



Under Jurisdiction of Dhanbad/Jharkhand Court Only

Bharat Coking Coal Limited

(A Miniratna Company)

A Subsidiary of **Coal India Limited**

Registered Office: Koyla Bhawan, Koyla Nagar, Dhanbad -826005

CIN:U10101JH1972GOI00091

Website: www.bcclweb.in

Material Management Department

Level-III, Commercial Block

Koyla Bhawan, Dhanbad-826005

(Fax No- 0326-2230183)

Phone No.0326-2230181

Email Id: gmmm.bccl@coalindia.in

Purchase Order

Ref: . BCCL/ PUR/419109/10KL Diesel Bowser/OTE/59/20-21/87

Date: 23.12.2020

To

M/s Hindusthan Technologies Pvt. Ltd.

Shivapuri (Nimpur), P.O.Jagatpur

Cuttack ,Odisha-754021

Email: marketing@hindusthantechnologies.com/

admin@hindusthantechnologies.com , Mobile No. 9439695800

GSTIN: 21AACCH5297D1ZU

Vendor Category : MSE/NSIC

PAN- AACCH5297D

Sub: Supply, Erection/Assembly, Commissioning and Performance Testing of 05 nos. of 10 KL Diesel Bowser along with all filters & O rings (including engine filters) required for warrant period i.e one year

Ref: Hindusthan Technologies Pvt. Ltd. Online offer vide Bid Id: 492910 dtd 11.02.2020 and subsequent Hindusthan Technologies Pvt. Ltd letters last Letter dtd 04.11.2020 & email dtd 05.12.2020 against open e-tender cum reverse auction no. BCCL/ PUR/419109/10KL Diesel Bowser/19-20/59 dtd 21.01.2020 [Tender Id: 2020_BCCL_162632_1, Cover-I opened on 12.02.2020 & cover-II opened on 27.07.2020].

Dear Sirs,

With reference to the above, we, for and on behalf of BCCL, hereby place PURCHASE ORDER on Hindusthan Technologies Pvt. Ltd. for the following items as per rate, terms and conditions indicated below as above Hindusthan Technologies Pvt. Ltd. referred offer has been accepted to the extent as indicated here under:

1. SCOPE OF SUPPLY-

Sl. No.	Item Description	Qty. (Nos.)	Unit Basic Rate (₹)	Total Landed Value (₹)
1	supply of tendered 10 KL Diesel Bowser and Consumables for Warranty Period of 01 Year as per details given in Annexure-A; Make and Model: Hindusthan Technologies Pvt. Ltd & Diesel Bouser	05	₹ 32,00,362.00	₹ 1,60,01,810.00
IGST @ 28 %				₹ 44,80,506.80
Subtotal				₹ 2,04,82,316.80
TCS @ 0.075 %				₹ 15,361.74
Total Landed Rate on FOR Basis				₹ 2,04,97,678.54
Total Landed Rate on FOR Basis (rounded off)				₹ 2,04,97,679.00

Note: All filters & O rings (including engine filters) required for warrant period i.e one year per equipment is as per Annexure – B

Supply Point: Equipment & Spares: Supply and billing will be from Jagatpur , Cuttack ,Odisha-754021

2. Total Purchase Value: - (Equipment & All filters & O rings (including engine filters) required for warrant period i.e one year operation): Rs **2,04,97,679.00** (Rs Two Crore Four Lakhs Ninety Seven Thousand Six Hundred And Seventy Nine Rupees Only.)

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The above prices are FIRM and on FOR Destination basis inclusive of packing & forwarding, Freight & insurance. Safe arrival of the complete equipment upto destination stores shall be Hindusthan Technologies Pvt. Ltd.'s responsibility.

3. GST:

- a) GST shall be paid at actual against documentary evidence as applicable at the time of dispatch within the stipulated delivery period. The current rate of GST is 18% on equipment. Input Tax credit benefit shall be availed by the consignee, for which Hindusthan Technologies Pvt. Ltd should submit GST complaint Invoice. Hindusthan Technologies Pvt. Ltd have to comply with the terms and conditions of GST Act / rules such as issuance of Tax invoices, ensure payment of GST and enabling mechanism to facilitate Input Tax credit by BCCL. Hindusthan Technologies Pvt. Ltd should upload the Tax Invoices / Debit Note / Credit Note in GST Portal, make payment of GST and file returns in time, as prescribed under GST Act and Rule to facilitate BCCL to avail Input Tax Credit (ITC) as per eligibility under GST. In case BCCL is unable to avail ITC or any liability arises to BCCL due to failure on the part of Hindusthan Technologies Pvt. Ltd to comply the above provisions, the entire amount including Interest (if any) borne by BCCL shall be recovered from Hindusthan Technologies Pvt. Ltd. The present rate GST applicable on individual items of spares is as per Annex- B enclosed.
- b) Invoice issued by Hindusthan Technologies Pvt. Ltd should contain following elements as per Section 31 of CGST Act, 2017 along with Rule 46 and 47 of CGST Rule, 2017:
- Firm Name, address and GSTIN;
 - A consecutive serial number (not exceeding sixteen characters) containing only alphabets and/or numerals, unique for a financial year; (should not be hand-written)
 - Date of its issue;
 - Name, address and GSTIN/ Unique ID Number, if registered, of the recipient;
 - Name and address of the recipient and the address of delivery, along with the name of State and its code, if such recipient is unregistered and where the taxable value of supply is fifty thousand rupees or more;
 - HSN code of goods or Accounting Code of services;
 - Description of goods or services;
 - Quantity in case of goods and unit or Unique Quantity Code thereof;
 - Total value of goods or services;
 - Taxable value of goods or services taking into account discount or abatement, if any;
 - Rate of tax (CGST, SGST or IGST);
 - Amount of tax charged in respect of taxable goods or services (CGST, SGST or IGST);
 - Place of supply along with the name of State, in case of a supply in the course of inter-State trade or commerce;
 - Place of delivery where the same is different from the place of supply;
 - Whether the tax is payable on reverse charge;
 - the word "Revised Invoice" or "Supplementary Invoice", as the case may be, indicated prominently, where applicable along with the date and invoice number of the original invoice; and
 - Signature or digital signature of Hindusthan Technologies Pvt. Ltd or its authorized representative
 - GST Registration Number of BCCL in case of supply for Jharkhand is 20AAACB7934MFZB and in case of supply for WB is 19AAACB7934M2Z7. Hindusthan Technologies Pvt. Ltd bills should bear this number to enable BCCL to claim INPUT TAX CREDIT.
- c) Hindusthan Technologies Pvt. Ltd. has to ensure proper uploading in Hindusthan Technologies Pvt. Ltd return so that BCCL may be able to avail Input Tax Credit.

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- d) Hindusthan Technologies Pvt. Ltd. has to ensure that if BCCL does not be able to avail Input Credit due to Hindusthan Technologies Pvt. Ltds Limited's fault then the loss amount shall be recovered from Hindusthan Technologies Pvt. Ltds Limited's bill.
- e) The benefit of any extra input tax credit earned by Hindusthan Technologies Pvt. Ltd. , if any, in future shall be passed on to BCCL.
- f) E-Way bill, if required, shall be arranged by Hindusthan Technologies Pvt. Ltd.
- g) HSN codes and GST rates of the items covered in the above supply order placed will be as under:

Sl no.	Item	HSN code	GST rate
1	Bowser	8704	28 % [IGST]

- h) Hindusthan Technologies Pvt. Ltd. GST details are as under:

SN	Particulars	Firm's Details
1	Name	M/s Hindusthan Technologies Pvt. Ltd.
2	Constitution of Business	Public Limited Company
3	Trade Type (Manufacturer/Dealer/Service Provider)	Manufacturer
4	PAN	AACCH5297D
5	GSTIN No.	21AACCH5297D1ZU

4. **Packing & Forwarding Charges:** inclusive

5. **Freight/Transportation Charges Inclusive Of Service Tax:** Inclusive

7. **Transit Insurance Inclusive Of Service Tax:** Inclusive

8. **TERMS OF PAYMENT:** For Payment of equipment and consumable spares and consumables for first 12 months of warranty period from the date of commissioning of the equipment in Indian Rupees:

- (a) 80% value of the equipment and consumable spares and consumables for first 12 months of warranty period from the date of commissioning of the equipment and 100% GST along with 100% transportation & Insurance charges will be paid within 21 days after delivery and acceptance of materials at site at the consignee's end and submission & acceptance of Performance Bank Guarantee whichever is later. The equipment should be accompanied with relevant dispatch documents like Challan, Maker's Test Cum Inspection Certificate Warranty Certificate, Pre dispatch inspection certificate wherever applicable etc.

- (b) Balance 20% payment and 100% erection and commissioning charges shall be made within 21 days of successful completion of erection testing, commissioning and final acceptance of the equipment(along with accessories) at site upon presentation of a certificate signed by the concerned officials of the Project and counter-signed by the Area General Manager and HOD of Excavation Deptt. of the BCCL HQ, where the equipment has been deployed and confirmation of receipt of spares and consumables for first 12 months of warranty period from the date of commissioning of the equipment by the paying authority.

BCCL is making payment of Hindusthan Technologies Pvt. Ltd's bills through Electronic Fund Transfer (EFT). Hindusthan Technologies Pvt. Ltd is therefore, advised to indicate their Bank Account number and other Bank Details in their Invoice.

Name of the Bank.

Name of the Branch with complete address.

Party's Account Style.

Party's nature of Account.

Party's Account Number.

Hindusthan Technologies Pvt. Ltd E-Payment mandate is enclosed as Annexure-J



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9. **DELIVERY:** Commencing within 3 months from the date of receipt of purchase orders and supply to be completed within 6 months from the date of receipt of purchase orders.
Erection & Commissioning and Performance Testing Period: Within a week of receipt at site.
10. **Erection/Assembly, Commissioning and Performance Testing:** Hindusthan Technologies Pvt. Ltd shall provide the Services of Specialist Technicians and labour to undertake the installation/erection/assembly, commissioning and any performance testing of the plant, Equipment and accessories supplied within a week of receipt. The technicians shall remain at site following commissioning until all necessary personnel are fully conversant with the maintenance and operation of the equipment.
If Hindusthan Technologies Pvt. Ltd fails to commission the equipment within the specified period, Liquidated damages will be recovered @ 0.5% of the delivered/landed price of the equipment along with accessories per week or part thereof for the delayed period subject to a maximum of 10% of the delivered/landed price of equipment along with accessories. Wherever felt necessary, the limit of 10% can be increased to 15% at the discretion of Head of the Materials management Division of BCCL.
11. **LIQUIDATED DAMAGES CLAUSE:**
(i) In the event of failure to deliver or dispatch the stores within the stipulated date/period in accordance with the samples and / or specifications mentioned in the supply order and in the event of breach of any of the terms and conditions mentioned in the supply order, BCCL should have the right:-
a) To recover from Hindusthan Technologies Pvt. Ltd as agreed liquidated damages, a sum of 0.5 % (half percent) of the price of any stores which the successful tenderer has not been able to supply as aforesaid for each week or part of a week during which the delivery of such stores may be in arrears limited to 10% (Ten percent). Wherever felt necessary, the limit of 10% can be increased to 15% at the discretion of Head of the Materials management Division of BCCL.
b) or to purchase elsewhere, after due notice to Hindusthan Technologies Pvt. Ltd on the account and at the risk of the defaulting supplier the stores not supplied or others of similar description without canceling the supply order in respect of the consignment not yet due for supply or,
c) To cancel the supply order or a portion thereof and if so desired to purchase the stores 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 forfeit the security deposit fully or partly.
f) Whenever, under this contract, a sum of money is recoverable from and payable Hindusthan Technologies Pvt. Ltd, BCCL shall be entitled to recover such sum by appropriating in part or in whole by deducting any sum or which at any time thereafter may become due to Hindusthan Technologies Pvt. Ltd in this or any contract should this sum be not sufficient to cover the full amount recoverable, the successful tenderer shall pay BCCL on demand the remaining balance. Hindusthan Technologies Pvt. Ltd shall not be entitled to any gain on any such purchase.
g) CGST, SGST or IGST will be levied as applicable as per the provision of GST Act and Rule thereon.
h) Hindusthan Technologies Pvt. Ltd will issue credit note as per the provision of Rule 53 of CGST Rule, 2017 on quality deduction or liquidity damage, if any arises
(ii) **Compensation for not achieving guaranteed Availability:-**
In the event that the Equipment fails to achieve the Availability herein provided during this twelve (12) month period, Hindusthan Technologies Pvt. Ltd shall be liable to pay to the Purchaser, as Penalty, a sum equal to, as indicated hereunder for each equipment :-
a) 1% of the delivered price of the equipment for every percentage reduction from the Guaranteed Availability for the first 5%
b) 10% of the delivered price of the equipment for reduction beyond 5% from the Guaranteed Availability.

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Hindusthan Technologies Pvt. Ltd has however the option to modify the equipment , if felt necessary , to bring its availability to the guaranteed level within three (3) months after expiry of initial guarantee period of twelve (12) months from the date of commissioning .

12. **CONSIGNEE:** The equipment allocated to the mine /projects/ areas as follows which is subject to change as per the requirement of purchaser:

Sl. No.	Name of the Area	Qty. (Nos.)	CONSIGNEE
1	Barora	01	Depot Officer, Regional Stores; Barora Area, Nawagarh Dhanbad, Pin-828306
2	Govindpur	01	Depot Officer , Regional Stores , Govindpur Area, Dhanbad, Pin-828128
3	Kusunda	01	Depot Officer , Regional Stores; Kusunda Area, Godhur, Dhanbad, Pin-828116
4	Katras	01	The Depot Officer, Regional Stores, Katras Area, Dhanbad ,Pin-828121.
5	Sijua	01	The Depot Officer ,Regional Stores, Sijua Area, RS Loyabad, Dhanbad Pin 828101

13. **PAYING AUTHORITY:** The HOD (Finance)/MM, Koyla Bhawan: Koyla Nagar, Dhanbad
14. **COMPOSITE GUARANTEE / WARRANTY:** As indicated in Technical Specification (ANNEXURE-A)
15. **SECURITY DEPOSIT:** Hindusthan Technologies Pvt. Ltd will have to submit Security Deposit for the 3% (as per GM (MM), CIL officer order no.2086 dtd 26.11.20) value of the total landed value of the contract including all taxes, duties and other costs and charges without having any ceiling (i.e. Rs 6,14,931.00) in the form of Bank Draft /Bank Guarantee (As per format given in ANNEXURE-K) within 30 days from the date of order.

In case of FOR destination contract in Indian Rupees, the total landed value of the contract will be arrived at after adding GST and any other tax and duty, if applicable and any other cost and charge, if applicable, to the FOR Destination price of the ordered Equipment and all filters & O rings required for warranty period.

The Security Deposit Bank Guarantee shall remain valid up to 3 months after the supply and commissioning of all the equipment covered in the contract and will be released within 30 days after successful commissioning of all the equipment covered in the contract and on receipt of confirmation of Performance Bank Guarantee (s) for all the equipment covered in the contract. The Bank Guarantee for Security Deposit shall be extended till the Performance Bank Guarantee (s) are submitted by the firm, failing which Security Deposit will be forfeited.

The SDBG issued by issuing bank on behalf of the bidder in favour of "Bharat Coking Coal Ltd.," shall be in paper form (Stamp Paper) as well as issued under "Structured Financial Messaging System". Issuing Bank should send the underlying confirmation to either of following banks:

Name of beneficiary & its details	Name	Bharat Coking Coal Limited
	Area	HQ, BCCL
	Bank Account no.	35160317947
	Deptt.	MM Department
Beneficiary Bank, Branch & Address	State Bank of India	
	Main Branch Dhanbad	
IFSC code	SBIN0000066	

Or

Name of beneficiary & its details	Name	Bharat Coking Coal Limited
	Area	HQ, BCCL
	Bank Account no.	019605001057
	Deptt.	MM Department
Beneficiary Bank, Branch & Address	ICICI Bank	
	ICICI Bank, Dhanbad	
IFSC code	ICIC0000196	

[Signature]

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Original copy of the Bank Guarantee issued by the Issuing Bank shall be sent by the issuing bank to MM department of BCCL.

16. **PERFORMANCE GUARANTEE:** In accordance with the provisions of clauses C.7.2.2 and C.7.3 of the Technical Specifications, Hindusthan Technologies Pvt. Ltd shall guarantee that the availability of the equipment shall be not less than **85% (eighty five per cent)** for a period of 12 months from the accepted date of commissioning.

Hindusthan Technologies Pvt. Ltd shall furnish a Performance Guarantee equivalent to 10% of the total value of the supply order / contract (by adding all taxes such as GST etc to the FOB destination price of the equipment ordered, in case of suppliers from purchaser's country and the estimated Marine Freight & Insurance, port charges and Customs Duty etc., in case of imported items).

This Bank Guarantee shall be initially valid for a period of 15 months from the date of commissioning of the equipment (The PBG(s) shall remain valid till 3 months after the completion of 12 months period from the date of commissioning of respective equipment covered in the contract) and the same shall either be released or extended depending upon the merit of the case. This Performance Guarantee shall be for the performance of the Contract / Supply Order.

The release of the Performance Bank Guarantee(s) after above indicated period shall be subject to satisfactory performance of the equipment during 12 months period from the date of commissioning of the equipment and fulfilment of contractual obligations failing which, action for further extension or encashment of PBG, as deemed suitable shall be taken. Release of PBG for each equipment may be done separately on satisfactory performance of the respective equipment as above. Hindusthan Technologies Pvt. Ltd has to submit the Performance Bank Guarantee in INR.

The Performance Bank Guarantee shall be issued by a scheduled bank in the format attached as ANNEXURE -L and shall be irrevocable and unconditional and BCCL shall have the powers to invoke/en-cash it notwithstanding any dispute or difference between Hindusthan Technologies Pvt. Ltd and BCCL pending before the court, tribunal, arbitrator or any other authority.

In case of Performance Bank Guarantee, Hindusthan Technologies Pvt. Ltd may also please note the following: The Bank Guarantee issued by the Bank on behalf of Hindusthan Technologies Pvt. Ltd in favor of "BHARAT COKING COAL LIMITED" shall be in paper form as well as issued under "Structural Financial Messaging System". The detail of beneficiary for issue of BG under SFMS platform is furnished below.

Name of beneficiary & its details	Name	Bharat Coking Coal Limited
	Area	HQ, BCCL
	Bank Account No	35160317947
	Deptt	MM Department
Beneficiary Bank Branch & Address	State Bank of India	
	Main Branch Dhanbad	
IFSC Code	SBIN0000066	

Or

Name of beneficiary & its details	Name	Bharat Coking Coal Limited
	Area	HQ, BCCL
	Bank Account No	35160317947
	Deptt	MM Department
Beneficiary Bank Branch & Address	ICICI Bank	
	ICICI Bank Dhanbad	
IFSC Code	ICIC0000196	

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The PBG issued by Issuing bank on behalf of Hindusthan Technologies Pvt. Ltd in favour of "Bharat Coking Coal Limited" shall be in paper form (Stamp Paper) as well as issued under "Structured Financial Messaging System". Original copy of the PBG issued by the Issuing Bank shall be sent by the issuing bank to BCCL. The total value of Performance Bank Guarantee is **Rs. 20,49,768.00 Or Rs. 04,09,954/-** per Equipment

- 17. PRICE FALL CLAUSE** – Hindusthan Technologies Pvt. Ltd undertakes that it has not offered to supply/ supplied/ is not supplying same or similar product/ systems or sub systems at a price lower than that offered in the present bid in respect of any Organization/ Ministry/ Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization during the currency of the contract and if it is found at any stage that same or similar product/ systems or sub systems was supplied by the bidder to any Organization/ Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries other PSU or any other private organization at a lower price during the currency of the contract, then that very price will be applicable to the present case and the difference in the cost would be refunded by the bidder to buyer, if the contract has already been concluded.
- 18. INSPECTION AND TESTS:**
- i) The purchaser or its authorized representative shall have the right to inspect and/or to test the goods to confirm their conformity to the contract. The purchaser shall notify the supplier in writing of the identity of any representative retained for these purposes.
 - ii) The inspections and tests may be conducted on the premises of the supplier or its subcontractors), at point of delivery and/or at the goods final destination when conducted on the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production date, shall be furnished to the inspectors at no charge to the purchaser.
 - iii) Should any inspected or tested Goods fail to conform to the specifications, the purchaser may reject them and the supplier shall both replace the rejected goods and make all alternatives necessary to meet specification requirements free of cost to the Purchaser.
 - iv) The Purchaser's right to inspect, test and, where necessary, reject the goods after the Goods arrival in the Purchaser's country shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representatives prior to the Goods shipment from the country of origin.
 - v) Material are subject to inspection by the purchaser before dispatch. The materials may also be subject to stage inspection by a third party nominated by BCCL for the purpose. Final inspection shall, however, be carried out at the consignee's end.
 - vi) Nothing in these documents shall in any way release the supplier from any warranty or other obligations under this contract.
 - vii) 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.
- 19. 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 outbreak of hostilities, declaration of an embargo or blockage or fire, flood, acts of nature or any other contingency beyond the supplier's control due to act of God, then the BCCL may allow such additional time by extending the delivery period as he considers to be justified by the circumstances of the case and its decision in this regard shall be final. If and when additional time is granted by the purchaser, the contract/supply order shall be read and understood as if it had contained from its inception the delivery date as extended. Power failure will not be considered as a force majeure conditions.





(a) The successful bidder will advise, 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 authorities, the beginning and end of the causes of the delay, within 15 days of the occurrence and cession of such force majeure conditions. In the event of delay last 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 delay arising out of Force majeure, the bidder will not claim any 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 cost provided it is mutually established that the force majeure conditions did actually exist

20. SUBMISSION OF BILLS: For payment for equipment in Indian Rupees, Hindusthan Technologies Pvt. Ltd will submit the following documents along with bills to the paying authority:

- Four copies of Hindusthan Technologies Pvt. Ltd 's invoice, Pre-Receipted and Stamped showing Contract Number, Goods description, quantity, unit price, total amount and GST No. of Ultimate Consignee.
- Receipted Challan/ Consignment Note of all the consignments.
- Manufacturer's Test & Inspection Certificate.
- Manufacturer's Warranty /Guarantee Certificate.
- Lowest Price Certificate
- Copy of Performance Bank Guarantee
- Documentary evidence for freight and transit insurance charges up to the destination.
- Copy of Certificate of Insurance.
- Any other document(s) required as per contract.

21. GENERAL TERMS AND CONDITIONS:

Unless otherwise specified in the purchase order, the Purchase order shall be subject to the General Terms and Conditions of Supply of Stores given as ANNEXURE –I. In case there is a conflict in any particular term of the NIT with the General Terms, the terms of the NIT will prevail.

22. INTEGRITY PACT: The Integrity Pact document has been signed by you and the same is deemed to have been signed by BCCL authorities.

23. JURISDICTION:

Any dispute arising out of this enquiry shall come under the sole jurisdiction of the Dhanbad/Jharkhand High Court, (INDIA).

All Other Terms & Conditions shall be as per NIT & as per Hindusthan Technologies Pvt. Ltd techno-Commercial accepted offer.

Two copies of the order is being sent to Hindusthan Technologies Pvt. Ltd . Hindusthan Technologies Pvt. Ltd is advised to acknowledge the receipt and acceptance of the order by returning one copy duly signed and stamped to this office positively within 15 days, failing which this order shall be deemed to have been accepted by Hindusthan Technologies Pvt. Ltd for execution.

INDENT & BUDGET CERTIFICATION REFERENCE:

Area Indent ref no. and Date				e-BC & e-FC Reference
Sl	Area	Qty	Indent no	
1	Barora	01	RS/BA/19-20/06 dtd 20.05.119	e.B.C.No.BCCL/C&B/CAP/REG.PN:25/SN:1 0/eBCNo:706 Dated;05.12.2020, HEAD: HEMM, Sub Head-HEMM New Job, File Org Authority : GM(Excvn)Hq , UNIT CODE: 2200 for amount of Rs 2,04,97,679.00
2	Govindpur	01	B-IV/19-20/36 dtd 29.05.19	
3	Sijua	01	NOCP/18-19/02 dtd 11.04.18	
4	Kusunda	01	BCCL/KA/19-20/Indent/03 dtd 30.04.19	
5	Katras	01	AKWMOCP/406/19-20/200062 13.05.19	
IR No.419109 dtd 13.12.19				e. F.C. No:-458 dtd 22.12.2020 for amount of Rs 2,04,97,679.00

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Enclosures		
SL	ANNEXURE	DESCRIPTION
1	ANNEXURE - A	Technical Specifications Comprising Schedule Of Requirement; Parts I,II, Schedule Of Requirements Of Service , Technical Specifications Preface ,A. Scope Of Supply , B. Specific Project Requirements, C. General Requirements, D. Equipment Specification
2	ANNEXURE - B	All filters & O rings (including engine filters) required for warrant period i.e one year per equipment
3	ANNEXURE - C	List of Tools to be provided with Bowser
4	ANNEXURE - D	List of Major Bought Out Items
5	ANNEXURE - E	Technical Details offered
6	ANNEXURE - F	Details of Nearest Depot/Warehouse and service facility available
7	ANNEXURE - G	Quality Assurance
8	ANNEXURE - H	Technical Parameter sheet
9	ANNEXURE - I	General Conditions of Contract
10	ANNEXURE - J	Bank Details for Electronic Payment
11	ANNEXURE - K	Performa of Security Deposit Bank Guarantee
12	ANNEXURE - L	Performa Of Performance Bank Guarantee

Yours faithfully,
For & on behalf of Bharat Coking Coal Limited

A.K. Sinha
23/12/2020
(Alok Kumar)
DM(MM)

A.K. Sinha
23/12/2020
(A.K.Sinha)
CM (MM)

[Note: - This is issued with approval of competent authority. This order is placed against the indent Ref no. REVISED/INDENT/HEMM/CAPITAL/10KL Diesel Bowser/19-20/51 dated 17.07.19 of GM (Excavation)/HOD, Excavation Department, BCCL HQ.]

Copy to:

1. GM(Excv) HOD, Koyla Bhawan: Koyla Nagar, Dhanbad
2. The HOD (Finance) MM, Koyla Bhawan: Koyla Nagar, Dhanbad
3. The GM(Area), Barora/Govindpur/Sijua/Kusunda/Katras Area , BCCL
4. GM/GM(MM), ECL/CCL/WCL/SECL/NCL/MCL
5. The Depot Officer , Regional Store, Barora/Govindpur/Sijua/Kusunda/Katras Area , BCCL
6. Tech-cell, MM Division, Koyla Bhawan: Koyla Nagar, Dhanbad
7. The Independent External Monitor for Integrity Pact :-
 - i) Shri Aditya Prakash Mishra IRSE (Retd.) Address: Flat No.-24, Aster-1 , Vatika City, Sohna Road, Sector-49 , Gurgaon-122003
 - ii) Shri Pramod Deepak Sudhakar , Address: A-002, Stellar Park Apartments, C-58/42, Sector-62, Noida (UP)- 201301

Annexure-A

Schedule of Requirements

Part I:

S.No	Brief Description of Goods & Services	Quantity	Expected Delivery Schedule at Site
1	10 KL Diesel Bowser	05 No	Commencing within 3 months from the date of receipt of purchase orders and supply to be completed within 6 months from the date of receipt of purchase orders.
2	Ancillary Equipment and other requirements for each of Item no.1 as specified in Technical Specifications.	In accordance with item 1	Delivery to be made with Diesel Bowser.

The quantities of equipment against which this procurement is being made are as follows:

Sl No.	Project with Consignee Address	Total Requirement	
		Under NCD	Under PCD
1	Barora	01 No	Nil
2	Govindpur	01 No	Nil
3	Kusunda	01 No	Nil
4	Katras	01 No	Nil
5	Sijua	01 No	Nil

Part II:

Sl. No	Brief Description of Services	Period/Quantum
1	Training of Purchaser's Personnel at the manufacturers works or elsewhere outside India.	Please refer to Schedule of Requirements of Services later in this Section and to the Technical Specifications.
2	Training of Purchaser's Personnel on Site.	Please refer to Schedule of Requirements of Services later in this Section and to the Technical Specifications.
3	Assembly and erection of equipment at Site in accordance with the Technical Specification and Conditions of Contract.	To be specified by the Bidder to comply with the Technical Specifications and the terms and Conditions of Contract.

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Schedule of Requirements of Services

- The Supplier's scope of the Contract will include the following
- I. Type test on each equipment included in the technical specification and offered in the bid.
 - II. Providing Services of Supplier's qualified engineer(s)/personnel for:
 - A. unloading, transportation to site, storage at site and/or
 - B. Transportation from storage to erection site, installation, testing and commissioning.
 - III. Training of Purchaser's Personnel:
BCCL 's estimates of the minimum training requirements (in terms of Purchaser's personnel, periods and locations) are given in the following table. These estimates relate to the total number of items of equipment specified in Part I

Type of Personnel	At Manufacturer's Works				At Site			
	No	Period		Total	No	Period		Total
Mech Engineer			weeks			1	Week	
Elec Engineer			weeks			1	Week	
Mech Supervisor			weeks			1	Week	
Elec Supervisor			weeks			1	Week	
Mech Fitter						1	Week	
Electrician						1	Week	
Operator						1	Week	
Total				weeks				weeks

Definitions:

Mech/Elect Engineer-


Elect/Mech Supervisor -

Mech Fitters/Electricians/Operators

Graduate Engineer having basic knowledge of the equipment

Diploma Holder Engineer having basic knowledge of the equipment

Un-skilled, semi-skilled and skilled.



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Technical Specification

Preface -

Introduction

These Technical Specifications identify the technical requirements of the Goods and Services which are the subject of this IFB.

The Technical Specifications are presented in four parts as follows:

- A. Scope of Supply
- B. Specific Project Requirements
- C. General Requirements
 - 1) Geography and Climatic Conditions
 - 2) Goods (Equipment and Machinery)
 - 3) Services
 - 4) Standards
 - 5) Supplier's Responsibility
 - 6) Spare Parts Provisions
 - 7) Availability Provisions
 - 8) Deemed Breakdown
 - 9) Composite Warranty / Guarantee
 - 10) Special Conditions
 - 11) Quality Assurance
 - 12) After Sales Service/Product Support

- D. Equipment Specifications

A. Scope of Supply

A.1 Equipment Package

A. : to manufacture and supply 10 KL diesel bowser required for carrying diesel from surface to the coal face inside the coal mines. The scope of works includes procurement of Truck chassis, fabrication of bowser unit over truck chassis with necessary pumps, digital metering unit and diesel dispensing arrangement, supply and fitment of safety items, one spare wheel fitted with tyre & tube, obtaining necessary safety and other clearance/approvals from Govt. and other regulatory bodies.

A.2 Supplementary Items

- I. First fill of all oils, grease and lubricants needed for test and commissioning of equipment.
- II. The equipment shall be provided with a comprehensive tool kit, which shall include any special tools required for erection, commissioning and for the maintenance and repair of all the equipment.
- III. All filters & O rings (including engine filters) required for warrant period i.e one year. List of such spares justifying the total requirement as per maintenance schedule should be submitted.

A.3 Information and Drawings

At least one month before the scheduled installation date, the Supplier shall provide not less than:

(a) Suitably illustrated copies of Operating, Repair and Maintenance Manuals for each type/model of equipment and accessories, written in the English language, substantially bound in book form;

One (1) copy to each project site; and

One (1) copy along with soft copy to the General Manager(Excv.), BCCL HQ. Koyla Bhawan.

(b) Suitably illustrated copies of detailed Spares Parts Manuals for each type/model of equipment and accessories, written in the English language, substantially bound in book form;

One (1) copy to each project site; and

One (1) copy along with soft copy to the General Manager (Excv.), BCCL Hqrs. Koyla Bhawan.

The Supplier shall also submit (in the same number of copies) the data identified in the specifications for each item of Equipment proposed. In addition to the Equipment drawings requested, The Supplier shall supply detailed Equipment's drawings illustrating major assemblies' locations, foundation and placement for items such as Prime Mover, Transmission, Final Drive and other installations/ Systems.

A.4 Erection/Assembly, Commissioning and Performance Testing

The Supplier shall provide the Services of Specialist Technicians (refer Part-C3) and labour to undertake the installation/erection/assembly, commissioning and any performance testing of the plant, Equipment and accessories supplied within a week of receipt.

The technicians shall remain at site following commissioning until all necessary personnel are fully conversant with the maintenance and operation of the equipment.

A.5 Training

The supplier in consultation with the project in-charge / HOD [Excavation] of the respective site shall make available experienced personnel to conduct training of engineers, supervisors, technicians and operation personnel for suitable period from the date of issue of acceptance certificate of the equipment. The training shall cover the following:

- a) Equipment system, safety and risk assessment
- b) Equipment operation and maintenance
- c) Trouble shooting, localization of fault and their remedies covering:
 1. Electrical and electronics
 2. Mechanical
 3. Hydraulic system
 4. Lubrication system
 5. Pneumatic system etc.

Comprehensive training manuals with clear illustration shall be provided to each participant in English language. The training courses shall be conducted in both English and Hindi language.

B. Specific Site Requirements

B.1 Project Specific Requirements

The equipment shall be suitable for use at the specific site projects under the conditions detailed below.

B.1.1 Opencast Projects

All the Opencast Project is owned by the Bharat Coking Coal Limited, a wholly owned subsidiary of Coal India Limited (the "Purchaser"). The mine is located partly in the Dhanbad District of Jharkhand approximately 30 Km from Dhanbad railway station.




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Part C.

General Requirements

C.1 Geography and Climatic Conditions

Elevation:-

The natural surface varies from 100 to 1000 m above mean sea level.

Climate:-

The climate is sub-tropical to tropical, dusty, with a hot and humid atmosphere. Monsoon rains occur in the period from June to October.

Ambient Conditions:-
Relative Humidity - Maximum 98%
Temperature - Minimum 0° C
Maximum 50° C

Rainfall:- The mean annual rainfall is 1,000mm, 90 to 95 % of which may fall in rainy season from June to October.

Wind:-
April to September - South to South Westerly
October to March - North Westerly
Speed:-
- 8 km per hr average
- 100 km per hr maximum

C.2 Goods (Equipment and Machinery)

Detailed specifications of the Equipment to be supplied are given in Part D of this section.

In general, all items shall be:

- designed and constructed to handle without overload and for the working hours stated, the maximum volumes/rates specified;
- designed to facilitate ready access, cleaning, inspection, maintenance and repair of component parts;
- designed to facilitate rapid changeover of consumable items.

The component parts of all items shall, wherever possible, be selected from the standard ranges of reputable manufacturers. The Equipment and accessories shall be physically robust and where necessary capable of dismantling for transportation and ready re-assembly using simple tools. All Equipment items provided shall be designed to be compatible within the proposed overall Scope of Supply.

Electrical Equipment shall provide all protection devices, controls and interfaces for the Equipment to operate safely and efficiently.

All workmanship and materials shall be of first class quality in every respect. All parts and surfaces, which are exposed to corrosive environment, shall be suitably protected to prevent any effects of corrosion or erosion.

C.3 Services

The supplier shall be responsible for the erection and commissioning of the equipment at site. The supplier shall depute qualified and competent Engineer(s) and specialist technicians to supervise the entire assembly, erection and commissioning of equipment free of cost.

C.4 Standards

The design supply, erection, testing and commissioning of all Equipment under this Contract shall in all respects comply with the requirement of this specification and with the appropriate current Indian standards and codes, or relevant Standards issued by the International Standards Organisation or any other equivalent international standards, which corresponds to specific ISO/Indian standards indicated in the technical specification. Such equivalent international standards are to be supported by documentary evidence certifying that offered standards are identical to the corresponding ISO/Indian standards.

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The equipment shall be to the approval of the Statutory Government Authorities including Director General of Mines Safety (DGMS) having jurisdiction over the Equipment and its use.

The system of units for all measurements shall be the System'e International d'Unites (S.I.)

The Diesel Bowser in all respect shall conform to latest Central Motor Vehicles Rules for mass emission standard at the time of supply of equipment.

Petroleum Rules for design and construction of Diesel Vehicles for transporting petroleum bulk should be complied.

Approval of drawing and dimension with specification of the proposed Diesel Bowser body from Chief Controller of Explosive (CCOE), Petroleum and Explosive Safety Organization (PESO) and getting the new fabricated Diesel Bowser inspected and passed from PESO will be the sole responsibility of bidder.

Registration of the Equipment from RTO Dhanbad, Jharkhand will be the sole responsibility of the supplier.

C.5 Suppliers Responsibility

The Purchaser requires that the Supplier shall accept responsibility for the provision of complete operable and compatible Equipment and systems within the Scope of Supply. This document identifies only the major items required for the installation and the Supplier shall ensure that the total supply includes all necessary Equipment for it to function effectively, safely and efficiently. Any additional items the Supplier considers necessary to ensure compliance with such a requirement shall be identified and included.

If the Supplier observes that this Specification document contains any anomalies, ambiguities, flaws, errors or omissions, the Supplier shall immediately bring these to the attention of the Purchaser but not later than 15 days prior to the due date of opening. The Supplier shall be responsible for the testing and commissioning of the Equipment and ensure that it meets the requirements as specified. The commissioning and setting to work of the whole Equipment Supply package shall be carried out under the supervision of the Supplier in conjunction with the Purchaser's nominated personnel.

C.6 Spare Parts Provisions

C.6.1.a. Availability of Spare Parts.

All items and Equipment proposed shall be of current design and manufacture. The Supplier shall warrant that sufficient spares and servicing facilities will be available to maintain the Equipment in use throughout its life.

C.6.1.b Bought-out assemblies and sub-assemblies

The supplier is required to furnish the details of all bought-out items as indicated in the technical specification against "Information to be provided by the bidder". The bidder has to furnish a certificate indicating therein that "All other components not identified/ mentioned herein are manufactured by the bidder at their works exclusively i.e. the components are propriety of bidder's firm."

C.6.2 Provision of Spare Parts

C.6.2.1 Within the Contract Price, the Purchaser shall agree to purchase all filters and O rings including standard engine filters required for minimum one year of operation of each equipment. The Bidder shall stock sufficient fast moving & maintenance and other spares in their Local Depots to ensure maximum availability of their equipment

C.6.3. Emergency Spare Parts

The Bidder shall ensure that Spare Parts required urgently by the Purchaser for repair of breakdown equipment are supplied at overriding priority.





C.6.3.1 Lifetime Spare Parts

The Supplier undertakes and guarantees to produce and maintain stocks, to be available for purchase by the Purchaser under separate agreement, of all Spare Parts and Consumables as may be required for maintenance and repair of the equipment throughout its working life. In the event that the Supplier wishes to terminate production of such Spare Parts, the Supplier shall:

- (a) give not less than six months notice in writing of its intention to terminate production in order to permit the Purchaser reasonable time in which to procure needed requirements; and
 - (b) immediately following termination, provide to the Purchaser at no cost, manufacturing drawings material specifications and all necessary permissions to facilitate manufacture of the Spare Parts elsewhere.
 - (c) Any change in part number or superseded part number should be informed to the HOD of Excavation department / MM department of BCCL hqrs. and the project site wherever the equipment is operating.
- In any event, the Supplier shall not seek to terminate manufacture of spare parts for a period of not less than (10) years from the date of completion of warranty period

C.6.4 Oils, Lubricants and Fluids

Not less than three (3) months before the scheduled date for Acceptance, the Supplier shall provide to the Purchaser a detailed schedule of all necessary oils, lubricants, fluids for the operation and maintenance of Equipment. The schedule shall indicate estimated annual consumption and specify the appropriate international standard number or the name and reference number of an equivalent available in India considered to be acceptable by the Supplier.

C.6.5 General

C.6.5.1 Nothing in this Clause C.6 shall relieve the Supplier of any Guarantee, Availability, Performance or other obligations or liabilities under this Contract.

C 7 Availability Provisions

C.7.1 Introduction

C.7.1.1 The Supplier shall guarantee that the Equipment supplied pursuant to this Contract shall be available for use by the Purchaser and shall meet the, performance criteria specifications at the level and in accordance with the terms and conditions of the Availability Guarantee herein contained.

C.7.1.2 Where Equipment supplied under the Contract fails to meet the criteria of the Availability Guarantee, the Supplier shall, at its own suitably qualified and experienced personnel at Site to demonstrate to the Purchaser's satisfaction that the required level of availability can be achieved and maintained.

C.7.1.3 The Supplier shall provide the Services of such personnel at Site within seven (7) days of notification by the Purchaser that the availability criteria have not been met in any one (1) month.

C.7.2 Guarantee

C.7.2.1 The Supplier shall guarantee that the Equipment supplied pursuant to the Contract shall be available to the Purchaser at the level hereinafter defined to perform to criteria of not less than that defined in the Technical Specifications incorporated in the Contract.

C.7.2.2 The Supplier shall guarantee that the Equipment shall be available to perform its duty to minimum criteria and to the minimum availability percentage level as defined in the individual Equipment specifications included as the Attachment to the Technical Specifications. The method of assessment applied shall be as follows:

Method of Assessment:

The following calculation shall determine the availability of the Equipment:

$$\% \text{ Availability} = \frac{\text{Scheduled Available Time} - \text{Downtime}}{\text{Scheduled Available Time}} \times 100$$

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Scheduled Available Time shall equate to 24 hours daily.

Downtime:-

Downtime shall mean all hours of work lost due to mechanical, electrical or other failure, including:

- a) routine servicing and maintenance in accordance with the manufacturer's published recommendations, including :changing oils, oil filters and air filters; lubrication; changing identified consumable or wear parts.
- b) planned preventative maintenance programmes;

It shall not however include:

- I. damage due to abusive use or incorrect operation methods by BCCL ;
- II. accidents;
- III. strikes or stoppage of work by BCCL 's personnel;
- IV. natural disaster;
- V. lack of Spare Parts not attributable to a failure of the Supplier, it's Agents or Representatives.

Downtime shall also specifically include all hours lost due to failures determined to be guarantee failures.

The Supplier shall provide a schedule of maintenance required to carry out (a) and (b) above for the first three years of operation and shall state the number of hours required to carry out each maintenance task. The time stated shall, with the agreement of the Purchaser, form the basis of the assessment of the availability.

This schedule of tasks and time will be reviewed periodically by the Purchaser and the Supplier, jointly, to monitor the practicality of the schedule.

The Purchaser will assist the Supplier, without relieving the Supplier of any other obligations under the Contract, to achieve the guaranteed availability by:

1. Providing normal and proper maintenance, including preventative maintenance in accordance with the Supplier's standard/published recommendations, and making all necessary repairs using only spare parts provided by the Supplier in accordance with the requirements specified in part B6. 2. Providing co-operation to all Supplier's authorised representatives, complying with all reasonable procedural suggestions to improve efficiency of machine operation or reduce downtime.

3. Where appropriate, providing and maintaining such conditions as:

- Proper electrical Supply
- Terrain Area
- Bench preparation
- Reasonable floor conditions

4. Providing all Suppliers's authorised representatives access at all reasonable times to the machine service and repair facilities.

Maintaining a logbook for each shift wherein the working hours, breakdown hours, maintenance hours, idle hours, etc. shall be recorded. This record will be available for examination and signature by the Supplier's representative.

C.7.3 Effect and Duration of Guarantee

C.7.3.1 This Guarantee shall become effective on the day on which the Equipment is commissioned at the Site. Commissioning shall be evidenced by the issue of the Purchaser's Acceptance Certificate.

C.7.3.2 This Guarantee shall remain effective for twelve (12) months from the date of commissioning, irrespective of the hours operated by the Equipment during the period of the guarantee.

C.7.3.3 In the event that the Equipment fails to achieve the Availability herein provided during this twelve (12) month period, the Supplier shall be liable to pay to the Purchaser, as Penalty , a sum equal to , as indicated hereunder for each equipment : -





a) 1% of the delivered price of the equipment for every percentage reduction from the Guaranteed Availability for the first 5%

b) 10% of the delivered price of the equipment for reduction beyond 5% from the Guaranteed Availability .

The Supplier has however the option to modify the equipment , if felt necessary , to bring its availability to the guaranteed level within three (3) months after expiry of initial guarantee period of twelve (12) months from the date of commissioning .

C.8 Deemed Breakdown

When the supplier is unable to supply the replacement of a failed part under warranty within 21 days of giving intimation by the consignee and if the machine is commissioned by using the spare from the stock of the project the period (after 21 days) till the supplier replaces the part under warranty shall be treated as "Deemed Breakdown" (the credit for keeping machine available shall not be given to the supplier).

C.9 Composite-warranty/guarantee:

The Bidder shall warrant that the equipment supplied under this contract is:--

a) In accordance with the contract specifications .

b) The equipment will be warranted against any manufacturing defects/workmanship for a period of 12 months from the date of commissioning or 18 months from the date of receipt and acceptance. Any defect observed on this account shall be attended to immediately and in no case beyond a period of one month.

The warranty shall cover for total equipment so that ultimate responsibility lies only with the Equipment Bidder although components may be supplied by different suppliers to the Bidder.

C.10 Special Condition

The offered type & model of equipment shall have proven performance as per the Eligibility Criteria for proven supplier for at least one year completed on or before the date of opening of tender with same offered configurations, which means the offered configuration of major assemblies/ subassemblies such as Engine, Splitter Box/ PTO assembly (if applicable), Brake system Hydraulic System and work attachment fitted on the quoted model of machine should be same as that of machine supplied in the past and have proven performance for at least one year completed on or before the date of opening of tender. The clear, legible & complete order copies along with all addendums/ Annexures shall be submitted along with the offer or else the offer shall be treated as non-responsive. If demanded by BCCL, the original order copy against proven-ness shall have to be shown for verification. The onus of providing necessary proof documentarily that all offered major assemblies have proven status lies on the bidder.

C.10.1 Bidder to upload as a separate attachment, scanned copies, ink signed and stamped, of supply orders with all addendums/Annexures received by them for establishing proven status. In case they are unable to provide the same due to confidentiality laws of particular country, a scanned copy of such laws is to be enclosed along with the offer for claiming exemption from submitting the supply order/contract copies and in such cases the bidder has to enclose a Customers List for the quoted Model of Equipment duly signed by the Original Equipment Manufacturer, clearly indicating the Customer Name & Address, Contract No. & date. Machine Sl. No., date of commissioning, guaranteed annual availability as per the performance guarantee clause of the supply order/ contract and actual achieved annual availability, for minimum 01 year from the date of commissioning, for each equipment supplied – SUBMITTED IN PROVENNESS DOCUMENT.

C.10.2 Bidder to upload as a separate attachment a scanned authenticated copy(s) of performance report of previous purchaser duly ink signed with official stamp, conforming that the quoted Model of equipment has performed satisfactorily for a minimum period of 01 year from the date of commissioning of the equipment (supplied during the last 05 years, as on the date of opening of the Tender) and the desired parameters of performance (Guaranteed availability) of the equipment stipulated in the supply order received and executed have been met and no warranty / guarantee claim is pending against the supply orders received and whose copy(s) enclosed by the bidder along with their offer to establish their provenness for the quoted Model of Equipment – SUBMITTED IN PROVENNESS DOCUMENT.

C.10.3 Bidder to upload as a separate attachment a scanned authenticated copy(s) of self-certification duly ink signed by the bidder with official stamp, confirming that the quoted Model of equipment has performed satisfactorily for a minimum period of 01 year from the date of commissioning of the equipment (supplied during the last 05 years, as on the date of opening of the Tender) and the desired parameters of the performance (Guaranteed availability) of the equipment stipulated in the supply order received and executed have been met and no warranty / guarantee claim is pending against the supply orders received and whose copy(s) enclosed by the bidder along with their offer to establish their provenness for the quoted Model of Equipment – SUBMITTED IN PROVENNESS DOCUMENT.

C.11 Quality Assurance

C.11.1 The Supplier should furnish in detail its quality assurance plan for various stages of manufacture. The Quality Assurance plan shall comply with an internationally recognised quality assurance standard such as ISO 9000 or latest.

C.11.2 The Supplier shall provide facilities to Purchaser or their authorised representatives for progress inspection during manufacture at his works and furnish all test data available in this regard for quality control, both for bought out items and his own manufactured items.

C.11.3 The Purchaser or his agent, when so required by him, shall also be provided with samples of "bought-out" materials for the purposes of undertaking independent tests, which independent tests shall be at the expense of the Purchaser.

C.12 After Sales Service/Product Support

The supplier must have adequate facility for product support for such machines in India with nearest Depot/Warehouse, Service facility and Personnel. Details of such facilities are to be mentioned at Clause 6 of Equipment Specification.





PART D:- EQUIPMENT SPECIFICATIONS.

Scope of Specification

D.1. This specification is intended to cover the technical requirements for the design, manufacture, testing, delivery, on-site erection and commissioning of fully Built-up Diesel Bowser of capacity 10 (Ten) KL required for carrying diesel in the open cast mines of BCCL which includes truck cab – chassis, fabrication of bowser unit mounted on a suitable new truck chassis with necessary pump(s), metering & diesel dispensing unit/arrangement, etc.

D.2. References

The offered 10 KL Diesel Bowsers with its Prime mover shall comply appropriate current Indian/international Standards, codes of practices, statutory rules & regulations, safety codes & practices, DGMS Rules & Regulation, MOST/CMVR/TAP115/116 Regulations, RTO Rules & Regulations, Environment Protection Acts / Rules etc. The detailed list and description of references complied by the offer shall be submitted with the offer. The Engine of the Prime mover shall be environmental friendly and comply with minimum BS IV/ Euro IV standard and shall meet all operational safety norms. Any other statutory requirement & norms and details of such norms followed, should be mentioned in the offer.

D.3. Design Criteria

- The Diesel Bowsers shall be capable of operating for protracted periods on a system of 3 shifts each of 8 hours duration per day throughout the year in the climate of sub-tropical, dusty, cold, hot & humid, heavy rainfall region.
- The Diesel Bowsers shall be designed for heavy duty application and off the road & on road operation capable for carrying 10 KL of fuel at the coal mine area and their transport from rough terrain area of open cast mines as well as metal road in the aforesaid operating conditions.
- The Diesel Bowsers shall be as per Regulation of Road Traffic or Motor Vehicle Act.
- The Diesel Bowsers shall be designed as per the Regulations of Chief Controller of Explosives (CCOE) and Petroleum and Explosive Safety Organization (PESO).
- The Diesel Bowsers shall be suitable painted for protecting from the weathering effects.

D.4. Technical Parameter/ Specification

The Diesel Bowsers of 10 KL capacity shall comply with the following technical parameter/specifications:

D.4.1. Truck Cab Chassis

The Diesel Bowser shall be fabricated and mounted on Full Front Control Truck Cab Chassis of suitable Gross Vehicle Weight (GVW) of Truck of TATA / ASHOK LEYLAND/EICHER/Equivalent Indian reputed manufacturers make having facility of PTO unit to power Diesel Pump(s). New PTO gear pump & metering unit of adequate rating shall be provided at suitable location.

The Cabin shall be safe, spacious, standard driver's adjustable seat & co-driver seat with seat belt, cabin light, head lights, doors, windows, wind shield glass, wiper & washer, rear view mirror, Driver backlit dash board/console fitted with gauges/indicators & all safety features.

D.4.2. General Treatment of all Metals

All steel plate and sheet structures and other components used for fabrication of bodies should be properly cleaned. Rust removal/prevention with chemical process like phosphate & anticorrosion zinc chromate red oxide primer/paint should be done before fabrication.

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D.4.3. Tank details

- a. The tank should be machine rolled elliptical in shape, maximum width of any part of tank body should not be extended beyond the tyres to meet RTA regulation.
- b. Capacity of tank should be able to carry 10000 Litres of fuel and unlase should be provided as per Rule.
- c. The tank should be provided with a ladder to climb up to top with its rugs of chequered plate.
- d. The tank should be made up of min. 3.15 mm MS sheet 100% electrically welded at joints from both inside & outside. Dished end and baffles should be made of min. 3.15 mm MS sheets.

Tank should be divided in to 03 compartments transversely. The tank should be anchored/mounted. (for point mounting) by means of mild steel saddles fabricated from 12mm thick MS plate, base plates means of mild steel saddle fabricated from 12mm thick MS plate, base plate 25mm thick, hard rubber packer sandwiched in between base plates and fastened with chassis by means of not less than 16 mm MS bolts and nyloc nuts. Each compartment should be provided with manhole. The tank should be securely anchored/ mounted in a manner that will not introduce undue concentration of stress, impair the stability as performance of the vehicle and allow any movement between the tank and the vehicle due to starting, stopping and turning. All stops and anchors used to anchor a tank to a tank to the vehicle shall be installed in such a manner that it provides readily accessible for the inspection and maintenance.

e. Each compartment of tank fitted with a discharge faucet ending in a common manifold. Immediately before the manifold, each such discharge pipe should be fitted with a heavy duty tested high quality gate valve/shut-off valve for opening and closing supply of manifold. The bottom outlet of each compartment of tank should have heavy duty shut off valve located inside the tank shell or in the sump forming an integral part of the shell as per recommendation of CCOE, Nagpur. The opening lever of shut off valve should be housed in a secondary control box in easily accessible position but remote from all openings and discharge faucets at the rear part of the Bowser. A shear section which will break under shall be provided between the internal shut-off value and the discharge faucet. The shear section shall be located as close as possible to the internal shut-off valve.

D.4.4. Material construction of tank

The tank shall be constructed of iron or steel having the following physical requirement and thickness of metal or of any other material approved by the Chief Controller.

Physical requirements :

Yield point: Minimum 1700 kg/cm²

Ultimate strength: Minimum 3100kg/cm²

Minimum elongation on a standard 5cm gauge length: 20 per cent.

D.4.5. Venting

Every compartment of tank should be fitted with an independent vacuum and pressure operated vent with a minimum effective opening of 3Sq. cm., the opening being covered with two layers of non-corroding metal wire gauge having not less than 11 meshes per centimeter.

The vent shall be so arranged as to limit the pressure within the compartment to 0.21kg/cm² and the vacuum to 5 centimeter water gauge.

EMERGENCY VENTING for fire exposure:- In addition to normal venting as indicated above every compartment of the tank shall be fitted with an emergency venting facility which shall be of the fusible type so as to provide a minimum fire venting opening having a net area in square centimeter equal to 8 plus 4.3 times the gross capacity of compartments in kiloliters.

The emergency vent shall be designed as to prevent loss of liquid through the vent in the case of vehicle upset in the case of pressure rise when in the upset position. Fusible vent shall be actuated by elements which will operate at a temperature not exceeding 93 degree Celsius.

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D.4.6. Top filling Pipe The top filling pipe shall be drawn close to the bottom of the tank. The inner end of the filling pipe shall be fitted with a proper splash spill proof device and the outer end threaded or so designed to ensure leak proof connection with the filling hose. The outer end of the filling pipe shall be fitted with an oil tight locker cap with chain.

D.4.7. Tank Gauging Arrangement

Each compartment shall be fitted with a dip pipe, calibrated dip stick & shall be carried to the bottom of the tank and opening in the dip pipe, except the capped top opening, shall be covered with two layers of wire gauge having not less than 11 mesh per centimeter. The dip pipe shall be fitted with an oil tight locker cap with chain.

D.4.8. Tank over turn protection.

All tank top fittings shall be protected from damage in the event of overturning of the vehicle chassis on which it is mounted. Protection of tank fitting should be provided by enclosing them within the contour of the shell or within a rigid coming welded to the tank shell, the area enclosed by such protection shall be adequately drained and provided with plugs or cut-outs, to enable the section to be gas-free completely before repair.

D.4.9. Discharge metering arrangement

- a. Centrifugal pump with mechanical seal having suction and discharge 2"x 2" with 1.5" outlet to be connected through separate filter with air eliminator to bulk metering pump. The pump and manual flow meter indicator should take drive through P.T.O fitted to the side opening of gear box of truck cab-chassis. Capacity of discharge should be 100 to 150 Ltrs. per minute through gun of 1" outlet size.
- b. The manual flow meter should be certified by weight and measure department Government of India within a range of +/- 0.1%. Flow meter should have ATEX or Equivalent approval for safety standard. The manual flow meter shall also be approved by CCOE, Nagpur. Filter with air eliminator shall be provided for correct meter reading.
- c. Hose winding arrangement Provision of a hose drum wound arrangement for 1" dia fuel dispensing hose of 15 meter should be provided with sprocket and bevel gear system to facilitate drawing and winding hose. One fuel dispensing hose reel of 15 meter long of 1" diameter shall be fitted with winding device & one addition fuel dispensing hose reel shall also be provided.

D.4.10. Safety arrangements

The Diesel Bowser should be provided with safety arrangement which includes following:

- a. First aid box complete conforming to IS 13115(B) (1991) or its latest amendment.
- b. Portable fire extinguisher of suitable type for firefighting Petroleum approved by Inspector of Explosive.
- c. Manhole covers, accessories ladder, mudguard for the rear dual wheel.
- d. Fire resistance screen between driver cabin and diesel tank (as per petroleum rule).
- e. Exhaust silencer at approved location & approved spark arrestor flame trap.
- f. Emergency shut-off valve.
- g. Inspection lamp having min 15mtr. cable with power tapping facility from driver cabin.

D.4.11. Painting Should be cleaned free from rust and dirt and treated with anti-corrosive primer and one under coat and two finish coats of synthetic enamel paint to desire shade. Tank should be conspicuously/noticeably marked on each side and rear thereof in letters at least 7 cm high on a background of sharply contrasting colour as "INFLAMMABLE" and "Diesel" as per statutory requirement. Emblem of Coal India & letters like "Bharat coking Coal Ltd., (A Government of India Undertaking), A Miniratna Company" should also be written on the body of Diesel Tank.

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D.4.12. Driver's Cabin

It should be provided with seating arrangement of driver and co-driver. The entire cabin should be fabricated with M.S sheet as required complete with dash board, doors, window, glasses, cabin light etc. There should be door stopper to prevent the door from opening beyond the limit necessary for the easy bearing in and out of the cabin along with two fix type peeping windows in the back wall of the cabin. All glasses should be of toughened quality of minimum 5.5 mm thick clear glasses.

D.4.13. Testing of Tank.

Each compartment of tank shall be tested by responsible competent person by hydrostatic pressure of not less than 0.316kg/cm². The pressure shall be maintained for a period of not less than one hour and shall be gauged at the top of the compartment. The compartment test shall not show any leakage or drop of pressure during test. Two adjoining compartments of a tank shall not be tested or filled with water simultaneously.

D.4.14. Detailed Dimensional Drawing A detailed dimensional drawing as per rule 71 of explosive act should be enclosed along with documentary evidence of getting license for plying the Diesel Browser at site should be furnished along with the offer.

D.4.15. Turn key& Licensing: The Diesel Bowser package unit of 10 KL capacity should be supplied on turned basis i.e ,procurement of front control truck cab –chassis of Tata /Ashok Leyland /Eicher or proven Indian make ,fabrication of browser unit &mounting on truck chassis with necessary pump(s),manual measuring, fitment of all safety device etc. duly approved by Director, Explosive, CCOE/PESO, Nagpur and certificate of Weights And Measures Department to be arranged by the bidder .Obtaining all approval &certificates will be the sole responsibility of the bidder. The Truck Chassis should be procured in the name of M/s Bharat Coking Coal Ltd. and the authorization letter for the same will be given by purchase to the supplier when it will be requested for, after award of supply order.

D.4.16. Lighting

Adequate lighting shall be provided for safe night shift operation. The lighting system should include the following:

- a) Headlights
- b) Brake, tail and parking lights
- c) Front and rear turn indicators
- d) Hazard warning lights
- e) Working lights front & rear

D.4.17.Fire extinguisher system

Minimum two number of fire extinguishers shall be provided at strategic point on the diesel browser, suitably mounted in heavy duty bracket for ease of removal. The extinguisher shall be of suitable capacity and shall comply with relevant IS. The materials and chemical to be used in the fire extinguisher to be supplied with Diesel Bowser must be in compliance of the type and make approved by DGMS.

D.5 Performance Guarantee

In accordance with the provisions of clauses C.7.2.2and C.7.3 of the Technical Specifications, the Supplier shall guarantee that the availability of the equipment shall be not less than 85% (eighty five per cent) for a period of 12 months from the accepted date of commissioning.




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Annexure-B

(All filters & O rings (including engine filters) required for warrant period i.e one year per equipment)



Hindusthan Technologies Pvt. Ltd.
(Formerly known as Hindusthan Enterprises)

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Website : www.hindusthantechnologies.com



FIRE FIGHTING
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Spare Parts for Maintenance Schedule of 10 KL Diesel Bouser for 1 year under warranty			
TATA/Ashok Leyland/EICHER/Bharatbenz Chassis			
ITEM	CHANGE INTERVAL	QUANTITY	TOTAL NO. OF CHANGE IN 1 year
Strainer	100000 Km/1 year	1	1
Diesel filter	80000 Km/1 year	1	1
Engine Oil filter	100000 Km/1 year	1	1
Air Filter Primary	120000 Km/1 year	1	1
PUMP			
ITEM	CHANGE INTERVAL	QUANTITY	TOTAL NO. OF CHANGE IN 1 year
O' ring Kit	1000 Hrs	1	1



For Hindusthan Technologies Pvt. Ltd.

AAQZ

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25/85

Annexure-C
(List of Tools to be provided with Bowser)



Hindusthan Technologies Pvt. Ltd.
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Tender no. : BCCL/ PUR/419109/10KL Diesel Bowser/19-20/59, Date: 21.01.2020

Standard tool kit required for maintenance of erection, commissioning and for the maintenance and repair of Diesel Bouser 10 KL capacity

Sl. No.	Item Description	Size	Make	Qty
1	DE Spanner	6-25 mm	TAPARIA/JHALANI/GEDORE	01 Set(12 Nos.)
2	Ring Spanner	6-25 mm	TAPARIA/JHALANI/GEDORE	01 Set(12 Nos.)
3	Adjustable wrench	200 mm	TAPARIA/JHALANI/GEDORE	01 No.
4	Pliers side cutting	200mm	TAPARIA/JHALANI/GEDORE	01 No.
5	Pipe wrench	450mm	TAPARIA/JHALANI/GEDORE	01 No.
6	Nose Plier	150mm	TAPARIA/JHALANI/GEDORE	01 No.
7	Screw Driver	150mm	TAPARIA/JHALANI/GEDORE	01 No.
8	File half round smooth with wooden handle	300mm	TAPARIA/JHALANI/GEDORE	01 No.
9	Hammer	½ kg	TAPARIA/JHALANI/GEDORE	01 No.
10	Spanner OJ	30 x 32 mm	TAPARIA/JHALANI/GEDORE	01 No.
11	Allen Key	1.5 to 10mm	TAPARIA/JHALANI/GEDORE	01 Set (9 Nos.)
12	Oil Funnel		Hindusthan	01 No.
13	Oil cane	500 ml	Hindusthan	01 No.



for Hindusthan Technologies Pvt. Ltd.

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26/85

Annexure-D
(List of Major Bought Out Items)

Website : www.hindusthantechnologies.com | CONSULTANTS

Details of Major Bought out items of 10 KL Diesel Bowser

Ref : Tender No. BCCL PUR 419109 10KL Diesel Bowser 19-20/59, Date: 21.01.2020
Tender ID : 2020_BCCL_162632_1

Sl.No.	Tender Specification	Offered Make & Model	Address
1	Full Front Control Truck Cab Chassis of TATA ASHOK LEYLAND EICHER Equivalent Indian Make fitted with PTO unit	Ashok Leyland 1920, 4750mm WB BS-VI CABIN chassis	Ashok Leyland Ltd., Chennai
		TATA ULTRA 1918.T.4530mm WB BS6 CABIN Chassis	TATA Motors Ltd., Mumbai
		EICHER Pro 3019, 4490mm WB BS6 CABIN Chassis	VE Commercial Vehicles Ltd., Gurgaon
		Bharatbenz 1617R , 5100mm WB BS6 Cabin Chassis	Daimler India Commercial Vehicles Pvt. Ltd., Chennai
2	Flow Metering Unit	Vermont Technologies Pvt. Ltd., Model : C 35 PD Flow Meter Or EASTERN AUTOMOTIVE MACHINE TOOLS PVT. LTD. (EASTMAN)	Vermont Technologies Pvt. Ltd., Plot No. 12, Chintamani Lane No. 6, Shahu Colony, Karvenagar, Pune-411052 Or EASTERN AUTOMOTIVE MACHINE TOOLS PVT. LTD. 1243, M.I.E. ,PART-B,BAHADURGARH, HARYANA-124507,INDIA
3	Centrifugal Pump Mechanical Seal of capacity 100- 150 LPM	Hickson Ani Engineerings Hindusthan Technologies Pvt. Ltd.	Hicon Pumps Or ANI Engineers,2716, G.I.D.C. Estate, Phase-IV,WADHWAN - 363035, Dist: Surendranagar, Gujarat or Hindusthan Technologies Pvt. Ltd., Cuttack



for Hindusthan Technologies Pvt. Ltd.

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TECHNICAL SPECIFICATION OF DIESEL BOUSER (10 KL CAPACITY);

SR.	SPECIFICATION	DESCRIPTION
1	CHASSIS	ASHOK LEYLAND or TATA or BHARATBENZ or MAHINDRA or EICHER or EQUIVALENT suitable for 10 KL Diesel Bouser
2	OIL TANK	10 KL (3+3+4) MADE OUT OF MS 3.15mm THK SHEET
3	PUMP	Rotary Gear Pump Model : of size 2"x2" in C.I. Construction with a built in relief valve to give 100-1550 LPM of diesel at a pressure of 2.5 Kg/cm ² at 1000 RPM
4	PTO	SIDE/REAR PTO FITTED TO ENGINE SUIT TO PMP PERFORMANCE
5	Flow Meter	2" (50 mm) Positive Displacement (Rotary Vane) Flow meter for Diesel Oil measurement, in Cast Steel Body construction, Alum Alloy Rotor, SS Bearings, Flow range upto 150 LPM, Accuracy +/- 0.1 % and repeatability 0.02 % , 150 class pressure and temperature 70 Deg C
6	CABIN SUPER STRUCTURE	Provided by Chassis OEM
7	PANELING	Provided by Chassis OEM
8	PAINTING	Two coats of zinc chromate red oxide primer and finished with two coats of synthetics enamel paint. Colour as per customer requirement
9	ACCESSORIES	AS PER IS / CUSTOMERS REQUIREMENT
10	Miscellaneous	AS PER EXPLOSIVE REQUIREMENT & MV ACT 1988

Manufactured by:

Hindusthan Technologies Pvt. Ltd.
(Formerly known as Hindusthan Enterprises)

Plot no. 5 & 7, Old Industrial Estate,

Jagatpur, Cuttack-754021, Odisha

Ph.-0671-2491348, Fax-2490348

e-mail : marketing@hindusthantechnologies.com

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29/85

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FIRE FIGHTING
SAFETY EQUIPMENTS
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HTPL/26-06-BCCL (DB10KL) -09/19-20
Date: 01.06.2020

To
Bharat Coking Coal Ltd.,
Koyla Bhawan,
Dist. Dhanbad, JH -826005.

Sub : **Technical Parameter Documents**

Ref : Tender No. BCCL/ PUR/419109/10KL Diesel Bowser/19-20/59 & Date: 21.01.2018
Tender ID : 2020_BCCL_162632_1

Dear Sir,

With reference to above, we would like to bring following few lines for favour of your kind consideration and necessary action please;

- 1- List of Major Components of 10 Kl Diesel Bouser
- 2- Technical Literature of Chassis (TATA/Ashok Leyland/Eicher/Bharatbenz)
- 3- Technical Literature of Flow Metering Unit (Vermont/EASTMAN)
- 4- Technical Literature of Pump (HISCON/ANI/Hindusthan)
- 5- List Spare Parts for Maintenance Schedule for 1 year under warranty

Further if any other Spare Parts required for Maintenance of 10 KL Diesel Bouser for 1 year warranty period, then the same shall be provided by us without any extra cost to BCCL.

We will comply with the clause C.4 standards and confirmed that Diesel Bowser in all respect conforms to latest Central Motor Vehicle Rules for mass emission standard and judgment of honorable Supreme Court of India (WPC No. 13029 of 1985 dated 24.10.18 at the time of supply of equipment. Also complied of Registration of Vehicles as per clause C.4 Standards.

Hope you will find our above clarification/confirmation most suitable to your requirement and evaluate our offer for further needful.

Kindly acknowledge the receive of the above documents and evaluate our offer for further needful.

Thanking you, and assuring of our best services at all the times,

Yours faithfully
for Hindusthan Technologies Pvt. Ltd.,



M.R.Panda (Director/HoD)

Encl : As stated above.

AMK

[Signature]



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Details of Major Components of 10 KL Diesel Bouser

Ref : Tender No. BCCL/ PUR/419109/10KL Diesel Bowser/19-20/59, Date: 21.01.2020
Tender ID : 2020 BCCL 162632 1

Sl.No.	Tender Specification	Offered Make & Model	Address
1	Full Front Control Truck Cab Chassis of TATA / ASHOK LEYLAND / EICHER / Equivalent Indian Make fitted with PTO unit	Ashok Leyland 1920, 4750mm WB BS-VI CABIN chassis	Ashok Leyland Ltd., Chennai
		TATA ULTRA 1918.T,4530mm WB BS6 CABIN Chassis	TATA Motors Ltd., Mumbai
		EICHER Pro 3019, 4490mm WB BS6 CABIN Chassis	VE Commercial Vehicles Ltd., Gurgaon
		Bharatbenz 1617R , 5100mm WB BS6 Cabin Chassis	Daimler India Commercial Vehicles Pvt. Ltd., Chennai
2	Flow Metering Unit	Vermont Technologies Pvt. Ltd., Model : C 35 PD Flow Meter Or EASTERN AUTOMOTIVE MACHINE TOOLS PVT. LTD. (EASTMAN)	Vermont Technologies Pvt. Ltd., Plot No. 12, Chintamani Lane No. 6, Shahu Colony, Karvenagar, Pune-411052 Or EASTERN AUTOMOTIVE MACHINE TOOLS PVT. LTD. 1243, M.I.E. ,PART-B,BAHADURGARH, HARYANA-124507,INDIA
3	Centrifugal Pump Mechanical Seal of capacity 100- 150 LPM	Hickson/ Ani Engineerings/ Hindusthan Technologies Pvt. Ltd.	Hicon Pumps Or ANI Engineers,2716, G.I.D.C. Estate, Phase-IV,WADHWAN - 363035, Dist: Surendranagar, Gujarat or Hindusthan Technologies Pvt. Ltd., Cuttack



for Hindusthan Technologies Pvt. Ltd.

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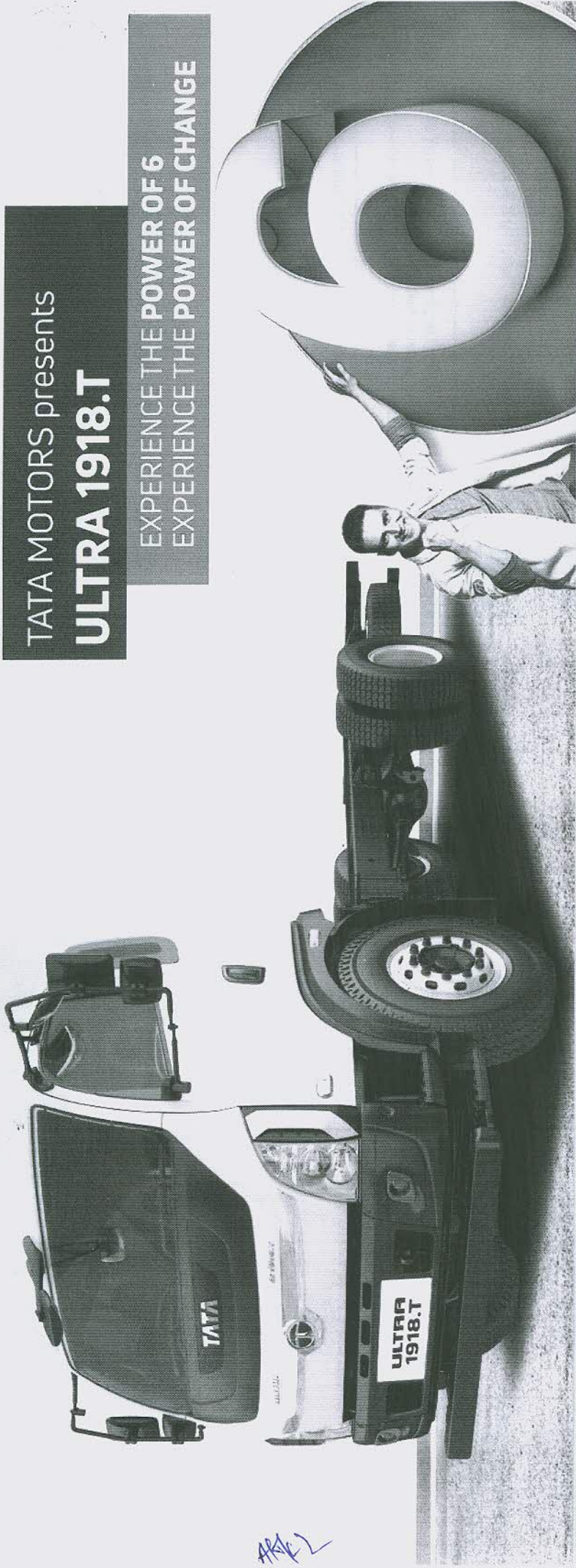
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TATA MOTORS
Connecting Aspirations

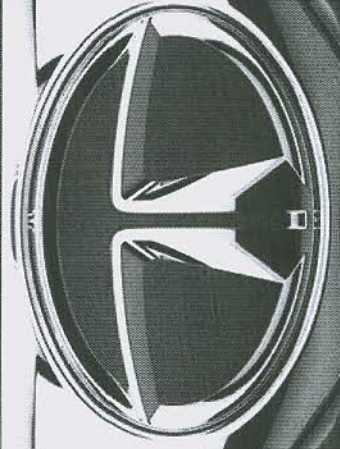


TATA MOTORS presents
ULTRA 1918.T

EXPERIENCE THE POWER OF 6
EXPERIENCE THE POWER OF CHANGE



ARZ 2



Devy

THE POWER OF 6



Power of enhanced performance



Power of lower total cost of ownership



Power of comfort and convenience



Power of choice



Power of connectivity












Total peace of mind

BS6



New and Improved Sampoorna Seva 2.0

BSI 785

VALUE FEATURES		CX	LX	VALUE FEATURE BENEFITS	
Electronic Anti Fuel Theft		YES	YES	Telematics enabled Fuel theft monitoring Savings in undue fuel expenses Lower cost of operations	
Reverse Parking Assistance System		YES	YES	Guided and Safe reversing of vehicles Prevention of damage and loss of productivity	
2 Mode Fuel Economy Switch		YES	YES	Load - Terrain - Speed based Fuel Economy management	
Gear Shift Advisor		YES	YES	Load - Terrain - Speed based Gear shift coaching	
Low Rolling Resistance Tyres		YES	YES	Higher Fuel Economy Longer Tyre Mileage	
New Generation Telematics		YES	YES	Advanced features for Fleet, Trip & Business Management	
Twin Fuel Tank (in long wheel base)		YES	YES	Lesser refills | Longer uninterrupted trips for long haulage Lesser chances of fuel theft No loss of reliability due to market built non-standard fuel tanks	
Air Conditioning (AC)		NO	YES	Higher Riding comfort | Protection from heat, dust, noise | Better trip turnaround time	
Truck Hub Unit (Unitized Wheel Bearing)		NO	YES	No hub greasing required for 5L Kms Saving in maintenance cost Higher running uptime	

1500 +

160 +

50 000 +

Service Workshops across India including Dealers and Tata Authorised Service Stations

TATA GENUINE PARTS (TGP) distributor points across India

Trained Mechanics

MODEL	TATA ULTRA 1918.T	
GROSS VEHICLE WEIGHT	18 500 kg	
ENGINE	TATA 5.0 l Turbotronn BS6	
MAXIMUM POWER	132 kW @ 2 200 r/min	
MAXIMUM TORQUE	700 Nm @ 1 000 -2 000 r/min	
CLUTCH	380 mm Dia Push type Single Plate Dry Friction Organic Lining	
TRANSMISSION	Tata G750 6 Forward + 1 Reverse Manual Synchronmesh	
FRONT AXLE	Tata Extra Heavy Duty 7T Reverse Elliot Type	
REAR AXLE	Tata Single Reduction RA1 085	
FRAME	Ladder Type, Heavy Duty Frame | (2 500 mm x 650 mm x 70 mm)	
CAB/ COWL	ULTRA SLEEPER CABIN (1 NSLP variant in 4 500 mm Wheelbase)	
TYRES	295/90R20 Radial Tube Tyres	
VENTILATION	Blower & Air Condition options	
EMISSION CONTROL	EGR + DOC + DPF + SCR + AMOX	
FUEL TANK	Metallic 225 l (4 500 mm, 4 900 mm, 5 300 mm) Wheelbase 350 l (5 600 mm, 6 800 mm) Wheelbase with Anti Fuel Theft	
WHEELBASE options	4 530 mm 4 920 mm 5 300 mm 5 560 6 750 mm	
DECK LENGTH options	5 486 mm 6 096 mm 6 706 mm 7 315 mm 9 754 mm	

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Tata Motors Limited
For more information, please visit our website: www.tatatrucks.tatamotors.com
You can also contact our Sales Office: Tata Motors Limited, 4th Floor, Ahura Centre, 82, Mahakali Caves Road, MIDC, Andheri (East), Mumbai - 400 093 or call toll-free no. 1800 209 7979
Terms and Conditions apply as per the policy of ITGI. Insurance available on light, intermediate and heavy commercial vehicles.
CAUTIONS: Accessories shown in the pictures or else where do not constitute standard fitment.
The specifications are merely indicative. Due to continuous product improvements, these specifications are liable to change without notice.



ASHOK LEYLAND

Aapki Jeet. Hamari Jeet.

ASHOK LEYLAND'S HAULAGE RANGE
DESIGNED TO BE A CLASS APART

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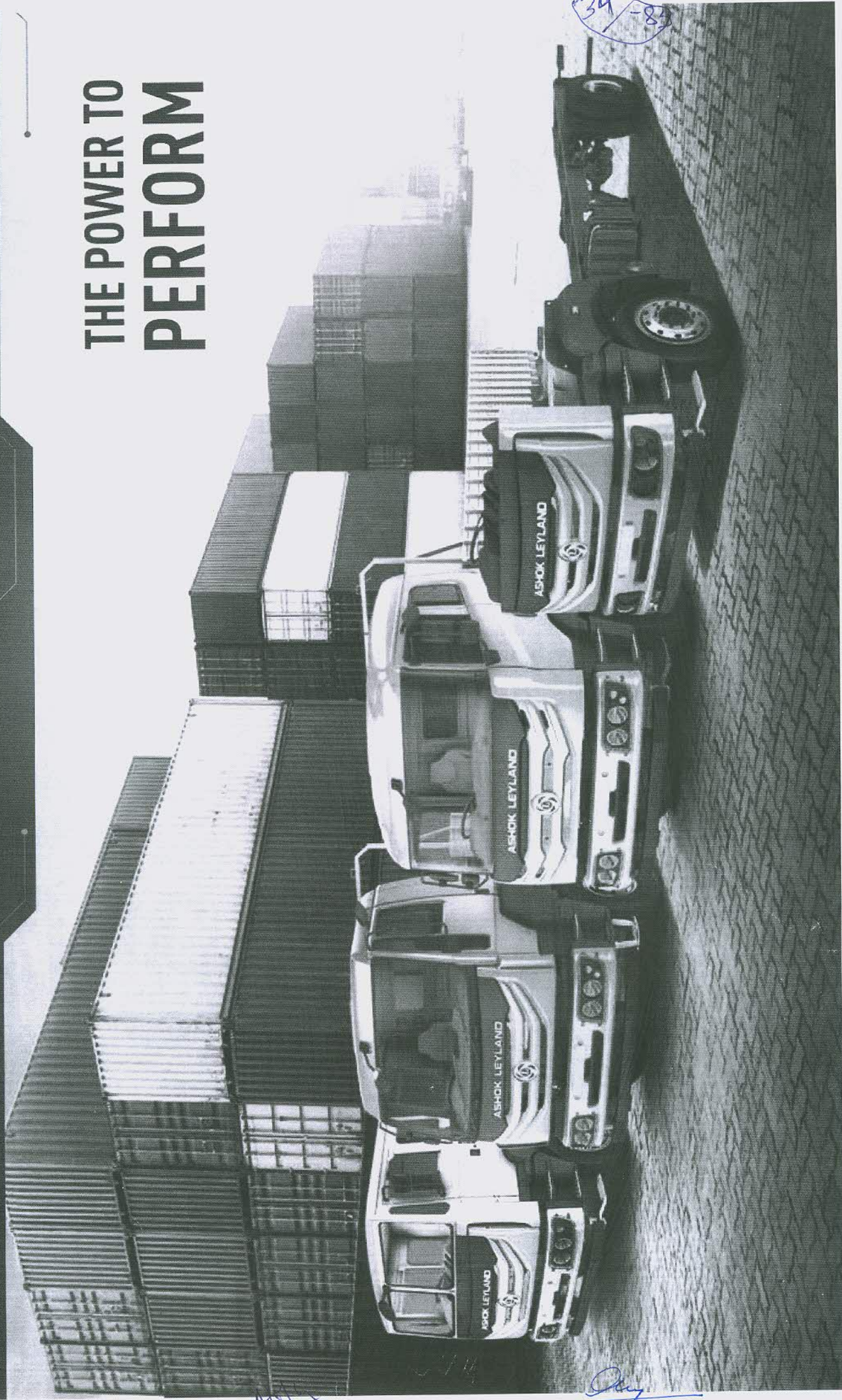
HINDILIA GROUP

33/86

1920 SERIES

4X2 HAULAGE

THE POWER TO PERFORM



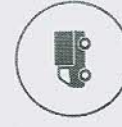
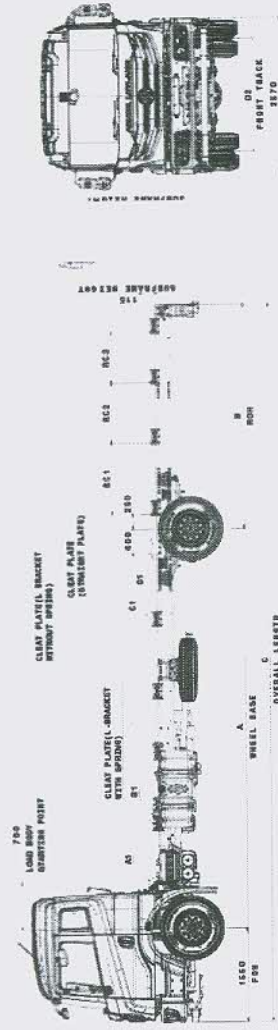
1920 SERIES

4X2 HAULAGE

SPECIFICATIONS

Engine type	H series BS-VI - 6 cylinder CRS with iEGR/SCR
Engine power	200 HP @ 2400 rpm
Engine torque	700 Nm @ 1200~2000 rpm
Clutch	380 mm dia - single plate, dry type with clutch booster
Gearbox	6 speed synchromesh - FGR 8.97
Propeller shaft	2 and 3 piece propeller shaft
Rear axle	Fully floating single speed rear axle RAR 4.63
Front axle	Forged i section - Reverse Elliot type
Steering	Hydraulic assisted power steering
Frame	275 x 75 x 6 mm - Bolted construction
Cabin options	New improved cowl, sleeper cabin in economy, value and premium variants
Suspension	Front : Semi - elliptic multileaf, optional - Parabolic Rear : Semi - elliptic multileaf, optional - Hybrid suspension
Brake	Full air Dual line with ABS with ASA Parking brake on rear wheels only
Diesel tank capacity	375 litres cross - linked polymer fuel tank on LH side additional 375 litres on RH side
Adblue tank	48 litres capacity on RH side
Electricals	24 V (120 AH batteries) 24 V (150 AH batteries) for AC cabin
Tyre options	295/90R20
GVW	18500 kg

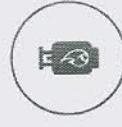
COACH BUILDER DRAWING



Market load



POL tanker



LPG cylinders



Parcel

Wheelbase

Loading span

32'

30'

28'

26'

24'

22'

20'

18'

Model

Eicher Pro 3019

GVW (kg)	18500						
Engine	E494, 4 Cylinder, BSVI						
Max Power	180 hp @ 2600 rpm						
Max Torque	600 Nm @ 1200-1800 rpm						
Clutch (mm)	362						
Gearbox	ET 70 S6, Manual						
Rear Axle	Heavy Duty fully floating single reduction, 395mm drive head						
FDR	5.857						
Chassis Dimensions (mm)	230x76x6						
Brakes	Dual circuit full air 'S' Cam with ABS						
Front Suspension	Parabolic						
Rear Suspension	Semi Elliptic						
Cabin	Sleeper Cabin						
Steering	Tilt and telescopic power steering						
Tyres	Front/ Rear: 295/90R20						
Fuel Tank (Litres)	190/ 425						
DEF Tank (Litres)	27						
Battery	24V						
Gradeability (%)	25						
Wheelbase (mm)	4900	5490		6690			
Variants	CBC	HSD	CBC	HSD	MS Container	CBC	CWC
Load body Span (mm)	6067	6112	7295	7361	7356	9695	10213
Applications	Fruits & Vegetables, Industrial Goods, Parcel & Courier, FMCG, e-Commerce, Auto Carrier, LPG & Tankers						

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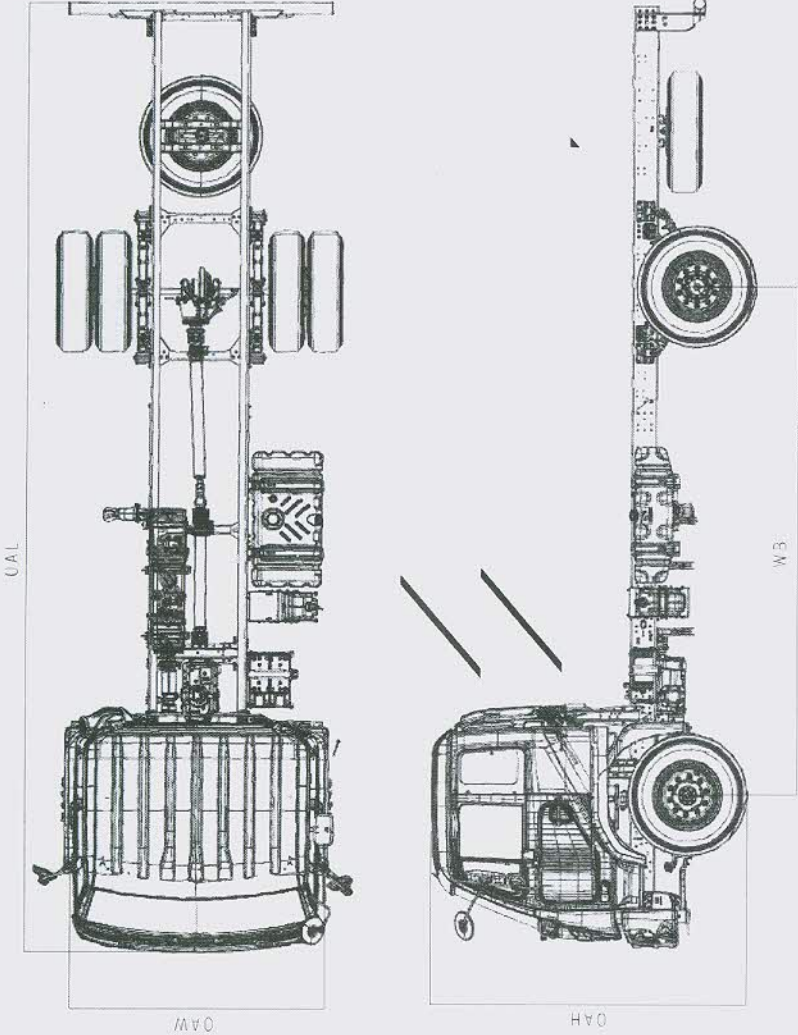
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A VOLVO GROUP AND EICHER MOTORS JOINT VENTURE
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Registered Address – 3rd Floor Select Citywalk,
A-3 District Centre, Saket, New Delhi 110 107, India
CIN – U74900DL2008PLC175032

CORPORATE ADDRESS
Eicher Trucks & Buses
#96, Sector – 32, Gurgaon
122001, Haryana, India

Caution: *do not weld or drill on chassis frame. *Accessories, colours and features shown in pictures or elsewhere may not constitute standard fitment. *Weight mentioned is for standard configuration with standard body sizes and will change due to optional fitments. *as a result of continuous research and innovation carried out, specifications are merely indicative and are subject to change without notice.



Vehicle Model	Overall Length (OAL) mm	Overall Width (OAW) mm	Overall Height (OAH) mm	Wheelbase (mm)
Pro 3019 CBC (6067mm)	8380	2332	2722	4490
Pro 3019 CBC (7295mm)	9580	2332	2722	5490
Pro 3019 CBC (9695mm)	11930	2332	2722	6690

36/85



BHARATBENZ

PROFIT
TECHNOLOGY 

LEAD THE CHANGE
WITH **1617R (4x2)**



16

Wheel Base (mm)	5100	5900	6700
Cabin	Sleeper	Sleeper	Sleeper
Loading Span (ft)/Loadbody cpc (Cu.m)	20ft	24ft	31ft
Overall Length (mm)	8600	9815	11995
Overall Width (mm)	2335	2335	2335
Overall Height (mm) (CBC)	2600	2600	2600
Front Overhang (mm)	1335	1335	1335
Rear Overhang (mm)	2165	2580	3960
Ground Clearance (mm)	270	270	270
Engine			
Engine Model	4D34i		
Maximum Power, KW	125 Kw @ 2500 rpm		
Maximum Torque, Nm	520 Nm @ 1500 rpm		
No. of Cylinders, CC	4, 3900		
Emission Std	Bharat Stage VI		
Transmission			
Gear Box Model & Type	Improved G85, 6F+1R, Mechanical, Synchromesh Gears		
Clutch Type	Single Dry Plate, Hydraulic Control		
Clutch Dia (mm)	362		
Axle			
Front Axle	IF 6.0		
Rear Axle	MS 145		
RAR*	5.57 (S) 6.17 (Optional / HAP)	5.57 (S) 6.17 (Optional / HAP)	5.57 (S) 6.17 (Optional / HAP)
Chassis Frame & Suspension			
Frame Section (D X W X T) (mm)	272x70x6		
Front Suspension	Multileaf Spring		
Rear Suspension	Multileaf Spring		
Anti-Roll Bar	Front & Rear: Standard for hazards goods pack & High centre of gravity pack & 6700 WB /Optic		
Brakes			
Service Brake	Pneumatic, Foot Operated, Dual Line with ABS		
Parking Brake	Spring Acutated with Hand Brake Valce @ Cab		
Front Axle Brake	Ø410 drum		
Rear Axle Brake	Ø410 drum		
Steering			
Steering Type	Hydraulic Power Assisted		
Fuel Tank & Electricals			
Fuel Tank / Filling Capacity*	215L/200L	215L/200L	215L/200L
Adblue Tank	43L / 36L		
Battery Capacity	75Ah/100AH (HAP)		
Voltage	24V		
Performance			
Maximum Gradeability %	23.9% (RAR 5.57) & 26.7% (RAR 6.17)		
Maximum Geared Speed kmph	80 Kmph		
TCD*	17.3m	19.3m	22.6m
Tyres (Size, Pattern)			
Pattern and Size	Radial Tyre - 10.00 R 20		
Weight			
Gross Vehicle Weight - GVW	16200 Kgs (POL tanker GVW will vary)		

ASAC ✓

Any

C35 PD Flow Meter (1½" & 2")

VERMONT

The C35 is a sturdy, compact and highly accurate Positive Displacement Flow Meter. Proven design and material selection make it possible to use it extensively for almost every sector of industry and process control.

DESIGN FEATURES

- High accuracy
- Low pressure drop
- Stepless calibration adjustment
- Wear compensating vane design
- Mechanical or electronic readout
- Suitable for a wide variety of liquids

PRINCIPLE OF OPERATION

The product enters the meter through the inlet manifold and causes the rotor to revolve by pressure on the blades.

The proximity of the rotor to the casing forms an efficient seal, whilst the profile of the casing ensures that the blades are guided through the measuring crescent. The vane blades divide the liquid into segments, the liquid segments are counted as they are displaced, giving a positive rotary motion to the rotor.

The rotor spindle transmits the drive through a pressure tight lip seal in the meter front cover to the calibrating mechanism, which calibrates the meter output for a correct counter readout.

APPLICATIONS

- Batching, blending and dispensing in chemical and process industries, petroleum companies, paints, solvents, pharmaceutical and other fields
- Container filling
- Tank truck / Rail wagon unloading



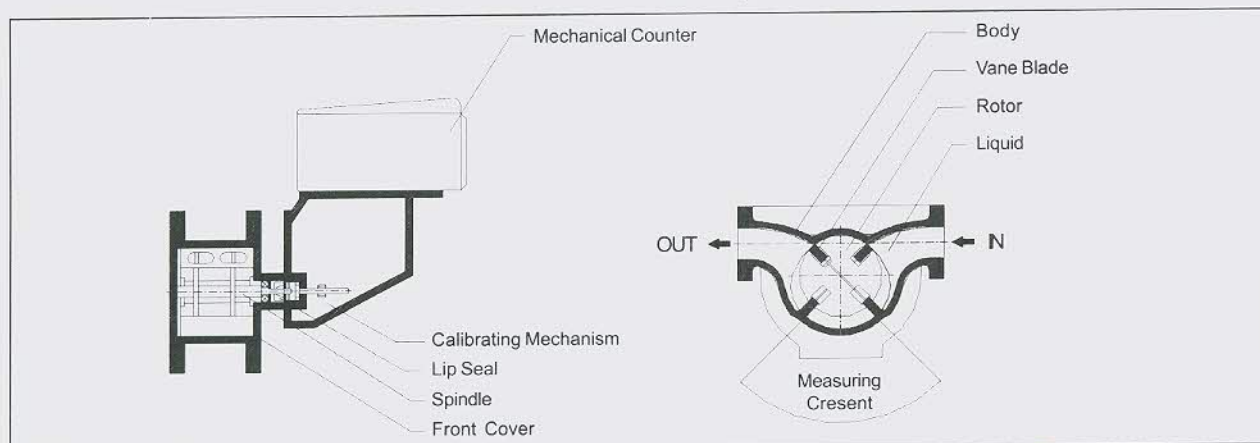
C35 Meter with Veeder Root 7887 Counter



C35 Meter with E Type Mechanical Counter

SPECIFICATIONS

Type	: Positive displacement rotary vane
Size	: 40 mm NB (1½") : 50 mm NB (2")
Flow Range	: 35 to 350 lpm (40 mm NB) (1½") : 45 to 450 lpm (50 mm NB) (2")
(Maximum flow rate can be uprated by 30% for aircraft refuelling with ATF)	



AKL

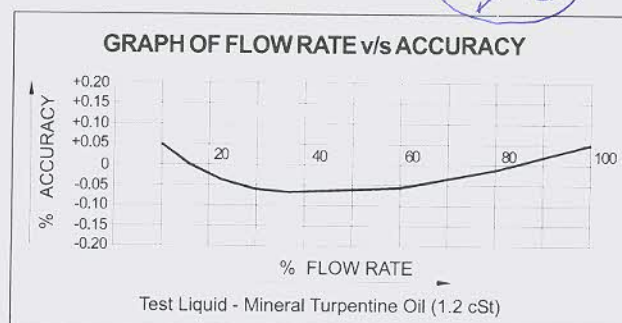
Any

Meter Hand of : Right hand entry, left hand delivery
 Discharge (when facing the counter) : Left hand entry, right hand delivery
 Drive : Positive gear train
 End Connections : Square flange ASA 150 (Standard)
 (Other standards are available on request)
 Accuracy : Better than $\pm 0.10\%$
 Repeatability : Better than $\pm 0.02\%$
 Rangeability : 100% to 10% of max. flow range
 Pressure Rating : 10.54 kg/cm² / 150 PSI / 10.5 Bar
 Temperature : Upto 70°C (Standard)
 : Upto 200°C (Special)
 Viscosity : 0.5 CST to 200 CST
 (Consult factory, for liquid viscosity above 200 CST)

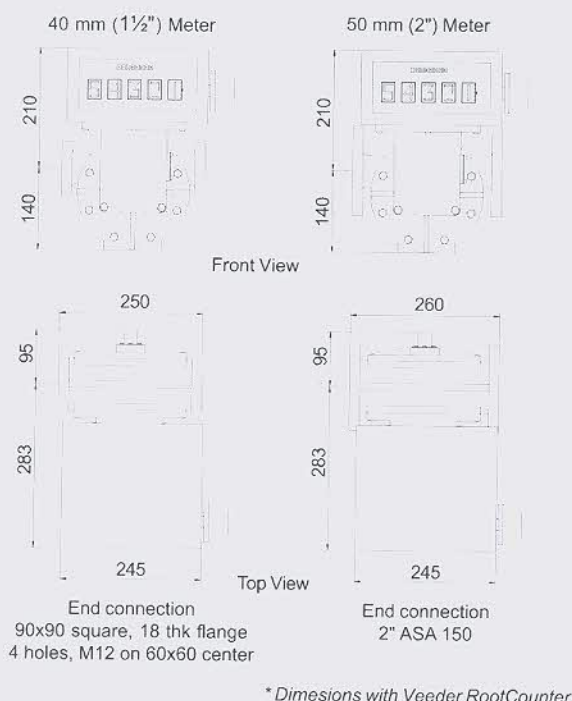
MATERIALS OF CONSTRUCTION

(A) Meter	
Housing	Cast Steel Stainless Steel
Rotor	Aluminium Alloy Stainless Steel
Vanes	Resin impregnated Morganite CY10C
Bearings	Stainless Steel
Rubber Parts	Buna-N (Nitrile), Viton, EPDM
(B) Preset Valve	
Housing	Aluminium Cast Steel Stainless Steel
Other Wetted Parts	Aluminium Alloy Stainless Steel
(C) Strainer / Air Eliminator	
Housing	Carbon Steel Stainless Steel

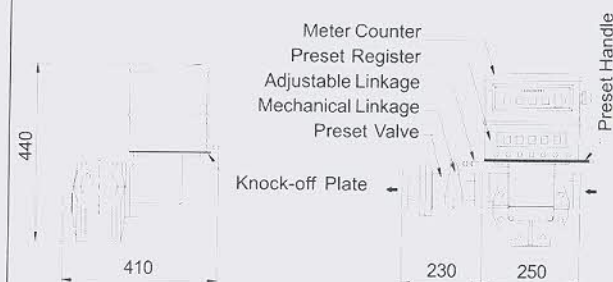
Counter Options	
Veeder Root 7887	5 digit resettable & 8 digit non-resettable
E type	Only 5 digit resettable or non-resettable



OVERALL DIMENSIONS OF METER



OVERALL DIMENSIONS OF METER WITH PRESET



- Above dimensions are for 1 1/2" size meter fitted with preset valve.
- Preset Valve's inlet flange is 90 x 90 x 15 thick, with $\varnothing 14$ x 4 holes at 60 x 60, to suit C35 Flow Meter's outlet flange.
- Preset Valve's outlet flange is as per ANSI B 16.5, FF/RF

AKCZ

Qing

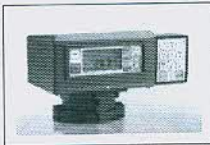
METER ACCESSORIES

A. Counters

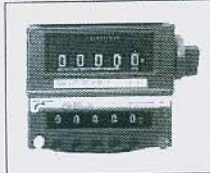
Veeder Root 7887 for volume indication, 5 digit large numerical reset with 8 digit non-reset totalizer. Liters, Dekaliters, Gallons indication.



VeederRoor EMR3 Electronic display counter with remote indication, 4-20 mA output, data logging facility.



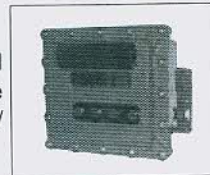
Veeder Root 7889 Preset Counter, select predetermined volume for precise batch control.



Veeder Root Ticket Printer 7888 provides an imprinted ticket for delivery transactions. Accumulative or Zero start options available.



Electronic Registration Ex proof as well as Panel mounted WP options to perform multiple functions and pulse output, RS232/485 communication.



Mechanical Rate of Flow Indicator Mechanical dial type flow rate indicator.



Mechanical Economic E type Totalizers provide 5 digit resettable or 5 digit non-resettable totalization.



B. Strainer and Air Eliminator

For efficient operation of meter, removes free air or vapour and protection from debris entering into the flow meter.



C. Flow Governor

A protective device, installed downstream of the flow meter, to limit the flow rate through the flow meter to the maximum meter flow rate capacity.



D. Mechanical Preset Valve

Preset valves provide an accurate and automatic control of a predetermined quantity of liquid to be delivered through the PD flow meter. A typical preset arrangement consists of a Preset Valve mounted on the PD flow meter outlet and connected by a mechanical linkage to the preset register fitted below the PD flow meter counter.



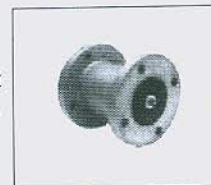
E. Digital Control Valve

Electrically actuated, hydraulically operated multifunction control valve. The valve also offers an in-built flow governing function.



F. Back Pressure Valve

Back Pressure Valve enables efficient air removal through the air eliminator, in a pump operated metering system.



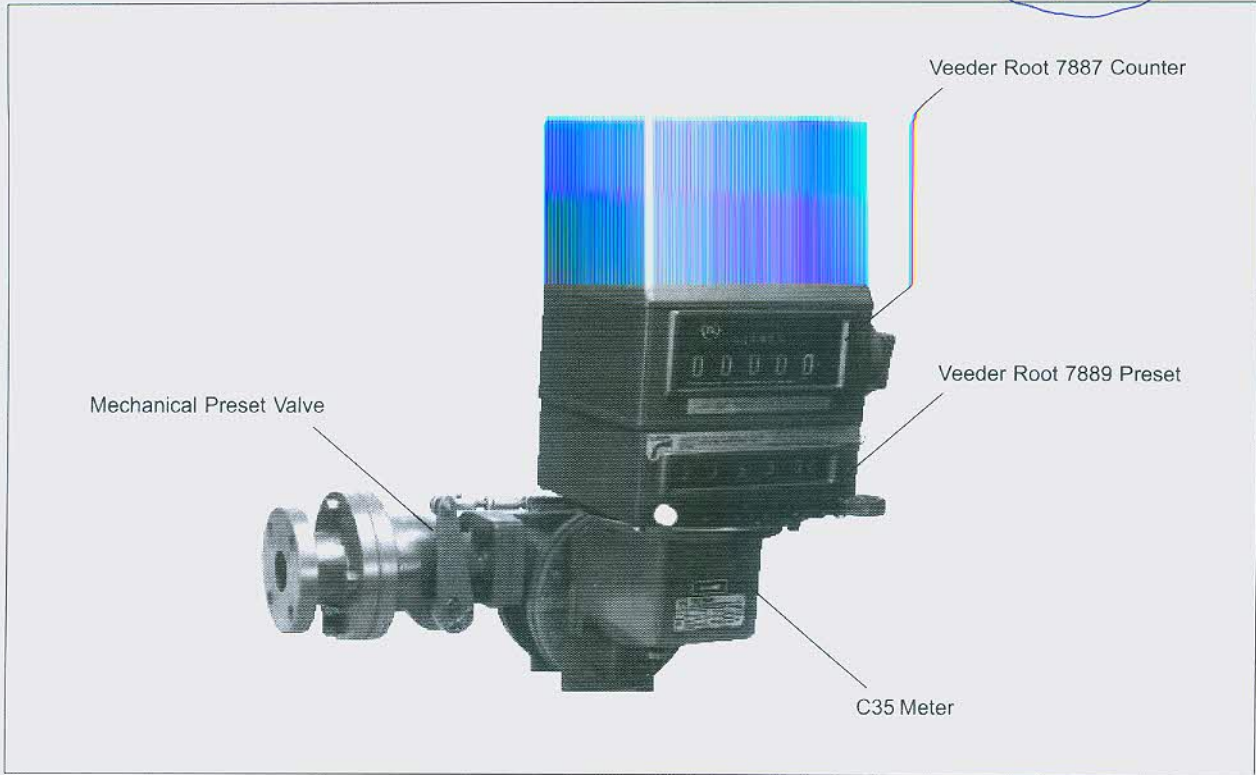
G. Pulse Transmitter

The electronic pulse signal output, to transmit to other electronic device for indication, flow control or data acquisition.



Adc

Day

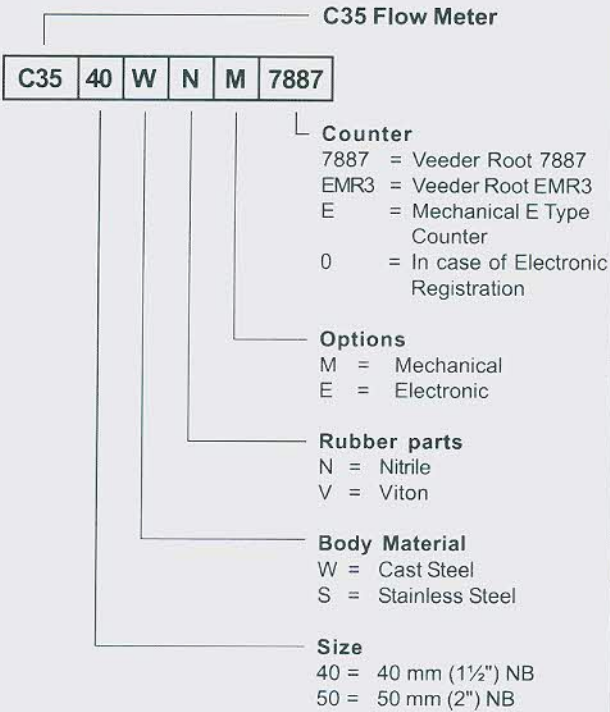


C35 1 1/2" Model Preset Metering Package

ORDERING INFORMATION

Application	Batching, Loading, Blending, etc
Operating Conditions	Liquid : Name Flow Range Temperature Range Max Working Pressure Viscosity Range
Unit of Registration	Gallons, Liters Dekaliters
Direction of Flow	Left to right is standard and will be supplied unless right to left is specified
Accessories	As required

MODEL DESIGNATION



● Specifications are subject to change without notice.
● All dimensions are in mm unless otherwise specified.

Pub. No. 001
Issue 1 Rev 1 04-2014

Vermont Technologies Pvt. Ltd.

Plot No.12, Chintamani, Lane No.6, Shahu Colony, Karvenagar, Pune- 411052. Maharashtra, India.
Tel : +91 (20) 32420419
Email : ho@vermonttechnologies.co.in
Website : www.vermonttechnologies.co.in

TELTECH
Since 1980

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C35 Strainer cum Air Eliminator

VERMONT

The combination C35 Strainer cum Air Eliminator ensures removal of solid impurities, air or vapour from the liquid, before they enter the flow meter. It is an essential accessory for a trouble free and accurate flow meter operation.

DESIGN FEATURES

- Low pressure drop due to large filter element area
- Easy filter element removal for maintenance
- High venting capacity air eliminator

PRINCIPLE OF OPERATION

The Strainer cum Air Eliminator is fitted on C35 flow meter's inlet side. The strainer consists of a fabricated body, having a horizontal offset between the inlet and outlet flanges. The wire mesh filter element is positively clamped by the end cover. A drain plug is provided to facilitate servicing. Liquid impurities get filtered on passing through the filter element and clean liquid flows through the flow meter. For new installations, it is advisable to first thoroughly flush lines before installing the flow meter. Periodic strainer basket inspection and cleaning is necessary to prolong the life of the flow meter.

The air eliminator is mounted along side the strainer body. It consists of a stainless steel float connected to a pilot valve via multiple linkages. When air collects in the air eliminator, the buoyant force acting on the float reduces, the float drops down along with the pilot valve connected to the linkage and the air escapes through the main valve. As liquid rises in the air eliminator, the float rises to lift the pilot valve, thereby closing the air release opening of main valve.



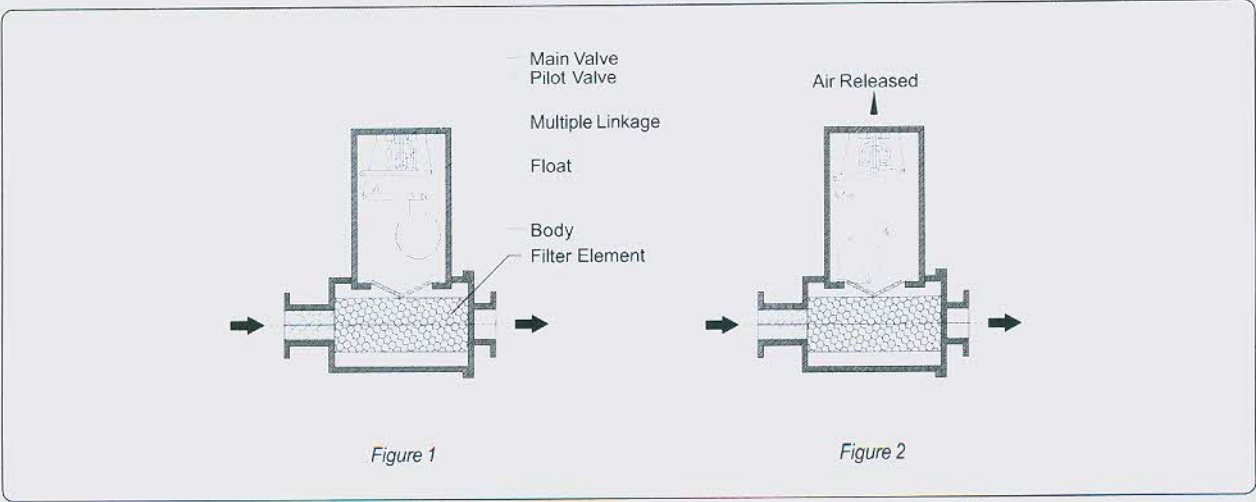
SPECIFICATIONS

STRAINER

Type	: Wire mesh filter element
Mesh	: 20 / 40 / 60 / 80
Size	: 40 mm NB 50 mm NB
Maximum Working Pressure	: 10.54 kg/cm ²
Temperature	: Upto 70°C
Mounting	: At the meter inlet

AIR ELIMINATOR

Type	: Float actuated pilot operated
Maximum Working Pressure	: 10.54 kg/cm ²
Temperature	: Upto 70°C



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MATERIALS OF CONSTRUCTION

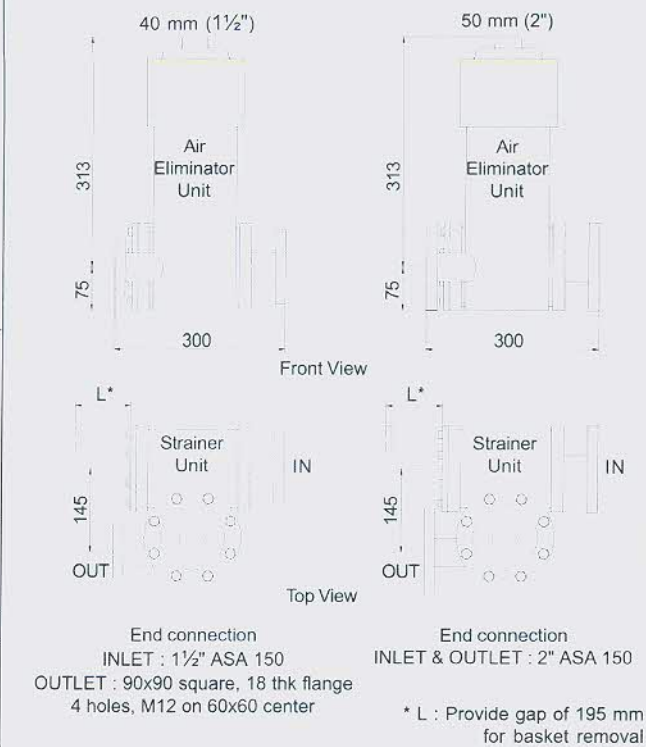
STRAINER

Body	: Carbon Steel (Fabricated) (Standard)
	: Stainless Steel AISI 316 (Optional)
Basket	: Stainless Steel AISI 304 mesh with Carbon Steel reinforcement sheet (Standard)
	: Stainless Steel AISI 316 mesh with Stainless Steel AISI 316 reinforcement sheet (Optional)
Seals	: Nitrile (Standard)
	: Viton (Optional)

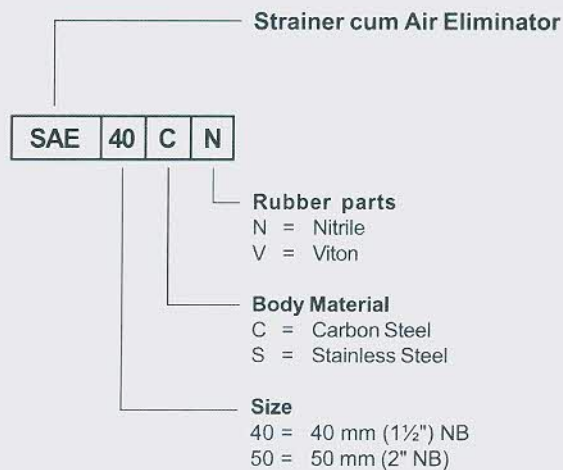
AIR ELIMINATOR

Body	: Carbon Steel (Fabricated) (Standard)
	: Stainless Steel AISI 316 (Optional)
Float	: Stainless Steel AISI 304
Linkages	: Aluminium (Standard)
	: Stainless Steel AISI 316 (Optional)
Seals	: Nitrile (Standard)
	: Viton (Optional)

OVERALL DIMENSIONS



MODEL DESIGNATION



Specifications are subject to change without notice.
All dimensions are in mm unless otherwise specified.

Pub. No. 001
Issue 1 Rev 0 08-2012

Vermont Technologies Pvt. Ltd.

Plot No.12, Chintamani, Lane No.6, Shahu Colony, Karvenagar, Pune- 411052. Maharashtra, India.

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Email : ho@vermonttechnologies.co.in

Website : www.vermonttechnologies.co.in

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45/83 Speed Post

WM-19(22)/2012
Government of India
Ministry of Consumer Affairs, Food and Public Distribution
Department of Consumer Affairs
Legal Metrology Division

Krishi Bhawan New Delhi
Dated: 23.11.2012

To,

✓ M/s. Vermont Technologies Pvt. Ltd.,
Plot No. 12, Chintamani, Lane No. 6, Sahu Colony,
Karvenagar, Pune- 411052

Subject: Model approval certificate – regarding.

Sir,

The undersigned is directed to refer to your letter no VTPL/WNM/2012-13/1 dated 12.9.2012 on the above mentioned subject and to state that there is no objection in using the following model approval certificates by M/s. Vermont Technologies Pvt. Ltd., Plot No. 12, Chintamani, Lane No. 6, Sahu Colony, Karvenagar, Pune- 411052 as per their legal agreement with M/s Teltech Instrumentation Pvt. Ltd., Pune:

Sr. No.	Approval mark No.	S.O. No	Published Date
1	IND/09/97/48	832	6 th April, 1998
2	IND/11/98/27	2049	9 th October, 1998
3	IND/13/2003/53	2253	1 st August, 2003
4	IND/13/2003/539	577	11 th February, 2004
5	IND/09/11/411	1534	7 th February, 2012

2. The said notifications may be amended shortly.

Yours faithfully,

Ashutosh Agarwal

(Ashutosh Agarwal)
Assistant Director (Legal Metrology)
For, Director, Legal Metrology
Phone 011-23386194
Email: adwm2-ca@nic.in

Copy to: The Controller of Legal Metrology, Govt. of Maharashtra, Mumbai for kind information.

Any

AAEL

116/85

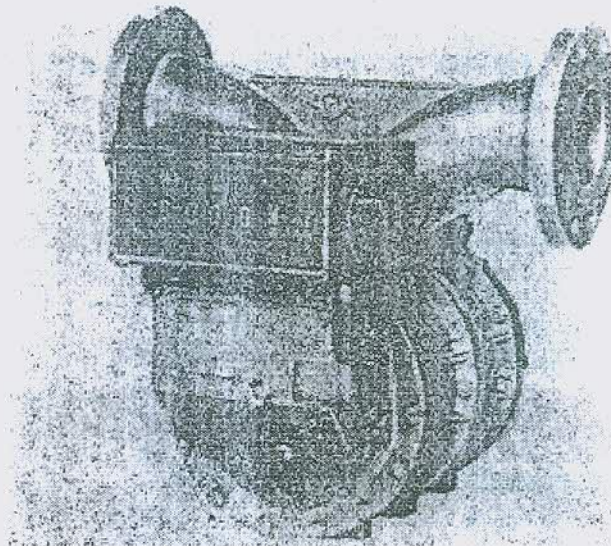
MINISTRY OF FOOD AND CONSUMER AFFAIRS

(Department of Consumer Affairs)

New Delhi, the 9th October, 1998

S.O. 2049. — Whereas the Central Government, after considering the report submitted to it by the prescribed authority, is satisfied that the Model described in the said report (see the figure given below), is in conformity with the provisions of the Standards of Weights and Measures Act, 1976 (60 of 1976) and the Standards of Weight and Measures (Approval of Models) Rules, 1987 and the said Model is likely to maintain accuracy over periods of sustained use and to render accurate service under varied conditions;

Now, therefore, in exercise of the powers conferred by sub-section (7) of section 36 of the said Act, the Central Government hereby publishes the certificate of approval of the Model of the "Meter for liquid (other than water)" of 'TL' series manufactured by M/s Teletch Instrumentation Private, Kamawala Chambers, 1st Floor, Sir Phirozeshan Mehta Road, Mumbai-400001, and which is assigned the approval mark IND/1/98/27;



The said Model is a positive displacement Meter. Its flowrate is 136 to 1364 litre per minute. It is used for measuring the quantity of liquid with viscosity upto 200 cst. The performance and flow range of the model is governed by the following pre-requisites: (i) the calibration and setting of the calibration screw is to be done at site with the metering fluid as flow medium; (ii) the flow range specification with the specified accuracy to be determined for the metering fluid; (iii) the same meter can not be used for fluids with different viscosities without adjusting the calibration screw.

Ashtosh Aggarwal
ASHTOSH AGGARWAL
Joint Secretary (Legal Metrology)
Government of India
Deptt. of Consumer Affairs
Min. Consumer Affairs, Food & P.D.
Krishi Bhawan, New Delhi-11



Ashtosh

Ashtosh

EXTRACT FROM THE GAZETTE OF INDIA (PART II - SEC. 3, SUB-SEC. (iii))

Appearing on Page No. 3855-3858

Dated: 17-10-1998

खाद्य और उपभोक्ता मामले मंत्रालय

MINISTRY OF FOOD AND CONSUMER AFFAIRS

(उपभोक्ता मामले विभाग)

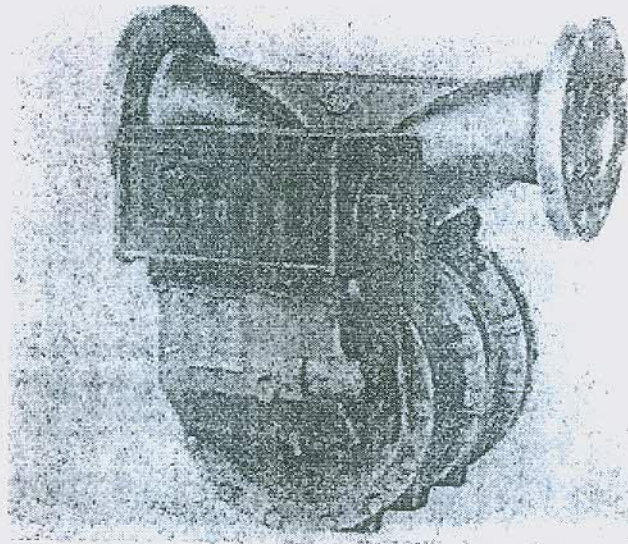
अधिसूचना

NOTIFICATION

नई दिल्ली, 9 अक्टूबर, 1998

क्रा. आ. 20-19. — केन्द्रीय सरकार का, विहित प्राधिकारी द्वारा उसे प्रस्तुत की गई रिपोर्ट पर विचार करने के पश्चात्, समाधान हो गया है कि भारत में निर्मित में-सिंगल मोडल (नाम दी गई आकृति देखें) वाटर और गैस मापक अंशोन्मेष, 1978 (1976 का 60) और वाटर और गैस मापक (आकृति) के अनुमोदन) नियम, 1987 का उपबन्धों के अनुरूप है और संभावना यह है कि अधिकतम उपयोग की अवधि में भी उक्त मोडल यथाश्रुति बनाए रखता और परिवर्तित उद्देश्यों में उपयोग सेवा देता रहेगा।

अतः अब केन्द्रीय सरकार, खाद्य अधिनियम का भाग 26 की उपधारा (7) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, "वाटर और गैस मापक (आकृति) मोडल के मोडल के "टी एन" अंकित चिह्नक निम्नलिखित में से टेलीफोन इन्फॉर्मेशन प्रोसेस, कारागृहवासी गैर, प्रधान मंत्री, सर निदेशक, मंत्रालय, नई दिल्ली-400001 द्वारा किया गया है और बिना अनुमोदन बिना आई.एन.डी./11/98/27 सम्बन्धित किया है, अनुमोदन प्रमाण पत्र प्रकाशित करता है।



आकृति

उक्त मोडल एक निश्चयात्मक विस्थापन मोटर है। इसकी प्रवाहदर 136 से 1364 लीटर प्रति मिनट है। यह 200 मापक टी तक स्थानता करा इस के प्रतिमाप मापने के लिए उपयोग में लाया जाता है। मोडल का संयोजन और प्रवाह रेंज निम्नलिखित पूर्व अपेक्षाओं द्वारा शासित है— (i) अंश जोधन रेंज (ii) अंश जोधन रेंज का जो व्यवस्थापन हो सके, जहां मापन तरल प्रवाह माध्यम है। (iii) तरल मापन के लिए विनिर्दिष्ट यथार्थता के साथ (iv) उक्त मोटर को अंशोन्मेष रेंज के समायोजन के बिना विभिन्न स्थानताओं वाले तरलों के लिए उपयोग

Ashutosh Aggarwal
ASHUTOSH AGGARWAL
Assistant Director (Legal Metrology)
Government of India
Deptt. of Consumer Affairs
Min. of Consumer Affairs, Food & P.D.
Krishi Bhawan, New Delhi-1

नई दिल्ली, 9 अक्टूबर, 1998
श्री. कृष्णशक्ति मिश्र, निदेशक, विभागाध्यक्ष, खाद्य और उपभोक्ता मामले मंत्रालय

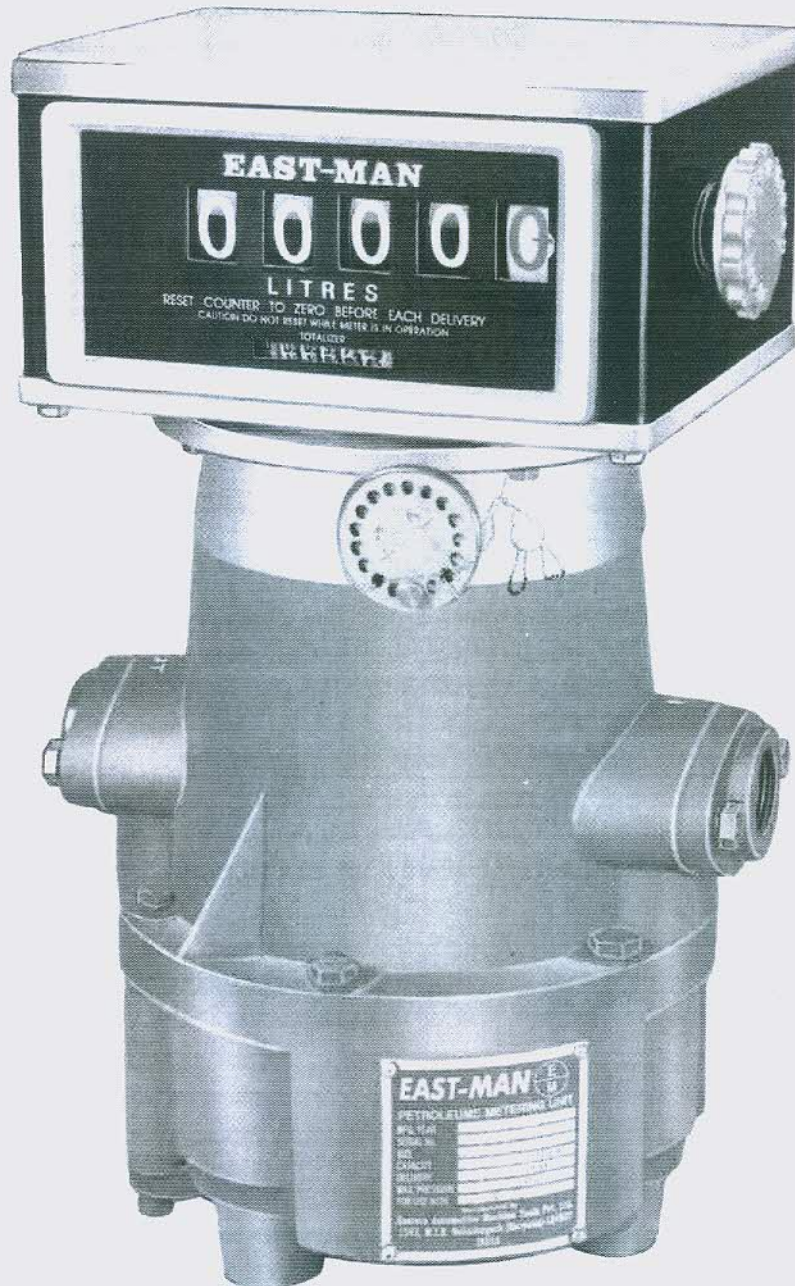
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AM-2

EAST-MAN



PETROLEUM METERING UNIT



METERING PETROLEUM EXCLUSIVELY

ACCURATE

COMPACT

FAST

ECONOMICAL

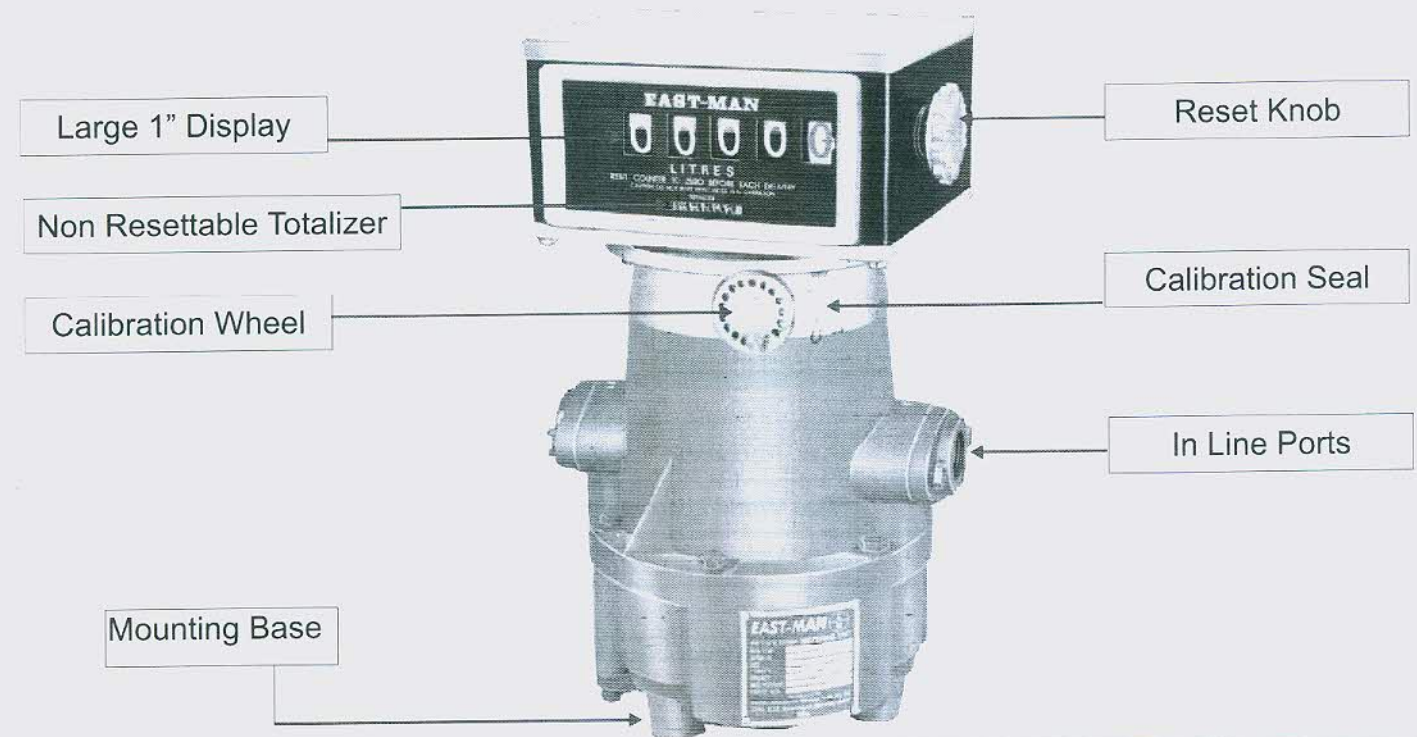
TROUBLE FREE

DURABLE

AKC

Any

"EAST-MAN" Petroleum Metering Unit (Liquid Flow Meters) are positive displacement, reciprocating piston type meters, designed for high sustained accuracy and continues volumetric measurement of any non corrosive liquid flowing through a pipe line. Especially suited to check the Exact Receipt, Transfer, Consumption, Dispensing, Mixing, Packaging of oils/Liquids. This unit is also widely adaptable to other various type of services. It will not freeze or get air locked and does not require more attention than any other ordinary type of Meters or equipments.

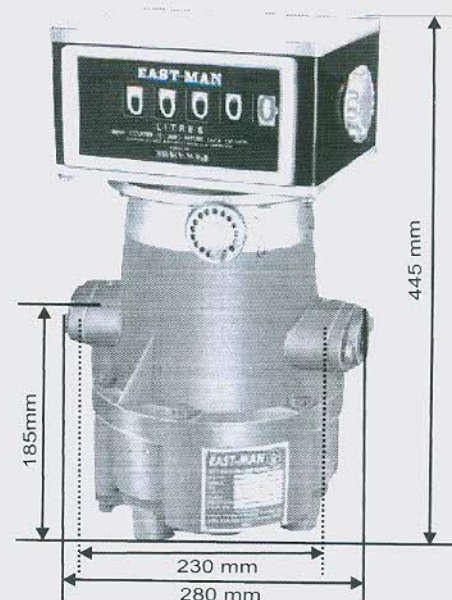


FEATURES	FUNCTIONS	ADVANTAGES & BENEFITS
Large 1" Display Current Reading	1" digit x 5 digit display. Shows current reading. Easy view from wide angle and distance.	Easy operation from three to four meter distance. Operator does not need to come/stand close to take reading every time. It helps to save the time as
Non Resettable Totalizer Total Reading	Accumulating every current reading.	Records the total out-put. Helps to maintain Records by registering the reading shift wise, day wise, week wise etc.
Reset Knob	Reset the counter ZERO for each delivery. First push the knob than turn it clockwise till all digits comes to ZERO.	Very useful function to get the repeated desirable out-put. Helps to make filling, mixing, packing directly and accurately.
Calibration Wheel	Adjust the current reading to actual delivery.	To get the exact out-put always, we recommended to test the out-put at regular intervals. During the schedule testing, if calibration is necessary, it is accomplished by removing locking pin and turning calibration wheel. If the amount in the test-measured is less than the counter reads, the calibration wheel should be turned clock-wise(viewed from face of wheel). If the amount in test-measure is more than counter shows, turn wheel in counter-clockwise direction.
Calibration Seal	Seal the calibration wheel after calibration done with punch from Dept. Of weight & Measures or wrapped a sticker duly signed by management to prevent from unauthorized calibration or tempering.	After adjusting to give desired calibration, insured the locking pin in the hole selected. A seal wire should then be slipped through the hole in the pin, through the hole in bolt head of the counter and wrapped around the rim of the wheel than the both end of sealed wire sealed with lead sel..
In Line Ports	Inlet & Outlet ports are in a straight line.	Easy installation on existing pipe line.

Petroleum Metering Unit , Size 1"x 1" BSP

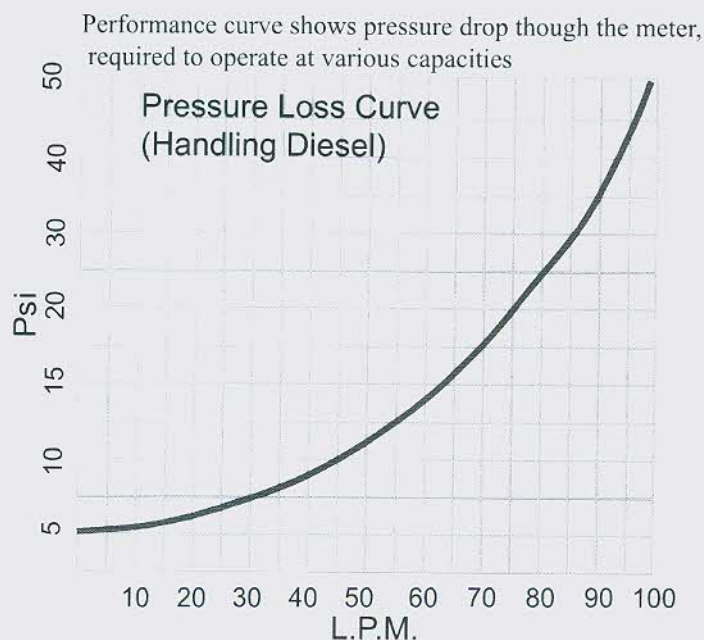
"EAST-MAN" Petroleum Metering Unit (Liquid Flow Meter) are positive displacement, reciprocating piston type Meters, designed for high sustained accuracy and continues volumetric measurement of any non corrosive liquid flowing through a pipe line. Especially suited to check the Exact Receipt, Transfer, Consumption, Dispensing, Mixing, Packaging of Oils/Liquids. This unit is also widely adaptable to other various type of services. It will not freeze or get air locked and does not require more attention than any ordinary type of Meter or equipment. Advance manufacturing techniques, dimensional accuracy, rigid C. I. Body, low noise. Cost effective and foremost indigenously built, make **"EAST-MAN"** Petroleum Metering Unit exceptionally reliable.

Digital Display, Digital Display with pre-set Quantity/Amount, Three Digital Display i. e. Quantity, Amount and Price are also available on request.



Specifications			
Accuracy	± 0.1 %	Max. Showing capacity	9999.9 litres (Five Digit)
Repeatability	100 %	Max. Recording capacity	9999999.9 litres (Eight Digits)
Size	1" x 1" BSP	Max. Working pressure	5 psi to 50 psi
Delivery	90 lpm	Max. Viscosity	120 centistokes (Equivilent to Raw Honey)
Operating temp.	0 ^o c to 82 ^o c	Weight	33 kg. Appx.
Adjusting Device	In the continuos manner i. e. stepless with range of calibration less than ± 1%.		

Material of Construction	
BODY	C. I.
SLEEVES	Stainless steel
PISTONS	Teflon
SEAT	Gun metal
VALVE	C. I.
SEAL	Nitrile/Neoprene
Remaining Parts	M. S., Brass, Alum.
All Meter Part in S. S. 304/316	On request



MECHANISM

We adapted the world wide proven technology as in the petrol pump machines. The unit has three Teflon pistons connected by yokes with a wobble plate. Inlet and discharge of liquid are calibrated by a triangular valve and a seat, operating above the pistons. The operation of this meter is simple, liquid came through the entrance port, goes down through the sides of valve along the valve intake, then into the end of a cylinder. When it does this, it forces the piston upward. A similar movement of liquid to the end of the next piston moves the liquid out through the discharge port. To put it simply, an "EAST-MAN" Petroleum metering unit is merely a liquid engine with three Teflon pistons operating with in three cylinders, just like an automobile engine. The movement of the three pistons measures liquid just if you were continually filling up three measuring cans with liquid and pouring them off.

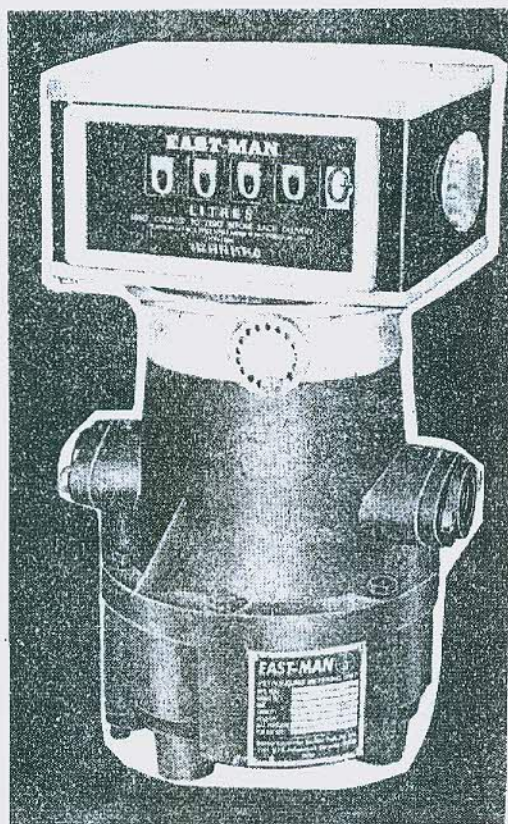
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New Delhi, the 12th August, 2004

S.O. 2039.—Whereas the Central Government, after considering the report submitted to it by the prescribed authority, is satisfied that the Model described in the said report (see the figure given below) is in conformity with the provisions of the Standards of Weights and Measures Act, 1976 (60 of 1976) and the Standards of Weights and Measures (Approval of Models) Rules, 1987 and the said Model is likely to maintain its accuracy over periods of sustained use and to render accurate service under varied conditions;

Now, therefore, in exercise of the powers conferred by sub-sections (7) and (8) of Section 36 of the said Act, the Central Government hereby publishes the certificate of approval of the Model of Meter for volumetric measurement-meter for liquids other than water with analogue indication (herein referred to as the model) of "3 PM" series with brand name "EAST-MAN", manufactured by M/s. Eastern Automotive Machine Tools Pvt. Ltd., 1243, MIE, Bahadurgarh-124 507 and which is assigned the approval mark IND/09/2004/01;



In addition to sealing the stamping plate, sealing shall also be done to prevent the opening of the machine for fraudulent practices.

The said Model (See the figure given below) is a mechanical meter for volumetric measurements (meter for liquids other than water) with analogue indication. The metering unit is positive displacement, reciprocating piston type meter for measurement of any non-corrosive liquids flowing through a pipeline. The maximum flow rate observed is 90 liter per minute. The instrument operates on 230V, 50Hertz alternate current power supply. Its maximum capacity is 9999.9 litre and least count is 100ml. It is used for measurement of petroleum products, liquid chemicals, edible oil etc.

[F. No. WM-21(292)/2002]

P. A. KRISHNAMOORTHY, Director, Legal Metrology



HICSON PUMPS

SELF PRIMING PUMP MODEL : 'AL'

FEATURES

Horizontal, side channel, self-priming designed for continuous operation handling clean or turbid liquids without abrasive matter.

Provided with two nos. grease lubricated deep groove ball bearings (designated by 'KK').

AL 4100 and AL 5100 pumps are also available with one no. each of ball bearing and mechanical seal on suction end and one no. bush bearing, flushed by the liquid handled, on delivery and (designated by 'KMS').

MATERIAL

Suction Cover	Close grained
Delivery Cover	Cast Iron
Intermediate Parts	
Impeller	: H.T. Brass
Shaft	: Stainless Steel

Special materials available on demand.

APPLICATION

Transfer of Liquid containing air or gas

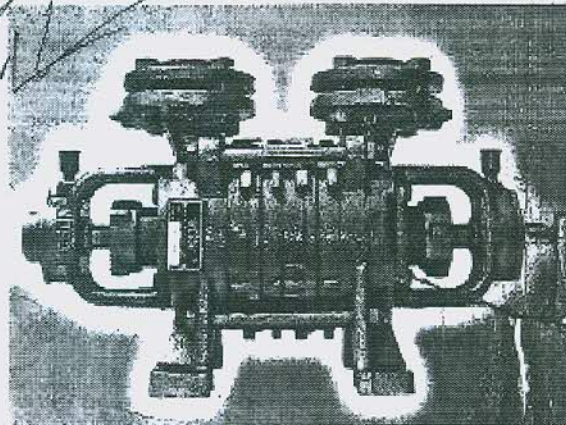
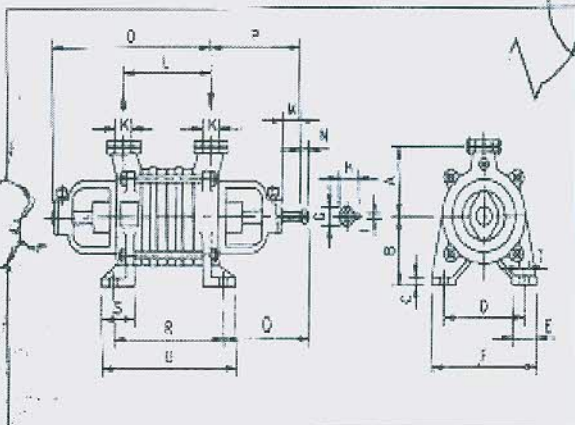
LPG, liquid propane, mineral oil transfer and other industrial applications

Bilge, Ballast, Fuel oil transfer, Fire fighting and other Marine applications

Domestic water supply.

TECHNICAL DATA

Capacity	: Max. 900 L.P.M.
Head	: Max. 68 M.
Speed	: 1450 R.P.M. (Normal) 1800 R.P.M. (Max)
Temperature	: Max. 60°C for Standard Pump Max. 100°C for Hot Water Pump (designated by 'H')
Suction Lift	: Max. 8M. for Standard Pump
Shaft Sealing	: Stuffing Box or Mechanical Seal
Connections	: BSP threads in Counter flanges
Rotation	: Clockwise looking from drive end. Anti-clockwise in 'RR' Pump



Pump Model	A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	Q	R	S	T	U	V
AL 4010 BB	132	132	20	160	47	218	19	21.5	6	1 1/2"	156	36	14	325	191	189	180	55	13	196	53
AL 4020 BB	132	132	20	160	47	218	19	21.5	6	1 1/2"	211	36	14	380	191	189	215	55	13	251	48
AL 5010 BB	140	150	20	180	47	218	22	24.5	6	2"	171	40	14	354	209	202	185	55	13	221	48
AL 5020 BB	140	150	20	180	47	218	22	24.5	6	2"	246	40	14	429	209	202	280	55	13	256	55
AL 7010 BB	150	150	20	200	50	250	26	29	8	2 1/2"	191	55	14	397	241	227	220	65	15	278	62
AL 7020 BB	150	150	20	200	50	250	26	29	8	2 1/2"	281	55	14	487	241	227	310	65	15	366	62
AL 8010 BB	175	170	20	200	50	250	32	35	8	3"	257	70	14	457	256	267	235	65	15	291	92
AL 8020 BB	175	170	20	200	50	250	32	35	8	3"	367	70	14	567	256	267	345	65	15	401	92

All dimensions are in millimeters unless otherwise stated

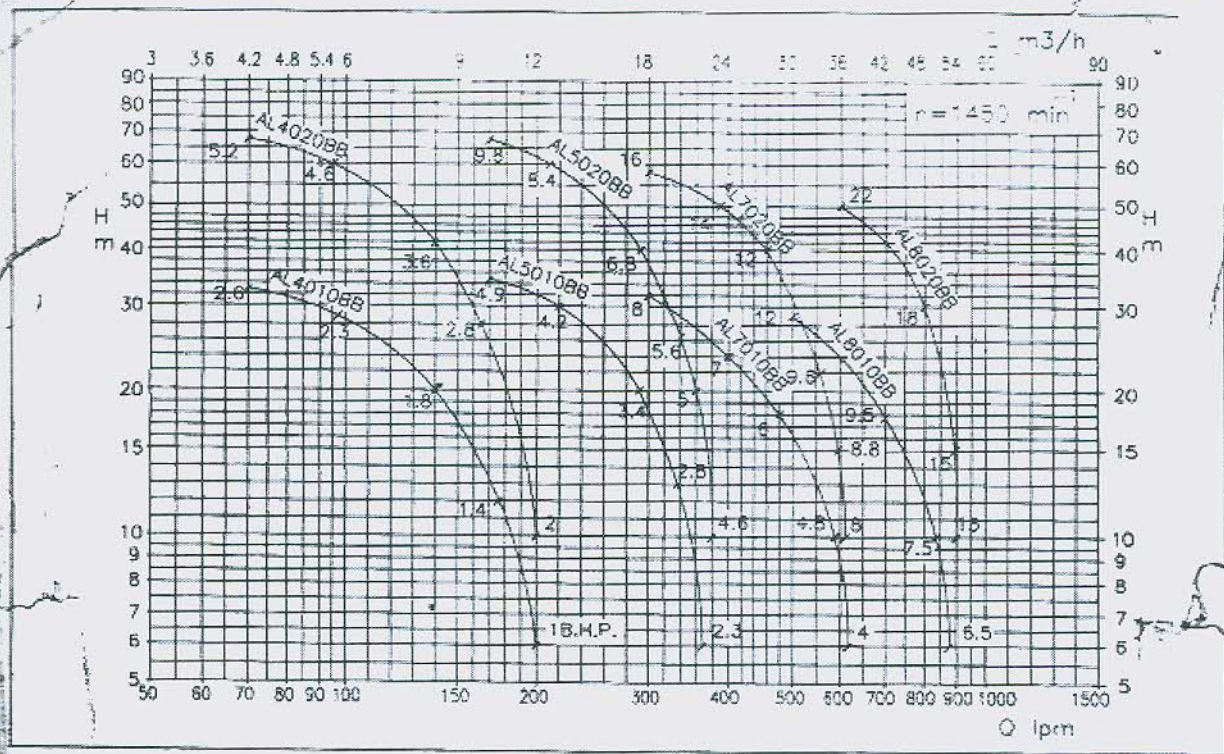
Casting dimensions are approximate

HICSON Pumps

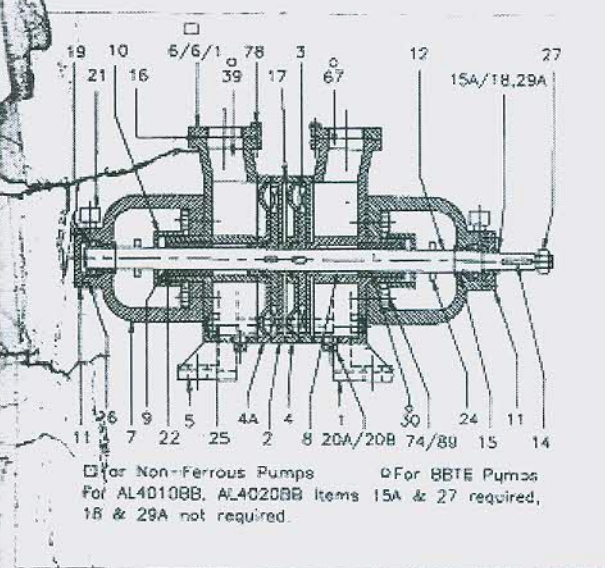
ALC

Only

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Tolerance on Capacity $\pm 10\%$ at rated head and rated R.P.M.
 Capacity applies to liquid at barometric height of 760 m.m. Mercury, temperature of 30°C. and kinematic viscosity of 1 mm²/S.
 Bhp values are applicable for water with sp. gr. 1.0.
 For std. pump with Suction lift of more than 4M. Capacity details available on request.
 For Hot water pump 'H' capacity table available on request.



LIST OF PARTS		
1	Suction Cover	*17 Paper Gasket
2	Intermediate Part II	18 Bearing Lock Nut
*3	Impeller	*19 Ball Bearing
4	Intermediate Part I	20A Plug
4A	Intermediate Part IV	20B Plug
5	Delivery Cover	21 Grease Cup
6	Counter Flange	*22 Packing
6/1	Counter Flange	24 Water Slinger
7	Bracket	25 Tie Bolt & Nut
9	Gland	26 C'SK Screw
10	Gland Nut	*27 Nut, Shaft End
11	Bearing Cover	29A Tab Washer
11A	Bearing Cover	30 Lantern Ring
*12	Shaft	39 Armeto Fitting
*14	Key	67 Copper Tube
*15	Collar Ring (Inner)	74 Hex, Hd. Screw
*15A	Collar Ring (Outer)	76 Bolt & Nut
16	Flange Gasket	89 Stud & nut.

* Spares Recommended

Manufacturer reserves the right to change specification and data for improvement in design.

Authorised Dealer :

Any

Adel

5/1/85

			CAPACITY TABLE IN IMPERIAL GALLONS PER HOUR (G. P. H.) WHEN RUNNING AT 1425 R. P. M. (Approx) Accuracy 10%															
Stage	Model	Motor B.H.P. (incl. margin)	GPH Feet	490 30	410 40	320 50	235 60	150 70	...	...	...	...	...	...	...	...	...	...
1	1"	AL 1010B	1/4	GPH Feet	490 30	410 40	320 50	235 60	150 70	...	...	...	...	...	...	...	...	...
2	1"	AL 1010B	1/3	GPH Feet	490 30	410 40	320 50	235 60	150 70	...	...	...	...	...	...	...	...	...
3	1"	AL 1010B	1/2	GPH Feet	490 30	410 40	320 50	235 60	150 70	...	...	...	...	...	...	...	...	...
4	1"	AL 1020B	1/2	GPH Feet	530 50	490 60	...	...	...	...	...	...	...	...	...	...	...	...
5	1"	AL 1020B	3/4	GPH Feet	530 50	490 60	450 70	410 80	370 90	320 100	280 100	...	...	...	...	...	...	...
6	1"	AL 1020B	1	GPH Feet	530 50	490 60	450 70	410 80	370 90	320 100	280 100	235 120	150 140	...	...	...	...	...
7	1 1/4"	AL 2010B	3/4	GPH Feet	650 30	560 40	520 50	470 60	420 70	370 80	330 90	280 100	250 120	325 120	...	...	...	...
8	1 1/4"	AL 2020B	1	GPH Feet	610 60	590 70	560 80	545 90	510 110	475 120	450 130	420 140	410 150	375 160	335 180	280 200	240 220	160 250
9	1 1/4"	AL 3010B	3/4	GPH Feet	990 40	900 50	830 60	760 70	...	...	...	...	...	...	...	...	...	...
10	1 1/4"	AL 3010B	1	GPH Feet	990 40	900 50	830 60	760 70	700 80	620 90	540 100	460 110	...	...	...	...	...	...
11	1 1/4"	AL 3010B	1 1/2	GPH Feet	990 40	900 50	830 60	760 70	700 80	620 90	540 100	460 110	370 120	260 130	180 140	...	...	...
12	1 1/4"	AL 3020B	1	GPH Feet	1089 60	1040 70	1000 80	...	...	...	...	...	...	...	...	...	...	...
13	1 1/4"	AL 3020B	2	GPH Feet	1080 60	1040 70	1000 80	960 90	920 100	890 110	810 130	770 140	730 150	640 170	520 200	...	...	...
14	1 1/2"	AL 3611B	1	GPH Feet	1580 30	1450 40	1300 50	1160 60	...	...	...	...	...	...	...	...	...	...
15	1 1/2"	AL 3611B	1 1/2	GPH Feet	1580 30	1450 40	1300 50	1160 60	1050 70	900 80	775 90	...	...	...	...	...	...	...
16	1 1/2"	AL 3622B	2	GPH Feet	1650 50	1580 60	1530 70	1450 80	1380 90	1300 100	1250 110	1160 120	...	...	...	...	...	...
17	1 1/2"	AL 4010BB	3	GPH Feet	2500 30	2300 40	2160 50	2000 60	1800 70	1600 80	1420 90	1240 100	1000 110	...	...	...	...	...
18	1 1/2"	AL 4020BB	3	GPH Feet	2700 40	2600 50	2520 60	2440 70	2360 80	2260 90	2170 100	...	...	...	...	...	...	...
19	1 1/2"	AL 4020BB	5	GPH Feet	2700 40	2600 50	2520 60	2440 70	2360 80	2260 90	2170 100	2080 110	2000 120	1900 130	1800 140	1720 150	1240 200	1000 225
20	2"	AL 5010BB	3	GPH Feet	4800 30	4580 40	4360 50	...	...	...	...	...	...	...	...	...	...	...
21	2"	AL 5010BB	5	GPH Feet	4800 30	4580 40	4360 50	4100 60	3800 70	3500 80	3200 90	2900 100	2570 110	...	...	...	...	...
22	2"	AL 5020BB	5	GPH Feet	4950 60	...	...	...	...	...	...	...	...	...	...	...	...	...
23	2"	AL 5020BB	7 1/2	GPH Feet	4950 60	4800 70	4700 80	4550 90	4420 100	4300 110	4150 120	4000 130	3820 140	3660 150	...	...	...	...
24	2"	AL 5020BB	10	GPH Feet	4950 60	4800 70	4700 80	4550 90	4420 100	4300 110	4150 120	4000 130	3820 140	3660 150	3360 170	2850 200	2400 225	...
25	2 1/2"	AL 7010BB	5	GPH Feet	7800 30	7390 40	6900 50	...	...	...	...	...	...	...	...	...	...	...
26	2 1/2"	AL 7010BB	7 1/2	GPH Feet	7800 30	7390 40	6900 50	6400 60	5950 70	5500 80	5100 90	...	...	...	...	...	...	...
27	2 1/2"	AL 7010BB	10	GPH Feet	7800 30	7390 40	6900 50	6400 60	5950 70	5500 80	5190 90	4500 100	4000 110	...	...	...	...	...
28	2 1/2"	AL 7020BB	10	GPH Feet	7920 50	7750 60	7550 70	7320 80	7120 90	...	...	...	...	...	...	...	...	...
29	2 1/2"	AL 7020BB	15	GPH Feet	7920 50	7750 60	7550 70	7320 80	7120 90	6850 100	6550 110	6400 120	6130 130	5800 140	5500 150	4880 170	...	...

NOTE : ● Total Head — Static Suction Lift + Static Delivery Height — Friction Loss in Pipes & Fitting
 ● Last But one Figure in Numerical reference indicates stage or stages
 ● Motor B. H. P. — Recommended includes ample margin when pumping clean and pure water
 For liquids of higher specific gravity higher B. P. Motor will be required.
 ● Standard Rotation — The shaft rotates clockwise when seen from the driving end of the pump

CONSTRUCTION :
 PUMP CASING
 IMPELLER
 GLAND NUT & GLAND
 GLAND PACKING
 BEARING
 BEARING
 Cast Iron
 Bronze
 Gun metal
 Self lubricating Graphite Packing
 Ball Bearing at driving end
 Ball Bearing at both ends

AKK2

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**Positive Displacement Rotary Twin gear Pumps type
AERN Series for Pumping & Transfer of all Kind of Viscous
Liquid & Petroleum Products**

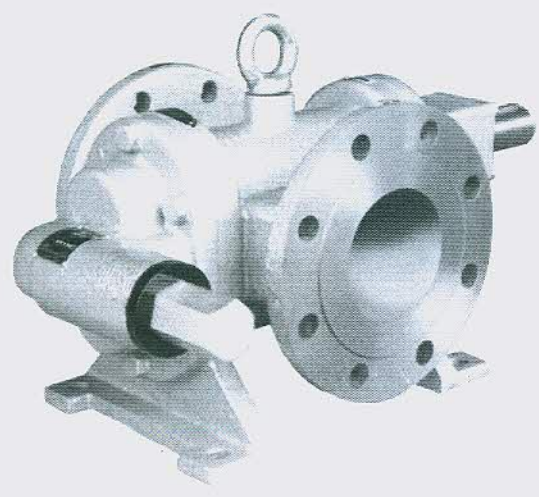
AERN SERIES



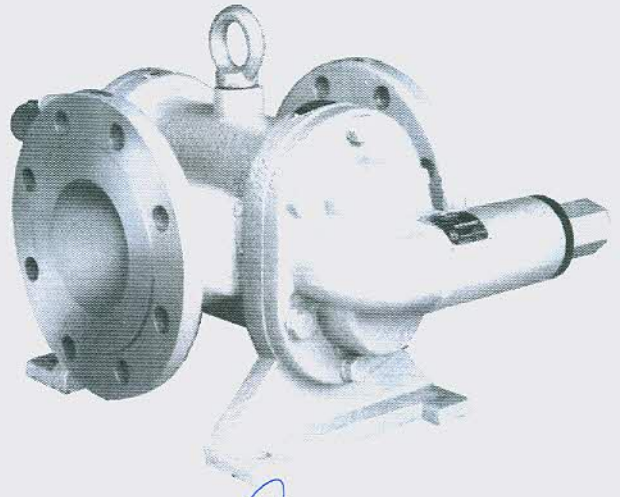
From 1/2" to 6" NB Size (Flanged to ASA 150 Class)
Capacity, From : 0.5 to 200 M³/hr, Pres-up to 12 Kg./Cm²
Viscosity up to 1,00,000 - cst , Temperature - up to 110^o C

FEATURES

- Herrigbone rotors design eliminates side thrust
- Modified tooth profile enhances the tooth life
- Floating gear-design ensures uniform load distribution
- Low-leakage path by design improve volumetric efficiency
- Extra thick shaft reduces bending effectively



AA2

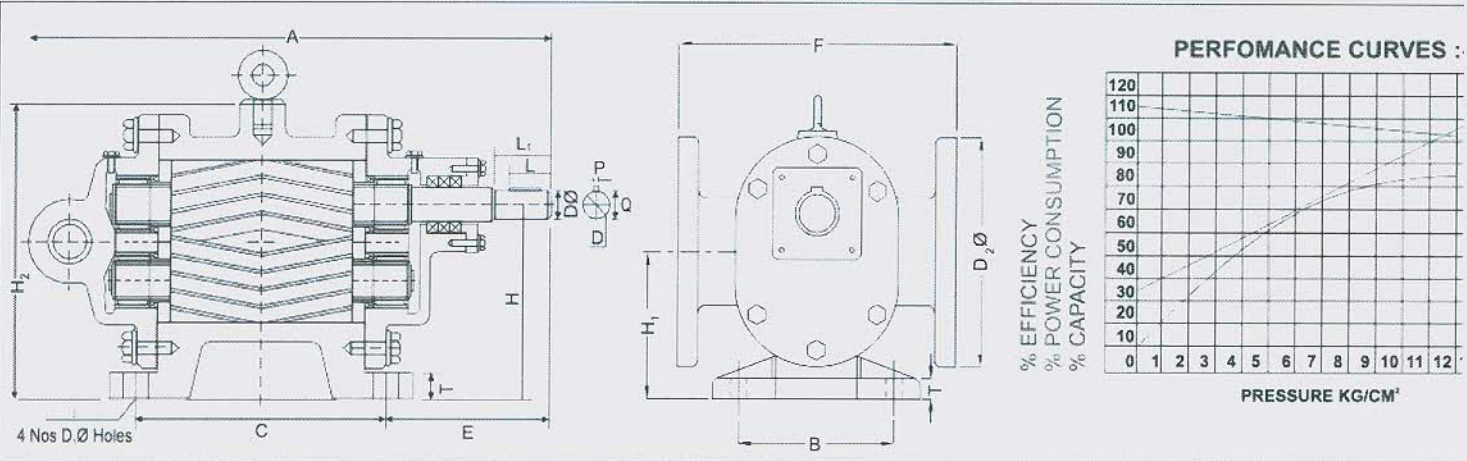


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MODEL	SIZE	SPEED	CAPACITY			HORSE POWER & CAPACITY CHART										PUMP WT.	
			LPM	US GPM	M3/hr	X' 1	2	3	4	5	7	8	10	12			
050-S			8.30	2.20	0.50	0.20	0.23	0.27	0.30	0.32	0.36	0.38	0.43	0.47			
050-M	½" X ½"		16.60	4.40	1.00	0.24	0.28	0.32	0.36	0.40	0.48	0.52	0.60	0.68	8.0		
050-L			25.00	6.60	1.50	0.30	0.36	0.41	0.47	0.52	0.63	0.70	0.81	0.93			
100-S			33.30	8.80	2.00	0.37	0.45	0.54	0.62	0.69	0.85	0.92	1.09	1.25			
100-M	1" X 1"		41.50	11.00	2.50	0.38	0.48	0.57	0.65	0.76	0.95	1.08	1.23	1.41	14.0		
100-L			50.00	13.20	3.00	0.40	0.50	0.60	0.75	0.89	1.17	1.30	1.59	1.85			
150-S			83.30	22.00	5.00	0.70	1.00	1.20	1.40	1.50	1.95	2.15	2.55	2.95			
150-M	1½" X 1½"		100.00	27.60	6.00	0.85	1.10	1.35	1.55	1.77	2.22	2.45	2.90	3.45	22.5		
150-L			125.00	33.30	7.50	1.05	1.45	1.95	2.10	2.40	2.95	3.25	4.00	4.90			
200-S			150.00	39.00	9.00	1.35	1.80	2.45	3.0	3.50	4.50	5.25	6.35	7.60			
200-L	2" X 2"		200.00	52.80	12.00	1.80	2.40	2.95	3.50	4.05	5.15	5.70	6.90	8.10	28.0		
250-S			250.00	66.00	15.00	2.00	2.50	3.20	3.75	4.30	5.60	6.20	7.70	9.50			
250-L	2½" X 2½"	1440 RPM	333.00	88.00	20.00	3.80	4.65	5.50	6.35	7.25	9.05	10.50	12.20	14.35	43.0		
300-S			415.00	105.00	25.00	5.00	6.00	7.00	8.00	9.00	11.00	12.00	14.25	16.50			
300-L	3" X 3"		500.00	132.00	30.00	6.00	7.35	8.65	10.15	11.45	14.05	15.40	17.90	21.00	59.0		
400-S			666.60	176.00	40.00	8.85	10.50	12.00	13.65	16.25	18.25	20.00	22.00	25.50			
400-L	4" X 4"		833.30	220.00	50.00	9.50	11.50	14.00	16.00	18.00	22.50	25.00	30.00	35.50	82.0		
500-S			1000.00	264.00	60.00	14.50	17.20	19.00	22.00	24.80	30.00	32.40	37.20	42.50			
500-L	5" X 5"		1250.00	330.00	75.00	17.50	20.50	23.50	27.00	30.50	36.50	40.00	46.00	53.00	150.0		
600-S			1660.00	440.00	100.00	21.50	25.55	30.00	34.55	40.00	48.85	52.90	62.00	72.00			
600-L	6" X 6"		2083.00	550.00	125.00	25.50	31.00	36.00	41.50	46.50	57.00	63.00	72.00	81.00	175.0		
601-S			2499.00	660.00	150.00	38.00	43.00	48.00	54.00	60.00	70.00	75.00	87.00	96.00			
601-L	6" X 6"		3332.00	880.00	200.00	50.00	57.00	64.00	72.00	79.00	93.00	100.00	115.00	127.00	190.0		

PARTS LIST WITH MATERIAL OF CONSTRUCTION			
Sr.	ITEM	QTY.	MATERIAL
1	PUMP CASING	1	CI/CS/SS
2	FRONT COVER	1	CI/CS/SS
3	BACK COVER	1	CI/CS/SS
4	GLAND COVER	1	CI/CS/SS
5	ROTOR SHAFT	1	SAE8620/EN31
6	STATOR SHAFT	1	SAE8620/EN31
7	IMPELLER GEAR	1	EN-24/SS
8	NEEDLE BRG.	1	NTN/IKO/NRB
9	WEAR PLATE	1	BRONZE/CI
10	LIFTING HOOK	1	STEEL
11	R.V. HOUSING	1	MALIRON
12	R.V. PISTON	1	EN-8/SS
13	R.V. SPRING	1	SPR.ST.
14	R.V.A.D. SCREW	1	EN-8/SS
15	BASE PLATE	1	M.S.
16	COUP. GUARD	1	ALUMN/MS
17	COUPLING	1	FLEXIBLE
18	COUP. KEY	1	EN-8/SS
19	SEALING SYS.	2	OS/MS/GP
20	DOWEL PIN	4	EN31
21	COMP. FLANGE	2	MS/SS
22	H/T HEX-BOLT	12	EN-8/SS

POWER CONSUMPTION IS AT 300 CSP VISCOSITY. IT WILL INCREASE AT 10% FOR EVERY 300 CSP INCREASE IN VISCOSITY



DIMENSIONS

Model	OVERALL DIMENSIONS			MOUNTING DIMENSIONS							FLANGE DIMENSIONS				SHAFT DIMENSIONS				
	A	F	H ₂	B	C	E	H	H ₁	T	D ₁ Ø	No. OF HOLE	D ₂ Ø	HOLE SIZE	P.C.D.	L	L ₁	DØ	P	C
AE-050-S-M-L	239	150	110	80	100	91	80	69.0	12	08	4	89	16	60	22	30	11.5	4	13
AE-100-S-M-L	271	160	130	90	110	100	90	74.0	12	10	4	108	16	79	25	30	15.0	5	17
AE-150-S-M-L	318	180	145	105	130	119	100	80.0	14	10	4	127	16	98	25	40	21.0	6	23
AE-200-S-L	359	200	165	110	150	133	112	89.5	14	12	4	152	19	121	40	50	24.0	8	27
AE-250-S-L	419	220	190	130	160	163	132	106.0	15	15	4	178	19	140	40	55	27.0	8	30
AE-300-S-L	481	240	220	160	220	168	160	131.0	20	18	4	190	19	152	53	60	32.0	10	35
AE-400-S-L	554	280	255	180	270	189	180	145.0	22	18	8	229	19	190	53	65	37.0	10	40
AE-500-S-L	615	295	280	200	300	215	200	160.0	25	19	8	254	22	216	60	85	47.0	14	50
AE-600-S-L	690	340	318	220	350	215	225	178.0	26	20	8	279	22	241	70	95	52.0	16	56
AE-601-S-L	749	360	357	240	380	230	250	200.0	28	22	8	279	22	241	70	100	57.0	16	61



Note: Due to Design Improvements, Specification & Performance are Subject to Change Without Prior Notice.

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TECHNICAL DATA SHEET FOR DIESEL BROWSER PUMP

Sr.No.	NORM	PARAMETER
1.	TYPE	CENTRIFUGAL
2.	TYPE OF GEAR	EXTERNAL HELICAL GEAR
3.	MODEL / SIZE	HTPL – 50 / 2" x 2" BSPT
4.	CAP. / PR. / RPM	150 LPM / 2.5 Kg/cm ² g / 1000 RPM
5.	SHAFT SEALING	NEOPRENA RUBBER TWIN MECHANICAL SEALS
6.	RATED BHP / EFF / Max BHP	3.3 / 25% / 4.3
7.	Rec. DRIVE	5 HP. 1000 RPM
8.	DESIGN TEMP / PR. HYDRO TEST PR.	100 Deg C / 10 Kg 15 Kg
9.	TYPE OF RELIEF VALVE	CUP & CONE TYPE SPRING LOADED BUILT IN
10.	NPSH AVL / REQUIRED	FLOODED / 7 M
11.	MATERIAL OF CONSTRUCTION	C I Gr.25 / ALLOY STL H&G
12.	TYPE OF BEARING	JOURNAL TYPE SLEEVE + BALL BEARING

Manufactured by:



OFFICE : At.-Shivapuri (Nimpur), P.O./P.S.-Jagatpur
Dist.-Cuttack-754021, Odisha

Works : Plot no. 5 & 7, Old Industrial Estate,
Jagatpur, Cuttack-754021, Odisha
Ph.-0671-2491348, Fax-2490348

e-mail: marketing@hindusthantechnologies.com

www.hindusthantechnologies.com



Hindusthan Technologies Pvt. Ltd.
(Formerly known as Hindusthan Enterprises)

Regd. Office : AT: SHIVAPURI, (NIMPUR) , PO: JAGATPUR,
DIST- CUTTACK, PIN -754021, ODISHA
Works : PLOT NO. - 5&7, OLD INDUSTRIAL ESTATE
JAGATPUR, CUTTACK - 754021, ODISHA
Ph. : (0671) 2491348 (O/W), Fax. (0671) 2490348
E-mail : admin@hindusthantechnologies.com
Website : www.hindusthantechnologies.com



FIRE FIGHTING
SAFETY EQUIPMENTS
& SYSTEMS.
CONSULTANTS

Spare Parts for Maintenance Schedule of 10 KL Diesel Bouser for 1 year under warranty

TATA/Ashok Leyland/EICHER/Bharatbenz Chassis

ITEM	CHANGE INTERVAL	QUANTITY	TOTAL NO. OF CHANGE IN 1 year
Strainer	100000 Km/1 year	1	1
Diesel filter	80000 Km/1 year	1	1
Engine Oil filter	100000 Km/1 year	1	1
Air Filter Primary	120000 Km/1 year	1	1
PUMP			
ITEM	CHANGE INTERVAL	QUANTITY	TOTAL NO. OF CHANGE IN 1 year
O' ring Kit	1000 Hrs	1	1



For Hindusthan Technologies Pvt. Ltd.

[Signature]

ARKE



Hindusthan Technologies Pvt. Ltd.
(Formerly known as Hindusthan Enterprises)

Regd. Office : AT: SHIVAPURI, (NIMPUR) , PO: JAGATPUR,
DIST- CUTTACK, PIN -754021, ODISHA
Works : PLOT NO. - 5&7, OLD INDUSTRIAL ESTATE
JAGATPUR, CUTTACK - 754021, ODISHA
Ph. :(0671) 2491348 (O/W), Fax. (0671) 2490348
E-mail : admin@hindusthantechnologies.com
Website : www.hindusthantechnologies.com



FIRE FIGHTING
SAFETY EQUIPMENTS
& SYSTEMS.
CONSULTANTS

HTPL / 09
Dtd. 30.05.2020

Bharat Coking Coal Ltd.,
Koyla Bhawan,
Dist. Dhanbad, JH -826005

Sub : Fire Extinguisher.

Ref : Tender No. BCCL/ PUR/419109/10KL Diesel Bowser/19-20/59 & Date: 21.01.20120
Tender ID : 2020_BCCL_162632_1

Dear Sir,

With reference to above, we confirmed that the Fire Extinguisher will supplied along with Diesel Bowser is ISI marked with materials test certificate from NFBL Accelerated laboratory.

Presently there is no fire extinguisher having DGMS approved in India. If fire extinguisher is available with DGMS approval, then we will definitely supply DGMS approved fire extinguisher in the supplied Diesel Bouser.

Make of Fire Extinguisher: Fire Safety Devices Pvt. Ltd., Faridabad or Equivalent ISI marked
Type: Dry Chemical Powder (ABC type) 6 Kg Capacity -01 No. & Mechanical Foam based 9 L- 01 No.

Thanking you, and assuring of our best services at all the times.

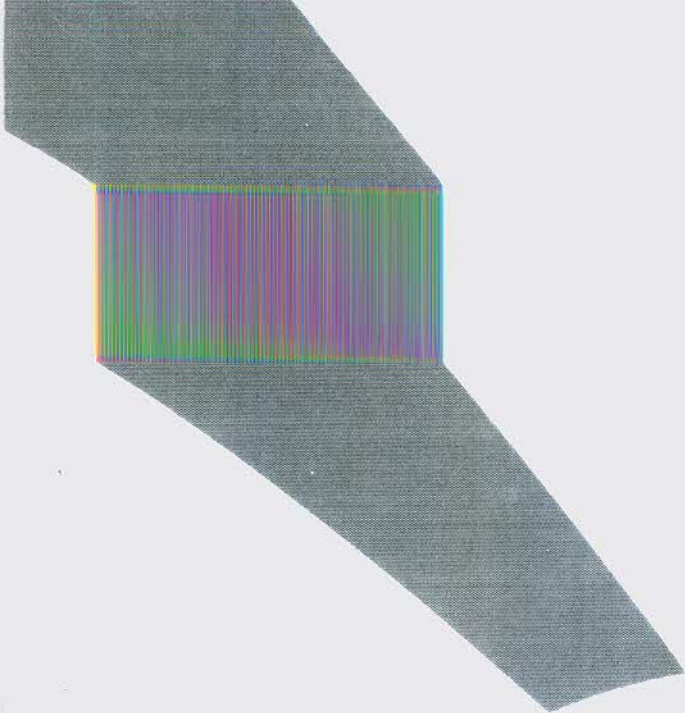
Yours faithfully,
for Hindusthan Technologies Pvt. Ltd.,



Authorized Signatory

Encl: Literature.

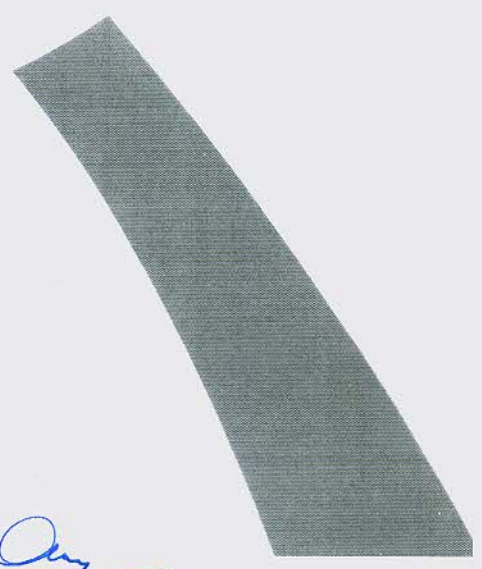
60/85



FIRECHEM



FIRST RESPONDERS



APR 12

Any

DRY POWDER FIRE EXTINGUISHERS (Stored Pressure)

ABC TYPE - PORTABLE

IS : 15683



CML-2651152

Firechem ABC or Multi-Purpose Extinguisher utilize a specially fluidized and siliconized mono ammonium phosphate dry chemical. It chemically insulates Class A fires by melting at approximately 350F and coats surface to which it applied. It smothers and breaks the chain reaction of Class B & C fires and will not be conduct electricity back to the operator

Features :

Non Corrosive Pull Pin
Mutipurpose agent contains 90% M.A.P.
Chrome plated brass valves
Large lop stainless steel pullpins with tether
Steel cylinder and internal siphon tubes



- Firechem Deep drawn container made of high tensile cold rolled sheet.
- Minimum welding points to give attractive appearance.
- Firechem extinguisher presssurized to 1 bar and 100% leakage tested.
- The epoxy powder coating of 50 to 55 micron thickness provides inner & outer surface of the body.
- The easy squeeze grip type control valve provides for quick activation of the extinguisher.
- Firechem easy operation, maintenance, refilling and service.

MODEL	FC-ABC-1	FC-ABC-2	FC-ABC-4	FC-ABC-6	FC-ABC-9
Capacity (Kg)	1 Applied	2 ISI	4 ISI	6 ISI	9 Applied
Anti-Corrosive Inhibitor	Epoxy Polyester Powder Coating	Epoxy Polyester Powder Coating	Epoxy Polyester Powder Coating	Epoxy Polyester Powder Coating	Epoxy Polyester Powder Coating
Confirming IS Code	15683	15683	15683	15683	15683
Type of Extinguisher	Constant Pressure	Constant Pressure	Constant Pressure	Constant Pressure/Gas Cartridge	Constant Pressure/Gas Cartridge
Type of Extinguishing Media	Dry Powder IS 14609/IS 4308	Dry Powder IS 14609/IS 4308	Dry Powder IS 14609/IS 4308	Dry Powder IS 14609/IS 4308	Dry Powder IS 14609/IS 4308
Expeliant	Pressurized with N2 Gas	Pressurized with N2 Gas	Pressurized with N2 Gas	Pressurized with N2 Gas	Pressurized with N2 Gas
Minimum Effective Discharge(%)	85	85	85	85	85
(Minimum Jet Length (mtrs.)	More than 2 mtr.	More than 2 mtr.	More than 2 mtr.	More than 2 mtr.	More than 2 mtr.
Discharge Time (Sec.)	Mor than 8 Sec.	Mor than13 Sec.	Mor than13 Sec.	Mor than13 Sec.	Mor than13 Sec.
Hydraulic Test Pressure(kgf/cm.)	35	35	35	35	35
Operating Position	Upright	Upright	Upright	Upright	Upright
Charged Pressure(kgf/cm.)	15	15	15	15	15
Operating Temperature Range (C)	(-30 to (+) 55	(-30 to (+) 55	(-30 to (+) 55	(-30 to (+) 55	(-30 to (+) 55
Operating Value	Squeeze Grip Type with Nozzle	Squeeze Grip Type with Nozzle	Squeeze Grip Type DischargeHose & Nozzle	Squeeze Grip Type DischargeHose & Nozzle	Squeeze Grip Type DischargeHose & Nozzle
Fire Rating	1A, 88 C	1A, 13B	2A, 34B	4A, 55	4A, 55B, C

Also available UL Listed Range of ABC Fire Extinguishers



Wood Paper, Fabric etc.



Oil, Kerosene, Petrol etc.



Flammable Gases



Electrically Started

ABC L

Any

CARBON DIOXIDE FIRE EXTINGUISHER

PORTABLE -TYPE

IS : 15683



CML-2651152



Capacity 2, 3, 4.5 kg

Features :

- Simple Operation and maintenance.
- The ring pin and visual seal help prevent unwanted discharge of the extinguisher.
- The discharge valve wheel type provides for good performance of the extinguisher.
- The epoxy powder coating of 50 to 90 micron thickness provides inner & outer surface of the body.
- Easy refilling and compact designed.

Firechem Co2 Extinguishers units provide the power to respond quickly and effectively by design to protect against Class B (flammable liquids and gases) and Class C (energized electrical equipment) fires. These extinguishers are well suited for indoor use in furnace rooms, printing presses, pump rooms, electrical power panels and laboratories where winds or drafts do not affect discharge.

SYMBOL : B, C & E

Model No.	FC - Co-2	FC - Co-3	FC - Co-4.5
Capacity (Kg)	2 Kg IS Applied For	3 Kg ISI	4.5 Kg ISI
Extinguishing Agent	Liquefied Gas (CO2)	Liquefied Gas (CO2)	Liquefied Gas (CO2)
Gas Filling Ratio	0.667% per kg	0.667% per kg	0.667% per kg
Fire Rating	13B	13B	21B
Discharge Time (Sec.)	8-15 Sec.	8-16 Sec.	9-16 Sec.
Discharge Horn	Polyethylene	Polyethylene	Polyethylene
Hose Length (mtr.)	N.A.	N.A.	N.A.
Working Pressure	N.A.	N.A.	150 kgf/cm ²
Operating Temperature	-30° C to 55° C	-30° C to 55° C	-30° C to 55° C
Dimension (OD) mm	110mm	110mm	110mm
Hydraulic Pressure Test	250kgf/cm ²	250kgf/cm ²	250kgf/cm ²



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POWDER FIRE EXTINGUISHERS (Cartridge Type)

ABC TYPE - PORTABLE

Capacity 1, 2, 4, 6, 9 kg

IS : 15683

CML-2651152



BC POWDER

ABC POWDER

MODEL	FC-BC-1	FC-BC-2	FC-ABC-4	FC-ABC-6	FC-ABC-9
Capacity (Kg)	1 Applied	2 ISI	4 ISI	6 ISI	9 Applied
Anti-Corrosive Inhibitor	Epoxy Polyester Powder Coating	Epoxy Polyester Powder Coating	Epoxy Polyester Powder Coating	Epoxy Polyester Powder Coating	Epoxy Polyester Powder Coating
Confirming IS Code	15683	15683	15683	15683	15683
Type of Extinguisher	Constant Pressure	Constant Pressure	Constant Pressure	Constant Pressure/Gas Cartridge	Constant Pressure/Gas Cartridge
Type of Extinguishing Media	Dry Powder IS 4308	Dry Powder IS 4308	Dry Powder IS 14609	Dry Powder IS 14609	Dry Powder IS 14609
Expellant	Pressurized with N2 Gas	Pressurized with N2 Gas	Pressurized with N2 Gas	Pressurized with N2 Gas	Pressurized with N2 Gas
Minimum Effective Discharge(%)	85	85	85	85	85
(Minimum Jet Length (mtrs.)	More than 2 mtr.	More than 2 mtr.	More than 2 mtr.	More than 2 mtr.	More than 2 mtr.
Discharge Time (Sec.)	Mor than 8 Sec.	Mor than13 Sec.	Mor than13 Sec.	Mor than13 Sec.	Mor than13 Sec.
Hydraulic Test Pressure(kgf/cm.)	35	35	35	35	35
Operating Position	Upright	Upright	Upright	Upright	Upright
Charged Pressure(kgf/cm.)	15	15	15	15	15
Operating Temperature Range (C)	(-30 to (+) 55	(-30 to (+) 55	(-30 to (+) 55	(-30 to (+) 55	(-30 to (+) 55
Operating Value	Squeeze Grip Type with Nozzle	Squeeze Grip Type with Nozzle	Squeeze Grip Type DischargeHose & Nozzle	Squeeze Grip Type DischargeHose & Nozzle	Squeeze Grip Type DischargeHose & Nozzle
Free Raiting	1A, 88 C	1A, 13B	2A, 34B	4A, 55	4A, 55B, C

Also available UL Listed Range of ABC Fire Extinguishers



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CLEAN AGENT FIRE EXTINGUISHER

PORTABLE -TYPE

IS : 15683



CML-2651152

Features :

- Zero Ozone Depletion Potential (ODP)
- Low Global Warming Potential (GWP)
- Environmentally Safe
- Electrically Non-Conductive
- Colorless and Odorless
- Rapidly Evaporating Liquid (leaves no residue)
- Cost Effective Extinguishing Agent
- User Friendly (low in toxicity)
- Good Visibility during discharge (does not impair operator's vision)

Areas of Application :

- Computer/Server Rooms
- Telecommunications Facilities
- Data Storage Areas
- Offices (for protection of sensitive electronic equipments)
- Boats & Vehicles
- Irreplaceable Document and Art Storage Rooms
- Laboratories
- Museums
- Aircrafts
- Bank ATM Centers

Clean Agent is the most powerful, Eco Friendly Fire Extinguisher
This ABC fire extinguisher is suitable for fire of paper, Wood
Cloth, Flammable Liquids (Petrol, Kerosene, Paints,
Gases (LPG, Acetylene) & Electricity Started
You can Fight with any type of fire



Model No.	FC - 142	FC - 144	FC - 146
Capacity (Kg)	2	4	6 Axp.
N2 Gas Pressure (kgf/cm ²)	18	18	18
Working Pressure at 27±2C	15	15	15
Testing Pressure (kgf/cm ²)	35	35	35
Duration of Discharge (Sec.)	More than 13	More than 13	More than 13
Operating Value	Squeeze Grip Type with nozzle	Squeeze Grip Type with Discharge Hose and nozzle	Squeeze Grip Type with Discharge Hose and nozzle
Temp Range	-20 + 55°C	-20 + 55°C	-20 + 55°C
Extinguishing Media	HFC(236) UL Listed	HFC(236) UL Listed	HFC(236) UL Listed



Wood Paper, Fabric etc.



Oil, Kerosene, Petrol etc



Flammable Gases



Electrically Started

APK

Devy

WATER/FOAM EXTINGUISHERS (Gas Cartridge Type)

IS : 15683



CML-2651152



WATER



FOAM

MODEL	FC-1	FC-2
Capacity (Kg)	6	9
Anti-Corrosive Inhibitor	Epoxy Polyester Powder Coating	Epoxy Polyester Powder Coating
Confirming IS Code	15683	15683
Type of Extinguisher	Constant Pressure	Constant Pressure
Type of Extinguishing Media	Soft Water	Soft Water
Expellant	Pressurized with N2 Gas 60 Gsm Gas Cartridge	Pressurized with N2 Gas 90 Gsm/120 Gas Cartridge
Minimum Effective Discharge(%)	95	95
(Minimum Jet Length (mtrs.)	More than 2 mtr.	More than 2 mtr.
Discharge Time (Sec.)	Mor than 13 Sec.	Mor than 13 Sec.
Hydraulic Test Pressure(kgf/cm.)	35	35
Operating Position	Upright	Upright
Charged Pressure(kgf/cm.)	15	15
Operating Temperature Range (C)	(-30 to (+) 55	(-30 to (+) 55
Operating Value	Squeeze Grip Type with Nozzle	Squeeze Grip Type with Nozzle
Free Raiting	2A,	3A

FC-6	FC-9
6	9
Epoxy Polyester Powder Coating	Epoxy Polyester Powder Coating
15683	15683
Constant Pressure/Gas Cartridge	Constant Pressure/Gas Cartridge
Water & AFFF IS4989	Water & AFFF Is4989
Pressurized with N2 Gas	Pressurized with N2 Gas
60 Gsm Gas Cartridge	90 Gsm/120 Gas Cartridge
95	95
More than 2 mtr.	More than 2 mtr.
Mor than 13 Sec.	Mor than 13 Sec.
35	35
Upright	Upright
15	15
(-30 to (+) 55	(-30 to (+) 55
Squeeze Grip Type	Squeeze Grip Type
DischargeHose & Nozzle	DischargeHose & Nozzle
2A 21B	3A 55B

Also available UL Listed Range of ABC Fire Extinguishers



Wood Panel Bahir ale



Discharge Hose

Hand

Any

KITCHEN FIRE EXTINGUISHER

Cooking appliances today allow for the potentially dangerous mixture of flammable oils and grease: with high efficiency heat sources, creating an environments in which fire is always a threat. Freeze fire kitchen extinguisher can protect all those diverse hazard areas and perform all the necessary auxiliary functions.

Why to use Freeze Fire Kitchen extinguisher?

Wet Chemical. With the introduction of the Class K in the late twentieth century for cooking media fires, wet chemical extinguishing agents have become important in both portable fire extinguishers and fire suppression systems. Test have shown that the previous school of thought protection grease fire with a Class B:C extinguisher have failed with the introduction of vegetable oils. Previously the primary grease used was animal fat based. Test showed that the dry chemicals would sink in the vegetable oils and the fire had a high potential to re-flash. These water based solutions produce a chemicals reaction when applied to vegetable oils, creating a thick foam-like blanket that smothers the fire on top of the oil and prevents re-flash.

APPROVALS

Confirming to NFPA 18

Meets the requirements of UL standard 8 and UL 711

Meets the new class K (Combustible cooking media) requirements of NFPA 10

• Areas of Application

- Hotel
- Open Kitchen Restaurants
- Food Courts
- Commercial Kitchen
- Residential Kitchen
- Canteen

• Features

- Easy to install
- Efficient Service
- Extremely Fast cooling
- Advanced agent technology

• Capacity

- 1kg, 2kg, 4kg, 6kg

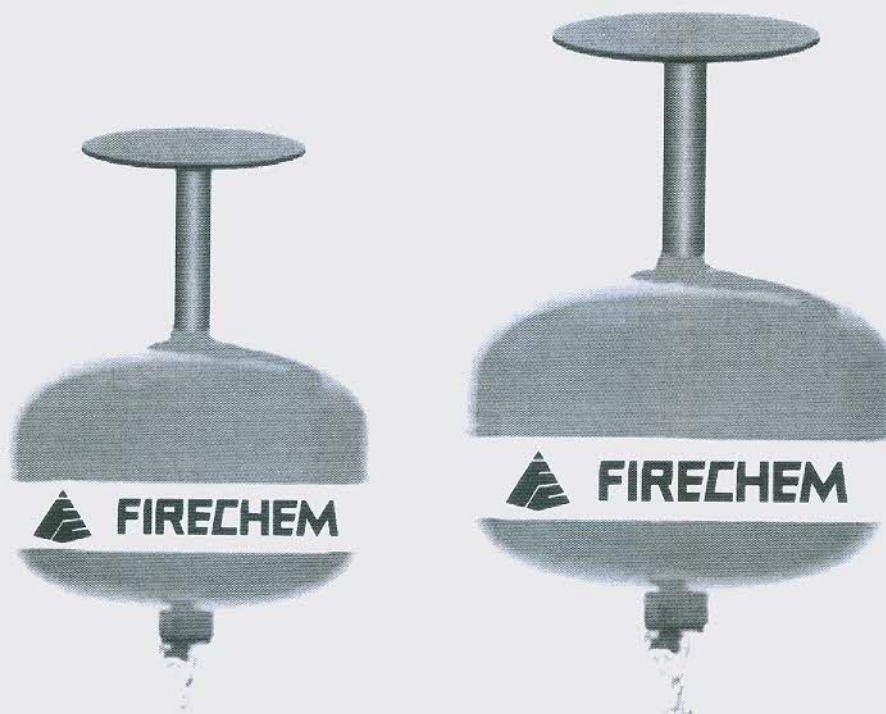


Only

MAZ

CEILING MOUNTED (MODULAR)

Automatic Fire Extinguisher (Clean /ABC / BC Type)



Application :-

Class A Fire : Wood, Textiles, Paper, Clothes, Cotton Mill, Jute Mill etc.

Class B Fire : Petroleum, Oil, Paint, Varnish, Solvent, Flammable and Volatile Liquids etc.

Class C Fire : Flammable Gases, Industrial Gases etc.

As well as Electrical Fires.

Technical Specification

Capacity (Kg)	:	2/4/5/6/10 & 15
Extinguishing Media	:	ABC Dry Powder / Clean Agent / BC Powder
Minimum Effective Discharge	:	95%
Testing Pressure (kgf/cm ²)	:	35
Testing Pressure (kgf/cm ²)	:	15
Charged Pressure (kgf/cm ²)	:	
Mounting	:	Ceiling Mounting Type
Operating Temperature	:	Automatically at 57/68/93/107 & 143 Deg. C
Available in	:	MAP 50 / MAP 90
Effective against	:	A,B,C, & Electrically Started Fires.



Wood, Paper, Fabric, etc.



Oil, Kerosene Petrol, etc.



Flammable Gases



Electrically Started



Fire Safety Devices Pvt. Ltd.

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Handwritten signature

68-785

Annexure-F

(Details of Depot/Warehouse and service facility available)

Tender no. : BCCL/ PUR/419109/10KL Diesel Bowser/19-20/59, Date: 21.01.2020

Clause No. D.6. (b) :

Details of nearest Depot warehouse and service facility available for service support (existing for the present offer) :

Major Depot/ Warehouse		Service Facility (existing for the present offer)		
Location	Contact nos.	Inventory value (Apporx.)	Type of facility available	No. of Service Engineers / Technicians with their Contact Numbers
Plot No. 5 & 7, Old Industrial Estate, Jagatpur, Cuttack-754021, Odisha Phone : 0671-2491348, 2490348(fax) e-mail : production@hindusthantechnologies.com service@hindusthantechnologies.com	Mr.B.B.Pattanayak (General Manager After Sales Service) Mobile: 9437579348 9439695799	64.87 Lakhs	1- Greasing 2- Overhauling of Pumps 3-Body Repair (Denting - Painting) 4- Tyre Changer 5- Crane facility upto 5 ton capacity 6- Painting Shop Facilities (Heat Chamber, High Capacity Compressor, Gun & Best Quality PU paint) 7- Sand blasting shot blasting facilities 8- Shower Rain test facilities 9- Servicing Ramp 10- Lathe facilities	No. of Service Engineer – 04 Nos. 1- Dillip Mohanty (M- 9439695809) 2- H K Sahoo (M-7381055998) 3- Deepak Mohapatra (M-8594906092) 4-Manoranjana Sahoo (M-9439695816) No. of Technicians – 06 Nos. 1- B D Samanta (M-9439695817) 2- Sanatan Behera (M-9438519090) 3- Sanjay Mohanty (M-7536967336) 4- Jayram Reddy (M- 8917659816) 5- Jyotirnanjan Das (M- 9861947044) 6-Paresh Das (M- 9337435349)

Moreover we hereby confirmed that we are having fully equipped workshop with trained service engineers at our end to attend and resolve the service issues within 24 to 72 hrs depending upon magnitude of defects (on site service location). The spare parts as and when required will be supplied as per mutual agreement in time bound manner for function of maintenance van uninterrupted.

Date: 30.05.2020
Place: Cuttack

for Hindusthan Technologies Pvt. Ltd.,



Authorized Signatory

[Handwritten Signature]

[Handwritten Signature]

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Annexure-G
(Quality Assurance)

CERTIFICATE



This is to Certify that the
Quality Management System
of

HINDUSTHAN TECHNOLOGIES PVT. LTD.

Regd. Office: Shivpuri, Nimpur, Jagatpur, Cuttack-754021,
Odisha, India

Works: Plot No. 5 & 7, Old Industrial Estate, Jagatpur,
Cuttack-754021, Odisha, India.

has been found to comply with

ISO 9001:2015

This certificate is applicable to the following scope
Manufacture and Supply of Fire Fighting Equipments (Vehicles/Pumps), Fire
Appliances & Safety Equipments, Explosive Vans, Canteen Vans, Maintenance
Vans, Police Vehicles, Water/Oil Tankers/Bousers and Other Commercial
Industrial Vehicles as per Customer Requirements

Certificate No.: I-QSC201908022

Date of initial registration	07, August, 2019
Surveillance Audit on/before	07, July, 2020
Certificate Expiry	06, August, 2020
Recertification Due	06, August, 2022

Authorized Signatory
BQC ASSESSMENT PRIVATE LIMITED

(Formerly BQC Certifications)
202 DLF Galleria Mall, Mayur Vihar Phase-1 Extension
Delhi-110091



Website: www.bqccert.com, E-mail: info@bqccert.com
Accredited by International Accreditation Service

The validity of this certificate can be verified at www.bqccert.com or through info@bqccert.com. This
certificate is the property of BQC Assessment Pvt. Ltd., and must be returned on request. Accreditation
details are available with IAS, (International Accreditation Service) Inc., USA at www.iasonline.org

FOR ONLY ATTESTED
BY: S. PRASANNA MOHANTY
JAGATPUR, CUTTACK
Date: 12.08.2019

AKEL



Hindusthan Technologies Pvt. Ltd.
(Formerly known as Hindusthan Enterprises)

Regd. Office : AT. SHIVAPURI, (NIMPUR) PO. JAGATPUR
DIST. CUTTACK PIN - 754021, ODISHA
Works : PLOT NO. 5&7, OLD INDUSTRIAL ESTATE
JAGATPUR, CUTTACK - 754021, ODISHA
Ph: (0671) 2491348 (O/W), Fax: (0671) 2490348
E-mail: admin@hindusthantechnologies.com
Website: www.hindusthantechnologies.com



FIRE FIGHTING
SAFETY EQUIPMENTS
& SYSTEMS
CONSULTANTS

QUALITY CERTIFICATE

Ref : Tender No. BCCL PUR 419109 10KL Diesel Bowser 19-20 59 & Date: 21.01.2018
Tender ID : 2020_BCCL_162632_1

I/We certify that there has not been any complaint against the quality of our products supplied to Government Departments or Public Sector Undertakings Other organizations.



Date : 11.02.2020

Signature of the Tenderer
Seal of the Firm

AKL

Annexure - H

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Tender Inviting Authority: GM (MM) BCCL HQ	
Name of Work: SUPPLY OF 10KL Diesel Bowser and Consumables for Warranty Period of 01 Year	
NIT No:BCCL/PUR/419109/10KL Diesel Bowser/19-20/59 Date: 21.01.2020	
Bidder Name: Hindusthan Technologies Pvt. Ltd.	

TECHNICAL PARAMETER SHEET											
S. No *	Item Code *	Description of Item *	Bidder's Eligibility Status	Specification Parameter *	Unit of Measure *	Evaluation Criteria (To be selected from drop down box in each cell) *	Required Value *	Bidder's value *	Eligibility		Remarks by bidder, if any
									Specification wise	Overall	
1	Item 1	10KL Diesel Bowser and Consumables for Warranty Period of 01 Year	0	Whether quoted or not quoted for this item?	NA	NOT NULL	NOT NULL	QUOTED	TRUE	COMPLIED	
				"Schedule of Requirements" as per Annexure-A of NIT	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Schedule of Requirements of Services" as per Annexure-A of NIT	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Instructions to Bidders" as per Annexure-A of NIT	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"General Requirements" as per Annexure-A of NIT	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Scope of specification "PART D:- Equipment Specification" of Annexure-A of NIT(Clause-1)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"References "PART D:- Equipment Specification" of Annexure-A of NIT(Clause-2)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Design criteria" as per "PART D:- Equipment Specification" of Annexure-A of NIT (clause-3)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D- Truck Cab Chassis" as per "Equipment Specification" of Annexure-A of NIT (clause 4.1)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D- General Treatment of all Metals" as per "Equipment Specification" of Annexure-A of NIT (clause-4.2)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D - Tank Details" as per "Equipment Specification" of Annexure-A of NIT (clause-4.3)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D- Material construction of Tank" as per "Equipment Specification" of Annexure-A of NIT (Clause-4.4)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D - Venting" as per "Equipment Specification" of Annexure-A of NIT (Clause-4.5)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D - Top filling pipe" as per "Equipment Specification" of Annexure-A of NIT (Clause-4.6)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART E- Tank Gauging arrangement" as per "Equipment Specification" of Annexure-A of NIT (Clause-4.7)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D- Tank overturn protection" as per "Equipment Specification" of Annexure-A of NIT (Clause-4.8)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D- Discharge metering arrangement" as per "Equipment Specification" of Annexure-A of NIT (Clause-4.9)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D - Safety arrangements" as per "Equipment Specification" of Annexure-A of NIT (Clause-4.10)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D - Painting" as per "Equipment Specification" of Annexure-A of NIT (Clause-4.11)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D - Driver's Cabin " as per "Equipment Specification" of Annexure-A of NIT (Clause-4.12)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D- Testing of Tank" as per "Equipment Specification" of Annexure-A of NIT (Clause-4.13)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D Detailed Dimensional Drawing " as per "Equipment Specification" of Annexure-A of NIT (Clause-4.14)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D - Turn key & Licensing " as per "Equipment Specification" of Annexure-A of NIT (Clause-4.15)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		The Chassis will be invoice in our name and shift to party will be BCCL in that invoice and we will deliver the complete Diesel Bowser along with all ownership documents (like Temporary registration, Form 21, 22 & 22A) in the name of BCCL, respective Consignee for permanent registration of vehicle. Permanent registration of 10 KL Diesel Bowser is BCCL scope of job.
				"Technical Specification "PART D - Lighting" as per "Equipment Specification" of Annexure-A of NIT (Clause-4.16)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D - Fire extinguisher system" as per "Equipment Specification" of Annexure-A of NIT (Clause-4.17)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification "PART D - Performance guarantee" and other requirements" as per "Equipment Specification" of Annexure-A of NIT (Clause-5)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		
				"Technical Specification" PART D - Information to be provided by the bidder" as per Annexure-A NIT (details to be uploaded separately in relevant upload section)	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE		

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Supplementary Items, Information and drawing, Erection, Assembly, Commissioning, Performance testing, and Training as per Scope of Supply of Annexure-A	NA	AGREED or DISAGREED	AGREE	AGREE	TRUE	
Do you have MSME status certificate for this item?	NA	YES or NO		YES	TRUE	
Do you have Ancillary status of BCCL certificate for this item?	NA	YES or NO		YES	TRUE	
Specify make and model:	NA	NOT NULL	NOT NULL	Hindustan Technologies Pvt. Ltd. & Diesel Brouser	TRUE	
Specify Offered Quantity	NA	NOT NULL	NOT NULL	five	TRUE	
***TECHNICAL PARAMETER SHEET						
***PLEASE ENTER THE DETAILS AS PER THE INFORMATION AND DOCUMENTS YOU HAVE W.R.T. YOUR OFFERED ITEM/S						
BY TENDER INVITING AUTHORITY						

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Annexure-I
(General Conditions of Contract)

GENERAL TERMS AND CONDITIONS OF SUPPLY OF STORES

1. Definition:

In the interpretation of the Contract and the general and special conditions governing it unless the context otherwise requires:

- i. "Contract" means the invitation of tender, instructions to tenderers, acceptance of tender, particulars and the general and special conditions specified in the acceptance of tender and includes a repeat order which has been accepted and acted upon by the supplier.
- ii. The term "SUPPLIER" shall mean the person, firm or company with whom the contract is placed and shall be deemed to include the supplier in successors (approved by the Purchaser) representatives, heirs, executors, administrators and permitted assignee as the case may be.
- iii. "CONTRACT PRICE" shall mean the sum accepted or the sum calculated in accordance with the price and / or terms accepted by or on behalf of the purchaser.
- iv. The Chairman – cum- Managing Director means Chairman – cum Managing Director of BCCL, Dhanbad
- v. The term DRAWING shall mean the drawings, the plans specified in or annexed to the schedule of specification.
- vi. The term "PURCHASE EXECUTIVE" shall mean the purchaser or purchaser named in the schedule to the tender, his or their successors or assignees.
- vii. The term INSPECTOR shall mean any person nominated by or on behalf of the purchaser to inspect supplies, Stores or works under the contract or his duly authorized agent.
- viii. The term PROGRESS OFFICER shall mean any person nominated by or on behalf of the purchaser to visit supplier's works to ascertain the position of deliveries of stores purchased.
- ix. The term MATERIALS shall mean anything used in the manufacture or fabrication of the stores.
- x. The term PARTICULARS shall mean the following:
 - a. Specification
 - b. Drawing
 - c. Sealed pattern denoting a pattern sealed and signed by the inspector
 - d. Certified or sealed sample denoting a copy of the sealed pattern or sample sealed by the purchaser for guidance of the Inspector.
 - e. Trade pattern denoting a standard of the ISI or other standardizing authority of Bharat Coking Coal Ltd and / or a general standard of the Industry and obtainable in the open market.
 - f. Proprietary make denoting the product of an individual manufacturer
 - g. Any other details governing the construction, manufacturer and or supply as existing in the contract
- xi. STORES means the goods specified in the supply order or schedule which the contractor has agreed to supply under contract.
- xii. The term TEST shall mean such test or tests as are prescribed by the specification or considered necessary by the Inspector or any agency acting under direction of the Inspector.
- xiii. The term SITE shall mean the place or places named in the SUPPLY ORDER or such other place or places at which any work has to be carried out as may be approved by the purchaser.
- xiv. Works denoting the persons shall include any company or association or body of individuals whether incorporated or not.
- xv. WRITING shall include any manuscript, typewritten or printed statement under or over signature or seal as the case may be.
- xvi. UNIT & QUALITY means the unit and quantity specified in the schedule.
- xvii. SUPPLY ORDER or PURCHASE ORDER means an order for supply of stores and includes an order for performance.

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2. The delivery of stores shall be deemed to take place on delivery of the stores in accordance with the terms of the contract after approval of stores by the Inspector to :
 - i. The consignee at his premises or
 - ii. Where so provided the interim consignee at his premises or
 - iii. A carrier or other persons named in the contract an interim consignee for the purpose of transmission to the consignee.
 - iv. The consignee at the destination station in case of contracts stipulated for delivery stores at destination station.
3. Words in the singular include the plural and vice-versa.
4. Words denoting the masculine gender shall be taken to include the feminine gender and work persons, shall include any company or association or body of individuals, whether incorporated or not.
5. Terms and expressions not herein defined shall have the meanings assigned to them in the India Sale of Goods Act 1930 or the Indian Contract, 1872 or the General Clauses Act 1897 and as amended in respect of all the Acts as the case may be.
6. (a) Parties :The Parties to the contract are the supplier and the purchaser named in the schedule or any other specifically mentioned in the contract.
 (b) Address to which communications are to be sent for all purposes of the contract, including arbitration there under, the address of the supplier mentioned in the tender shall be the address to which all communications addressed to the supplier shall be sent, unless the supplier has notified a change by a change by a separate letter containing no other communication and sent by registered post acknowledgement due to the head of the office placing the supply order.
 The supplier shall be solely responsible for the consequence of an omission to notify a change of address in the manner aforesaid. Any communication or notice on behalf of the purchaser in relation to the contract may be issued to the supplier by Purchase Executive and all such communications and notices may be served on the supplier either by registered post or under certificate of posting or by ordinary post or by hand delivery at the option of such executive.
7. i. The price quoted shall be either FOR place or Railway station of dispatch, FOR destination. Delivery free to the consignee, FOB or CIF as specified in the invitation to the tender. All offers from countries other than Purchaser's country shall quote on FOB and CIF basis.
 ii. In all cases the prices quoted must be net per unit shown in the enquiry and must include all packing and delivery where applicable. Refunds on account of returnable packages (if any) are to be separately specified. The price should show separately the Foreign Exchange element and the Rupee element for stores to be imported. Sales Tax shall be shown separately and whether it is State Sales Tax or Central Sales Tax. If no mention is made about Sales Tax, it will be assumed to be included in the price quoted. The prices should be included of Excise, or excise duty should be separately mentioned. In case where price is quoted inclusive of excise duty, the rate of quantum of the same should be separately indicated. In case of contracts providing for free delivery to the consignee, octroi charges shall be included where leviable.
 iii. The price must be stated separately for each item on unit basis.
 iv. When quotations are made for units other than those specified in the enquiry, the relationships should be stated.
 v. The prices quoted must be firm and the offers made must remain open for at least Six months from the date of submitting quotations unless otherwise specified.
 vi. Tender must invariably be submitted along with illustrated literature giving complete and detailed specifications, particulars etc. of the main unit and of the standard accessories to be supplied with the stores.

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- vii. Tender must clearly specify their recommended spare parts that will be supplied along with the main unit and item wise prices of the spares parts, also what are fast moving, medium moving, slow moving and insurance spares and the period up to which they are likely to last.
- viii. Printed terms and conditions of the tendering firms shall not be considered as forming part of their tender. In case the terms and conditions of contract applicable to this invitation to tender are not acceptable to the tendering firms, they should clearly specify deviations there from in their tender.
- ix. Typed quotations should be submitted. Those containing erasures and over-writings are liable to be rejected. Any corrections made in the tenders must be initialled by the tenderers, failing which their tenders will not be considered.
- x. Insurance arrangement will be made as per instructions being issued from time to time by the Materials Management Division of Coal India Limited and / or its subsidiary companies.

- 8. i. Samples of each item, if considered necessary, should be submitted simultaneously by the contractor for inspection by Inspector / Inspectors unless the articles under tender are of considerable bulk in which case separate arrangement will be made for inspection of the articles offered while considering the quotation.
- ii. All samples required for inspection or test shall be supplied by the successful tenderer free of cost.
- iii. All samples must be clearly labelled with the tenderer's name, this offer enquiry number and the last date of opening of tender.

9. a) Subletting and Assignment: The supplier shall not save with the previous consent in writing of the purchaser, sublet, transfer, assign the contract or any part thereof or interest therein or benefit or advantage thereof in a manner whatsoever. Provided nevertheless that any such consent shall not relieve the supplier from any obligation, duty or responsibility under the contract.

b) Change in a Firm:

- i. 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 contract and accept as liabilities incurred by the firm under the contract prior to the date of such undertaking.
- ii. On the death or retirement of any partner of the supplier firm before complete performance of the contract the purchaser may at his option cancel the contract in such case the supplier shall have no claim whatsoever for compensation against the purchase.
- iii. If the contract is not determined as provided in the sub-clause 1.ii above notwithstanding the retirement of a partner from the firm, he shall continue to be liable under the contract for acts of the firm until a copy of the public notice given by him under Section 32 of the Partnership Act has been sent by him to the purchaser by registered post acknowledgement due.

10. (a) Consequence of Breach: Should the supplier or a partner in the supplier firm commit breach of either of the conditions (a) or (b) of this sub-clause, it shall be lawful of the purchaser to cancel the contract and purchase or authorise the purchaser of the stores at the risk and cost of the supplier and in that event the provisions of clause 20 shall as far as applicable shall apply.

(b) The decision of Coal India Ltd. and/or its subsidiary companies as to any matter or thing concerning or arising out of this sub-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 sub-clause contained shall be final and binding on the supplier.

11. Use of raw materials secured with Government assistance:

a. Where any raw material for the execution of the contract is procured with the assistance of CIL and or its subsidiary companies by purchase or under arrangement made or permit, license, quota certificate or release order issued by or on behalf of or under authority or by any officer empowered in that behalf by law, or is

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issued from government stock and where advance payments are made to the supplier to enable him to purchase such raw materials for the execution of the contract, the supplier.

I. Shall hold such material as trustee of Coal India Limited and / or its subsidiary companies.

II. Shall use such material economically and solely for the purpose of the contract.

III. Shall not dispose of the same without the previous permission in writing of the purchaser; and

IV. Shall tender due account of such material and return to the purchaser at such place as the purchaser may direct all surplus or unserviceable material that may be left after the completion of the contract or its termination for any reason whatsoever. On returning such material, the supplier shall be entitled to such price thereof as the purchaser may fix having regard to the condition of such material.

b. Where the contract is terminated due to any default on the part of the supplier, the supplier shall pay all transport charges incurred for returning any material up to such destination as may be determined by CIL and / or its subsidiary companies whose decision shall be final.

c. If the supplier commits breach of any of the conditions in this clause specified, he shall, without prejudice to any other liability, penal or otherwise, be liable to account to CIL and or its subsidiary companies all money, advantages of profits accruing from or which in the usual course would have accrued to him by reasons of such breach.

d. Where the stores manufactured or fabricated by the supplier out of the materials arranged or procured by or on behalf of Coal India Limited and / or its subsidiary companies are rejected the supplier shall, without prejudice to any other right or remedy of the Government, pay to the Government on demand the cost price or market value of all such materials whichever is greater.

12. The tenderers in case of imported items, shall clearly mention in the question that in the event of the supply order being placed with them, they shall arrange for supply within a reasonable period of all necessary maintenance tools and spares parts that may be required from time to time during the normal life of the machines, on a continuous basis and at a price not in excess of the landed cost at their premises plus a stated percentage differential (such a differential should be indicated) and proper servicing of the main unit supplied by them as and when required. In case there is a Rate Contract with the DGS&D supply be made at the RC rates.

13. For orders placed directly on overseas suppliers, the tenderers should separately indicate whether their prices quoted include any commission for the manufacturer's agents in India and the amount of remuneration for the agent included in the quoted price. The Price shall include:

a. The service that will be rendered by them as manufacturer's agent

b. The name and address of agents, if any, in India, and

c. The agency commission or remuneration or freight in case FOR prices are accepted will be paid in Rupees in India

14. On acceptance of the tender, a formal acceptance of tender or supply order will invariably be issued. Advance intimation in writing of acceptance of the tender will be given whenever considered necessary by the said authority. In case advance intimation has been given, the formal acceptance of tender or supply order shall follow in due course, but immediate action towards execution of supply order shall be taken on receipt of the advance intimation.

15. Inspection and Rejection: Generally the stores shall be of the best quality and workmanship and comply with the contract or supply order in all respect. The stores supplied shall be in accordance with specification unless any deviation is authorised and specified in the contract or supply order or any amendment thereof. a) Facilities for Test and Examination: The supplier shall, at his own expenses, afford to the Inspector all responsible facilities and such accommodation as may be necessary for satisfying it, that the stores are being and/or have been manufactured in accordance with particulars. The Inspector shall have full

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and free access at any time during the execution of the contract to the suppliers work for the purpose aforesaid, and he may require the supplier.

b) Cost of Test: The supplier shall provide without any extra charge, all materials, tools, labour and assistance of every kind which the inspector may demand from him for any test, and examination, other than special or independent test, which he shall require to be made on the supplier's premises and the supplier shall bear and pay all costs attendant thereon. If the supplier fails to comply with the conditions aforesaid, the Inspector shall in consultation with the purchaser, be entitled to remove for test and examination all or any of the stores manufactured by the supplier to any premises other than his (suppliers) and in all such cases the supplier bear the cost of transport and/or carrying out such tests elsewhere. A certificate in writing of the Inspector that the supplier has failed to provide the facilities and the means, for test and examination shall be final.

c) Delivery of Stores for Test : The supplier shall also provide and deliver the test free of charge, at such place other than his premises as the Inspector may specify, such materials or stores as he may require.

d) Liability for Costs of Laboratory Test : In the event of rejection of stores or any part thereof by the Inspector in consequence of the sample thereof, which removed to the laboratory or other place of test, being found on test to be not in conformity with the contract or in the event of the failure of the supplier for any reason to deliver the stores passed on test within the stipulated period, the supplier shall, on demand pay to the purchaser all costs incurred in the Inspection and/or test cost of the test shall be assessed at the rate charged by the laboratory to provide persons for similar work.

e) Method of Testing: The Inspector shall have the right to put all the stores or materials forming part of the same or any part thereof to such tests as he may think fit and proper. The supplier shall not be entitled to object on any ground whatsoever to the method of testing adopted by the Inspector.

f) Stores Expended in Test: Unless otherwise provided for in the contract, all stores/materials expended in test will be to suppliers account.

g) Inspector – Final Authority and to Certify Performance

i. The Inspector shall have the power: Before any stores or part thereof are submitted for inspection to certify that they cannot be in accordance with the contract owing to the adoption of any unsatisfactory method of manufacturer.

ii. To reject any stores submitted as not being in accordance with the particulars.

iii. To reject the whole of the instalment tendered for inspection, if after inspection of such portion thereof as he may in his discretion think fit, he satisfied that the same is unsatisfactory; and

iv. To mark the rejected stores with a rejection mark so that they may be easily identified if resubmitted.

(h) Consequence of Rejection : If on the stores being rejected by the Inspector or consignee at the destination, the supplier fails to make satisfactory supplies within the stipulated period of delivery, the purchaser shall be at liberty to

i. Allow the supplier to resubmit the stores, in replacement of those rejected, within a specified time, the suppliers bearing the cost of freight, if any, on such replacement without being entitled to any extra payment on the account; or

ii. Purchase or authorise the purchase of quantity of the stores rejected or so others of a similar description (when stores exactly complying with particulars opinion of the purchase executive which shall be final, readily available) without notice to the supplier's liability as regards the supply of any further instalment due under the contract; or

iii. Cancel the contract and purchase or authorise the purchase of the stores or others of a similar description (when stores exactly complying with particulars are not in the opinion of the purchaser, which shall be final readily available) at the risk and cost of the supplier. In the event of action being taken under sub-clause (ii) above or this sub-clause in the provisions of clause 20 shall apply as far as applicable.

(i) Inspector's Decision as to Rejection Final: The Inspector's decision as regards the rejection shall be final and binding on the supplier.




(j) Where under a contract, the price payable is fixed on FOR station of despatch basis, the supplier shall, if the stores are rejected at destination by the consignee, be liable in addition to other liabilities to reimburse to the purchaser the freight paid by the purchaser.

(k) Notification of Result of Inspection: Unless otherwise provided in the specification or schedule, the examination of the stores will be made as soon as practicable after the same have been submitted for inspection and the result of the examination shall be notified to the supplier.

(l) Marking of Stores: The supplier shall if so required, at his own expense mark or permit the Inspector to mark all the approved stores with a recognised Government or purchaser's mark. The stores which can not be so marked shall, if so required by the Inspector, be packed in suitable package or cases each of which shall be sealed and marked with such mark.

(m) Removal of Rejection

i. Any stores submitted for inspection at a place other than the premises of the supplier and rejected shall be removed by the supplier subject as hereinafter provided within 14 days of the date of receipt of intimation of such rejection. If it is proved that letter containing such intimation is addressed and posted to him at the address mentioned in the schedule, it will be deemed to have been served on the supplier at the time when such letter would in the course of ordinary post reach the supplier. It shall be competent for the Inspector to call upon the supplier to remove what he considers to be dangerous, infected or perishable stores within 48 hours of the receipt of such intimation.

ii. Such rejected stores shall under all circumstances lie at the risk of the supplier for the moment such rejection and if such stores are not removed by the supplier within the period aforementioned, the Inspector/Purchaser may either return the same to the supplier at his risk and cost a public tariff rate by such mode of transport as the purchaser or Inspector may select, or dispose of such stores at the supplier's risk on his account and retain in such portion of the proceeds as may be necessary to cover any expense incurred in connection with such disposal. The purchaser shall also be entitled to recover handling and storage charges for the period during which the rejected stores are not removed.

(n) Inspection Notes: On the stores being found acceptable by the Inspector, he shall furnish the supplier with necessary copies of inspection note duly completed, for being attached to the supplier's bill thereof.

16. Packing and Transport

(a) It shall be the responsibility of the successful tenderers to arrange for the stores being sufficiently and properly packed for transport by Rail, Road or Sea as the case may be so as to their being free from loss or injury on arrival at destination. The packing of the stores shall be done at the expense of the successful tenderer.

(b) The successful tenderer is responsible for obtaining a clear receipt from the transport authorities specifying the goods despatched. He will not book any consignment on a "said to contain" basis. If he does so, he does it on his own responsibility. Bharat Coking coal Ltd shall pay for only such stores as are actually received by them in accordance with the contract.

(c) All packing cases, containers, packing and other similar materials shall be supplied free by the successful tenderer and shall not be returned unless otherwise specified in the contract/supply order.

(d) Packages must be so marked that identification is made easy. Packages will be stamped with identification marks both outside the packages as well as on the contents inside. Packages containing articles liable to be broken by rough handling like glass or machinery made of cast iron will be marked with cautionary words like 'Fragile', 'Handle with care'. Weight of each package will be marked on the package.

(e) A complete list of contents in each package called the packing list will be prepared and one copy will be packed in the package itself and another copy will be forwarded to the consignee in advance.

17. Delivery: The time for and the date of delivery of the stores stipulated in the 'Purchase Order' shall be deemed to be the essence of the contract and delivery of the stores must be completed by the date specified.

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18. If the execution of the contract / supply order is delayed beyond the period stipulated in the contract / supply order as a result of outbreak of hostilities, declaration of any embargo or blockage, or fire, flood, acts of nature or any other contingency beyond the suppliers' control due to act of God then CIL or its subsidiary Companies 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 the CIL and its subsidiary companies, the contract / supply order shall be read and understood as if it had contained from its inception the delivery date as extended.

19. The supplier shall allow reasonable facilities and free access to his works and records to the Inspector, Progress Officer or such other Officer nominated for the purpose. Inspector of stores, i.e. supplies made by the successful tenderer against the supply order mentioned at (15) above, shall be carried out by the Inspector / Consignee at the Colliery site/ stores or by the Inspecting Wing (inclusive of all its branch officer) of the DGS&D, New Delhi or any other agency as may be specified in the supply order. Where necessary, inspection may be carried out at the supplier's premises.

20. Coal India Ltd and / or its subsidiary companies do not bind itself to accept the lowest or any tender and reserves to itself the right of accepting the whole or any part of the tender or portion of the quantity offered and the tenderer shall supply the same at the rate quoted.

21. The supplier shall at all times indemnify CIL and its subsidiary companies against all claims which may be made in respect of the supplies for infringement of any right protected by patent, Registration of Design, or Trade Mark, provided that in the event of any claim in respect of alleged breach of Letter Patent, Registered Design, or Trade Mark being made against CIL and / or its subsidiary companies, the said authority shall notify the supplier of the same and the supplier shall be at liberty at his own expense to settle any dispute or to conduct any litigation that may rise there from

22. Carrying vessels for Imported Items: In case of machinery imported from abroad, it is preferable that shipment should be affected in Indian Vessels, wherever possible. Supplies will however not be delayed on this account.

23. **Freight:** The stores shall be dispatched at Public tariff rates in the case of FOR station of dispatch contract and the stores shall be booked at full wagon rates whenever available and by the most economical route or by the most economical tariff available at the time of dispatch as the case may be. Failure to do so will render the supplier liable for any avoidable expenditure causes to the purchaser. Where alternative routes exist, CIL and or its subsidiary companies shall, if called upon also to do indicate the most economical route available or name the authority whose advice in the matter should be taken and acted upon. If any advice of any such authority is sought his decision or advice in the matter shall be final and binding on the supplier.

24. **Passing of Property:** Property in the stores shall not pass to the purchaser unless and until the stores have been delivered to the consignee or interim consignee as the case may be in terms of the contract.

25. Laws Governing the Contract.

(a) This contract shall be governed by the Laws of India for the time being in force.

(b) Irrespective of the place of delivery, the place of performance of place of payment under the contract, the contract shall be deemed to have been made at the place from which the acceptance of tender or supply order has been issued.

(c) **Jurisdiction of Courts:** The courts of the place from the acceptance of tender has been issued shall alone have Jurisdiction to decide any dispute arising out of or in respect of the contract.




(d) Marking of Stores: The marking of the stores must comply with the requirement of the law relating to merchandise marks for the time being in force in India.

26. Corrupt Practices:

(a) The supplier shall not offer or give or agree to give to any person in the employment of the purchaser or working under the orders of Coal India Ltd. and/or its subsidiary companies any gift or consideration of any kind as an inducement or reward for going or forbearing to do or for having done or forborne to do any act in relating to the obtaining or execution of the contract or any other contract with the purchaser or for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other with the Purchaser. Any breach of the aforesaid condition by the supplier or any one employed by him or acting on his behalf (whether with or without the knowledge of the supplier) or the Commission of any offence by the supplier or by any one employed by him or acting on the behalf under Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1947 and any amendments thereto or any other Act enacted for the prevention of corruption by Public Servants shall entitle Coal India Limited and or its subsidiary companies to cancel the contract and all or any other contract with the supplier and to recover from the supplier the amount of any loss arising from such cancellation in accordance with the provisions of Clause 20.

(b) Any dispute or difference in respect of either the interpretation effect or application of the above condition or of the amount recoverable, the re-under by the purchaser from the supplier shall be decided by Coal India Limited and its subsidiary companies whose decision shall be final and binding on the supplier.

27. Insolvency and Breach of Contract

a) Coal India Limited and or its subsidiary companies may at any time by notice in writing, similarly determine the contract without compensation to the supplier in any of the following events that is to say – If the supplier being an individual or if a firm any partner thereof shall at any time be adjudged insolvent or shall have a receiving order or order of administration of his estate made against him or shall take any proceeding for composition under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or enter into any arrangements or composition with his creditors or suspend payment or if the firm be dissolved under the Partnership Act.

b) If the supplier being a company is wound up voluntarily by the order of a court or a receiver, Liquidating Manager on behalf of the Debenture-Holders is appointed or circumstances shall have arisen which entitles the court or Debenture-Holders to appoint a Receiver, Liquidator or Manager.

c) If the supplier commits any breach of the contract not herein specifically provided for – Provided always that such determination shall not prejudice any right of action or remedy which shall have accrued or shall accrue thereafter to the purchaser and provided also the supplier shall be liable to pay to the purchaser for any extra expenditure he is thereby put to and the supplier shall under no circumstances be entitled to any gain on repurchase.

28. Progress Report

a) The supplier shall from time to time render such reports concerning the progress of the contract and or supply of the stores in such form as may be required.

b) The submission, receipt and acceptance of such reports shall not prejudice the right of the purchaser under the contract, nor shall operate an estoppel against the purchaser merely by reason of the fact that he has not taken notice of or objected to any information contained in such report.

29. All disputes arising out of this contract shall be under the jurisdiction of Dhanbad /Jharkhand Court only and as per the “Law of the Land”.

Annexure-J
(Bank Details for Electronic Payment)

Annexure-A4
Mandate Form for Electronic Fund Transfer / Internet Banking Payment
(Please fill in the information in CAPITAL LETTERS, Please TICK wherever it is applicable)

1	VENDOR / SUPPLIER / CONTRACTOR / CUSTOMER'S NAME & ADDRESS: (With Telephone No. & Fax No.)	Hinduvethan Technologies Pvt. Ltd. Sriwarpuri, Nimpur, Jagatpur, Cuttack-751021 Ph: 0671-2411348, Fax No.- 0671-2490348
2	PARTICULARS OF BANK ACCOUNT:	
	A. BANK NAME:	AXIS Bank Ltd.
	B. BRANCH NAME: (Including RTGS Code)	Jagatpur, UTI 30000859
	ADDRESS:	Jagatpur, Kendrapara Road, Cuttack-754021
	C. 9-DIGIT CODE NUMBER OF THE BANK & BRANCH (As appearing on MICR Cheque issued on the Bank) Or 5-DIGIT Code Number of SBI	753211004
	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)	917030028740418
3	DATE OF EFFECT:	11-02-2020

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold the user institution responsible. I have read the option invitation letter and agree to discharge responsibility expected of me as a participant under the scheme. Any bank charges levied by the bank of such e-transfer shall be borne by us.

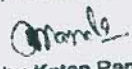
Date: 11-02-2020


Signature of the Customer
Vendor / Supplier / Contractor


Signature of the Authorized
Officials from the Bank


Certified that the particulars furnished above are correct as per our records.


For AXIS BANK LIMITED
Jagatpur Branch, Cuttack


Bibhu Ketan Panda
Sr. Manager & Operation Head
S.S.No-8813, Emp ID-54145









Annexure-K
Security Deposit Bank Guarantee Proforma

.....(Name & address of the Purchaser)
.....Company)

Re: Bank Guarantee in respect of Agreement dated.....Day of.....20...between .(Name Of Purchaser Company) and (Name of Supplier Company)

Messers.....acompany/Firm having its office at No.
.....herein after called the Contractor as entered in
to the said agreement dated.....(herein after called 'the said
agreement') with..... (Name of the Purchaser Company) hereinafter
called (the company) to supply.....stores/materials amounting
to Rs.
.....on the terms and conditions contained in the said agreement.

It has been agreed that(.... percent) payment of the value
of the stores/materials will be made to the Contractor in terms of the said agreement on the
contractors furnishing to the company a bank guarantee for the sum of
Rs.
.....
as
security for due repayment of the said sum in terms of the said agreement, and also interest
as therein provided.

The..... (Name of the Bank) having its office at.....has at
the request of the Contractor agreed to give the guarantee as herein after contained.

We.....(Name of the Bank)(hereinafter called' the Bank) do here by
unconditionally agree with the Company that if the Contractor shall in anyway fail to
observe or perform the terms and conditions of the said agreement regarding repayment of
the said sum of Rs.....or any of them including the term for payment of interest
for

Delay in deliveries or shall commit any breach of its obligations there under, the Bank shall
on demand and without any objection or demur pay to the Company the said sum of
Rs...

.....
or
such portion as shall then remain unpaid with interest without requiring the company to
have recourse to any legal remedy that may be available to it to compel the Bank to pay the
same, or calling on the company to compel such payment by the contractor.

Any such demand shall be conclusive as regards the liability of the Contractor to the
Company and as regards the amount payable by the Bank under this guarantee. The Bank
shall not be entitled to withhold payment on the ground that the contractor 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 the Company and the contractor regarding the
claim.

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We, the Bank further agree that the guarantee shall come into force from the date hereof and shall remain in full force and effect till the period that will be taken for the performance of the said agreement which is likely to be the.....day of but if the period of agreement is extended either pursuant to the provisions in the said agreement or by mutual agreement between the contractor and the Company the Bank shall renew the period of the guarantee failing which it shall pay to the Company the said sum of Rs , or such lesser amount out of the said sum of Rs as maybe due to the Company and as The Company may demand. This guarantee shall remain in force until the dues of the Company in respect of the said sum of Rs..... and interest are fully satisfied and the company certifies that the agreement regarding re-payment of the said sum of Rs.....has been fully carried out by the contractor and discharges the guarantee.

The Bank further agrees with the Company that the Company shall have the fullest liberty without the consent of the Bank and without affecting in any way the obligation share under to vary any of the terms and conditions of the said agreement or to extend the time for performance of the said agreement from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the contractor and to forbear to enforce any of the terms and conditions relating to the said agreement and the Bank shall not be relieved from its liability by reason of such failure or extension being granted to the contractor or through any forbearance, act or omission on the part of the Company or any indulgence by the Company to the contractor or any other matter or thing whatsoever which under the law relating to sureties would but for this provisions have the effect of relieving or discharging the Guarantor.



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 the Company the said sum of Rs..... or such lesser sum as may then be due to the Company out of the said advance of Rs..... and as the Company may require.

Notwithstanding anything herein contained the liability of the Bank under this guarantee is restricted to Rs.....only. The guarantee shall remain in force till the..... Day of and unless the guarantee is renewed or a claim is preferred against the

Bank within 3 months from the said date all rights of the company under this guarantee shall cease and the Bank shall be released and discharged from all liability hereunder except as provided in the preceding clause.

The Bank has under its constitution power to give this guarantee and..... (Name of the person) who has signed it on behalf of the Bank has authority to do so.

Dated this.....day of20.....
Place..... Signature of the authorized person
For and on behalf of the Bank.

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Annexure-L
Performance Bank Guarantee Proforma

..... (Name & address of the Purchaser)
..... Company)

Re : Bank Guarantee in respect of Agreement dated Day
of.....20...between.... (Name of Purchaser Company) and.....(Name
of Supplier Company)

Messrs.....acompany/Firm having its office
at No.hereinafter called the Contractor
has entered into the said agreement dated... (here in after
called 'the said agreement')..... with
.....(Name of the Purchaser Company) hereinafter
..... called (the
..... company) to
..... supply
..... stores/ materials
amounting to Rs.on the terms and conditions contained in the said
agreement.

It has been agreed that(.....percent) payment of the
value of the stores /materials will be made to the Contractor in terms of the said
agreement on the contractors furnishing to the company a bank guarantee for the sum
of Rs.....as security for due repayment of the said sum in terms of
the said agreement, and also interest as therein provided.

The.....(Name of the Bank) having its office at.....
Has at the request of the Contractor agreed to give the guarantee as herein after contained.

We..... (Name of the Bank)(herein after called' the Bank) do
Hereby unconditionally agree with the Company that if the Contractor shall in any way
fail to observe or perform the terms and conditions of the said agreement regarding
repayment of the said sum of Rsor any of them including the term for
payment of interest for delay in deliveries or shall commit any breach of its obligations
there under, the Bank shall on demand and without any objection or demur pay to the
Company the said sum of Rs.....or such portion as shall then remain unpaid
with interest without requiring the company to have recourse to any legal remedy that may
be available to it to compel the Bank to pay the same, or calling on the company to compel
such payment by the contractor.

Any such demand shall be conclusive as regards the liability of the Contractor to the
Company and as regards the amount payable by the Bank under this guarantee. The Bank
shall not be entitled to withhold payment on the ground that the contractor 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 the Company and the contractor
regarding the claim.

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We, the Bank- further agree that the guarantee shall come into force from the date hereof and shall remain in full force and effect till the period that will be taken for the performance of the said agreement which is likely to be the.....day of...

but if

The period of agreement is extended either pursuant to the provisions in the said agreement or by mutual agreement between the contractor and the Company the Bank shall renew the period of the guarantee failing which it shall pay to the Company the said sum of Rs....., or such lesser amount out of the said sum of Rs... as may be due to the Company and as the Company may demand. This guarantee shall remain in force until the dues of the Company in respect of the said sum of Rs...

..... and interest are fully satisfied and the company certifies that the agreement regarding repayment of the said sum of Rs.....has been fully carried out by the contractor and discharges the guarantee.

The Bank further agrees with the Company that the Company shall have the fullest liberty without the consent of the Bank and without affecting in any way the obligations hereunder to vary any of the terms and conditions of the said agreement or to extend the time for performance of the said agreement from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the contractor and to forbear to enforce any of the terms and conditions relating to the said agreement and the Bank shall not be relieved from its liability by reason of such failure or extension being granted to the contractor or through any forbearance, act or omission on the part of the Company or any indulgence by the Company to the contractor or any other matter or thing whatsoever which under the law relating to sureties would but for this provisions have the effect of relieving or discharging the Guarantor.

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 the Company the said sum of Rs.....or such lesser sum as may then be due to the Company out of the said advance of Rs..and as the Company may require.

Notwithstanding anything herein contained the liability of the Bank under this guarantee is restricted to Rs.....only. The guarantee shall remain in force till the.....day of.....and unless the guarantee is renewed or a claim is preferred against the Bank within 3 months from the said date all rights of the company under this guarantee shall cease and the Bank shall be released and discharged from all liability hereunder except as provided in the preceding clause.

The Bank has under its constitution power to give this guarantee and (Name of the person) who has signed it on behalf of the Bank has authority to do so.

Dated this.....day of20.....
Place.....Signature of the authorized person

For and on behalf of the Bank.

