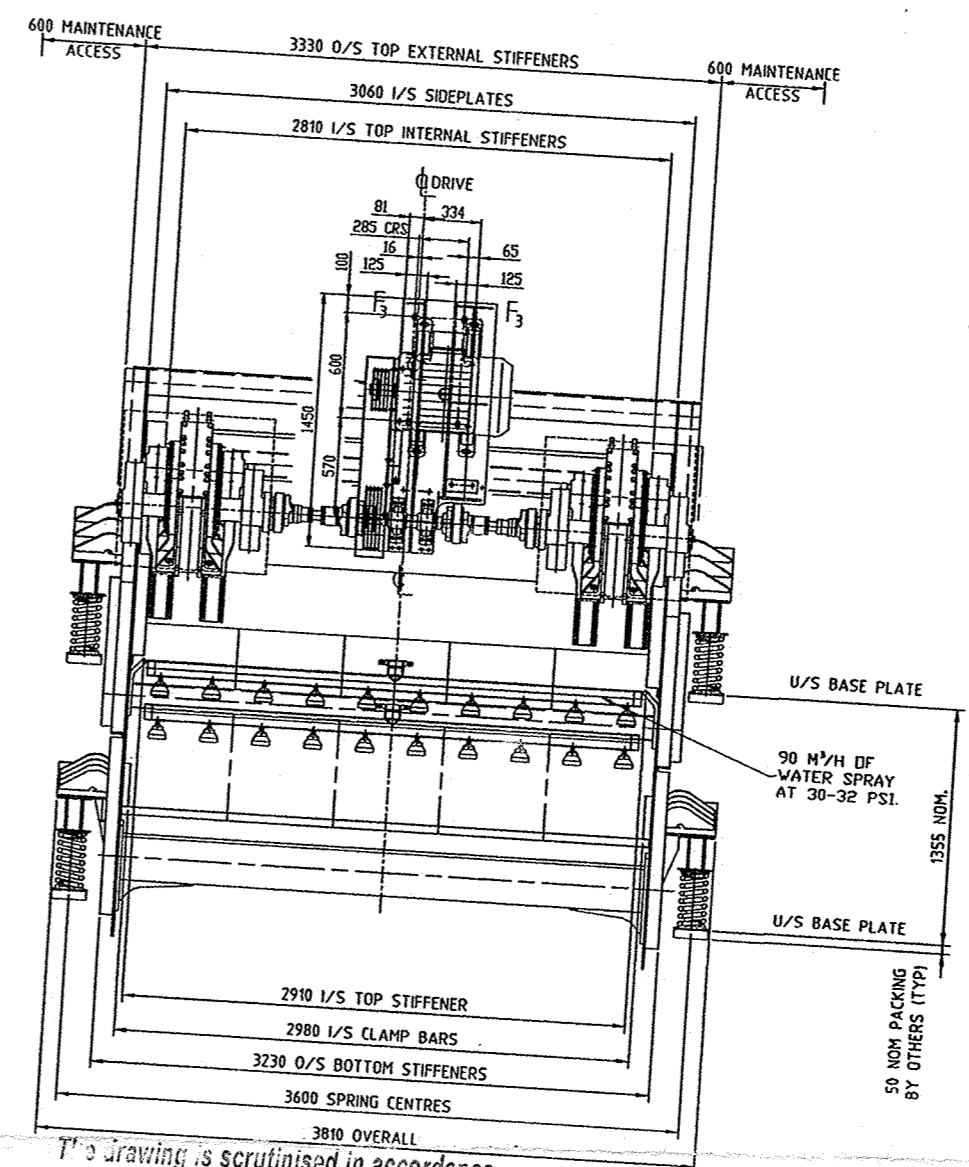
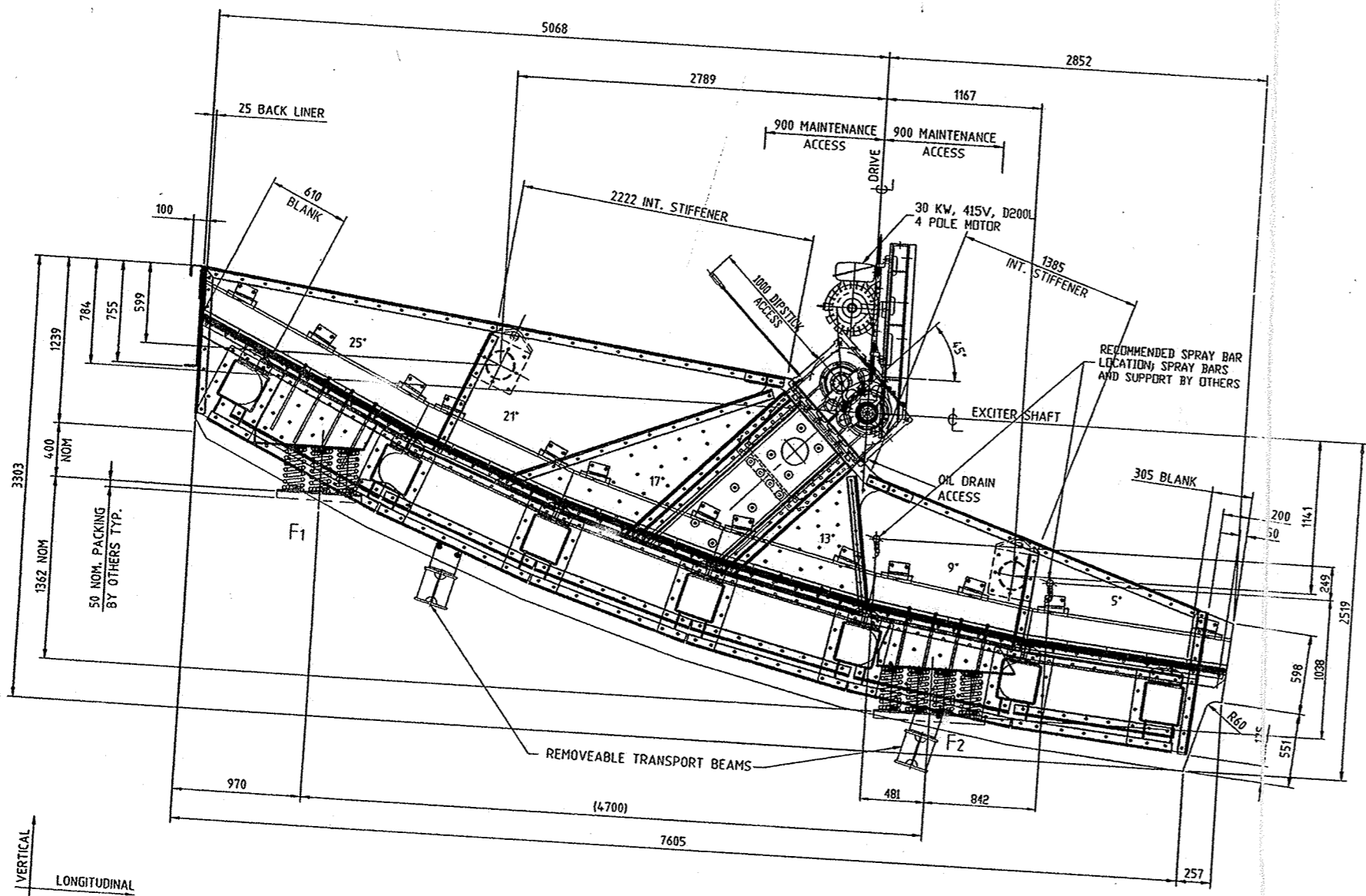


SCHENCK PROCESS ASSUMES NO RESPONSIBILITY FOR THE DESIGN OR OPERATION OF ANY STRUCTURES OR MATERIAL ORDERED ON THIS DRAWING BUT WILL FURNISH DESIGN AND DRAWING CONTRACT TO WHICH THIS DRAWING APPLIES.

THIS PRINT IS LOANER SUBJECT TO RETURN UPON DEMAND AND UPON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED DIRECTLY OR INDIRECTLY IN ANY WAY RETROGRADE TO DATE HERETO.



HEC/SP-MW/BCCL-02-2181



FEEDER LOADS AT EACH SUPPORT POINT IN NEWTONS, WITHOUT MATERIAL INCLUDES FACTOR OF SAFETY

STATIC	DYNAMIC		
	VERTICAL	LONGITUDINAL	TRANSVERSE
FEED END F1 = 23846	FEED END F1 = 2330	FEED END F1 = 934	FEED END F1 = 187
DISCHARGE END F2 = 36473	DISCHARGE END F2 = 3495	DISCHARGE END F2 = 1400	DISCHARGE END F2 = 200
DRIVE F3 = 2820	DRIVE F3 = 220	DRIVE F3 = 220	DRIVE F3 = 49

MAX OVERTURNING MOMENT AT F3: 508 Nm  
 VIBRATOR MOTOR MODEL: N/A  
 EXCITER MODEL: D501S  
 SETTING: XX0XX  
 OPERATING SPEED: 910 RPM/52Z

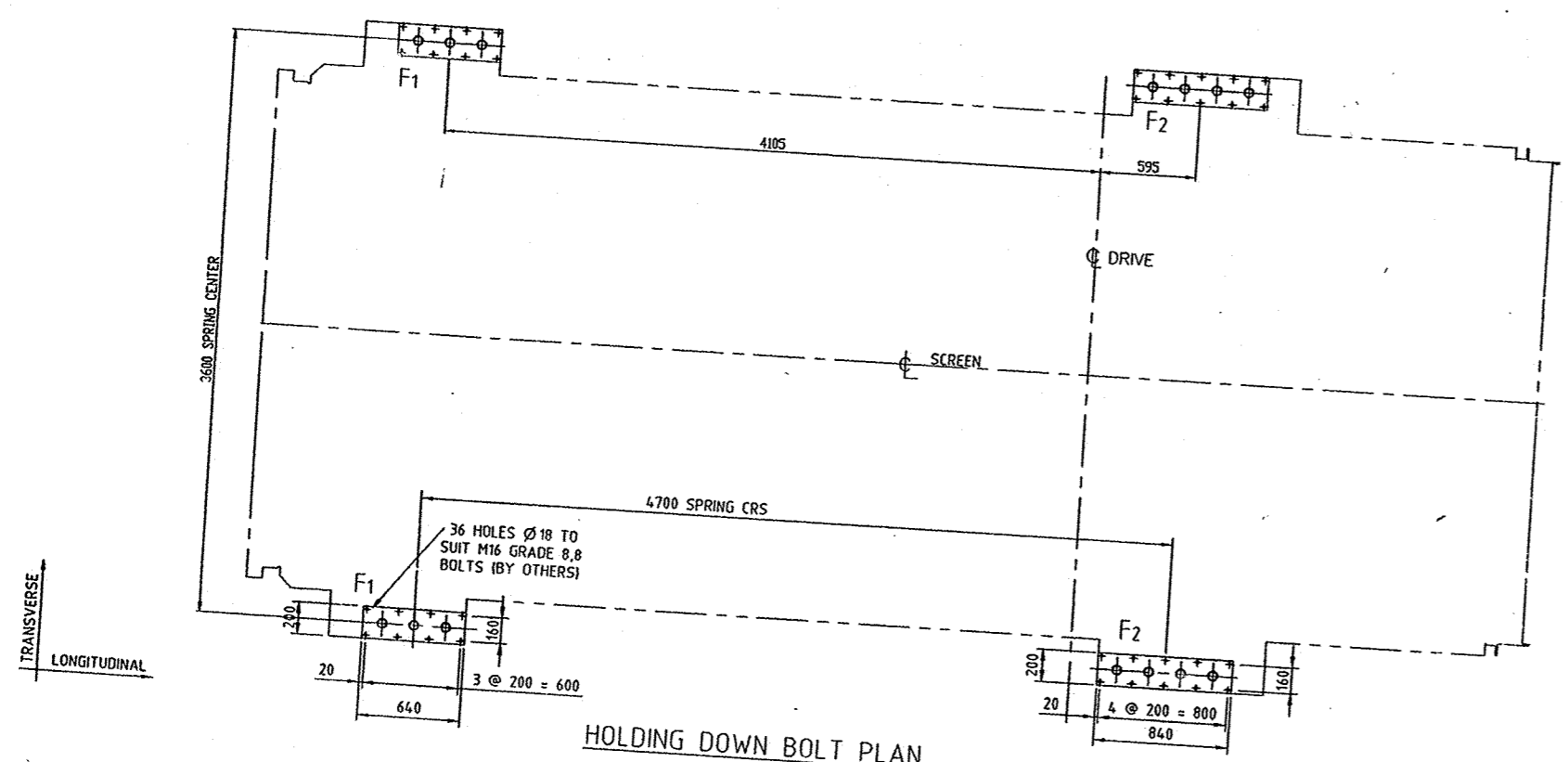
SCREEN MAINTENANCE WEIGHTS IN KILOGRAMS WITHOUT FACTOR OF SAFETY

EXCITER	915
EXCITER GUARD	31
DRIVE SHAFT	21
DRIVE SHAFT GUARD	29
INTERMEDIATE SHAFT	N/A
INT. SHAFT GUARD	N/A
DRIVE ASSEMBLY	670
MOTOR	300
SCREEN ASSEMBLY	11637
SCREEN BODY	8195
SPRING	15
ISOLATION FRAME	N/A
DUST HOUSING F/E	N/A
DUST HOUSING D/E	N/A

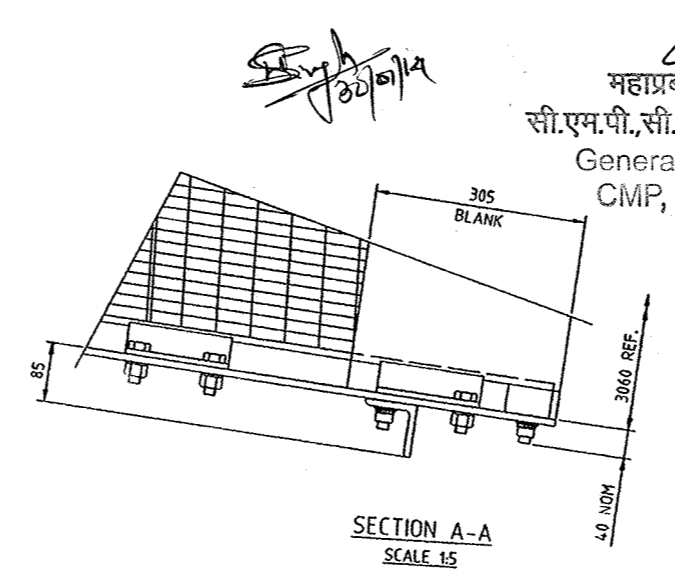
SCREEN MINIMUM STATIC CLEARANCES

VERTICAL UP	75
VERTICAL DOWN	75
LONGITUDINAL	75
TRANSVERSE	50

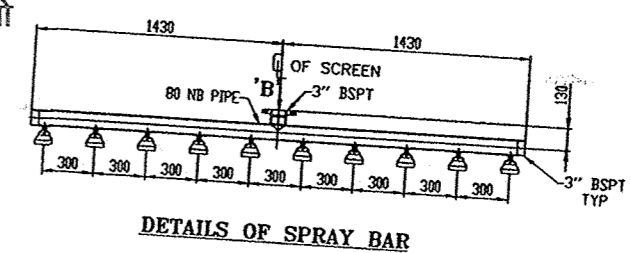
NOTE: 120 VERTICAL REQUIRED TO CHANGE SPRINGS WITHOUT COMPRESSING SPRINGS



This drawing is scrutinised in accordance with the provisions of the contract for her necessary action by BCCL with the following comments.



NAME	: MIDDINGS D&R SCREEN
EQUIPMENT NO.	: 3076
CAPACITY	: 170 TPH
MATERIAL	: COAL
PARTICLE SIZE	: 13~0mm
BULK DENSITY	: 0.9 g/cm³
DECK APERTURE	: 1.0 MM
MEDIUM	: 565 M³/H MAGNETITE AND WATER.



महाप्रबल (सी.एम.पी.)  
 सी.एम.पी.सी. एम. पी. डी. आई. रॉची  
 General Manager (CMP)  
 CMP, CMPDI, Ranchi

NO	DATE	DESCRIPTION	BY	APPD.
02	18.12.13	REVISED AS PER CLIENT'S COMMENT.	MG	SM
01	29.07.13	MINOR CHANGES IN SCREEN DIMENSIONS.	MG	AB

REVISION

CATEGORY OF DRG.	APPROVAL	INFORMATION	REFERENCE	RECORD	CONSTRUCTION
CLIENT :	BHARAT COKING COAL LIMITED, DHANBAD				
CONTRACTOR:	CONSORTIUM OF HEC & SCHENCK PROCESS				
LEAD MEMBER:	HEAVY ENGINEERING CORPORATION LTD. RANCHI				
ASSOCIATE-1:	SCHENCK PROCESS				
DRAWING NO.	PIN2423-011036-01				

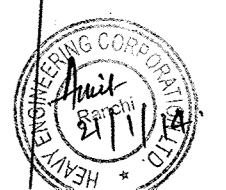
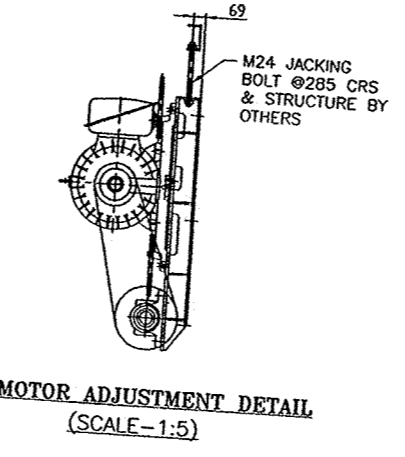
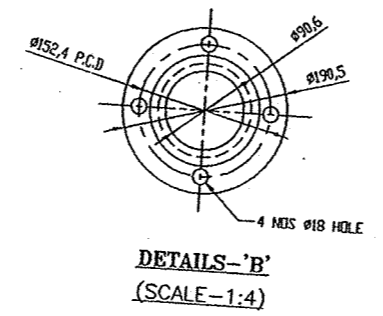
PROJECT:- MADHUBAND NLW COAL WASHERY OF BCCL (5.0MPA)

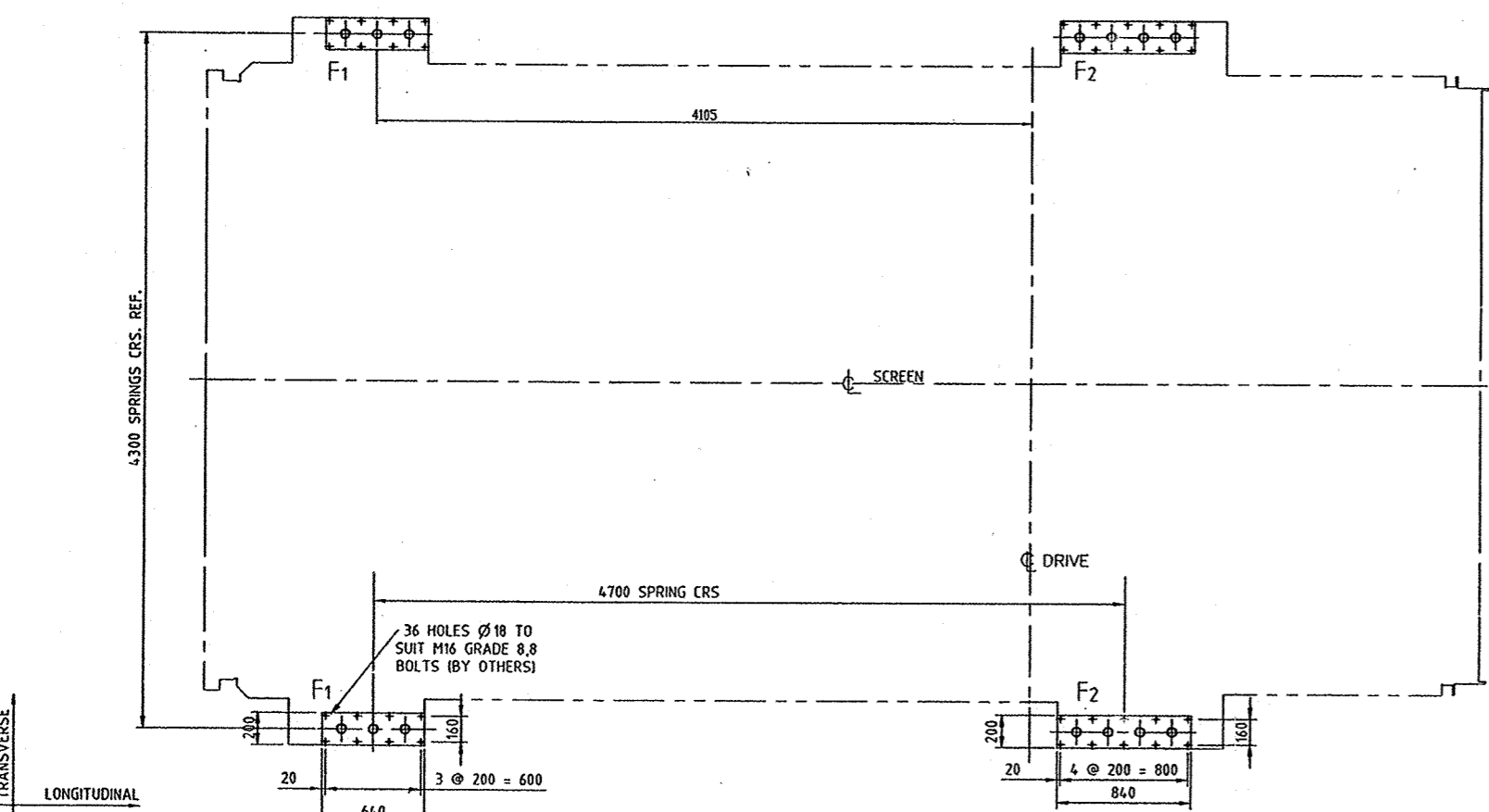
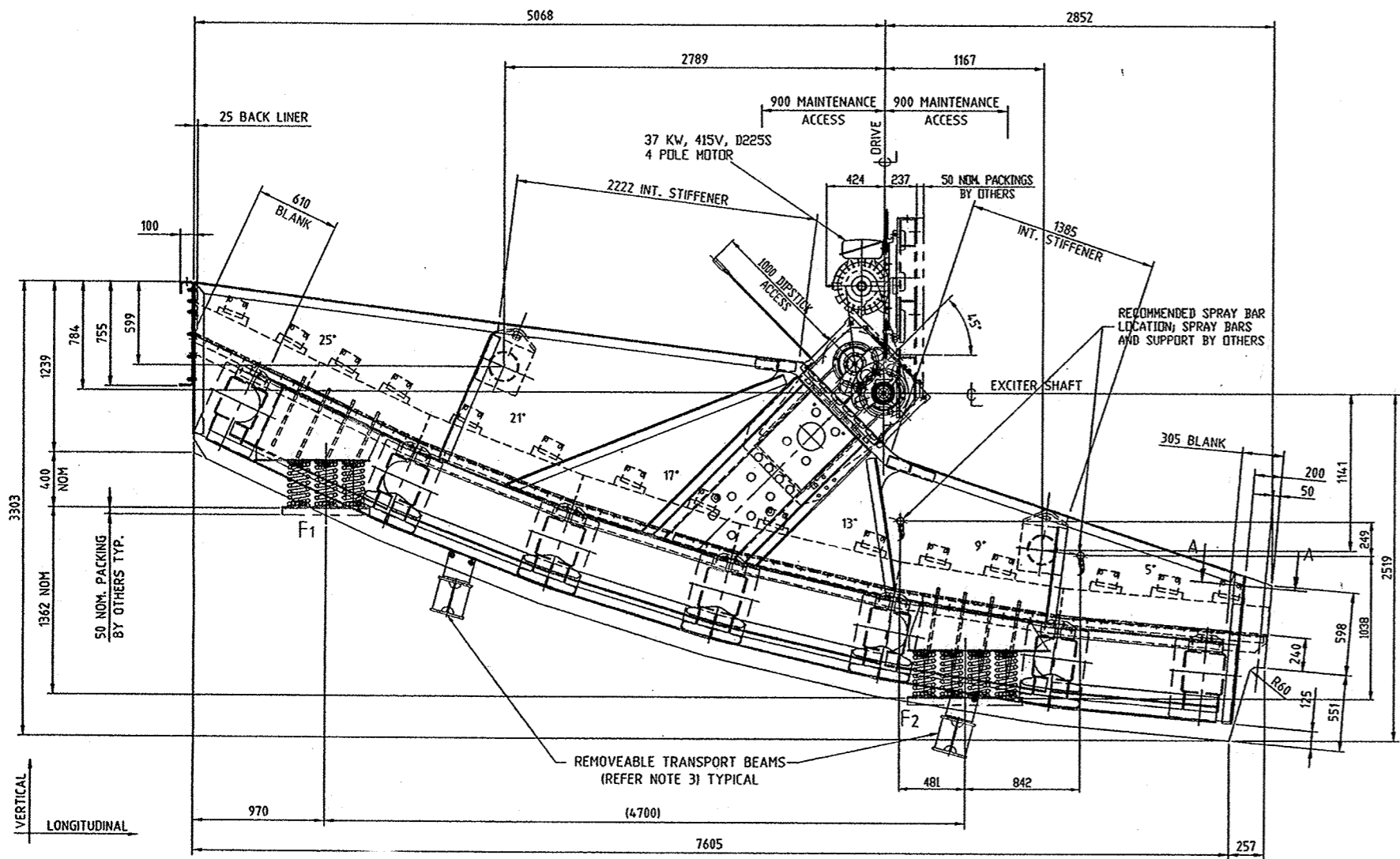
DESIGN.	A.B	TITLE :-	GA OF MIDDINGS D&R SCREEN
DRAWN.	S.M	SCALE :-	1:20
CHKD.	M.G	PROJECT DRAWING NO.	HEC/SP-MW/BCCL-02-2181
APD.	A.B	REV.	

- NOTES:-
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
  - SHIM UNDER SPRING BASEPLATES TO ACHIEVE EQUAL SPRING LENGTHS EACH SIDE WITHIN 4mm WITH SCREEN DECK LEVEL WITHIN 2mm.
  - EXCITER GUARDS, DRIVE SHAFT GUARD AND BELT GUARDS SUPPLIED.
  - TRANSPORT BRACKETS TO BE REMOVED BEFORE OPERATING.
  - EXCITER SPEED AND PLUG WEIGHT SETTINGS TO BE CONFIRMED AFTER WORKSHOP TESTING.
  - CENTRE DRIVE MAY BE LOCATED AS SHOWN OR 90° CW, CLIENT TO NOMINATE.
  - SCREEN TO BE TRANSPORTED WITH EXCITERS MOUNTED.

DRAWING IS HEREBY ACCEPTED IN ACCORDANCE WITH THE CONDITIONS OF THE CONTRACT. THIS ACCEPTANCE DOES NOT RELIEVE M/s. HEC & SCHENCK PROCESS FROM THEIR CONTRACTUAL OBLIGATIONS.

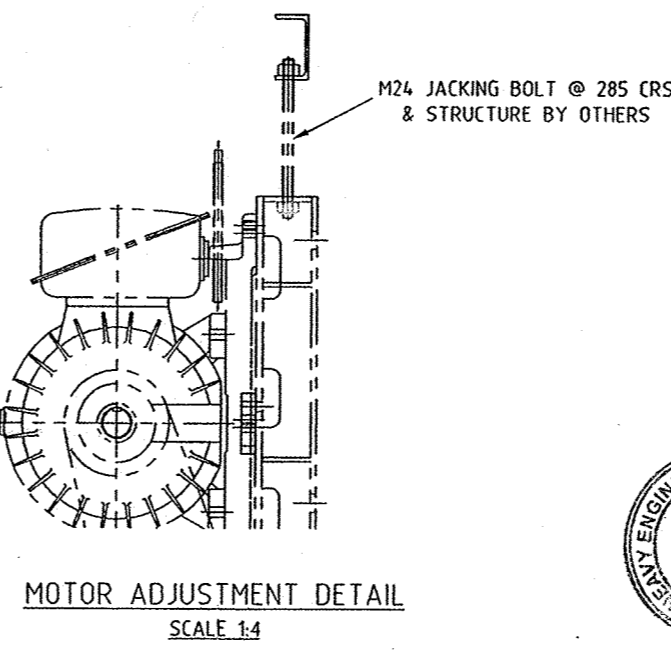
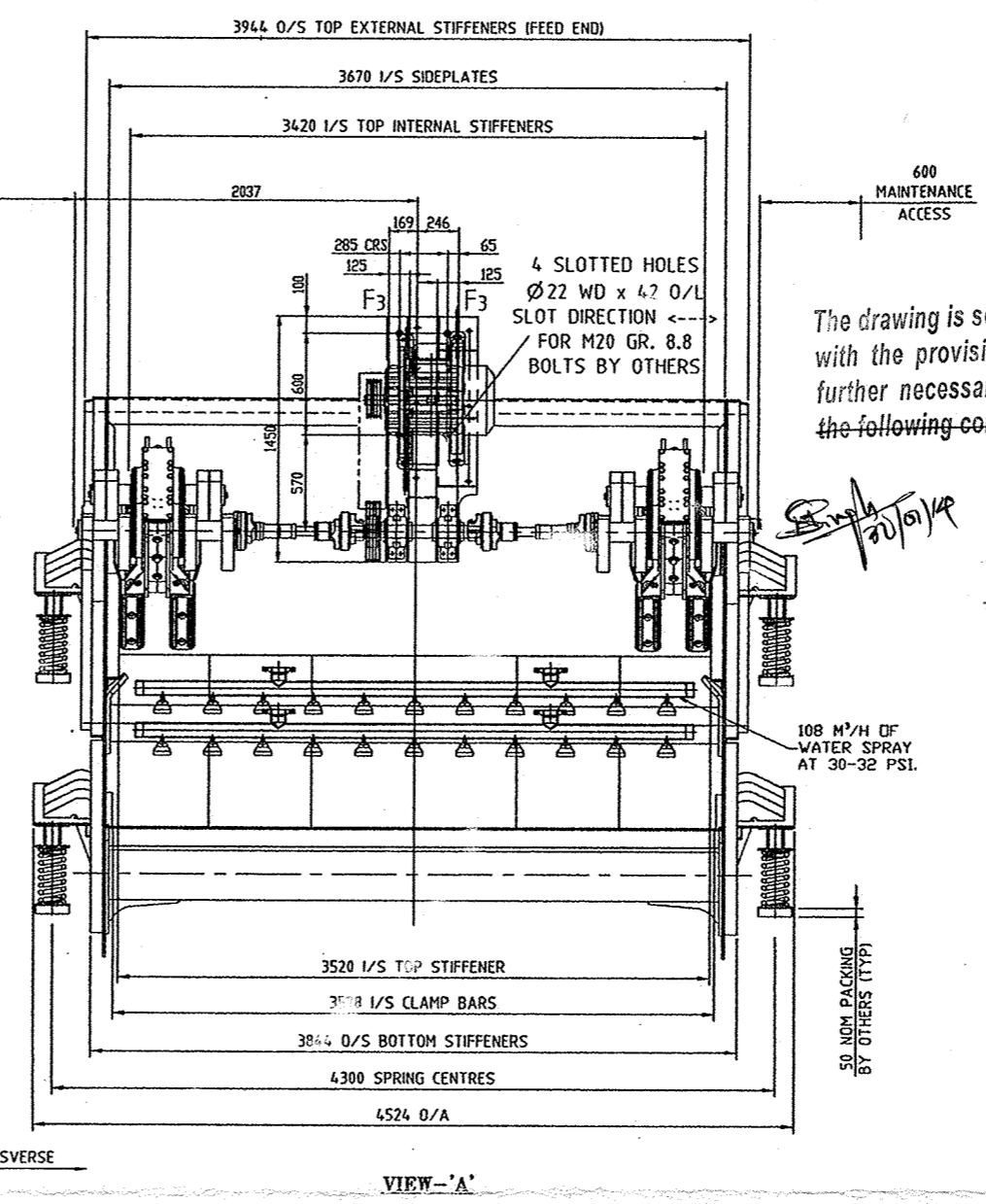
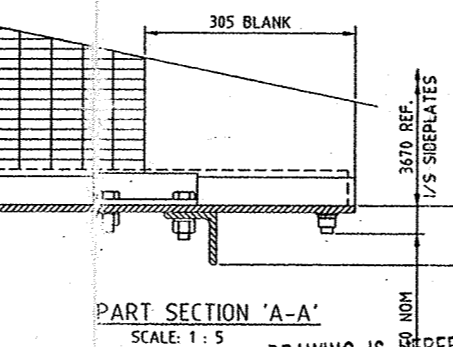
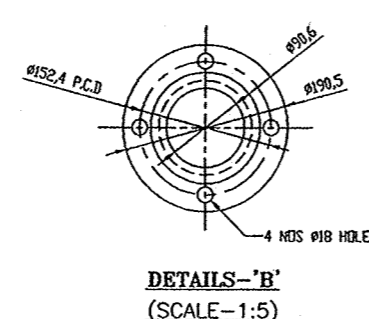
Project Officer  
 Madhuband NLW Washery  
 Bharat Coking Coal Limited





HOLDING DOWN BOLT PLAN

- NOTES:-
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
  - SHIM UNDER SPRING BASEPLATES TO ACHIEVE EQUAL SPRING LENGTHS EACH SIDE WITHIN 4mm WITH SCREEN DECK LEVEL WITHIN 2mm.
  - EXCITER GUARDS, DRIVE SHAFT GUARD AND BELT GUARDS SUPPLIED.
  - TRANSPORT BRACKETS TO BE REMOVED BEFORE OPERATING.
  - EXCITER SPEED AND PLUG WEIGHT SETTINGS TO BE CONFIRMED AFTER WORKSHOP TESTING.
  - CENTRE DRIVE MAY BE LOCATED AS SHOWN OR 90° CW. CLIENT TO NOMINATE.
  - SCREEN TO BE TRANSPORTED WITH EXCITERS MOUNTED.



SCREEN LOADS AT EACH SUPPORT POINT IN NEWTONS, WITH ISOLATION FRAME & WITHOUT MATERIAL INCLUDES FACTOR OF SAFETY

STATIC	DYNAMIC		
	VERTICAL	LONGITUDINAL	TRANSVERSE
FEED END F1 = 32429	FEED END F1 = 4017	FEED END F1 = 1610	FEED END F1 = 325
DISCHARGE END F2 = 47046	DISCHARGE END F2 = 5357	DISCHARGE END F2 = 2146	DISCHARGE END F2 = 430
DRIVE F3 = 3286	DRIVE F3 = 220	DRIVE F3 = 220	DRIVE F3 = 70

MAX OVERTURNING MOMENT AT F3: 632 Nm  
 EXCITER MODEL : DF504S  
 VIBRATOR MOTOR MODEL :  
 SETTING : XX0XX  
 OPERATING SPEED : 950 RPM ± 5%

The drawing is scrutinised in accordance with the provisions of the contract for further necessary action by BCCL with the following comments:

महाप्रबन्धक (सी.एम.पी.)  
 सी.एम.पी.सी. एम. पी. आई. रं.  
 General Manager (CMP)  
 CMP, CMPDI, Ranchi

SCREEN MAINTENANCE WEIGHTS IN KILOGRAMS WITHOUT FACTOR OF SAFETY

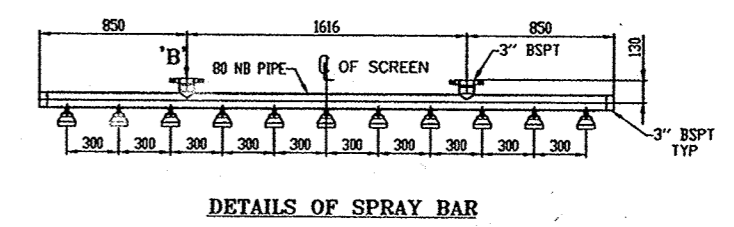
EXCITER	915
EXCITER GUARD	N/A
DRIVE SHAFT	21
DRIVE SHAFT GUARD	39.7
INTERMEDIATE SHAFT	33
INT. SHAFT GUARD	N/A
DRIVE ASSEMBLY	720
MOTOR	350
SCREEN ASSEMBLY	15466
SCREEN BODY	10733
SPRING	15
ISOLATION FRAME	N/A
DUST HOUSING F/E	N/A
DUST HOUSING D/E	N/A

SCREEN MINIMUM STATIC CLEARANCES

VERTICAL UP	75
VERTICAL DOWN	75
LONGITUDINAL	75
TRANSVERSE	50

NOTE: 120 VERTICAL REQUIRED TO CHANGE SPRINGS WITHOUT COMPRESSING SPRINGS

NAME	: CLEAN COAL D&R SCREEN
EQUIPMENT NO.	: 3056
CAPACITY	: 290 TPH
MATERIAL	: COAL
PARTICLE SIZE	: 13~0mm
BULK DENSITY	: 0.3 g/cm <sup>3</sup>
DECK APERTURE	: 1.0 MM
MEDIUM	: 893M <sup>3</sup> /H MAGNETITE AND WATER



NO	DATE	DESCRIPTION	BY	APPD.
01	18.12.13	REVISED AS PER CLIENT'S COMMENT.	MG	SM

REVISION

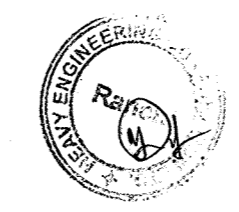
CATEGORY OF DRG.	APPROVAL	INFORMATION	REFERENCE	RECORD	CONSTRUCTION
CLIENT :	BHARAT COKING COAL LIMITED, DHANBAD				
CONTRACTOR:	CONSORTIUM OF HEC & SCHENCK PROCESS				
LEAD MEMBER:	HEAVY ENGINEERING CORPORATION LTD. RANCHI				
ASSOCIATE-1:	SCHENCK PROCESS	DRAWING NO. PIN2423-011039-01			

PROJECT:- MADHUBAND NLW COAL WASHERY OF BCCL (5.0MTPA)

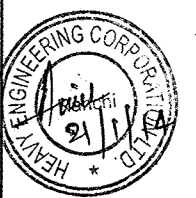
DESIGN.	A.B	TITLE :-	GA OF CLEAN COAL D&R SCREEN
DRAWN.	S.M	SCALE :-	1:20
CHKD.	M.G	PROJECT DRAWING NO.	HEC/SP-MW/BCCL-02-2176
APD.	A.B	REV.	01
DATE	05.02.13	SHEET 1 OF 1	

DRAWING IS HEREBY ACCEPTED IN ACCORDANCE WITH THE TERMS & CONDITIONS OF THE CONTRACT THIS ACCEPTANCE HOWEVER DOES NOT RELIEVE M/s. HEC LTD. & M/S SCHENCK PROCESS FROM THEIR CONTRACTUAL OBLIGATION.

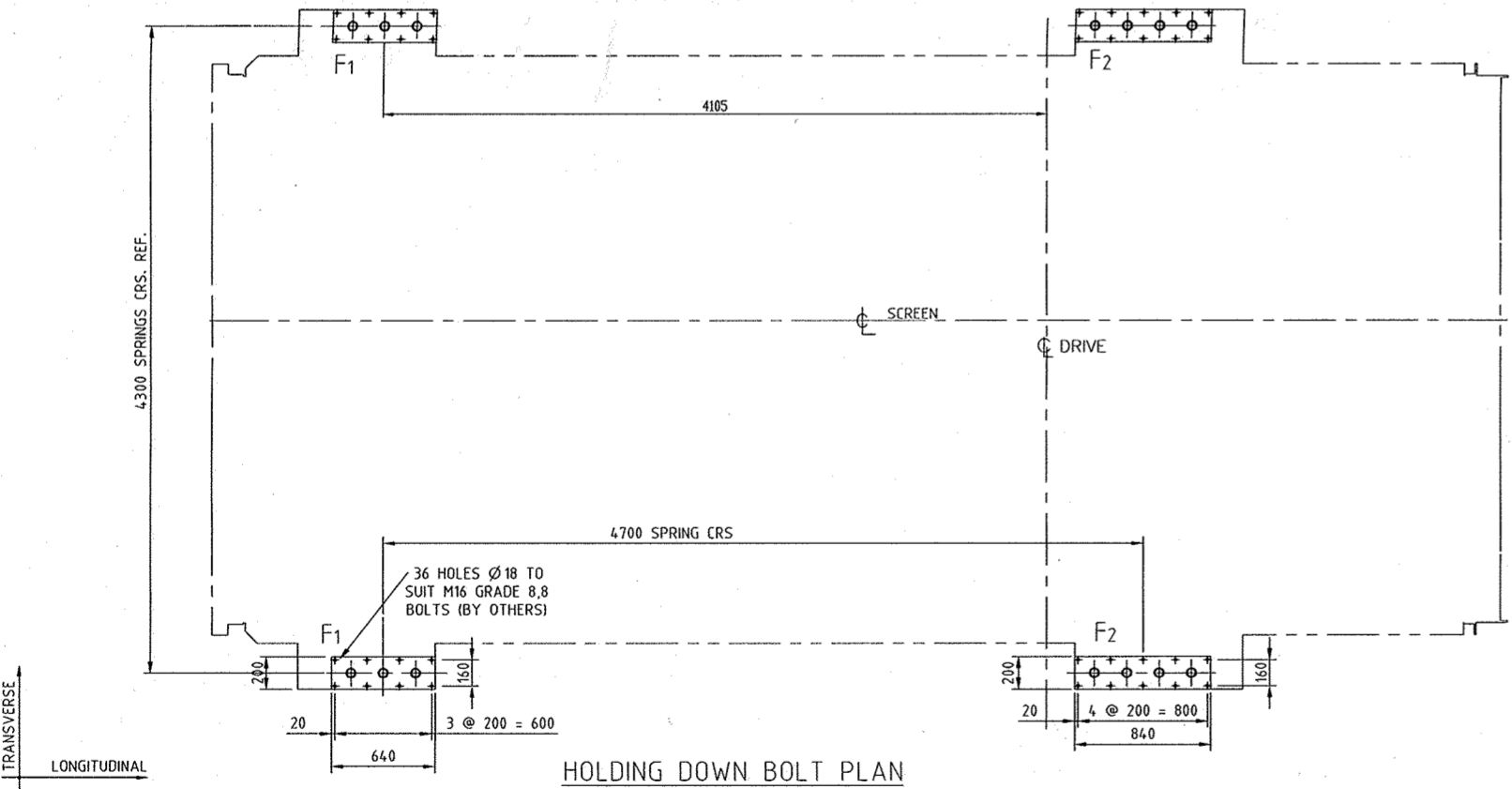
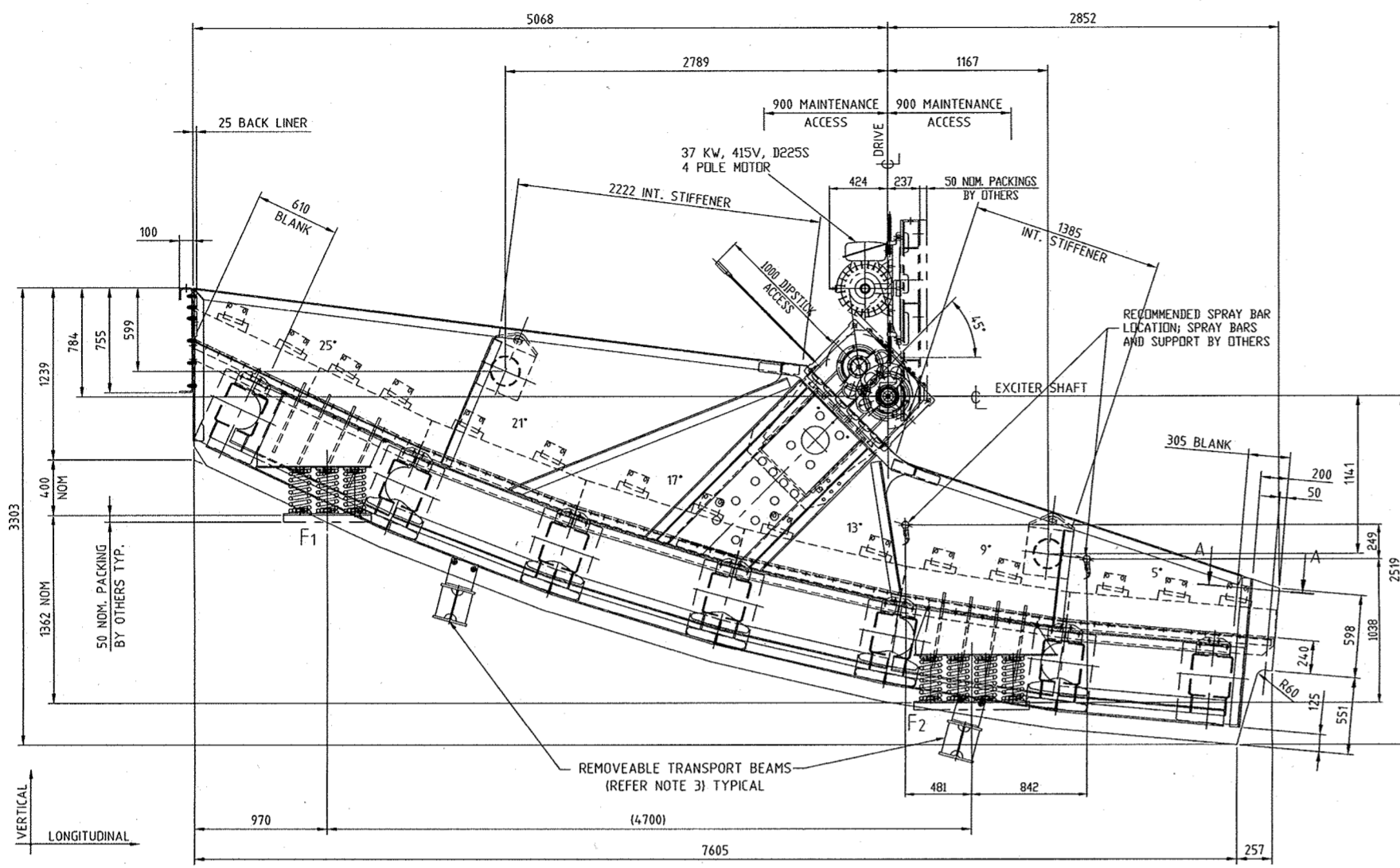
Project Officer  
 Madhuband NLW Washery  
 Bharat Coking Coal Limited



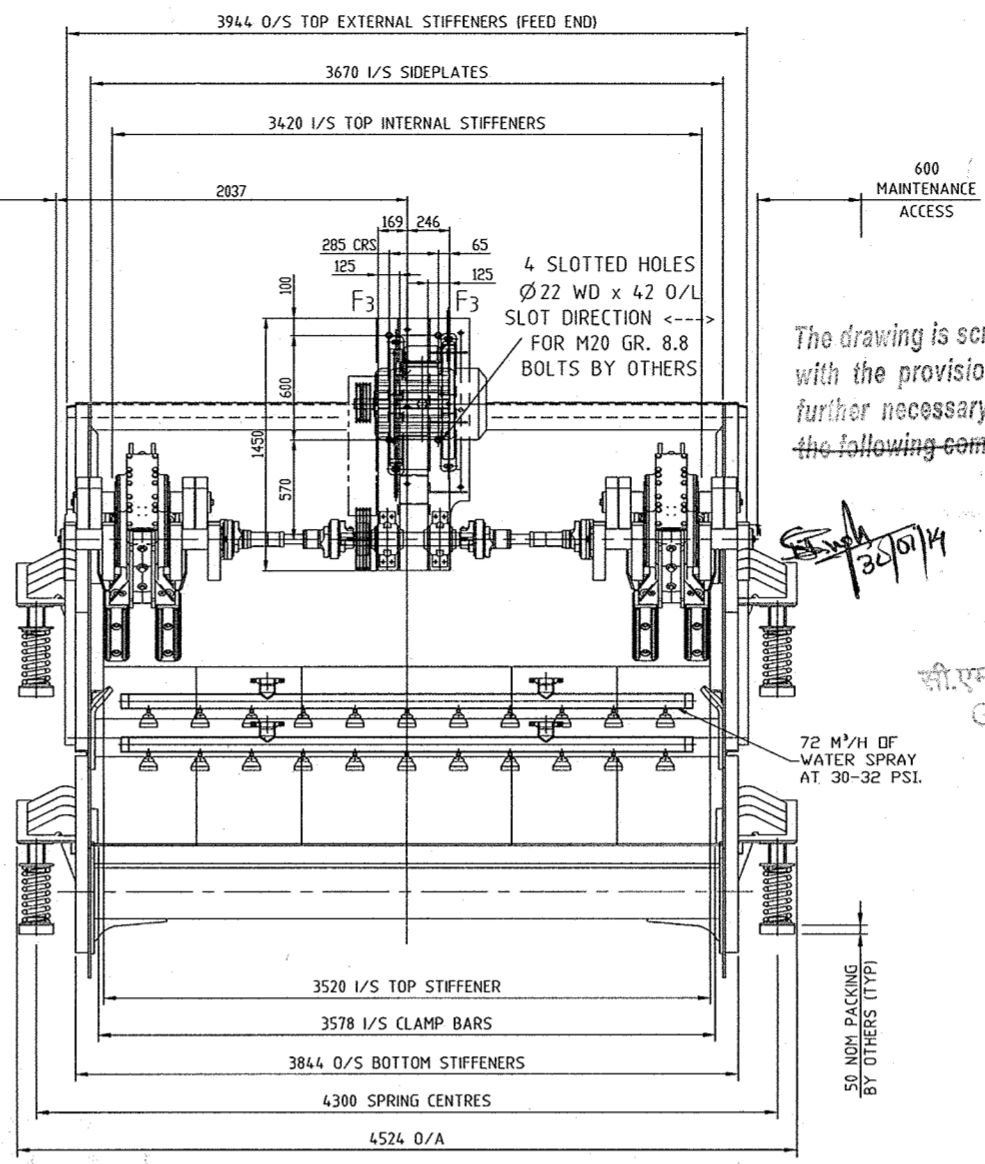
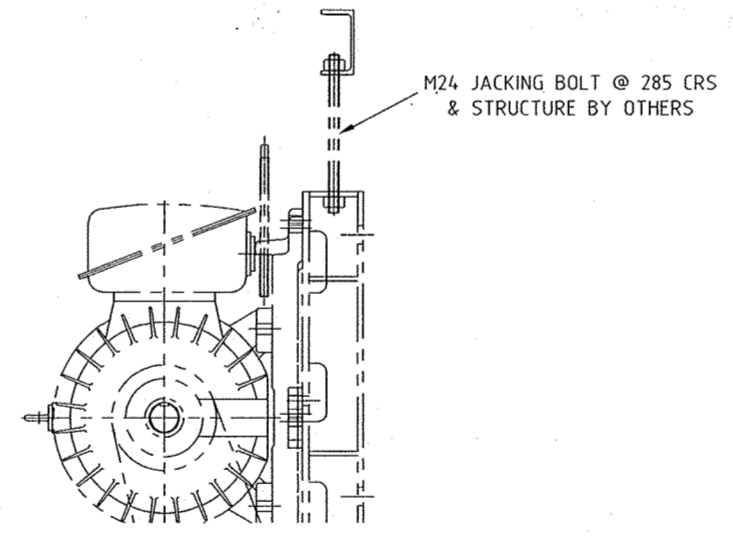
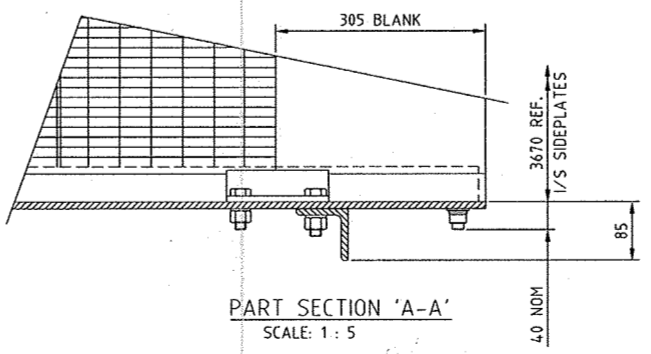
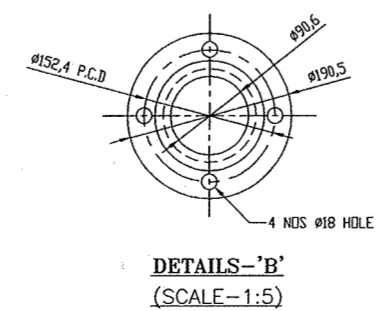
221







- NOTES:-
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
  2. SHIM UNDER SPRING BASEPLATES TO ACHIEVE EQUAL SPRING LENGTHS EACH SIDE WITHIN 4mm WITH SCREEN DECK LEVEL WITHIN 2mm.
  3. EXCITER GUARDS, DRIVE SHAFT GUARD AND BELT GUARDS SUPPLIED.
  4. TRANSPORT BRACKETS TO BE REMOVED BEFORE OPERATING.
  5. EXCITER SPEED AND PLUG WEIGHT SETTINGS TO BE CONFIRMED AFTER WORKSHOP TESTING.
  6. CENTRE DRIVE MAY BE LOCATED AS SHOWN OR 90° CW, CLIENT TO NOMINATE.
  7. SCREEN TO BE TRANSPORTED WITH EXCITERS MOUNTED.



SCREEN LOADS AT EACH SUPPORT POINT IN NEWTONS, WITH ISOLATION FRAME & WITHOUT MATERIAL INCLUDES FACTOR OF SAFETY

STATIC	DYNAMIC		
	VERTICAL	LONGITUDINAL	TRANSVERSE
FEED END F1 = 32429	FEED END F1 = 4017	FEED END F1 = 1610	FEED END F1 = 325
DISCHARGE END F2 = 47046	DISCHARGE END F2 = 5357	DISCHARGE END F2 = 2146	DISCHARGE END F2 = 430
DRIVE F3 = 3286	DRIVE F3 = 220	DRIVE F3 = 220	DRIVE F3 = 70

MAX OVERTURNING MOMENT AT F3: 632 Nm

EXCITER MODEL : DF504S  
VIBRATOR MOTOR MODEL :  
SETTING : XX0XX  
OPERATING SPEED : 950 RPM ± 5%

The drawing is scrutinised in accordance with the provisions of the contract for further necessary action by BCCL with the following comments:

महाप्रबंधक (सी.एच.पी.)  
सी.एच.पी.सी. एच. पी. डी. आई. रॉंची  
General Manager (CMP)  
CMP, CMPDI, Ranchi

SCREEN MAINTENANCE WEIGHTS IN KILOGRAMS WITHOUT FACTOR OF SAFETY

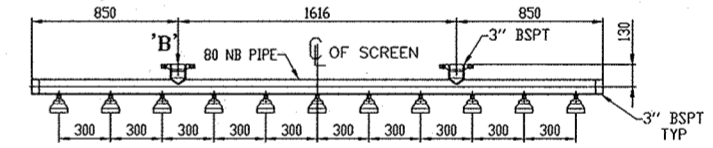
EXCITER	915
EXCITER GUARD	N/A
DRIVE SHAFT	21
DRIVE SHAFT GUARD	39.7
INTERMEDIATE SHAFT	33
INT. SHAFT GUARD	N/A
DRIVE ASSEMBLY	720
MOTOR	350
SCREEN ASSEMBLY	15466
SCREEN BODY	10733
SPRING	15
ISOLATION FRAME	N/A
DUST HOUSING F/E	N/A
DUST HOUSING D/E	N/A

SCREEN MINIMUM STATIC CLEARANCES

VERTICAL UP	75
VERTICAL DOWN	75
LONGITUDINAL	75
TRANSVERSE	50

NOTE: 120 VERTICAL REQUIRED TO CHANGE SPRINGS WITHOUT COMPRESSING SPRINGS

NAME	: COARSE REJECT D&R SCREEN
EQUIPMENT NO.	: 3011
CAPACITY	: 335 TPH
MATERIAL	: COAL
PARTICLE SIZE	: 75~0mm
BULK DENSITY	: 1.6 g/cm³
DECK APERTURE	: 2.0 MM
MEDIUM	: 27.3M³/H MAGNETITE AND WATER



NO	DATE	DESCRIPTION	BY	APPD.
01	18.12.13	REVISED AS PER CLIENT'S COMMENT.	MG	SM

REVISION

CATEGORY OF DRG.	APPROVAL	INFORMATION	REFERENCE	RECORD	CONSTRUCTION
------------------	----------	-------------	-----------	--------	--------------

CLIENT :	BHARAT COKING COAL LIMITED, DHANBAD			
CONTRACTOR:	CONSORTIUM OF HEC & SCHENCK PROCESS			
LEAD MEMBER:	HEAVY ENGINEERING CORPORATION LTD. RANCHI			
ASSOCIATE-1:	SCHENCK PROCESS	DRAWING NO.	PIN2423-011037-01	

PROJECT:- MADHUBAND NLW COAL WASHERY OF BCCL (5.0MTPA)

DESIGN.	A.B	TITLE :-	GA OF COARSE REJECTS D&R SCREEN
DRAWN.	S.M	SCALE :-	
CHKD.	M.G	PROJECT DRAWING NO.	HEC/SP-MW/BCCL-02-2164
APD.	A.B	REV.	
DATE	05.02.13	SHEET 1 OF 1	



DRAWING IS HEREBY ACCEPTED IN ACCORDANCE WITH THE TERMS & CONDITIONS OF THE CONTRACT THIS ACCEPTANCE HOWEVER DOES NOT RELIEVE HEC LTD & M/S SCHENCK PROCESS FROM THEIR CONTRACTUAL OBLIGATION

THIS DRAWING IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED IN ANY MANNER OR IN ANY WAY UNAUTHORIZED BY THE ISSUING OFFICE.

Handwritten signature and date: 05/02/13