

**THE WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED**  
(A Govt. of West Bengal Enterprise)  
Bakreswar Thermal Power Project  
P.O.Bk.T.P.P , Dist -Birbhum,Pin -731104

**NIT No.: WBPDC/ Tend-Adv/CC/14-15/202/BkTPP Date:07.02.2015**

**SUB** : TENDER DOCUMENT FOR PROCUREMENT OF Grinding Elements 08( Sets)  
for 10E10 Coal Mill at BkTPP

P.R. No. BKSR: PUR-III/13-14/14414

Date :01/11/14

Sealed tenders in two parts, Part A (for techno- commercial specification bid) and Part B (for price bid) in duplicate are invited by the General Manager, BkTPP from manufacturer or Supplier to the original manufacturer of Grinding Elements 08( Eight) sets for 10E 10 Coal Mill. Materials specifications for the supply of following material at BkTPP:

<u>Sl.No.</u>	<u>Material Code</u>	<u>Description of Material</u>	<u>Quantity</u>
a)	00C060087	<b>Grinding Ball Of 10E10 Coal Mill Size 00-0770 To 774 (1Set=10Balls), Indigenous, Material : 3.5% Chrome Alloy steel Mechanical Properties :Hardness : 425+/-25 BHN. Chemical Composition : 0.69-0.72 %C , 0.44-0.47 %Si ,0.68-0.71%Mn , 0.03-0.036 %S 0.025-0.027 %P ,3.25-3.5 %Cr, 0.29-0.33 %Ni , 1.35-1.60%Mo Rest:- Fe. , Weight:-1.45-1.50 MT/Ball , Ball OD :770-774mm, Thickness:- 125mm.Materials are to be properly Heat treated to achieve said guaranteed life.</b>	<b>08 SETS</b>
b)	00C060090	<b>Top Grinding Ring Of Coal Mill, Indigenous, Material :High Chrome white cast iron Mechanical Properties: Hardness : 600-650 BHN. Chemical Composition : 2.0-2.8 %C , 0.0.69-1.0 %Si , 0.80-1.5 % Mn , 0.033-0.06 %S, 0.033-0.06 %P ,18.0-22.0 %Cr, 0.35-1.0 %Ni , 0.5-2.0%Mo,Rest:-Fe. Weight:-7.0-7.3 MT/Ring , Initial Depth of Ring- 105 mm. Materials are to be properly heat treated to achieve said guaranteed life.</b>	<b>08 NOS</b>

- c) 00C060091 **Bottom Grinding Ring Of Coal Mill, 08 NOS**  
**Indigenous, Material : High Chrome white cast iron Outer Band (dimension 25 mm thick x100 mm width ) is required to be shrink fitted with Bottom Grinding Ring for fixing of Rotary Throat. Mechanical Properties: Hardness : 600-650 BHN.**  
**Chemical Composition :**  
**2.0-2.8 %C , 0.0.69-1.0 %Si ,0.80-1.5 % Mn , 0.033-0.06 %S, 0.033-0.06 %P ,18.0-22.0 %Cr, 0.35-1.0 %Ni , 0.5-2.0%Mo, Rest:- Fe.**  
**Weight:-4.8-5.2 MT/Ring**  
**Initial Depth of Ring- 100 mm. Materials are to be properly heat treated to achieve said guaranteed life.**
- d) 00C060092 **Fill in Grinding Ball for 10E10 Coal Mill 08 NOS**  
**Size 00699 mm to 702 mm, Indigenous, Material : 3.5% Chrome Alloy steel Mechanical Properties: Hardness : 425+/-25 BHN. Chemical Composition :**  
**0.69-0.72 %C , 0.44-0.47 %Si ,0.68-0.71%Mn , 0.03-0.036 %S, 0.025-0.027 %P ,3.25-3.5 %Cr, 0.29-0.33 %Ni ,1.35-1.60%Mo,Rest:-Fe. ,**  
**Weight:- 0.90-1.0 MT/Ball Ball OD :699-702mm, ID:-520mm. Materials are to be properly heat treated to achieve said guaranteed life.**
- e) 00C060897 **Grinding Ball Of 10E10 Coal Mill, 08 SETS**  
**Size : 770 To 774 mm (1Set=10Balls), Indigenous, Material: High Chrome (V-20), Ball OD: 770-774 mm., ID: 520 mm.,**  
**Chemical Composition:**  
**C-2.6-2.8%, Mn-2% max.,Cr-18-22%,Si-1% max, Ni-1 max%,Mo- 2% max,S-0.04-0.05%,p-0.04-0.05%.**  
**Hardness-500-550 BHN, Material should be properly heat treated to achieve said guaranteed life.**
- f) 00C060898 **Top Grinding Ring Of Coal Mill, Indigenous, 08 NOS**  
**Material: Hi-Chrome (V-20)**  
**Chemical Composition:**  
**C-2.6-2.8%, Mn-2% max.,Cr-18-22%,Si-1% max ,Ni-1 max%,Mo-2% max,S-0.04-0.05%,p-0.04-0.05%.**  
**Hardness-550-650 BHN, Initial depth of ring-105 mm, Material should be properly heat treated to achieve said guaranteed life.**

- g) 00C060899      **Bottom Grinding Ring Of Coal Mill, Indigenous, 08 NOS**  
**Material: Hi-Chrome (V-20)**  
**Chemical Composition:**  
C-2.6-2.8%, Mn-2% max.,Cr-18-22%,Si-1% max,  
Ni-1 max%,Mo-2% max,S-0.04-0.05%,p-0.04-0.05%.  
Hardness-550-650 BHN, Initial depth of ring-100 mm,  
Material should be properly heat treated to achieve said  
guaranteed life. M. S. Band(dimension 25 mm thickx100 mm width)  
is required to be shrink fitted with bottom grinding ring for  
fixing of rotary throat.
- h) 00C060900      **Fill In Grinding Ball For 10E 10 Coal Mill,                      08 NOS**  
**Size : 699mm To 702mm, Indigenous,**  
**Material: High Chrome (V-20)**  
**Chemical Composition:**  
C-2.6-2.8%, Mn-2% max.,Cr-18-22%,Si-1% max,  
Ni-1 max%,Mo-2% max,S-0.04-0.05%,p-0.04-0.05%.  
Hardness-500-550 BHN, Material should be properly  
heat treated to achieve said guaranteed life.

1. WBPDCCL reserves the right to split up any or all tender(s) if necessary  
Without assigning any reason(s) to the participating vendors whatsoever.
2. Earnest Money: Bank Guarantee/                      : Rs. 13,50,000/-  
Demand Draft
3. Cost of Tender Paper    : Rs. 500/-
4. Sale of Tender Paper    : 09.02.2015 to 20.02.2015
5. Last Date of submission of                                      : 11.03.2015 at 03:00 PM  
Sealed Tender Paper
6. Opening date of Tender  
i) Part - A (for technical bid)                                      : 11.03.2015 at 03:00 PM  
ii) Part - B (for price bid)    : Opening date will be intimated to the  
Successful i.e technically accepted  
Bidders later on.
7. Delivery Period    : 1st G.E. Set will have to be delivered  
within 03 months after receipt of the FIRM order and thereafter, other sets will  
be dispatched in each successive month (within 30 days each)

**Qualifying Requirement :**

- i) **Guaranteed Life of supplied G.E. set must be 8000 Hrs. NIT has been raised considering both type of item specification, namely (A) &(B). Type (A) specification consists of item under item code No: 00C060087,00C060090, 00C060091 & 00C060092. Type (B) specification consists of item under item code No:00C060897, 00C060898, 00C060899 & 00C060900. Material procurement may be done either (A) type specification or (B) type specification.**

**Combination of few items from (A) type and few items from (B) type will not be accepted**

**ii) Delivery Schedule: 1<sup>st</sup> G.E set will have to be delivered within 03 months after receipt of FIRM order & thereafter one set in each successive month( within 30 days each)**

**iii) Materials are to be guaranteed for 8000 running hours. In case of failure of Ring and /or Ball prior to achieving 4000 running hours, free replacement of the failed item shall be made .In case of failure between 4001-7999 running hours, the following percentage of the set value will be refunded :-**

- a) 4001 - 5000 running hours - 35%.**
- b) 5001 - 6000 running hours - 20%.**
- c) 6001 - 7000 running hours - 15%.**
- d) 7001 - 7999 running hours - 10%.**

**In case of any Crack found in Bottom Grinding ring /Top grinding ring during Mill internal checking before completion of 8000 running hours,5% deduction from set value will be made as Penalty even if the Mill can be run up to guaranteed period with the Crack. Please note that these 5% deduction is exclusive from above mentioned running hours guarantee deductions. .**

**iv) All test certificates & dimensional certificates of Grinding elements are to be submitted with the dispatch documents with a copy to Sr. Mgr.(B/M).Ball No., Ball outer dia., thickness & Ball weight must be painted/embossed in each ball & the same should also be mentioned in dimensional & Test certificates clearly. Top & Bottom grinding element Casting No. should be painted/embossed in each Grinding Element & the same should also be mentioned in dimensional & Test certificates clearly.**

**v) During delivery to BK.T.P.P. Store, Bottom ring Grinding Track must be Upper side & Top ring grinding track must be in Lower side.**

**vi) Proper seating of Outer band in Bottom ring with proper hole position to fix rotary throat segment must be ensured. Outer band Top surface should be at same level as that of the Bottom ring Outer surface. Uniformity of Outer band top surface should be maintained properly.**

**vii) Grinding ball to ball weight variation should be maintained within +/- 25 kg (total 50 kg) with respect to average actual weight of balls in a set.**

**viii) Inspection will be done by the representative of the Sr .Mgr (MM-B) at BkTPP Store after effecting delivery.**

**ix) Transit Insurance is to be arranged by the party and relevant charges at actual will be reimbursed by WBPDC.**

**x) All BGs must be on any only Nationalized Bank in the prescribed format**

**xi) Only manufacturers with proven prior experience in supplying above size grinding rings & balls for such applications are allowed to bid for the above critical items.**

**xii) No manufacturing drawings will be provided to the bidder.**

**xiii) Grinding elements set (all four items) must be supplied by a single vendor irrespective of individual items price.**

**xiv) In case offer/s are found acceptable, the facilities available shall have to be approved by our quality/technical wing, and WBPDC- BkTPP reserves the right to accept /reject any/all offer/s without assigning any reason.**

**xv) Price will be quoted against Supply of 1 new Set of G.E (1 set of Grinding Element comprising of 1 no. top ring & 1 no. bottom ring and 10 nos standard size balls & 1 no Fill- in ball)**

**i) with 1 set of used G.E. will be supplied (buy-back) to the vendor by BkTPP.**

**ii) without buy back of GE set.**

**Transportation of used G.E. Set on the party's scope but loading at BkTPP to the transporter will be made by WBPDC**

**xvi) There may be a provision for repeat order of 50% of the total ordered quantity from the supplier with the same price & terms & conditions**

**xvii) The agencies should include the following documents in their quotation while submitting the offer:**

- a) Valid I.T. & S.T., Service Tax Registration, Professional Tax Clearance Certificates, Provident Fund A/C No, etc.**
- b) Credential of "similar item(s)" supplied directly under a Government/Quasi Government Organization/Private Company during period of any three year within last seven years reckoning from 31.12.2014**
- c) "Similar item(s)" means 'Supply of GE set(s) for 10E10 Coal Mill' with specifications detailed elsewhere in the Tender Document**

**xviii) The value of Order executed for similar type of items as mentioned above, completed by agency should be as follows:**

- a) In a single order of value not less than Rs 528 lakhs.**

**OR**

- b) In two orders each of value not less than Rs 330 lakhs**

**OR**

- c) In three orders each of value not less than Rs 264 lakhs**

- xviii) Average Annual Financial Turnover in last 3 financial years, (viz. 2012-13, 2013-14 & 2014-15) should be at least Rs. 200 lakhs. Also Average net worth in last three financial years should be positive. Audited balance sheet should be provided for last three financial years.**
- xxiv) The bidder shall have to be acquainted with all possible hazards associated with the supply of items and shall equip themselves accordingly beforehand. All tenderers are hereby cautioned that conditional offers or deviation from the conditions of contract or other requirements stipulated in these tender documents shall be rejected as non-responsive and shall not be considered further in tender evaluation**
- xxv) The entire offer to be submitted by the tenderer should be unconditional. Any information, assumption, statement having a direct or indirect relation/ correspondence with the quoted rates shall be treated as a condition and as such a deviation from the tender norms stipulated in the tender documents. Bidders are therefore requested to thoroughly scrutinize the entire tender document and seek clarifications if required before submission of tender. The Quoted rate, after award of contract, shall remain firm.**

Detailed terms & conditions are set forth in the Tender Paper (Non - Transferable) which can be obtained from the Sr. Manager(S&P), BkTPP on application and on production of Sales Tax / VAT Registration Number, PT Registration Certificates and Credential of successful completion of similar nature of supply along with the cost of Tender Paper to be deposited in the Account Section, BkTPP from 10.30 AM to 01.30 PM (except Saturday, Sunday and Holiday). Tender Paper will not be issued against DD / MO / Cheque and by post. If any change or extension of due date or any corrigendum, may please visit website. The WBPDCCL reserves the right to accept or to reject any or all tender either in full or in part or to split up, if necessary without assigning any reasons whatsoever. The WBPDCCL does not bind itself to accept the lowest tender and qualification of tenderer will be adjudged as per sole discretion of WBPDCCL authority. The validity of tender will remain effective for 6 (six) months from the date of opening of Price Bid of tender. All other details are available in the tender document. For qualifying requirements and other details visit website [www.wbpdcl.co.in](http://www.wbpdcl.co.in)

**(KuntalSarkar)**  
**Sr.Manager(S&P)**

