	BHARAT COKING COAL LIMITED (A Subsidiary of Coal India Limited) Office of the General Manager(MM) Materials Management Department Commercial Block L-III , Koyla Bhawan : Koyla Nagar Dhanbad : 826005(Fax No- 0326-2230183)
SUPPLY/PURCHASE ORDER	Under jurisdiction of Dhanbad Court and Jharkhand High Court only.

Ref no:- BCCL/PUR/712059/Elevating Belt Conveyor/13-14/ 112

BY FAX/ REGD.POST

Dt. 03.09.2013

To

M/s Bengal Tools Ltd

2, Jessore Road , Dum Dum

Kolkata -700028

Fax no. 033-25519953

Vendor Code:- New-1/12/M/S/117

Old- 229897

E-Mail:-bndas@bengalttools.com

Sub:- Supply of Elevating /Troughed Belt Conveyor

Ref : Your Offer no BTL/MHD-1651/12-13/QTN-1317/3037 dated 03.09.2012 against our e-Tender Enquiry No. BCCL/PUR/712059/ Elevating Belt Conveyor /12-13/34 due & opened on 11.10.2012(off line) and on 12.10.2012 (on line), e-Price Bid opened on 11.04.2013 and subsequent correspondences on the above tender last being letter/Fax no BTL/MHD-1651/12-13/QTN-1317/ dated 30.08.2013

Dear Sirs,

With reference to the above, we for and on behalf of BCCL hereby place **PURCHASE ORDER** on you for supply of Elevating Belt Conveyor at the following price, terms and conditions:

1. SCOPE OF SUPPLY:

SN	Description	Qty. (Nos)	Unit Basic Rate in Rs.	Extended Value in Rs
1	Elevating Belt Conveyor Complete System with belt 1200 mm wide Length -60 mtr long Lift -16 Mtr with horizontal looptake up arrangement with Electricals NFLP Capacity- 400 TPH Detailed Technical Specification is given in the Annexure-A	05 Nos	2684424.00	13422120.00
	Ex. Duty @ 12.36%		331794.81	1658974.00
	Sub Total		3016218.81	15081094.00
	CST @ 2%		60324.38	301621.90
	Packing , Forwarding & Transit Insurance		Included	Included
	Freight		47648.00	238240.00

(Handwritten signatures)

	Landed Rate		31,24,191.18	15620956.00
	CMPDIL Inspection charge @ 1.00%		31,241.91	156209.60
	Service Tax on Ins. Charge @ 12.36%		3861.50	19307.50
	Total Contractual Value		3159294.59	15796473.00

Total Purchase value : Rupees One Crore Fifty Seven Lakh Ninety Six Thousand four Hundred Seventy three only.

TERMS & CONDITIONS:

- 1. Payment Terms:** 100% within 21 days of receipt and acceptance of the materials by the consignee or from the date of receipt of Bills, whichever is later.

Bank Details:

VENDOR/SUPPLIER/CONTRACTOR/CUSTOMER'S NAME & ADDRESS: (With Telephone No. & Fax No.)	M/s Bengal Tools Ltd 2, Jessore Road , Dum Dum Kolkata -700028
PARTICULARS OF BANK ACCOUNT:	
A.BANK NAME:	State Bank of India
B.BRANCH NAME:(Including RTGS Code)	RM-IV ,Commercial Branch ,SBIN0007502
ADDRESS:	24 Park Street,Kolkata 700016
C.9-DIGIT CODE NUMBER OF THE BANK & BRANCH (Appearing on MICR Cheque issued on the Bank) Or 5-DIGIT Code Number of SBI	700002120
D. ACCOUNT TYPE: (S.B. Account/Current Account Or Cash Credit with Code 10/11/13)	Cash Credit
E.LEDGER NO./LEDGER FOLIO NUMBER:	
F.ACCOUNT NUMBER (CORE BANKING) & STYLE OF ACCOUNT (As appearing on the Cheque Book)	30997439620

- 2. PRICE:** FIRM & On F.O.R. Destination basis
- 3. E.D and cess.:** Excise duty will be paid extra at the rate applicable at the time of supply against documentary evidence required as per Excise rule for getting CENVAT credit . Quoted rate indicated above.
- 4. CST:** CST will be paid extra at the rate applicable at the time of supply against declaration form to be issued by consignee. Quoted rate indicated above.
- 5. CENVAT:** In order to get CENVAT credit, the following information must be contained in the invoice issued by the supplier for Revenue and Capital goods:
 - Serial number of the invoice ,
 - Registration number,
 - Address of the concerned central excise division,
 - Name of the consignee,
 - Description of the goods,
 - Classification of the goods,
 - Time and date of removal,
 - Mode of the transport and vehicle registration,
 - Rate of duty,





- Quantity and value of goods and
- Duty payable thereon.

THE DESIRED INFORMATION FOR RAISING CENVAT INVOICE		
	SUPPLIER	CONSIGNEE
Name & Address Of Area:		Ekra Central Store, Block – II Area, BCCL, Nawagarh, Dhanbad, Jharkhand – 828306
Tin No.:		20821500736
JST No.:		KT – 651 (R)
CST No:		KT – 254 (C)
Circle / Sub		Katras Circle Katras
Service Tax Regd. No:		AAACB7934MST 009
Central Excise Duty Regd. No:		AAACB7934MEM 007
Range (Code):		Dhanbad - Code - 02
Division (Code		Dhanbad - Code - 02
Commissionerate (Code):		Ranchi - Code - 87

6. **Packing Forwarding, & Insurance: NIL.**
7. **Freight:** @ Rs. 47648.00 each against documentary evidence as indicated above.
8. **DELIVERY SCHEDULE:** Delivery should commence after expiry of four months and to complete within 6 months after placement of supply order. Delivery schedule shall be reckoned from the 10 th day from the date of order and the date of receipt of material at our stores shall be treated as the date of delivery. **NOTE: Safe arrival of materials shall be your responsibility.** Any increase in the rate of taxes & duties beyond delivery period will be to your account.
9. **Performance Bank Guarantee** – You shall furnish a Performance Bank Guarantee (PBG) equivalent to 10 % of the order value (order value means FOR destination price including taxes, duties, transportation & insurance charges & other charges if any). The performance guarantee shall be submitted in the form of Bank Guarantee issued by a scheduled Bank / Nationalised Bank on non judicial Stamp paper valuing Rs. 250.00. The Bank Guarantee shall be valid for three months beyond the expiry of Guarantee/Warranty period. It shall have to be submitted to MM Division, BCCL, Koyla Bhawan on or before commencement of supply. PBG may be submitted either for the entire order quantity at a time or each no./set wise.
10. **Security Money:** Not applicable being NSIC Registered Firm.
11. **Inspection:** Pre-dispatch inspection of each consignment shall be carried out by M/s. Central Mine Planning & Design Institute Ltd (CMPDIL), Ranchi/their Regional Office as per the terms and conditions indicated here under:
 Pre-dispatch inspection shall be carried out by M/s. CMPDIL (the above firm) as per their methodology. The third Party Inspection shall include examination of raw material, test certificate verification, continuous monitoring of quality assurance by manufacturer which will include regular and surprise visits. In brief, the scope and condition of inspection by M/s. CMPDIL will be as follows:
 Checking and approval of test procedures/quality assurance plans.
 Verification of records and documents of your works.
 Verification of documents and test certificate of bought out items and cross checks. You shall provide facilities for carrying out all necessary tests as required in the specification at your works else these will be carried out at an independent test house at your cost.
 Final testing and checking of materials as per specifications. M/s. CMPDIL will have full and free access to the premises of manufacturer during the process of manufacturing and during inspection activities.

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Inspection fee @ 1.00% of total F.O.R. Destination price with service Tax of 12.36% is to be paid to M/s. CMPDIL along with inspection call letter payable by DD which will be reimbursed subsequently by BCCL together with consignment billing.

Minimum 7 calendar days notice shall be given by you to M/s. CMPDIL for arranging inspection within valid delivery period as per contract.

The ultimate responsibility for supply of correct materials as per requirement of relevant specification lies solely with you in spite of clearance/acceptance by inspection authority i.e. M/s. CMPDIL. The manufacturer will be required to replace the material free of cost if found defective/unserviceable/not according to relevant specifications.

The charges for third party inspection and the cost of materials that would be required for destructive tests, if any, shall be reimbursed by BCCL together with the consignment billing.

Such cost shall be reimbursed only if it is duly certified by M/s. CMPDIL.

Please send inspection call to M/s. CMPDIL, Ranchi/ their Regional Office as indicated above

Final inspection shall be arranged by the consignee after receipt of the material at our destination.

The purchaser shall, at its discretion, have the right to test the ordered material in a Government Test House or in a test house nominated by the purchaser. In case of failure of the material after testing the cost of tests as well as of the material shall have to be borne by the supplier.

Final Inspection shall be carried out at the consignee end by authorised representative of GM (E&M) after receipt of materials.

12. Transit Insurance – Shall be arranged and covered by you for safe arrival of the materials to the consignee end at your cost and risk.

13. PENALTY FOR FAILURE TO SUPPLY IN TIME: The delivery of stores stipulated in Purchase order shall be deemed to be of the essence of the contract and delivery of the stores must be completed by the date specified. No materials should be supplied beyond the specified delivery period, unless specific approval has been obtained from the purchaser. In the event of failure to deliver the stores within the stipulated date/ period in accordance with the samples and/or specification mentioned in the supply order, and in the event of breach of any terms and conditions mentioned in the supply order. Bharat Coking Coal Limited reserves the right:

a) To recover from successful tenderer, as agreed liquidated damages, a sum not less than 0.5% (half percentage) of the price of the stores which successful tenderer has not been able to supply (for this purpose part of a unit supplied will not be considered) as aforesaid for each week or part of a week during which the delivery of such stores may be in arrears limited to 10%. Where felt necessary the limit of 10% can be increased to 15% at the discretion of Head of the Materials Management Division.

b) To purchase elsewhere, after due notice to the successful tenderer on the account and at the risk of the defaulting supplier the stores not supplied or others of a similar description without canceling the supply order in respect of consignment not yet due for supply or

c) To cancel the supply order or a portion thereof, and if so desired to purchase the store at the risk and cost of the defaulting supplier and also

d) To extend the period of delivery with or without penalty as may be considered fit and proper. The penalty, if imposed shall not be more than the agreed liquidated damages referred to in clause (a) above.

e) To encash any Bank guarantee which is available for recovery of the penalty or

f) To forfeit the security deposit full or in part.

g) Whenever under the contract a sum of money is recoverable from and payable by the supplier, BCCL shall be entitled to recover such sum by appropriating, in part or whole by deducting any sum or which at any time thereafter may be due to the successful tenderer in this or any other contract with Bharat Coking Coal Ltd. or any subsidiary of Coal India Ltd. Should this sum be not sufficient to cover the full amount recoverable, the successful tenderer shall pay BCCL on demand the remaining amount. The supplier shall not be entitled to any gain under this clause.



14. **PRICE FALL CLAUSE.** i) The prices charged for the stores supplied under the contract by the supplier shall in no event exceed the lowest price at which the supplier offer to sell the stores of identical description to any other organization from date of offer till completion of supply under the contract.
- ii) If at any time during the said period the supplier offers lower sale price of such stores to any other organization at a price lower than the price chargeable under this contract, the supplier shall forthwith notify such reduction or sale to the consignee concerned under intimation to CGM(MM), Bharat Coking Coal Limited, Commercial Block, Level -III, Koyla Bhawan, Koyla Nagar, Dhanbad and the price payable under the contract for the stores supplied after the date of coming into force of such reduction or sale, shall stand correspondingly reduced. The above stipulated will not, however apply to exports by the supplier.
15. **Guarantee /Warranty:** Materials supplied should be guaranteed for a period of 12(twelve) months from the date of fitment or 18 months from the date of receipt and acceptance at consignee end whichever is earlier against any manufacturing defects / workmanship / inferior quality. Any defect observed on this account shall be attended within 07 days from the date of receipt of report and replace the materials within 21 days free of cost.
16. **Packing:** Consignment shall be supplied in suitable standard proper packing.
17. **Force Majeure Clause:** If the execution of the contract/supply order is delayed beyond the period stipulated in the contract / supply order as a result of out-break of hostilities, declaration of an embargo / curfew or blockade or fire, flood, acts of nature or any other contingency beyond the supplier's control due to act of God then BCCL may allow such additional time by extending the delivery period, as it considers to be justified by the circumstances of the case and its decision shall be final. If and when additional time is granted by BCCL the contract/supply order shall be read and understood as if it had contained from its inception the delivery date as extended. Further this clause state that:
- a) The successful bidder will, in the event of his having to resort to this clause by a registered letter duly certified by the local Chamber of Commerce or statutory authority, the beginning and end of the causes of the delay, within fifteen days of the occurrence and cessation of such Force Majeure Conditions. In the event of delay lasting out of Force Majeure, BCCL will reserve the right to cancel the contract and provisions governing termination of contract, as stated in the bid documents will apply.
- b) For delays arising out of Force Majeure, the bidder will not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither BCCL nor the bidder shall be liable to pay extra costs provided it is mutually established that Force Majeure Conditions did actually exists.
- c) If any of the force majeure conditions exists in the place of operation of the bidder even at the time of submission of bid, he will categorically specify them in his bid and state whether they have been taken into consideration in their quotations.
18. **Paying Authority:** GM (F) MM Div, Koyla Bhawan, Koyla Nagar, Dhanbad.
19. **Consignee:** Depot Officer, Ekra Central Stores., P.O:- Bansjora (Sijua), Dhanbad, Jharkhand, India (Phone NO:-0326-2330350)
20. **Issue of Road Permit:** Road Permit if required may be obtained directly from the Consignee under intimation to this office.
21. You have signed Integrity pact issued with NIT. Justice Ashok Kumar Chakraborty (Retired) ,BB-69 Sector I, Salt Lake, Kolkata-700064, will be independent external monitor against this tender/ contract.
22. All disputes are subject to Dhanbad Court and Jharkhand High Court




ALL OTHER REMAINING COMMERCIAL TERMS & CONDITIONS AND TECHNICAL SPECIFICATIONS ALONG WITH SCOPE OF SUPPLY WILL STRICTLY BE AS PER OUR NOTICE INVITING TENDER AS CONFIRMED IN YOUR OFFER AND YOUR SUBSEQUENT LETTERS.

N.B:- This issues with the concurrence of CM(F) OP vide diary no. 8669/F dtd 21.06.2013 and approval of D(T)OP vide diary no. 1678/F dtd 29.07.2013. This contract is concluded with the issuance of this order. You are requested to kindly acknowledge receipt and acceptance of order within 15 days from date of issue of order. In case no reply is received, it will be presumed that the order has been accepted by you for execution.

Encl : Annexure-A (Technical details)&PBG Format

Yours faithfully,
For & on behalf of Bharat Coking Coal Ltd.


(A K Sinha)
Sr. Manager (MM)Pur



(A K Chaudhary)
GM (MM)PUR

INDENT REFERENCE:- This order is placed against Indent given below:

Indent nos. and Date	Budget Certification Details.
i) Lodna indent Ref:LOD/IND/11-12/59 dtd 21.07.2011 Qty-02 nos	i) e-BC No: BCCL/C & B/CAP/P&M/HQ/19/141/282 /eBC dated 13.08.2013 for Rs 1,57,96,473.00 (Rupees One Crore Fifty Seven Lakh Ninety Six thousand four hundred and Seventy three only.) e-FC No: 92 dated 30.08.2013 (HQ) for Rs Rs 1,57,96,473.00 only)
ii) Bastacolla indent : BCCL/BA-IX/E&M/Feeder Breaker/Belt Conveyor/11-12/252 dtd 29.08.2011 Qty-02 nos.	
iii) Sijua indent : GM /SA:Engg.:F-40:220 dtd 25.26/07/11 Qty-01 no.	
As above Indent from GM (E&M) vide no.BCCL/E&M/2011-12/Belt Conveyor dtd 04.01.2012 IR Ref No: 712059(12-13) dtd 28.06.2012	

Copy to:

1. Depot Officer, Ekra Central Stores.: ordered items in subject order will be issued as per release order issued by GM (E&M), BCCL
2. GM (F) MM Div, Koyla Bhawan.
3. GM (E & M) , Koyla Bhawan , Dhanbad
4. GM(E&M), CMPDIL, Gondwana Place, Kanke Road, Ranchi
5. SM (Tech Cell), MM Div, Koyla Bhawan.
6. Master File/Office Copy.
7. GM (MM), CCL / NCL / WCL/ SECL / MCL / ECL /CMPDIL.
8. Shri Ashok Kumar Chakraborty, (Retd Judge), BB 69, Sector-I, Salt Lake, Kolkata- 700064


SM (MM)


GM (MM) PUR

ANNEXURE- "A"

Technical Specification as per NIT and Technically accepted offer of M/s Bengal Tools Limited:
Annexure: Specifications For Troughed Belt Conveyors For Installation At Surface In Coal Mines
SPECIFICATIONS FOR TROUGHED BELT CONVEYORS FOR INSTALLATION AT
SURFACE IN COAL MINES

1.0.0	SERVICE CONDITIONS	:
1.1.0	Place of installation	: Coal mines at Surface/CHP
1.2.0	Duty	: Continuous(24hrs.\ Day)
1.3.0	Maximum ambient air temperature	: 50 deg.C.
1.4.0	Relative humidity(Max)	: 100%
1.5.0	Environment	: Dusty(Mostly coal dust)
2.0.0	CONVEYOR DATA	
2.1.0	Capacity in TPII	: As per SOR given in annexure.
2.2.0	Conveyor width in mm(Belt width)	: - D0 -
2.3.0	Total length of conveyor in Mtrs.	: As per SOR given in annexure.
2.4.0	Belt speed in M/Sec.	: As per SOR given in annexure.
2.5.0	Drive configuration	: As per SOR given in annexure.
2.6.0	Take up travel in Mtrs.	: As per SOR given in annexure.
2.7.0	Power Rating in K.W.	: As per SOR given in annexure.
2.8.0	Type of enclosure for Motor & Starter(FLP/NFLP)	: NFLP
2.9.0	Lift	: As per SOR given in annexure.
3.0.0	SCOPE OF SUPPLY :	
	Drive head assembly consisting of below mentioned Components as detailed at Sl.No.5.1.0.0(5.1.1.0 to 5.1.10.15)	
3.1.1.	Drive head frame	
3.1.2	Pulleys with shafts	
3.1.3	Gear Boxes	
3.1.4	Motor	
3.1.5	Fluid coupling	
3.1.6	Out put coupling	

- 3.1.7 Equalizing gear(for tandem Drives)
- 3.1.8 Bearing blocks
- 3.1.9 Anti roll back device
- 3.2.0 Starter as detailed at Sr.No. 5.2.0.0(5.2.1.0 to 5.2.13.0)
- 3.3.0 Discharge pulley(Head pulley) assembly consisting of below Confirmed Mentioned components as detailed at Sr.No.5.3.0.0(5.3.1.0 to 5.3.5.3)**
 - 3.3.1 Discharge pulley with shaft
 - 3.3.2 Bearing blocks
 - 3.3.3 Structure for discharge Pulley assembly
 - 3.3.4 Belt scraper
- 3.4.0 Tail end assembly consisting of below mentioned Components as detailed at Sr.No.5.4.0.0(5.4.1.0 to 5.4.6.1)**
 - 3.4.1 Return Pulley with shaft
 - 3.4.2 Bearing blocks
 - 3.4.3 Tail end structure
 - 3.4.4 V-type plough scraper Return Belt
- 3.4.5 Wiper cum dust collector unit as per DGMS Circular No.4 dated 11.5.2004
- 3.5.0 V.G. Take up assembly consisting of below mentioned Components as detailed at Sr.No.5.5.0.0(5.5.1.0 to 5.5.4.0)**
 - 3.5.1 Take up pulley with shaft
 - 3.5.2 Bend/diversion pulley
 - 3.5.3 Bearing blocks
 - 3.5.4 Hanger with box for weights in case of vertical gravity take up
 - 3.5.5 Take up guide rails
 - 3.5.6 V-type plough scraper on return belt before take up
- 3.6.0 Intermediate structure consisting of below mentioned components as detailed at Sr.No.5.6.0.0(5.6.1.0 to 5.6.6.3)**
 - 3.6.1 Stringers
 - 3.6.2 Stools
 - 3.6.3 Idler frames and brackets for carrying impact and transition idlers.
 - 3.6.4 Idler brackets for return idlers
 - 3.6.5 Carrying idlers
 - 3.6.6 Return idlers
 - 3.6.7 Impact idlers
 - 3.7.0 Decking plates as specified at Sr.No.5.7.0.0
 - 3.8.0 Skirt plates as specified at Sr.No.5.8.0.0
 - 3.9.0 Protective guards/fences as specified at Sr.No.5.9.0.0

Accessories mentioned below as detailed at Sr.No.5.10.0.0
(5.10.1.0 to 5.10.3.5) Table 1

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- 3.10.1 Pull cord switches
- 3.10.2 Belt Sway switches
- 3.10.3 Pre-start Audio-visual warning alarm.
- 3.11.0 Required No .of fasteners

NOTE :- **Belting is not included in the scope of supply.**

4.0.0.0 : **GENERAL REQUIREMENTS :**

- 4.1.0.0 Modular construction -
- 4.1.1.0 The various components/ (real modular design)
Assemblies have to be
capable of dismantling
transport and easy reassembly
- 4.1.2.0 It should be possible to take out and refit the
components/assemblies without dismantling adjacent
unit.
- 4.2.0.0 Flexibility -
- 4.2.1.0 The design of the drive head and other equipment shall
be flexible so that they can be adopted to different mine
conditions.
- 4.3.0.0 High reliability - Confirmed
- 4.3.1.0 The conveyors will have to be well designed and
precision manufactured so that a trouble free service
with minimum of maintenance is guaranteed.

5.0.0.0 DETAILED SPECIFICATION :-

5.0.1.0 DRIVE HEAD ASSEMBLY:

- 5.1.1.0 Design configuration : As per SOR
- 5.1.2.0 Drive Head Frame : Shall be made of heavy
structured steel sections
- 5.1.3.0 Drive Pulleys & Shaft :
- 5.1.3.1 Drum Dia : 630 mm
- 5.1.3.2 Drum width : 1400 mm
- 5.1.3.3 Shell thickness : 16 mm.
- 5.1.3.4 N.B: The drum shall be rubber Lagged.
Dia of Shaft at bearing seating :
Up to 45 KW : 110 mm
Above 45 Kw up to and including
110 KW : 150 mm.
- 5.1.3.5 Shaft material : C-40 as per IS:1570
- 5.1.4.0 Snub Pulley & Shaft (Applicable in case the drive configuration(Clause
No.2.5.0) is Snub" }
 - 5.1.4.1 Drum dia : 500 mm.
 - 5.1.4.2 Drum width : 1400 mm.
 - 5.1.4.3 Shell thickness : 12 mm.
 - 5.1.4.4 Dia of shaft at bearing seating :
Up to 45 KW : 90 mm.
Above 45 KW up to and inclming 110 KW : 110 mm.
 - 5.1.4.5 Shaft material : C-40 as per IS: 1570

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5.1.5.2	<u>Bearing blocks</u>	:
5.1.5.1	Material of construction	: Cast steel
5.1.5.2	Type	: Heavy duty
5.1.5.3	Bearings	: Heavy duty self aligning spherical roller bearings.
5.1.3.0	Equalizing Gears :	: To be provided with protective sheet metal cover
	(For tandem drive)	
5.1.6.1	Material of construction	: Cast steel/Alloy Steel
5.1.6.2	Type of Gear	: Spur
5.1.4.0	<u>Gear Boxes</u>	
5.1.7.1	Type of gear box	: Helical
5.1.7.2	Mounting	: Foot mounted
5.1.7.3	Service factor to be considered for selection	: 1.6 over motor rating
5.1.7.4	Cooling	: Oil cooled (Natural)
5.1.7.5	No. of stages	: Bidder to Confirm
5.1.7.6	Make	: BTL Own make
	(Acceptable makes) : Elecon/Greaves/FMG/ New Allenbury Works/Any other proven make in CIL/other PSUS/Govt departments(see Cl.7.4.0)	
5.1.7.7	Type of anti roll back device	: Bidder to Confirm
5.1.8.0	<u>Fluid coupling</u>	:
5.1.8.1	Type of fluid coupling	: Spider Bush /pin bush(Multidisc type not acceptable):-
5.1.8.2	Material of Body	: Steel/Iron Body: --
5.1.8.3	Operating Fluid	Fire resistant fluid :-
5.1.8.3	Make & Model	: Pembril/Fluidomat
	(Acceptable makes)	: -Pembril/Fluidomat/Voith/Any other/ProvenmakeinCIL/other PSU's/Govt.deptt(see cl.7.4.0)
5.1.9.0	<u>Out put coupling</u>	:
5.1.9.1	Type of coupling	: Geared
5.1.9.2	Service factor to considered for selection	: 1.25 over motor rating:-
5.1.9.3	Make and Model	: Bidder to indicate:-
5.1.10.0	<u>Motor</u>	:
5.1.10.1	Type	: Sq. Cage Induction:---
5.1.10.2	Operating Voltage system	: 440V 3 Ph, 50 Hz.
5.1.10.3	K.W. rating	: As per SOR given in the annexure:- 75 KW
5.1.10.4	Minimum starting torque	: 2 times full load torque:-
5.1.10.5	Motor RPM(Syn.)	: 1500
5.1.10.6	Class of duty	: S-1 as per IS:325/1996:-
5.1.10.7	Type of starting	: Star - Delta
5.1.10.8	Class of insulation	: Class F with temp. rise limited to Class B
5.1.10.9	Type of Enclosure	: T E F C : ---
5.1.10.10	Degree of protection	: IP-55 of IS:4691-1985 :-
5.1.10.11	Frame size(As per IS:1231-74)	: Bidder to indicate:- 280 M
5.1.10.12	Mounting of motor	: Foot mounted{B3 as per:- IS:2253-74}
5.1.10.13	Cable Entry	: Suitable for PVC DWA :- mining cable for

5.1.10.14	Standard specifications	required size
5.1.10.15	Make (Acceptable makes)	: IS:325-1996 :- : (Marathon/Alstom) : Alstom/KEC/BB/ABB/Crompton/Siemens/NGEF/ BHEL/Any other proven make in CIL/other PSUs/Govt.deptt(see cl.7.4.0)
5.2.0.0	<u>STARTER</u>	
5.2.1.0	Type	: Star-Delta
5.2.2.0	Voltage system	: 440V,3 Ph, 50 Hz:-
5.2.3.0	K.W. rating	: Bidder to indicate- (Suitable for the motors)
5.2.4.0	<u>CONSTRUCTION</u>	
5.2.4.1	In two compartments	
5.2.4.2	One shall house through going bus bars and off load isolator	
	Ratings of bus bar and isolator	: 300A
5.2.4.3	It shall house contactors and protective	
5.2.4.4	Door of line compartment shall be interlocked with isolator in such a way that the door can be opened only when the isolator is in 'OFF' position	
5.2.4.5	Cable terminal boxes with sealing boxes shall be provided for both incoming and out going terminals suitable for PVC DWA mining cables of required size	
5.2.4.6	Through going terminals of bus bar shall be provided with bus trunking box with blanking cover	
5.2.4.7	Four nos. auxiliary terminals (4x2) with terminals box and cable sealing boxes suitable for Twin core 2.5 Sq.mm.PVC SWA cable shall be provided for sequence starting, Pull cord switch and pre-start alarm circuits.Zero speed switch etc.	
5.2.4.8	Type of Enclosure	: NFLP :-
5.2.4.9	Degree of protection(For NFLP)	: IP-54 of IS:13947(Part-I):-
5.2.4.10	Mounting	: Skid mounted :--
5.2.5.0	Utilisation category	: AC3 of IS:13947(Part 4/Sec.1):- 1993 :-
5.2.6.0	Nominal current rating of contactors(for AC-3 duty)	: Not less than 2.0 times the full load current of motor :-
5.2.7.0	Operating limits of contactor	: Shall be as per IS:13947,except for the drop out voltage , which shall not be more than 50% of rated control supply voltage.:-
5.2.8.0	<u>PROTECTION</u>	
5.2.8.1	Over load protection	: Magnetic overload relay with oil dash pot type time lag.:-
	Range of current adjustment	: 75% to 150%:-
5.2.8.2	Earth leakage protection	: CBCT operated, non self resetting type earth leakage relay with test/reset and indication facility.:-
	Current setting range	: 0.75 A to 2A

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- 5.2.8.3 Short Circuit protection :HRCfuses of suitable rating:-
- 5.2.9.0 INTERLOCKS
- 5.2.9.1 Suitable provision shall be made in the starter for sequence starting interlock with other starter with timer.
- 5.2.9.2 The starter shall have provision for interlocking with pull cord switches(Sr.No.5.10.1.0)belt sway switches(Sr.No.5.10.2.0),Audio-Visual alarm(Sr.No.5.10.3.0)and limit switches at tail end(Sr.No.5.4.6.1)and zero speed switch.(Sr.No.5.10.3.6)
- 5.2.10.0 Instruments : 1)Amp Meter of suitable range with selector switch: -
: 2) Voltmeter of suitable range with selector switch:-
: IS;13947(Part4/Sec.1)-1993
- 5.2.11.0 Standard specifications
- 5.2.12.0 Make of Starter (Acceptable make) : **Mineline**
:Macneill Engg/Yule/Mine Line/Protection India/Electro Technica/Reyrolle Burn/Any OthermakeproveninCIL/other PSUs/Govt.deptt(see cl.7.4.0)
: L&T/A.Y./Telemechanic
- 5.2.13.0 Make of contactors :Bidders to indicate (Acceptable make) :
: Any CPRI tested make }
- 5.3.0.0 **DISCHARGE PULLEY ASSEMBLY**
- 5.3.1.0 Structure / Frame : Made of heavy structural sections.
- 5.3.2.0 Discharge pulley and shaft : Same as drive pulley specified at cl.no.5.1.3.0:-
: Same as cl.no.5.1.5.0:-
- 5.3.3.0 Bearing blocks
- 5.3.5.0 **BELT SCRAPER**
- 5.3.5.1 Type of belt scraper : Counter weighted/spring loaded :-
: 10 mm thick x 100 mm wide:-
: Bidder to confirm
- 5.3.5.2 Rubber strip dimensions
- 5.3.5.3 Rubber strip shall be fixed to the scraper by means of slotted holes to facilitate easy adjustment
- 5.4.0.0 **TAIL END ASSEMBLY**
- 5.4.1.0 Structure : Shall be made of heavy structural sections:-
: Same as clause No.5.1.5.0:-
: Same as clause No.5.1.5.0:-
- 5.4.2.0 Tail pulley and shafts : 300 mm :-
- 5.4.3.0 Bearing blocks
- 5.4.4.0 Minimum ground clearance below tail pulley
- 5.4.5.0 **BELT SCRAPER ON RETURN BELT BEFORE TAIL DRUM:**

5.4.5.1	Type of Belt Scraper	: V-type plough scraper:-
5.4.5.2	Angle of V	: 60 deg.:-
5.4.6.0	<u>WIPER CUM DUST COLLECTOR</u>	:
5.4.6.1	A wiper cum dust collector trolley shall be provided at the tail end as per DGMS(Tech)Circular No.4 dated 11.05.2004, a copy of which is enclosed :	
5.5.0.0	<u>TAKE UP ASSEMBLY</u>	:
5.5.1.0	Type of Take up	: As per SOR given in Annexure:-
5.5.2.0	Material of construction for take up structure, guide rails, hanger with box (for weights)	: Suitable structural sections and plates:-
5.5.3.0	For horizontal loop take up suitable winches with wire rope shall be provided	:
5.5.4.0	Take up Pulley, diversion pulley and shafts.	: Same as clause No.5.1.4.0:-
5.5.5.0	Bearing blocks	: Same as clause No.5.1.5.0:-
5.6.0.0	<u>INTERMEDIATE STRUCTURES</u>	:
5.6.1.0	<u>STRINGERS</u>	:
5.6.1.1	Stringer length	: 3 meters:-
5.6.1.2	Stringer section	: ISMC 125 X 65
5.6.1.3	Connecting bracing	: 'N' shaped, ISA 50X50X6:-
5.6.1.4	Size of fasteners	: M – 16
5.6.2.0	<u>STOOLS</u>	:
5.6.2.1	Height of stool	: 600 mm:-
5.6.2.2	Steel section	: ISMC 125 X 65:-
5.6.2.3	Steel section to be used for bracing for stools	: ISA 50 X 50 X 6:-
5.6.2.4	Size of fasteners	: M – 16
5.6.2.5	Thickness of base plate	: 10 mm:-
5.6.3.0	<u>CARRYING IDLER SETS</u>	:
5.6.3.1	Spacing	: 1000 mm:-
5.6.3.2	Troughing angle	: 35 deg.:-
5.6.3.3	Forward tilt of side idlers	: 2 deg(max.)
5.6.3.4	Steel section to be used for idler frame(transome)	: MSA 75 x75 x 8
5.6.3.5	Steel section to be used for idler brackets	: M.S. flat 65 x 10 or ISLC 75 X 40
5.6.3.6	Carrying idler roller	: Shall conform to enclosed Specification and Annexure- A
5.6.3.7	Thickness of mounting base plate	: 10 mm
5.6.3.8	Provision for belt training	: Mounting base plates shall be provided with slotted holes to facilitate belt training:-
5.6.3.9	Size of fasteners	: M – 16
5.6.3.10	Self aligning Idlers	: Same as carrying idler, but with swivel .(2 nos. at 5 M spacing from head & tail




		and at 15M in intermediate section.):-
5.6.4.0	<u>RETURN IDLERS</u>	: Shall conform to enclosed and specification Annexure A
5.6.4.1	Spacing	: 3 M:-
5.6.4.2	Brackets	: Shall be bolted to stools or stringers:- keeping provision for adjustment
5.6.4.3	Thickness of plate used for brackets	: 10 mm:-
5.6.4.4	Size of fasteners to be used	: M - 16
5.6.4.5	Return idler roller	: Shall conform to enclosed and Specification Annexure:-
5.6.4.6	SA Return Idler	: Spacing same as at 5.6.3.10:-
5.6.5.0	<u>IMPACT IDLER SETS</u>	:
5.6.5.1	Location	: In the loading section at tail end:-
5.6.5.2	Spacing	: 0.5 M:-
5.6.5.3	No. of idler Sets	: 4 Sets:-
5.6.5.4	Impact . idler roller	: Shall conform to enclosed and Specification Annexure-B
5.6.6.0	<u>TRANSITION IDLER SETS</u>	:
5.6.6.1	Location	: At delivery jib and Tail end
5.6.6.2	No. of idler sets	: 3 sets
5.6.6.3	Troughing angles	: 5 deg. 10 deg. 20 deg.:-
5.7.0.0	<u>DECKING PLATES</u>	:
5.7.1.0	Thickness of Plate	: Not less than 1.5 mm
5.7.2.0	Location	: At drive head, loop take up and loading section
5.7.3.0	Total length	: Sufficient to cover the above sections:-
5.8.0.0	<u>SKIRT PLATES</u>	:
5.8.1.0	Location	: For loading section on both sides of belt:-
5.8.2.0	Thickness of Plate	: Not less than 6 mm
5.8.3.0	Length	: 3 Meters(Min.)
5.8.4.0	Height of plate	: Not less than 450 mm above belt:-
5.8.4.0	Rubber strip dimensions	: 10 mm thick x 100 mm wide
5.8.6.0	Rubber strips shall be fixed to the skirt plate by means of slotted holes to facilitate easy adjustment	:
5.9.0.0	<u>PROTECTIVE GUARDS/FENCES</u>	:
	Suitable protective guards/Fencing shall be provided at all rotating parts	:

at drive head, discharge point, tail end
etc.

5.10.0.0 ACCESSORIES

5.10.1.0 Pull Cord Switches

- 5.10.1.1 Type of switch : Manual reset type:-
- 5.10.1.2 Enclosure : Metal clad, dust and vermin proof:-
- 5.10.1.3 Spacing : 30 m on one side:-
- 5.10.1.4 Required Nos. : As per SOR given in the Annexure:-
- 5.10.1.5 Pull rope : Stranded and PVC sheathed
- 5.10.1.6 Make : Bidder to indicate:-

5.10.2.0 BELT SWAY SWITCHES

- 5.10.2.1 Type of switch : Auto reset type:-
- 5.10.2.2 Enclosure : Metal clad, and dust and vermin proof:-
- 5.10.2.3 Spacing : 30 m on both sides:-
- 5.10.2.4 Required Nos. : As per SOR given in the annexure:-

5.10.2.5 Make :

5.10.3.0 AUDIO VISUAL ALARM

- 5.10.3.1 Type : Audio Visual alarm with pre-start warning (compact unit):-
- 5.10.3.2 Enclosure : NFLP, dust and vermin proof-
- 5.10.3.3 Spacing : 30 m-
- 5.10.3.4 No. of units required : As per SOR given in the annexure
- 5.10.3.5 Make : Mine Line
- 5.10.3.6 Zero Speed Switch : - do- (To detect slippage or snapping of belt

6.0.0 PRE-DESPATCH INSPECTION AND TESTS :

6.1.0 The belt conveyors will be inspected by BCCL's representative/third party inspection agency at manufacturer's works before dispatch of the equipment to ascertain the conformity of the conveyors to supply order specifications, relevant ISS, statutory regulations and type test certificates.

6.2.0 Testing of assemblies/components, wherever required will be carried out by the inspector as per the relevant standards and supply order. The manufacturer shall make available to the inspector, the required test facilities with necessary support for conducting the tests :-

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6.3.0 The manufacturer shall make available to the inspector the following documents during the inspection.

- a) Copies of relevant ISS:-
- b) All records of quality checks as per QAP:-
- c) Dimensional/manufacturing drawings of different assemblies/components of the conveyors:-
- d) Invoices in respect of purchase of raw-materials viz. Steel, bearings, tubes(for rollers) etc, and bought out items:-
- e) Manufacturer's test certificates in respect of raw-materials and bought out items:-
- f) Copies of type test certificates from CPRI for contactors used in the starters as per IS:13947{Part-4/Sec.1}-1993.

~~7.0.0 DOCUMENTS TO BE SUBMITTED WITH THE OFFER~~

- ~~7.1.0 Self certified copies of GA drawings with dimensions & weights for~~
- ~~7.1.1 Complete conveyor~~
- ~~7.1.2 Drive Unit assembly~~
- ~~7.1.3 Delivery Jib Assembly~~
- ~~7.1.4 Take up Assembly~~
- ~~7.1.5 Tail end assly~~
- ~~7.1.6 Intermediate structures & Idlers sets~~
- ~~7.1.7 Assembly drawing of idlers showing the internals~~
- ~~7.2.0 Self certified copies of supplied order received for belt conveyors of tendered and higher capacity from CIL/subsidiaries of CIL/Other PSUs/Govt deptts~~
- ~~7.3.0 Technical leaflets/literature in respect of all the bought outs~~
- ~~7.4.0 Self certified copies of past supply order from CIL/subsidiaries of CIL/other PSUs/Govt deptt for gear box, Fluid coupling, Motor and Starter in support of their proveness in case any make other than those specified at relevant clauses are offered~~

8.0.0 DOCUMENTS TO BE SUBMITTED ALONG WITH EQUIPMENT:

- 8.1.0 Maintenance and parts catalogues of the equipment and all the bought outs.
- 8.2.0 Assembly drawings showing all the dimensions and weights
- 8.3.0 Self Certified copies of type test certificates from CPRI for contactors used in the.

SPECIFICATION FOR CONVEYOR ROLLERS

1. SR.	2 DESCRIPTION	3 PARAMETER	4 Confirmation of the FIRM
1.0	Environmental / operating conditions :		
1.1	Place of use		: Coal Mines at Surface:- :-
1.2	Temperature(Max.)		: 50 deg. C:-
1.3	Humidity(Max.)		: 100%:-
1.4	Atmosphere		: Dusty(Mostly coal dust) and watery:-
1.5	Conveyor speed(Max.)		: As per SOR. :-
2.0	BASIC PARAMETERS		:

- 2.1 Type of roller : Drop in type, greased for life (Maintenance free) :-
- 2.2 Friction co-efficient : Not more than 0.015 :-
- 2.3 Run out / Eccentricity : As per clause 4.5 of IS:8598 :-
- 2.4.0 Dimensional / Details :
- 2.4.1 Top roller (Troughing roller) :
- 2.4.2 Bottom roller (Return roller) :
- 2.4.3 Impact roller :
- 3.0 MATERIALS AND CONSTRUCTIONAL DETAILS :-
- 3.1.0 Barrel / Tube :
- 3.1.1 Material of barrel : Steel tube conforming to grade Yst 210 of IS:9295-1983. :-
- 3.1.2 Boring of the pipe : The pipe shall be bored on double ended boring machine, capable of simultaneous boring of both ends in a single setting to maintain coaxiality.
- 3.2.0 BEARING HOUSING :-
- 3.2.1 Material of bearing housing : Pressed sheet metal housing drawn in CRCA Sheets of extra deep drawing quality. :-
- 3.2.2 Nominal thickness of CRCA Sheet : 3.15 mm (Min.) :-
- 3.2.3 Wall thickness of housing after stamping & machining : Not less than 2.5 mm. :-
- 3.2.4 Machining Tolerance for housing : The housing shall be finished to M7 (Min) as per IS : 919 for accommodating the outer race of the bearing. :-
- 3.2.5 Welding of bearing housing : The bearing housings shall be welded to the pipe by Twin bead MIG/MAC (CO₂) welding machine capable of welding the housing at both ends simultaneously in a single setting. :-
- 3.3.0 SHAFT :
- 3.3.1 Material of shaft : Carbon steel conforming to C-40 of IS : 1570 of En-8A of BS : 970
- 3.3.2 Machining tolerance of shaft : The shaft shall be machined and ground to J6 (Min.) as per IS : 919 at bearing seatings, maintaining coaxiality of both ends. :-
- 3.3.3 Shaft ends : Type 'A' as per IS: 8598-1987 :-
- 3.4.0 BEARINGS :
- 3.4.1 Type of bearings : Seize resistant ball bearings.
: For rollers of shaft dia above

- 3.4.2 Acceptable make of bearings 30 mm, single row deep groove ball bearing of C3 clearance is also acceptable.
:SKF/NBC/ABL/FAG/GRB
- 3.5.0 **LUBRICATION :**
- 4.5.1 Lubricant : Lithium based grease with a worked penetration of 220-250, class 3.
: Hindustan Petroleum
: sufficient to fill up space
- 3.5.2 Make / brand of grease
- 3.5.3 Quantity of grease
- 3.4.0 **SEALING :**
- 3.6.1 Type of seal : Labyranth type seal
- 3.6.2 Material of seal : H.D.P
- 3.6.3 Back / Inner seal : H.D.P
- 3.6.4 Dust seal and rain cap : CRCA sheet
- 3.6.5 The sealing is to be done for the life time of the bearing
- 3.7.0 Assembly of roller : The bearings and seals shall be press fitted on the roller
:
- 3.8.0 **RUBBER RINGS FOR IMPACT ROLLER**
- 3.8.1 Shore hardness of rubber : 50 – 60 deg. On shore 'A' scale :-
- 3.8.2 Thickness and No. of rings :- 50mm thick. Side ring 2 nos centre ring 7 nos
:
- 4.0 **PAINTING**
The surface of the rollers shall be cleaned properly, removing rust, oil film etc. and one coat of anti rust paint to be given. Over this another coat of good quality paint of smoke grey colour shall be given.
:- confirmed 1 coat red oxide primer and another coat good quality smoke grey colour paint
- 5.0 **IDENTIFICATION MARKING :**
Manufacturer's name/trade mark, month and year of manufacturer shall be permanently and legible marked on the roller, by etching/embossing which should last for the life of roller
- 6.0 **TESTING :**
The following tests shall be conducted on completed rollers at appropriate frequencies in the production batch
a) Friction co-efficient test.:-
b) Dimensional check up and Run out/essentricity test.
c) Dust sealing test.
d) Water proofness test
- 7.0 **GUARANTEE**
Complete roller shall be guaranteed for a working life not less than 25000 hours.

8.0 **PRE-DESPATCH INSPECTION**

8.1 The rollers will be inspected by BCCL's representative/third party inspection agency at the manufacturer's works before dispatch of the consignments to ascertain the conformity of the rollers to supply order specifications and relevant ISS.

8.2 The manufacturer shall make available to the inspector, the required test facilities with necessary support for conducting the inspection and test as per the order specifications and relevant ISS.

8.3 Samples for the tests will be drawn from the lots(size wise) by random sampling methods. The sample size for the tests will be as follows.

	TEST	SAMPLE SIZE	
		Lot size: up to 1000 above 1000 upto 2000	
1.	Dimensional check up including measurement & run out / eccentricity	5 Nos	8nos
2.	Friction co-efficient	2 Nos.	4nos
3.	Dust penetration and measurement of dia of shaft (at middle) and thickness of tube and bearing housing etc.	2 Nos.	
4.	Water penetration	2 Nos.	3nos

For lot sizes above 2000, the sample size will be decided on pro-rata basis.

8.4 The manufacturer shall make available to the inspector the following documents during the inspection.

- a) Copy of supply order.:-
- b) Copies of relevant ISS. :-
- c) Test methods. :-
- d) Works test certificates. :-
- e) Invoices in respect of purchase of bearings, tubes and bars(for shaft) etc. :-
- f) Manufacturer's test certificates in respect of raw materials.

:-

10.0 **DOCUMENTS TO BE SUBMITTED WITH CONSIGNMENTS:**

10.1 Pre- despatch inspection and test report.

10.2 General arrangement /assembly drawing of the roller showing distinctly the tube, shaft, bearing housing, bearings, seals etc.

10.3 Technical leaflets if any.

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[Handwritten signature]

ANNEXURE

SECHEDULE OF REQUIREMENT(SOR)

Annexure to the Specifications for Troughed Belt Conveyors for Installation at Surface / CHP in Coal Mines.

SR.NO. 1	DESCRIPTION 2	PARAMETERS 3
2.1.0	Capacity in TPH	: 400
2.3.0	Total length of Conveyor in Meters.	: 60
2.4.0	Belt Speed	: 1.8 M/Sec.
2.5.0	Drive Configuration	: Tandem Drive Head
2.6.0	Take up Travel in Mtrs.	: 3.5
2.7.o.& 5.1.10.3	Power Rating in KW	: Commensurate to the Peak Load – Start(Min. KW-75)
5.5. 1.0	Type of Take - up	: Vertical Gravity take – up
5.7.1.4	No.of PullCordSwitches	: 3
	Nof Belt Swayswitches	: 4
5.7.2.4	No. of Audio Visual Alarm	: 3
5.10.3.6	Zero Speed Switch	: 1
3.1.9	Anti roll Back	:EM Thruster Brake and hold back with Gear Box.
	Conveyor suitability for the belt size (mm)	: 1200
	Lift of the Conveyor	: 16 M
	Voltage System : 440V(+)or(-) 10%, 3 Ph A.C.	
	No. of Belt Conveyors	: 5

SM (MM)

GM (MM)PUR

Format of PERFORMANCE BANK GUARANTEE.
(RS.250 non-judicial stamp paper)

1. Messers ----- a company having its office at -----
-----hereinafter called the Seller has entered into a Contract
No.-----dt.----- (hereinafter called the said Contract) with Bharat
Coking Coal Limited (hereinafter called , the Purchaser) to supply equipment on the terms and conditions in the
said Contract.

It has been agreed that hundred percentage(100%) payment of the value of the equipment will be
made to the seller in the terms of the said Contract on the seller furnishing to the Purchaser a Bank Guarantee
for the sum of ----- equivalent to 10 % of the value of each equipment and accessories dispatched by
the seller as security for the due and faithful performance of the terms of the said contract and against any loss
or damage caused to or would be caused to or suffered by the purchaser by reason of any of the terms or
conditions contained in the said contract.

The----- Bank having its office at ----- has at the request of seller agreed to
give the guarantee herein after contained.

2. We,----- Bank Ltd.,do hereby undertake to pay the amounts due and payable under this
guarantee without any demur merely on a demand from the purchaser stating that the amount claimed is due by
way of loss or damage caused to or would be caused to or suffered by the purchaser by reason of any breach by
the said seller of any of the terms or conditions contained in the said contract or by reason of the seller's failure
to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due
and payable by the Bank under this guarantee. We shall not withhold the payment on the ground that the seller
has disputed its liability to pay or has disputed the quantum of the amount or that any arbitration proceeding or
legal proceeding is pending between purchase and the seller regarding the claim. However , our liability under
this guarantee shall be restricted to an amount not exceeding -----.

3. We,----- Bank Ltd., further agree that the guarantee herein contained shall come into
force from the date hereof and shall remain in full force and effect during the period that would be taken for the
performance of the said contract and that it shall continue to be enforceable till all the dues of the purchase
under or by virtue of the said contract have been fully paid and its claim satisfied or purchase certified that the
terms and conditions of the said contract have been fully and properly carried out by the said seller and
accordingly discharged the guarantee .Unless a demand or claim under this guarantee is made on us in writing
on or before the ----- (date to be given-----months from the date of Bank Guarantee) we shall
be discharged from all liability under this guarantee thereafter.

4. We., Bank Ltd. further agree with the purchaser ,that the purchaser , shall have the fullest liberty without our
consent and without affecting in any manner no obligations hereunder to vary any of the terms and conditions
of the said contract or to extend time of performance by the said seller(s) from time to time or to postpone for
any time or from time to time any of the powers exercisable by the purchaser , against the said seller and to
forbear or enforce any of the terms and conditions relating to the said contract and we shall not be relived from
our liability by reason or any such variation or extension being granted to the said seller or for any forbearance
act or omission on the part of the purchaser , or any indulgence by the purchaser to the said seller by any such
matter or thing whatsoever which under the law relating to sureties would be for this provision have effect of an
relieving us. The Bank further agrees that in case this guarantee is required for a longer period and it is not
extended by the bank beyond the period specified above , the bank shall pay to this purchaser the said sum of ---
----- or such lesser sum as may than be due the purchaser and as the purchaser may demand.

5. We ,----- Bank Ltd. lastly undertake not to revoke this guarantee during its currency except with the
previous consent of the purchaser , in writing.

6. The Bank has under its constitution power to give this guarantee and Mr.-----Manager , who has
signed it on behalf of the Bank has authority to do so.

7. This Bank Guarantee will not be discharged due to the change in the constitution of the Bank or the
Contractor.

Date----- Day of -----20

For ----- Bank Limited

Signature of the authorised person
for and on behalf of the Bank