

ISO 9001:2000 &14001:2004 NAVARATNA COMPANY

1. Annexure –I Qualifying criteria

3. Annexure –III Details of vendor.

2. Annexure -II Specifications of Silica Sand

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MATERIAL MANAGEMENT (PURCHASE) °Éï]ÍLÉ (ÉÉE) (KODÍD (ÉÉT) (ÉÉTÉÉ) (ÉÉTÉÉE) ID

CENTRAL FOUNDRY FORGE PLANT, BHARAT HEAVY ELECTRICALS LTD **(fff*)*, cff*uf** (fff*if) - 249403

RANIPUR, HARIDWAR (INDIA) - 249403

Phone No.+91-1334-284548,FAX No. +91-1334-225892 e-mail: **s_kumar@bhelhwr.co.in** & manoj26@bhelhwr.co.in

| Ref:MM/SDC/EOI/08-09/01 | Dated: 1/2/2008 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| То | |
| | |
| | |
| Dear Sir, | |
| Sub: Expression of interest to supply Different grades of si | lica sand as per Specifications . |
| CFFP/BHEL, Hardwar procures Silica Sand. The list of specifica (Annexure-II). In case any details or clarifications are further rethrough mail ,fax or phone . | |
| Please let us know the items that you firm will be interested in supper Format in Annexure –III | oplying to CFFP by entering details as |
| Replies must be submitted on or before $07/03/2008$. | |
| Please write on envelope containing reply "Expression of Interest Grades and arrange to submit the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the tender Box on or better the same in the | for supply of Silica Sand of Different fore 2.00 PM on 07 th March'2008. |
| Also required are the filled up Vendor Registration Form for new available at our Website www.bhelhwr.co.in and www.bhel.com. | v vendors .All relevant documents are |
| Please note that this is only invitation for expression of interest t price bid & supply of material . | to supply and not a formal Enquiry for |
| Issued without any prejudice & without any commitment at this stag | e. |
| Thanking you. | |
| Yours faithfully | |
| (Sunil Kumar) Sr. Manager (Purchase) | |
| To Refer: (Available at mentioned web sites) | |

ANNEXURE-I

QUALIFYING CRITERIA

- 01 Vendor to submit valid lease deed.
- 02 Vendor to submit mining plan approved by Indian bureau of mines.
- 03 Vendor to submit proof of Royalty and Forest Duty payment.
- 04 Vendor to give undertaking that he has not been black listed anywhere.

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FF06041 Rev 00 क्रय विनिर्देश dl vii s vni संस्थान (सी.एफ.एफ.पी. - हरिद्वार) SIGN & DATE पष्ठ Gd. Salta Page PURCHASE SPECIFICATION (CFFP - HARDWAR) SUPERSEDES INVENTORY NO. WASHED AND DRIED SILICA SAND FOR USE IN FOUNDRY WITH **RESIN BINDERS** CONTROLLSD COFF General Hagel Special 8 This specification governs the quality requirements of washed and dried high silica sand for use The In in foundries. 2. Application Used as raw material in the preparation of moulds and cores particularly for resin bonded sand Heavy Electrical to the interest of the CONFIDENTIAL system (acidic and basic) for steel and cast iron castings. is the property of Bharal is in any way derimentallio 3. Compliance with national standard AND This specification is generally based on IS:1987-2002, "High silica sand for use in Foundries". COPYRIGHT 4. Shape and size 4.1 Washed sand grains shall be mostly sub-angular to round in shape. Į, page 4.2 Sieve analysis: 70% and above retained by three adjacent sieves 425 microns, 300 microns, 212 microns. Fines shall be limited to 4% max on 106 micron, 75 micron and pan. 4.3 Grain fineness number shall be in the range of AFS 40-50. However both lower and upper limit 126 may be extended by 2 points (i.e., AFS 38 & AFS 52) provided Clause No. 4.2 is satisfied. HEER 雪 -प्रदेश 帮 SILE 松田田 Barr 营 49 5. Composition 忭 SYDRAM 智 म्यं अपन्य सन्स्थितरक 5.1 The sand, when analysed in accordance with IS:1917-1992 and IS:1918-1966, shall conform to 15 gedel हित में गोपनीयक the requirements given below: \$29.00 10 0.2% max. Clay Straft * States Silica (SiO₂) 99.0% min. हिंब. स्वत्वाधिकार 5.2 Moisture content in sand not to exceed 0.5%. selfigueer

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TRANSLATED BY

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DATE: 17.04.07

STANDARDS COMMITTEE

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ISSUED : FOUNDRY TECHNOLOGY

WORKED BY

SUPERVISED BY

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FF06041 Rev 00 क्रय विनिर्देश df vii s vni संस्थान (सी.एफ.एफ.पी. - हरिद्वार) SIGN & DATE पुष्ठ G. Salus Page PURCHASE SPECIFICATION (CFFP - HARDWAR) SUPERSEDES INVENTORY NO. WASHED AND DRIED SILICA SAND FOR USE IN FOUNDRY WITH RESIN BINDERS CONTROLLSD COFF General Hogs Hogs 13 This specification governs the quality requirements of washed and dried high silica sand for use The sa in foundries. 2. Application Used as raw material in the preparation of moulds and cores particularly for resin bonded sand Heavy Electrical to the interest of the CONFIDENTIAL system (acidic and basic) for steel and cast iron castings. is the property of Bharal is in any way detrimentallio 3. Compliance with national standard AND This specification is generally based on IS:1987-2002, "High silica sand for use in Foundries". COPYRIGHT Shape and size 4.1 Washed sand grains shall be mostly sub-angular to round in shape. ¥ page 4.2 Sieve analysis: 70% and above retained by three adjacent sieves 425 microns, 300 microns, 212 microns. Fines shall be limited to 4% max on 106 micron, 75 micron and pan. 4.3 Grain fineness number shall be in the range of AFS 40-50. However both lower and upper limit MER may be extended by 2 points (i.e., AFS 38 & AFS 52) provided Clause No. 4.2 is satisfied. HEER 每 -प्रहत्ता 事 SIL 存 改会 Ball ř 47 5. Composition 怀 MUNICIPAL 智 ा एवं अग्रन्थ हानिकारक 5.1 The sand, when analysed in accordance with IS:1917-1992 and IS:1918-1966, shall conform to 15 Section 2 南井 the requirements given below: गोपनीयक इसका 10 0.2% max. Clay Straft * States Silica (SiO₂) 99.0% min. प्यं. स्वत्वाधिकार

5.2 Moisture content in sand not to exceed 0.5%.

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DATE: 17.04.07

STANDARDS COMMITTEE

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ISSUED : FOUNDRY TECHNOLOGY

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| म्बद्धाः | 6.2 10-20T – One composite sample, drawing samples from four places of | the truck. |
| सन्मग्री यूडी सब्या को अधिकमित करण | 6.3 Above 20T – One composite sample, drawing samples from six places | of the truck. |
| Pe el | 7. Acceptance Tests | |
| COPYRIGHT AND CONFIDENTIAL information on this documents is the property of Bharat Heavy Electrical ted It must not be used directly or indirectly in any way detrimental to the interest of the company. | Each consignment shall be accepted on the basis of tests carried out a of sand grains shall be checked on surveillance basis. | s per clauses 4 & 5. Shape |
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| COPYRIGHT The information on this docum Limited it must not be used dire | 8.2 BHEL reserves the right to inspect material at site before desparative prior intimation in such case. The supplier shall enclose a advance of the material offered for inspection. However inspect The supplier shall offer BHEL representative all reasonable test satisfy the latter that the material is being furnished in accordance. | copy of test certificate in ion at BHEL shall be final. facilities without charge to |
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APPROVED : PLANT STANDARDS COMMITTEE
হিলাদ : জার্য দোরজ্বী ইন্দার্লালী

PREPARED : FOUNDRY TECHNOLOGY

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DATE: 17.04,07

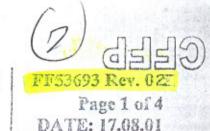
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| SUPERSEDES INVENTORY NO. | 6. Sampling CONTROLLED COPE |
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| संख्या करता | 6.2 10-20T – One composite sample, drawing samples from four places of the truck. |
| सामधी सूधी संख्या को अधिकमित करता | 6.3 Above 20T – One composite sample, drawing samples from six places of the truck. |
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| COPYRIGHT AND CONFIDENTIAL information on this documents is the property of Bazar Heavy Electrical ted it must not be used directly, or indirectly, in any way derrimental to the interest of the company. | 8.1 Sand shall be tested at CFFP, BHEL and will be binding on supplier. If the material received at CFFP is not found in accordance with the requirements, it shall be rejected.8.2 BHEL reserves the right to inspect material at site before despatch. The supplier shall be |
| AL I | given prior intimation in such case. The supplier shall enclose a copy of test certificate in advance of the material offered for inspection. However inspection at BHEL shall be final. The supplier shall offer BHEL representative all reasonable test facilities without charge to satisfy the latter that the material is being furnished in accordance with this specification. |
| गई शुद्धना भारत हेवी फिली भी तरह प्रयोग, जाट । | The supplier shall prepare and provide necessary test specimens for testing to be carried out at his premises. If facilities are not available at his works, the supplier shall make necessary arrangements for carrying out the prescribed tests elsewhere. |
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| etincal al to the | 10.Packing and Marking | | | | | |
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PLANT PURCHASING SPECIFICATION CFFP, BHEL-LARDWAR



HIGH SILICA SAND FOR USE IN FOUNDRIES - UNWASHED

1. General

This specification governs the requirements of unwashed high silica sand for use in foundries.

2. Application

Used as raw material in the preparation of moulds and cores particularly for chemically bonded sands (sodium silicate, oil sand) for steel and cast Iron castings.

3. Compliance with national standard

This specification is generally based on IS:1987-1074, " High silica sand for use in Foundries".

4. Shape and size

.4.1 Unwashed sand grains shall be mostly sub-angular to round in shape.

.4.2 Sieve analysis: 70% and above retained by three adjacent sieves 425 microns, 300 microns, 212 microns. Fines shall be limited to 6% max on 106 micron, 75 micron and pan.

4.3 Grain fineness number shall be AFS 40-50

5. Composition

5.1 The sand, who analysed in accordance with IS:1917-1962, shall conform to the requirements given below:

Clay

0.7% max.

Silica (SiO₂)

98.0% mln.

5.2 Moisture content in sand not to exceed 3.5%.

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| RMI | NK Sahu- | 1 1000 | CHD | AK Chakraborty | 1 18 |
| MPIC | KB Sood | L. hours had | SUP. | N Khan | mil Kin |
| CHAIRMAN CPSC | KK Gupta | Rombie | | VED: CFFP PLANT STA | ANDARDS |
| | | | ** | COMMITT | EE |
| | | | ISSUEL | BY: FOUNDRY TECHN | OLOGY DEPTT. |

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PLANT PURCHASING SPECIFICATION CFFP, BHEL-HARDWAR

Page 2 of 4 DATE: 17.08.01

6. Sampling

6.1 Samples will be drawn as follows:

Upto 10T – one composite sample, drawing samples from two places of the truck.

10-20T - One composite sample, drawing samples from four places of the truck or wagon.

After collecting samples as above, one composite sample will be sent to laboratory for testing by mixing all the samples taken from different trucks/wagons, of a particular supplier, received on a particular day.

7. Acceptance Tests

Each consignment shall be accepted on the basis of tests carried out as per clauses 4 & 5. Shape of sand grains shall be checked on surveillance basis.

8. Inspection, Deviation and Replacement

- 8.1 BHEL reserves the right to inspect the material at site before despatch. The supplier shall intimate BHEL in advance, enclosing a copy of test certificate of the material offered for inspection.
- 8.2 Final tests shall be carried out at BHEL and will be binding on supplier.
- 8.3 If the material received is not found suitable according to the requirements, it shall be replaced free of cost by the supplier.
- 8.4 For any deviation demanded by the supplier from the specification, prior approval of BHEL must be obtained.

9. Test certificates

The supplier shall give three copies of test certificates for each consignment/batch with the following information

(a) BHEL PO Reference

(b) Supplier's name and address

WKD T Dave (1)
CHD AK Chakrabocty / 10
SUP, N Khan 2000 - 10
APPROVED:

CFFP PLANT STANDARDS COMMITTEE

ISSUED BY: FOUNDRY TECHNOLOGY DEPTT.

ANNEXURE-III DETAILS OF VENDOR

SUPPLY CAPACITY (MT) DRIER QTR-I QTR-III QTR-IV QTR-II LOCATION **FREIGHT** TYPE OF SAND / (POINT OF **YEARLY** M/C (NO./CAP TESTING (APRIL TO (JULY TO (JAN TO (TO PAY / (OCT TO **REQUIREMENTS** DESPATCH) CAPACITY/MT **AVAILABLE** ACITY) **FACILITY** JUNE) SEPT) DEC) MARCH) PRE PAID) ANY OTHER **WASHED & DRIED** SAND SPEC.FF06041 **REV.00 WASHED & DRIED** SAND SPEC.FF06042 REV.00 UNWASHED SAND SPEC.FF53696 REV.02

ALL TERMS & CONDITIONS FOR BUSINESS ALONGWITH PRESENT DUTIES AND TAXES APPLICABLE MAY ALSO BE MENTIONED SEPARATELY.

NAMES OF REPUTED CUSTOMERS TO WHOM SUPPLYING AT PRESENT.