



BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. Of India Undertaking)

Power Sector, Eastern Region

2X800 MW DVC Koderma Super Thermal Power Plant

PO – Benjhidi, Distt. – Koderma,

Jharkhand – 825421

NOTICE INVITING TENDER

To,

Dear Sir/Madam,

OFFER IN SINGLE PART BID SYSTEM ARE INVITED FOR THE SUBJECT JOB BY THE UNDERSIGNED ON BEHALF OF BHARAT HEAVY ELECTRICALS LIMITED AS PER THE TENDER DOCUMENT. ISSUE OF TENDER TO ANY BIDDER SHALL NOT CONSTRUCT THAT THE BIDDER IS CONSIDERED TO BE QUALIFIED. FOLLOWING POINTS RELEVANT TO THE TENDER MAY PLEASE BE NOTED AND COMPLIED WITH.

Salient Features of NIT

SL NO	ISSUE	DESCRIPTION	
i	TENDER NUMBER	Ref: PSER: KDM:Bolt:2026:03	Date:05-10-26
ii	Broad Scope of job	Supply of of HSFG SS Fit Bolts & Nuts for Koderma 2 × 800 MW, Phase-II.	
iii	ISSUE OF TENDER DOCUMENTS	Through Email	Applicable
iv	DUE DATE & TIME OF OFFER SUBMISSION	Date: 07-10-26 Time: 1700 Hrs. IST) (Offer to be submitted through e-mail)	Applicable
v	TECHNO-COMMERCIAL BID OPENING OF TENDER	Date: 07-10-26 Time: 1800 Hrs. IST) Place: Koderma Site Office, participating bidders may witness the opening of tender, no separate intimation will be provided	Applicable
vi	Latest updates	-	Shall be intimated to bidder over E-mail
vii	Evaluation currency	INDIAN RUPEES (INR)	

1.0 The offer shall be submitted as per the instructions provided in the tender document. Only one set of tender documents (**through Email only**) signed by authorised company representative of bidder and stamped on each page shall be submitted as detailed further, as given below. Bidders to note specifically that all pages of tender document, including these NIT pages together with subsequent correspondences, if any, for this particular tender shall be submitted by them (after signing/stamping on each page) as a part of their offer. **Price shall be mentioned in the relevant price schedule only. Price/Rates including discounts/rebates, if any, mentioned anywhere/ in any form in the techno-commercial portion of the offer, shall not be entertained.**

2.0 The offer shall be submitted through Email as described below:

OFFER DESCRIPTION	DOCUMENTS TO BE SUBMITTED
TECHNICAL OFFER	1. Scanned copy of Covering letter of offer. 2. Scanned copy of Entire tender documents signed & stamped in each page by authorized representative of the bidder. 3. Copy of Tender change notice (TCN), if applicable. 4. All supporting documents/ Annexures etc. as applicable. 5. No deviation certificate in bidder's letterhead as per format given in Tender. 6. Copy of Documents as applicable in line with TCC & SCC

PRICE BID	Duly filled in Price Schedule (Excel file) as per tender. Excel must be password protected. Password shall be shared with BHEL on date of price-bid opening (shall be intimated later)
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SPECIAL NOTE:

- A) Offer & documents submitted along with the offer shall be signed and stamped in each page by authorised representative of the bidder. No overwriting/correction in tender documents by bidders shall be allowed. However, if correction is unavoidable, the same may be signed by authorized signatory.
- B) All documents / Annexures submitted with the offer shall be properly annexed and placed in respective places of the offer as per enclosure list mentioned in the covering letter. BHEL shall not be responsible for any missing documents.
- 3.0 No deviation with respect to tender clauses and no additional clauses/ suggestions/clarification in Techno-commercial bid/Price bid shall normally be considered by BHEL. Bidders are requested to positively comply with the same. Offers with deviation are liable for rejection.
- 4.0 BHEL reserves the right to accept or reject any or all offer without assigning any reasons thereof. BHEL also reserve the right to cancel the tender wholly or partly without assigning any reason thereof. BHEL also reserve the right to split/part award the job. Also, BHEL shall not entertain any correspondence from bidders in this matter.
- 5.0 You are free to visit the site and study the prevailing site conditions including law & order situation etc. before quoting for this tender.
- 6.0 In case of absence of any queries from bidder(s), their quoted price will be PRESUMED to be final and complete with reference to the tender documents (including Tender change notes (TCNs), clarifications, corrigendum issued by BHEL, if any). Bidders are requested to study the tender documents in detail and prepare their queries/clarifications accordingly. All such queries / clarifications shall be cleared/replied by BHEL. Such clarification letters, corrigendum and/or Tender change notes (TCNs), if issued by BHEL, shall form part of tender document.
- 7.0 In the event of any conflict between requirement of any clause of this specification / documents /drawings /data sheets etc. or requirements of different codes/ standards specified/ contradictions between any two clauses of tender document, the same to be brought to the knowledge of BHEL by bidders in writing for clarification before due date of seeking clarification, otherwise, more stringent requirement as may be interpreted by BHEL shall prevail and shall be binding on you. Any typing error/missing pages/ other clerical errors in the tender documents, noticed by you must be pointed out before submission of offer, or else, BHEL's interpretation shall prevail & binding on you.
- 8.0 Unless specifically mentioned otherwise, bidder's quoted price shall have deemed to be in compliance with tender.
- 9.0 Tender document containing above mentioned volumes shall be signed & stamped in all pages including their covering letter. Price bid shall be furnished in the specified format enclosed with the tender.
- 10.0 The Price Bid will be opened for the subject job on the basis of evaluation of Techno-Commercial bid. BHEL's decision in this regard shall be final & binding.
- 11.0 While BHEL reserve the right to open the price bid of the offers in camera, the date & time to open the Price bid opening shall be intimated to the bidders.
- 12.0 Price Bids shall be evaluated in the manner as prescribed in Price Schedule. However, Unit Rates shall also be furnished if applicable in the Price Schedule.
- 13.0 ***Bid should be free from correction, overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection.***
- 14.0 **Bidders are required to submit their BEST price as per tender Price Schedule format in the form & manner as mentioned in tender.**

- 15.0 Bidders are requested to note that the accepted / agreed tender terms (technical & commercial) in their original offer cannot be altered / withdrawn by their own during the processing of tender.
- 16.0 The Bidder along with its associate/collaborators/sub-contractors/sub-vendors/ consultants/service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.
- 17.0 The offers of the bidders who are on the banned list as also the offer of the bidders, who engages the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.
- l) Integrity commitment, performance of the contract and punitive action thereof:
- a) Commitment by BHEL:
- BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity.
- b) Commitment by Bidder/ Supplier/ Contractor:
- b.i) The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.
- b.ii) The bidder/ supplier/ contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL.
- b.iii) The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL.
- If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage includes in mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal code, 1860 or any other law in force in India, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on www.bhel.com and/ or under applicable legal provisions.
- 18.0 The bidder may have to produce original document for verification if so decided by BHEL.
- 19.0 Suspension of Business dealings with Suppliers/ Contractors: BHEL reserves the right to take action against contractors who fail to perform or indulge in malpractices, by suspending business dealings with them as detailed in **Annexure-IV**.

20.0 Preference to make in India:

“For this procurement, the local content to categorize a supplier as a Class I local supplier / Class II local supplier / Non-local supplier and purchase preference to Class I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 19.07.2024 issued by DPIIT. In case of subsequent orders issued by the nodal ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT”.

Duly filled & signed Form-3 (Format for local content), as applicable, to be submitted by bidders along with their techno-commercial offer.

21.0: - MSE suppliers can avail the intended benefits in respect of the procurements related to the Goods and Services only (Definition of Goods and Services as enumerated by Govt. of India vide Office Memorandum F.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय) POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091 फैक्स/Fax: (033) 23211960 फ़ोन/Phone: बोर्ड/EPABX: 23398220	Page - 3 of 20
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No. 21(8)/2011-MA dtd. 09/11/2016 office of AS & DC, MSME) if they submit along with the offer, attested copies of either Udyam Registration Certificate or EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or Udyog Aadhar Memorandum (UAM) & Acknowledgement or EM II certificate along with attested copy of a CA certificate (Format enclosed at Annexure – B where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer.

Any Bidder falling under MSE category, shall furnish the following details & submit documentary evidence/Govt. Certificate etc. in support of the same along with their techno-commercial offer: -

Type under MSE	SC/ST owned	Women owned	Others (excluding SC/ST & Women Owned)
Micro			
Small			

Note: - If the bidder does not furnish the above in the tender, offer shall be processed construing that the bidder is not falling under MSE category.

22.0 Compliance to Restrictions under Rule 144 (xi) of GFR 2017

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. The Competent Authority for the purpose of this Clause shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Clause means:
 - a. An entity incorporated established or registered in such a country; or
 - b. A subsidiary of an entity incorporated established or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d. An entity whose beneficial owner is situated in such a country; or
 - e. An Indian (or other) agent of such an entity; or
 - f. A natural person who is a citizen of such a country; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The beneficial owner for the purpose of (III) above will be as under:
 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation

 - a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company;
 - b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of the such association or body of individuals;
 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

Note:

- (i) The bidder shall provide undertaking for their compliance to this Clause, in the Format provided in Form-2.
- (ii) Registration of the bidder with Competent Authority should be valid at the time of submission as well as acceptance of the bids.

23.0 The Bidder declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

In case, the Bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/ guidelines.

Bidder shall submit duly filled & signed Annexure-VII along with their techno-commercial offer.

24.0 "A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. **The bidder found to have a conflict of interest shall be disqualified.** A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

- a) they have controlling partner (s) in common; **or**
- b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; **or**
- c) they have the same legal representative/agent for purposes of this bid; **or**
- d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; **or**
- e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid, **or**
- f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:
 1. The principal manufacturer directly or through one Indian agent on his behalf; and
 2. Indian/foreign agent on behalf of only one principal,

or
- g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; **or**

- h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business. "

25.0 Order of Precedence: In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below: -

- i) Amendments/Clarifications/Corrigenda/Errata/Tender change notice (TCN) etc. issued in respect of the tender documents by BHEL
- ii) Notice Inviting Tender (NIT)
- iii) Price Schedule
- iv) Technical Condition Contract (TCC)
- v) Special Conditions of Contract (SCC)
- vi) General Conditions of Contract (GCC)

It may please be noted that guidelines/ circulars/ amendments/ govt. directives issued from time to time shall also be applicable.

for BHARAT HEAVY ELECTRICALS LTD.

Mgr/BHEL Koderma Site

Agency	Contact details: Sh. Debraj Chatterjee/Mgr	
BHEL, KODERMA SITE	Address	M/S BHARAT HEAVY ELECTRICALS LTD. BHEL SITE OFFICE 2x800 MW DVC KODERMA TPS PH II BANJHEDIH, PO : BANJHEDIH, KODERMA, JHARKHAND – 825421.
	Phone no.	9437495615
	E-mail ID	debarj@bhel.in

Enclosures:

- i) ANNEXURE-II: No Deviation Certificate
- ii) ANNEXURE-III: Format for seeking clarification
- iii) ANNEXURE-IV: Suspension of business dealing with Suppliers
- iv) ANNEXURE-V: Declaration for Relation in BHEL.
- v) Other Relevant Format as per this NIT
- vi) TCC & SCC
- vii) Price schedule
- viii) Other Tender documents as per this NIT

NO DEVIATION CERTIFICATE(TO BE SUBMITTED IN BIDDER'S LETTERHEAD)

To,

M/S BHARAT HEAVY ELECTRICALS LTD.
 2x800 MW DVC KODERMA TPS PH II
 BANJHEDIH, PO: BANJHEDIH,
 KODERMA, JHARKHAND – 825421.

Job	Supply of of HSFG SS Fit Bolts & Nuts for Koderma 2 × 800 MW, Phase-II	
Ref	1.0	TENDER : Ref: PSER: KDM:Bolt:2026:03
	2.0	Other references (if any).

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed / modified the tender documents as appeared in the website / issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions and unqualified compliance to technical specification.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorised representative of the contractor)

[illegible]

ANNEXURE-IV

1.0	<u>Suspension of Business dealings with Suppliers/ Contractors</u>
1.1	BHEL reserves the right to take action against Suppliers/ Contractors who fail to perform or indulge in malpractices, by suspending business dealings with them.
1.2	Suspension of business dealings with Suppliers/ Contractors could be in the form of following: a. Debarment within the unit for specific item(s)/ material category(ies)/ type of work(s) for six months. b. Debarment within the unit for all item(s)/ material category(ies)/ type of work(s) for one year. c. Debarment across BHEL for all items/ material category(ies)/ type of work(s) for two years. The Supplier may be debarred, as detailed hereinafter on the basis of one or more of the category wise reasons as enumerated hereunder:
1.2.1	Debarment within the unit for a specific item(s)/ material category(ies)/ type of work(s) shall be imposed for six months in the following cases, if i. In the last three consecutive supplies of a specific material category, average quality rating, as provided in the supplier performance rating (SPR) as per SEARP, falls below 80% of the quality weightage. This is irrespective of supplies against PO(s) having single/ multiple delivery schedules. Note: Not applicable in cases for erection works of Power Sector Regions, where separate guidelines for evaluation of capacity of bidders is being followed. ii. Two consecutive delays, for reasons of delay attributed to the Supplier, in execution of the contracts where delay occurred is such that a. prescribed maximum LD time limits of the contracts is exceeded or b. delay period has equaled/ exceeded half the original delivery period specified in the contracts whichever among the above is earlier. iii. a. Overall SPR (Supplier Performance Rating) in that particular Unit in line with SEARP falls below 60% of the specific material category. b. Bids of contractors (in PS-MSX portal) shall not be considered (if average score of last six months falls 60% or below as per guidelines for evaluation of capacity of bidders formula). Note: – for (b), No specific period of Debarment shall be applicable. iv. a. Supplier works are under strike/ lockout for a period of more than three months. b. Contractor has resorted to wanton stalling of work, strikes, picketing etc. during currency of the contract.

1.2.2	Debarment within the unit for all item(s)/ material category(ies)/ type of work(s) shall be imposed for One year in the following cases, if i. Supplier tampers with tendering procedure affecting ordering process. ii. Supplier has misused BHEL documents/ drawings/ technical information or has breached the confidentiality agreement with BHEL. iii. after placement of order, Supplier fails to execute the contract. iv. within warranty period as per contract, Supplier continues to supply low/ less/ non-performing equipment/ services, repetitive failures, remains non-responsive. v. Wherever any part or full scope of supply/ work/ service has been awarded at the Risk and Cost of the defaulting vendor and the unexecuted value of scope for which the Risk and Cost action taken is more than 5% of the contract value. vi. After price bid opening but before placement of order, Supplier withdraws his offer or varies it in any manner within the validity period. vii. In spite of warnings, the Supplier persistently violates or circumvents the provisions of labour laws/ regulations/ rules or other statutory requirements. viii. Violation of Section 2, read with Section 3 of Integrity Pact, which are not covered in the list of defaults as per guidelines.
1.2.3	Debarment across BHEL shall be imposed for two years in following cases, if i. Supplier has made false declaration and/ or provided false information and/ or forged documents or has forged BHEL documents, certificates etc. for securing business, meeting PQR or for enlistment in BHEL or with other customers. ii. Supplier is found to be involved in cartel formation or in any other act so as to influence the bidding process or influence the price of the tender. iii. The Supplier has indulged in malpractices or misconduct such as bribery, corruption and fraud, pilferage, coercion, etc. iv. The Supplier is found guilty by any court of law for criminal activity/ offences involving moral turpitude in relation to business dealings. v. Supplier is found to have obtained any internal information/ documentation of BHEL by unauthorized means. vi. The foreign Principals along with the representing Agent shall be debarred together if information submitted jointly by them about their precise relationship, commission/ remuneration etc. payable/ receivable and other particulars as asked by BHEL, as per the extant guidelines regarding dealing with Agents of Foreign Suppliers is found false/ incorrect, at any stage. vii. Supplier has, damaged, failed to return free issue materials/tools etc. of BHEL, for which recovery could not be affected against such materials, or substituted free issue materials/ tools etc. of BHEL. viii. Supplier has been declared insolvent or is under dissolution/ insolvency proceedings so as to affect the execution of work. ix. The Supplier has tarnished/ maligned the image of BHEL or unfairly acted in a manner prejudicial to the commercial interest of BHEL or breached the confidentiality of the vital information with an intent to prejudice the interest of BHEL.
1.2.4	A Supplier can also be debarred with the approval of Director (E, R&D) provided a direction to this effect has been received from the administrative ministry of the Government.

Note: Above shall be applicable along with Guidelines for “Suspension of Business dealings with Suppliers/ Contractors” available in BHEL website <http://www.bhel.com>. These shall form part of tender documents.

DECLARATION FOR RELATION IN BHEL

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder failing which the offer of Bidder is liable to be summarily rejected)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: **Declaration for relation in BHEL**

Ref.: 1) NIT/Tender Specification No:

I/We hereby submit the following information pertaining to relation/relatives of Proprietor / Partner(s)/Director(s) employed in BHEL.

Tick (✓) any one as applicable:

1. The Proprietor, Partner(s), Director(s) of our Company/Firm DO NOT have any relation or relatives employed in BHEL

OR

2. The Proprietor, Partner(s), or Director(s) of our Company/Firm HAVE relation/relatives employed in BHEL and their particulars are as below:

(i)

(ii)

Signature of the Authorized Signatory

Note:

1. Attach separate sheet, if necessary.
2. If BHEL Management comes to know at a later date that the information furnished by the Bidder is false, BHEL reserves the right to take suitable against the Bidder/Contractor.

DECLARATION

Date: -----

Job: Supply of of HSFG SS Fit Bolts & Nuts for Koderma 2 × 800 MW, Phase-II.**Tender No.: Ref: PSER: KDM:Bolt:2026:03**

To: -----
 Address: BHEL, -----

 Email: -----

Sub: Details of related firms and their area of activities

Dear Sir/Madam,

Please find below details of firms owned by our family members that are doing business/registered for same item with BHEL, -----(NA, if not applicable)

1	Material Category/ Work Description	
	Name of Firm	
	Address of Firm	
	Nature of Business	
	Name of Family Member	
	Relationship	
2	Material Category/ Work Description	
	Name of Firm	
	Address of Firm	
	Nature of Business	
	Name of Family Member	
	Relationship	
...		

Note: I certify that the above information is true and I agree for penal action from BHEL in case any of the above information furnished is found to be false.

Regards,

(-----)

From: M/s-----
 Supplier Code: -----
 Address: -----

PART – B: GENERAL CONDITIONS OF CONTRACT (GCC)

SL. NO.	BHEL STANDARD TERMS	Bidder's confirmation
1	Requirement is for use at BHEL-PSER's 2X800 MW DVC Koderma TPS PH – II, JHARKHAND. Techno-commercial bids shall be opened first & afterwards price bid shall be opened for qualified bidder(s), who have qualified in Techno-commercial bids. Tenders will be received up to 15.00 Hours on the said due date. <u>If the vendor submits offer i.e. Technical & Price bid together in single attachment, the offer shall be liable for rejection.</u> <u>Price should be submitted as per tender format only and as a separate attachment.</u> Note: In order to maintain sanctity of the tender system, it is advised that one Agent cannot represent two suppliers or quote on their behalf in a particular tender. In the tender, either one agent on behalf of the principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for same item/product.	
2	If any vendor sought to quote through their agents/partners, they have to inform to BHEL in advance, before opening date. Otherwise the offer will be treated as Unsolicited Offer and same will not be opened".	
3	BHEL keeps its right to reject / load any offer which is having deviations to BHEL Specifications, Standard Terms & Conditions. All the bidders shall submit their offers only by filling the original BHEL tender documents. No other offer will be entertained. In case of Technical-Cum-Commercial bid, copy of the price bid has to be used to indicate commercial terms without price.	
4	Tender shall be strictly in accordance with the tender specifications.	
5	No revision in rate shall be entertained after opening of the tenders	
6	The price should be valid at least for a period of 90 days from the tender due date of submission (extended, if any). Price Variation Clause will not be entertained.	
7	<u>PAYMENT TERMS:</u> AS PER (SCC) of tender. No advance shall be paid. Payment shall be paid in INR only. Payment shall be through RTGS. Successful bidder shall have to submit the requisite details in RTGS format. Paying Authority: RAO/SITE FINANCE, BHEL KODERMA TPS.	
8	<u>GUARANTEE: AS PER (SCC) of tender.</u>	
9	<u>DELIVERY:</u> AS PER (SCC) of tender. <u>Offer with delivery period beyond tendered delivery schedule (AS PER - TECHNICAL SPECIFICATIONS AND SPECIAL CONDITIONS OF CONTRACT) shall be liable for rejection.</u>	
10	<u>DISCOUNTS:</u> Discounts offered by the vendor in price shall not be entertained by BHEL. The vendor should factor in his discount in the price offer only. In-spite of the same, if a discount is offered by the bidder, the same shall not be considered for evaluation of the offer, but purchase order shall be issued on bidder's final discounted price.	
11	<u>LIQUIDATED DAMAGE (LD)/ PENALTY CLAUSE: AS PER (SCC) of tender.</u>	
12	<u>SECURITY DEPOSIT & PERFORMANCE BANK GUARANTEE: AS PER (SCC) of tender.</u>	
13	<u>INSPECTION: AS PER (SCC) of tender.</u>	
14	Bidder shall be responsible to expedite the movement of consignment after same leaves their premises after loading.	
15	<u>FORCE MAJEURE :</u> The vendor shall be subject to force majeure clause defined as under : This force majeure is herein defined as any cause which is beyond the control of the tenderer which they would not have foreseen or with a reasonable amount of diligence could not have foreseen and which subsequently affect the performance of the contract such as SRCC (strike riot and civil commotion), earthquake, flood, acts of god, acts of any government, domestic or foreign including but not limited to war. The tenderer shall not be liable for delay in performing his obligation resulting from any force majeure clause as referred to and/or defined above. The date of completion will be subject to hereinafter provided be extended by a reasonable time even though such cause may occur after tenderer's performance of his obligation has been delayed for other causes.	
16	ARBITRATION & CONCILIATION	
16.1	ARBITRATION:	
पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय) POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091 फैक्स/Fax: (033) 23211960 फ़ोन/Phone: बोर्ड/EPABX: 23398220		Page - 13 of 20

16.1.1	Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided in Clause 16.2 herein below or otherwise) in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract (hereinafter referred to as the 'Dispute'), then, either Party may, commence arbitration in respect of such Dispute by issuance of a notice in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the 'Notice'). The Notice shall contain the particulars of all claims to be referred to arbitration in sufficient detail and shall also indicate the monetary amount of such claim. The arbitration shall be conducted by a sole arbitrator to be appointed by the Head of the BHEL Power Sector Region issuing the Contract within 60 days of receipt of the complete Notice. The language of arbitration shall be English. The Arbitrator shall pass a reasoned award. Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or reenactments thereof and the rules made thereunder as in force from time to time shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be Kolkata (the place from where the contract is Issued). The Contract shall be governed by and be construed as per provisions of the laws of India. Subject to this provision 16.1.1 regarding ARBITRATION, the principal civil court exercising ordinary civil jurisdiction over the area where the seat of arbitration is located shall have exclusive jurisdiction over any DISPUTE to the exclusion of any other court.	
16.1.2	In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable: In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD (Administrative Mechanism for Resolution of CPSEs Disputes) as mentioned in DPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018 as amended from time to time.	
16.1.3	The cost of arbitration shall initially be borne equally by the Parties subject to the final allocation thereof as per the award/order passed by the Arbitrator.	
16.1.4	Notwithstanding the existence of any dispute or differences and/or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner unless the dispute inter-alia relates to cancellation, termination or short-closure of the Contract by BHEL.	
16.2	CONCILIATION: If at any time (whether before, during or after the arbitral or judicial proceedings), any Disputes (which term shall mean and include any dispute, difference, question or disagreement arising in connection with construction, meaning, operation effect, interpretation or breach of the agreement, contract), which the Parties are unable to settle mutually, arise inter-se the Parties, the same may, be referred by either party to Conciliation to be conducted through Independent Experts Committee (IEC) to be appointed by competent authority of BHEL from the BHEL Panel of Conciliators. Notes: 1. No serving or a retired employee of BHEL/Administrative Ministry of BHEL shall be included in the BHEL Panel of Conciliators. 2. Any other person(s) can be appointed as Conciliator(s) who is/are mutually agreeable to both the parties from outside the BHEL Panel of Conciliators. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided in Procedure 2.3 to this GCC (as available in www.bhel.com). The Procedure 2.3 together with its Formats (as available in www.bhel.com) will be treated as if the same is part and parcel hereof and shall be as effectual as if set out herein in this GCC. The Contractor hereby agrees that BHEL may make any amendments or modifications to the provisions stipulated in the Procedure 2.3 (as available in www.bhel.com) to this GCC from time to time and confirms that it shall be bound by such amended or modified provisions of the Procedure 2.3 (as available in www.bhel.com) with effect from the date as intimated by BHEL to it.	

16.3	No Interest payable to Contractor Notwithstanding anything to the contrary contained in any other document comprising in the Contract, no interest shall be payable by BHEL to Contractor on any moneys or balances including but not limited to the Security Deposit, EMD, Retention Money, RA Bills or the Final Bill, or any amount withheld and/or appropriated by BHEL etc., which becomes or as the case may be, is adjudged to be due from BHEL to Contractor whether under the Contract or otherwise.	
17	JURISDICTION: All disputes or differences arising under out of or in connection with the purchase order shall be subject to the exclusive jurisdiction of court at Kolkata.	
20	BREACH OF CONTRACT, REMEDIES AND TERMINATION: In case of breach of contract, wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is at least 10% of the contact value, the same be encashed. In case the value of security instruments available is less than 10% of the contract value, the balance amount be recovered from other financial remedies (i.e. available bills of the contractor, retention amount, etc. with BHEL) or legal remedies be pursued. The balance scope shall be got done independently without Risk & Cost of the failed supplier/ contractor. Further levy of Liquidated damages, debarment, termination, de-scoping, short-closure, etc. shall be applied as per provisions of the contract.	
21	CONSIGNEE DETAILS OF THE EQUIPMENT: - AS PER PART-C OF THE TENDER All documents / correspondences must bear the Tender no. / Purchase Order No. & Date.	
22	Note: The offers not complying the above Terms & Conditions will not be accepted.	

Note:

01. In case of any conflict / inconsistency in any clause of the tender or between various sections of the tender, bidder should bring the same in writing to BHEL for clarification before submission of the bid, failing which the most stringent interpretation of the clause in favor of BHEL shall be adopted and the same shall be binding to the bidder.
02. Any deviation sought by the bidder should be indicated in the techno-commercial offer.
03. Bidder should write "accepted" in the column "Supplier Confirmation" for each clause.
- 04. If any clause left blank, shall be presumed that the clause is accepted by the bidder.**

SIGNATURE OF THE BIDDER WITH SEAL AND DATE

FORMS AND PROCEDURES**F-01****RTGS FORMAT****Form for getting payment through RTGS (Real Time Gross Settlement)**

01. NAME OF VENDOR
02. ADDRESS
03. VENDOR'S BANK A/C NAME
04. VENDOR'S BANK A/C NO.
05. NAME OF BANK
06. NAME OF BRANCH
07. BRANCH PH. NO.
08. CITY
09. IFSC CODE OF THE BRANCH

THE CHARGES IF ANY FOR PAYMENT THROUGH RTGS MAY BE RECOVERED FROM THE BILL SUBMITTED BY US.

SIGNATURE OF AUTHORISED
REPRESENTATIVE OF VENDOR WITH
DATE & SEAL

CONFIRMATION BY BANKER WITH
OFFICE SEAL

Note: Incorrect information will create accounting complications and payment will be delayed.

F-02**FORMAT FOR DETAILS OF BIDDER**

NAME OF BIDDER	
ADDRESS OF BIDDER	
Company Registration Number*	
Name of Partners / Directors	
Bidder Type Indian/ Foreign*	
City*	
State*	
Country*	
Postal Code*	
PAN/TAN Number*	
Company's Establishment Year	
Company's Nature of Business*	
Company's Legal Status* {limited company/undertaking/joint venture/partnership/other}	
Company Category* {micro unit as per MSME/small unit as per MSME/medium unit as per MSME/ UAN as per Udyog Aadhaar Memorandum/ Udyam Registration No. / Ancillary unit/project affected person of this company/SSI/ other} Relevant documents to be submitted as applicable.	
Enter Company's Contact Person Details Title(Mr. / Mrs. / Ms. / Dr. / Shri)*	
Contact Name*	
Date Of Birth*	
Correspondence Email* (Correspondence Email ID can be same as your Login ID. All the mail correspondence will be sent only to the Correspondence Email ID.)	
Designation	
Phone*	
FAX NO.	
Mobile*	

**DECLARATION REGARDING MINIMUM LOCAL CONTENT IN LINE WITH
REVISED PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA), ORDER 2017 DATED 04TH JUNE, 2020 AND
SUBSEQUENT ORDER(S)**
(To be submitted in the bidder's letter head)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration reg. minimum local content in line with Public Procurement (Preference to Make in India), Order 2017-Revision, dated 04th June, 2020 and subsequent order(s).

Ref : 1) NIT/Tender Specification No:
2) All other pertinent issues till date

We hereby certify that the items/works/services offered by..... (specify the name of the organization here) has a local content of _____ % and this meets the local content requirement for '**Class-I local supplier**' / '**Class II local supplier**' ** as defined in Public Procurement (Preference to Make in India), Order 2017-Revision dated 04.06.2020 issued by DPIIT and subsequent order(s).

The details of the location(s) at which the local value addition is made are as follows:

- | | |
|----------|----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| ... | |
| ... | |
| ... | |

Thanking you,
Yours faithfully,

(Signature, Date & Seal of Authorized Signatory of the Bidder)

** - Strike out whichever is not applicable.

Note:

- Bidders to note that above format Duly filled & signed by authorized signatory, shall be submitted along with the techno-commercial offer.
- In case the bidder's quoted value is in excess of Rs.10 crores, the authorised signatory for this declaration shall necessarily be the statutory auditor or cost auditor of the company (in case of companies) or a practising cost accountant or practicing chartered accountant (in respect of suppliers other than companies)
- In the event of false declaration, actions as per the above order and as per BHEL Guidelines shall be initiated against the bidder.

FORM – 4**(To be submitted in the bidder's letter head)****In-line with Department of Expenditure's (DoE) Public Procurement Division Order vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.07.2020****Tender No.: Ref: PSER: KDM: Bolt: 2026:03****Job: Supply of of HSFG SS Fit Bolts & Nuts for Koderma 2 × 800 MW, Phase-II.**

"I have read the tender clauses pertaining to Department of Expenditure's (DoE) Public Procurement Division Order (Public procurement no 1, 2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020) regarding restrictions on procurement from a bidder of a country which shares a land border with India. I hereby certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached]"

For and behalf of _____ (Name of the bidder)**(Signature, date & seal of authorized representative of the bidder)**

Annexures of the NIT

- i)Annexure-A Technical Specification (SSFIT-001 Rev.02)**
- ii) Annexure-B Mandatory Bid Compliance Checklist**
- iii)Technical Condition Contract (TCC)**
- iv)Special Conditions of Contract (SCC)**
- v) Price Schedule**

BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPPALLI-620 014

SUPPORTING STRUCTURES/PE(FB)



Title Sheet

Specification for

HEXAGON FIT BOLT, NUT ASSEMBLIES AND WASHERS

Specification Number: SSFIT-001

Revision No. 02

02	28.02.2026	Clause 1.0, 5.0 & 6.0 revised; Clause 7.0 added	HK/KRG/VS RK
01	20.09.2025	Ref. standard for clause 5.0 is revised to BS EN 14399-9	HK/KRG/VS RK
Rev. No.	Revision Date	Revision Statement	Checked & Approved

	Name	Signature	Date
Prepared	HARIKRISHNA.T		04-06-2015
Checked	D.VISWANATHAN		05-06-2015
Approved	N.MURUGAN		06-06-2015

HEXAGON FIT BOLT, NUT ASSEMBLIES AND WASHERS

1.0 SCOPE

Covers the requirements of Hexagon fit bolt, Nut and Washers

Type / Category	Consists of
Bolt Assembly	1 Bolt + 1 Nut + 2 Plain washers
Bolt Assembly with DTI	1 Bolt + 1 Nut + 1 DTI + 1 Bolt face washers

The Bolt Assembly / Bolt Assembly with DTI shall be obtained from a single vendor source.

2.0 REFERRED STANDARD FOR HEXAGON FIT BOLT (CURRENT VERSION IS APPLICABLE)

BS EN 14399-8: Latest Rev. High-strength structural bolting assemblies for preloading – Part 8: System HV – Hexagon fit bolt and nut assemblies

2.1 DIMENSIONS OF FIT BOLTS

Dimensions see Figure 1 and Table 1, clamp length see Figure 2 and Table 2

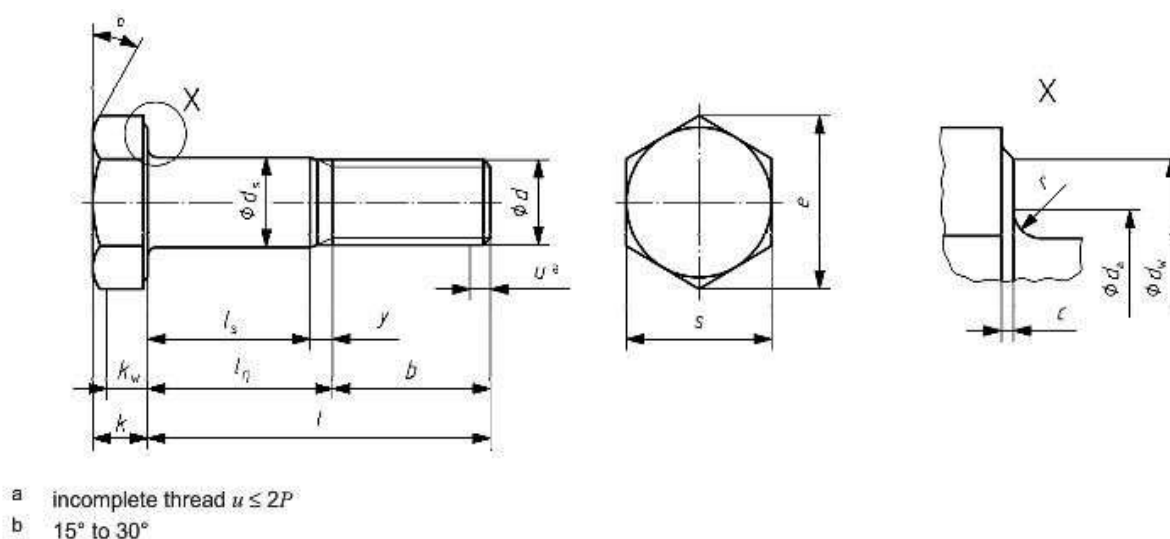


Figure 1 — Dimensions of fit bolts

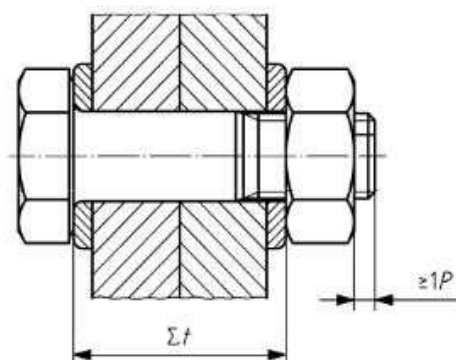


Figure 2 — Clamp length Σt

Table 1 --- Dimensions of fit bolts ^a

Dimensions in millimetres									
Thread d		M12	M16	M20	M22	M24	M27	M30	M36
p^b		1,75	2	2,5	2,5	3	3	3,5	4
b	(ref.)	23	28	33	34	39	41	44	52
c	min.	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4
	max.	0,6	0,6	0,8	0,8	0,8	0,8	0,8	0,8
d_a	max.	15,2	19,2	24	26	28	32	35	41
d_s	nom.	13	17	21	23	25	28	31	37
	min. ^c	12,74	16,74	20,71	22,71	24,71	27,71	30,67	36,67
	max. ^c	12,85	16,85	20,84	22,84	24,84	27,84	30,83	36,83
d_w	min.	20,1	24,9	29,5	33,3	38,0	42,8	46,6	55,9
	max.	d	d	d	d	d	d	d	d
e	min.	23,91	29,56	35,03	39,55	45,20	50,85	55,37	66,44
k	nom.	8	10	13	14	15	17	19	23
	min.	7,55	9,25	12,1	13,1	14,1	16,1	17,95	21,95
	max.	8,45	10,75	13,9	14,9	15,9	17,9	20,05	24,05
k_w	min.	5,28	6,47	8,47	9,17	9,87	11,27	12,56	15,36
r	min.	1,2	1,2	1,5	1,5	1,5	2	2	2
s	max.	22	27	32	36	41	46	50	60
	min.	21,16	26,16	31	35	40	45	49	58,8
y	max.	6,5	7,5	8,5	8,5	10,0	10,0	11,5	13,0

Table 1 (continued)

Dimensions in millimetres

Tread <i>d</i>			M12		M16		M20		M22		M24		M27		M30		M36	
<i>l</i>			<i>l_s f and l_g e</i>															
nom.	min.	max.	<i>l_s</i> min.	<i>l_g</i> max	<i>l_s</i> min.	<i>l_g</i> max.	<i>l_s</i> min.	<i>l_g</i> max.	<i>l_s</i> min.	<i>l_g</i> max.	<i>l_s</i> min.	<i>l_g</i> max.	<i>l_s</i> min.	<i>l_g</i> max.	<i>l_s</i> min.	<i>l_g</i> max.	<i>l_s</i> min.	<i>l_g</i> max.
50	48,75	51,25	20,5	27														
55	53,5	56,5	25,5	32														
60	58,5	61,5	30,5	37														
65	63,5	66,5	35,5	42	29,5	37												
70	68,5	71,5	40,5	47	34,5	42												
75	73,5	76,5	45,5	52	39,5	47	33,5	42										
80	78,5	81,5	50,5	57	44,5	52	38,5	47	37,5	46								
85	83,25	86,75	55,5	62	49,5	57	43,5	52	42,5	51								
90	88,25	91,75	60,5	67	54,5	62	48,5	57	47,5	56	41	51						
95	93,25	96,75	65,5	72	59,5	67	53,5	62	52,5	61	46	56	44	54			30	43
100	98,25	101,75			64,5	72	58,5	67	57,5	66	51	61	49	59			35	48
105	103,25	106,75			69,5	77	63,5	72	62,5	71	56	66	54	64	49,5	61	40	53
110	108,25	111,75			74,5	82	68,5	77	67,5	76	61	71	59	69	54,5	66		
115	113,25	116,75			79,5	87	73,5	82	72,5	81	66	76	64	74	59,5	71		
120	118,25	121,75			84,5	92	78,5	87	77,5	86	71	81	69	79	64,5	76		
125	123	127			89,5	97	83,5	92	82,5	91	76	86	74	84	69,5	81	60	73
130	128	132					88,5	97	87,5	96	81	91	79	89	74,5	86	65	78

NOTE The popular lengths are defined in terms of lengths *l_s* min and *l_g* max.

- ^a For hot-dip galvanized bolts, the dimensions apply before galvanizing.
- ^b *P* is the pitch of thread. ^c Corresponding to tolerance class
- b11. ^d $d_w \max = S_{\text{actual}}$ ^e $l_g \max. = l_{\text{nom.}} - b$ ^f $l_s \min. = l_g \max.$
- $y_{\max}$

Table 2 – Clamp length $\sum t$ ^a

Dimension in
millimeters

Tread d			M12		M16		M20		M22		M24		M27		M30		M36	
<i>l</i>			$\Sigma t_{\min b}$ and $\Sigma t_{\max c}$															
nom.	min.	max.	min.	max	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
50	48,75	51,25	31	36														
55	53,5	56,5	36	41														
60	58,5	61,5	41	46														
65	63,5	66,5	46	51	42	47												
70	68,5	71,5	51	56	47	52												
75	73,5	76,5	56	61	52	57	48	53										
80	78,5	81,5	61	66	57	62	53	58	52	57								
85	83,25	86,75	66	71	62	67	58	63	57	62								
90	88,25	91,75	71	76	67	72	63	68	62	67	59	64						
95	93,25	96,75	76	81	72	77	68	73	67	72	64	69	61	66			51	60
100	98,25	101,75			77	82	73	78	72	77	69	74	66	71			56	65
105	103,25	106,75			82	87	78	83	77	82	74	79	71	76	69	74	61	70
110	108,25	111,75			87	92	83	88	82	87	79	84	76	81	74	79		
115	113,25	116,75			92	97	88	93	87	92	84	89	81	86	79	84		
120	118,25	121,75			97	102	93	98	92	97	89	94	86	91	84	89		
125	123	127			102	107	98	103	97	102	94	99	91	96	89	94	83	88
130	128	132					103	108	102	107	99	104	96	101	94	99	88	93

NOTE The popular lengths are defined in terms of lengths $\sum t_{\min}$ and $\sum t_{\max}$.

^a For proper function of the proloaded bolted joint the following condition for the clamp length $\sum t$ shall be fulfilled:

$(l_{g \max} + 2P) < \sum t < (l_{\min} - P - m_{\max})$, where P is the pitch of thread and $m_{\max}$ is the maximum nut height according to Table 5.

The values of $\sum t_{\min}$ and $\sum t_{\max}$ specified in Table 3 are within this range.

The $\sum t_{\max}$ values are specified on the condition that the minimum bolt protrusion beyond the unloaded nut face shall be $1 P$.

2.2 SPECIFICATION FOR BOLTS AND REFERENCE STANDARDS

Hexagon fit bolt shall be hot dip galvanized.

Table 3 --- Specifications for bolts and reference standards

Material		Steel
General requirements		EN 14399-1 ^a
Thread	Tolerance	6g ^b
	International Standards	ISO 261, ISO 965-2
Mechanical properties	Property class	10.9
	European Standard	EN ISO 898-1
Impact strength	Value	$K_{V,min} = 27 \text{ J at } -20^{\circ}\text{C}$
	Test specimen ^c	ISO 148-1
	Test	EN 10045-1
Tolerances	Product grade	C except: dimension c Tolerance for lengths $\geq 155 \text{ mm}$: $+1T17$ $-0,51T17$
	International Standard	EN ISO 4759-1
Surface finish^d	normal	as processed ^e
	hot dip galvanized	EN ISO 10664
	others	to be agreed ^f
Surface discontinuities		Limits for surface discontinuities are covered in EN 26157-1.
Acceptability		For acceptance procedure, see EN ISO 3269.
^a For the time being EN 14399-1 refers only to EN 14399-3 and EN 14399-4 as far as dimensions and mechanical characteristics of the components and functional characteristics of the assemblies are concerned. Such references shall also apply to EN 14399-8. ^b The tolerance class specified applies without surface finish. Hot-dip galvanized bolts are intended for assembly with oversize tapped nuts. ^c The preparation of the test specimens with V-notch in the fastener shall be as specified in EN ISO 898-1. ^d Attention is drawn to the need to consider the risk of hydrogen embrittlement in the case of bolts of property class 10.9, when selecting an appropriate surface treatment process (e.g. cleaning and coating), see the relevant coating standards. ^e "As processed" means the normal finish resulting from manufacture with a light coating of oil. ^f Other coatings may be negotiated between the purchaser and the manufacturer provided they do not impair the mechanical properties or the functional characteristics. Coatings of cadmium or cadmium alloys are not permitted.		

2.3 MARKING OF HEXAGON FIT BOLTS

High-strength structural bolts according to this specification shall be marked with:

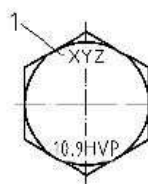
- a) Property class marking in accordance with EN ISO 898-1 and the letters HVP.

EXAMPLE 1 10.9 HVP

- b) The identification mark of the manufacturer of the assembly.

It is permissible for the marking to be either embossed or indented on the top surface of the head.

EXAMPLE 2 of bolt marking (see Figure 3):



Key

1 identification mark of the manufacturers of the assembly

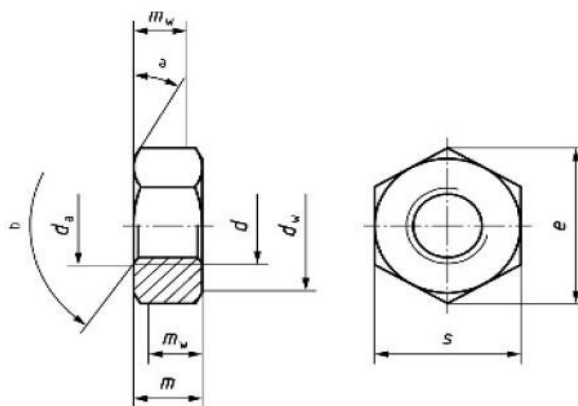
Figure 3 — Example for marking of a bolt

3.0 REFERRED STANDARD FOR NUT ASSEMBLIES (CURRENT VERSION IS APPLICABLE)

BS EN 14399-4: Latest Rev. High-strength structural bolting assemblies for preloading – Part 4: System HV – Hexagon bolt and nut assemblies.

3.1 DIMENSIONS OF NUTS

Dimensions see Figure 4 and Table 4.



Key

a 15° to 30°

b 110° to 130°

Figure 4 --- Dimensions of nuts

Table 4 --- Dimensions of nuts ^a

Dimensions in millimetres

Thread (<i>d</i>)		M12	M16	M20	M22	M24	M27	M30	M36
<i>P</i> ^a		1,75	2	2,5	2,5	3	3	3,5	4
<i>d</i> _a	max.	13,0	17,3	21,6	23,7	25,9	29,1	32,4	38,9
	min.	12	16	20	22	24	27	30	36
<i>d</i> _w	max.	^b	^b	^b	^b	^b	^b	^b	^b
	min.	20,1	24,9	29,5	33,3	38,0	42,8	46,6	55,9
<i>e</i>	min.	23,91	29,56	35,03	39,55	45,20	50,85	55,37	66,44
<i>m</i>	nom. = max.	10	13	16	18	20	22	24	29
	min.	9,64	12,30	14,90	16,90	18,70	20,70	22,70	27,70
<i>m</i> _w	min.	7,71	9,84	11,92	13,52	14,96	16,56	18,16	22,16
<i>s</i>	max.	22	27	32	36	41	46	50	60
	min.	21,16	26,16	31,00	35,00	40,00	45,00	49,00	58,80
^a <i>P</i> is the pitch of thread. ^b <i>d</i> _{w,max} = <i>s</i> _{actual} .									

3.2 SPECIFICATION FOR NUTS AND REFERENCE STANDARDS

Nut assemblies shall be hot dip galvanized.

Table 5 --- Specification for nuts and reference standards

Material		Steel		
General requirements		EN 14399-1 and EN 14399-2		
Thread	Coating of the bolt	Uncoated	Hot dip galvanized	Others
	Tolerance class of the nut	6H	6AZ	6H ^a
	International Standards	ISO 261, ISO 965-2	ISO 261, ISO 965-5	ISO 261, ISO 965-2, ISO 965-5
Mechanical properties	Property class	10		
	European Standard	EN ISO 898-2		
Tolerances	Product grade	B		
	European Standard	EN ISO 4759-1		
Finish — Coating	Uncoated	As processed ^b		
	Hot dip galvanized	EN ISO 10684		
	Others	to be agreed ^c		
Surface integrity		Limits for surface discontinuities as specified in EN ISO 6157-2.		
Acceptability		For acceptance procedure, see EN ISO 3269.		

^a For other coatings that need an increased fundamental deviation and according to the relevant standard, oversize tapped nuts with a thread tolerance class up to 6AZ may be used.

^b “As processed” means the normal finish resulting from manufacture with a light coating of oil.

^c Other coatings may be negotiated between the purchaser and the manufacturer provided they do not impair the mechanical properties or the functional characteristics. Coatings of cadmium or cadmium alloys are not permitted.

3.3 DECARBURIZATION OF THE NUT THREAD

The decarburization of the nut thread, when measured in analogy to external threads as given in EN ISO 898-1, shall not exceed $G = 0,015\text{mm}$.

3.4 MARKING OF NUTS

High-strength structural nuts according to this specification shall be marked with:

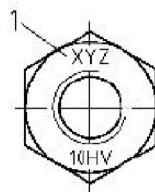
- a) Property class marking in accordance with EN 20898-2 and the letters HV.

EXAMPLE 1 10 HV

- b) The identification mark of the manufacturer of the assembly.

The marking shall be indented on either bearing face.

EXAMPLE 2 of nut marking (see Figure 5):



Key

1 identification mark of the manufacturer of the assembly

Figure 5 — Example for marking of a nut

4.0 DESIGNATION OF THE FIT BOLT / NUT ASSEMBLY

EXAMPLE 1 Designation of an assembly for high strength structural bolting, system HV, consisting of a hexagon fit bolt with large width across flats, with thread M16, nominal length $l = 80\text{ mm}$ and property class 10.9 and a hexagon nut with large width across flats, with thread M16 and property class 10:

Hexagon fit bolt/nut assembly EN 14399-8 --- M16 x 80 --- 10.9/10 --- HVP

If surface finishes other than “as processed” are required, the specified surface finish shall be added to the designation.

EXAMPLE 2 Designation of a hexagon fit bolt with large width across flats, with thread M16, nominal length $l = 80\text{ mm}$ and property class 10.9:

Hexagon fit bolt EN 14399-8 --- M16 x 80 --- 10.9 --- HVP

5 REFERRED STANDARD FOR PLAIN CHAMFERED WASHERS (CURRENT VERSION IS APPLICABLE)

BS EN 14399-6: Latest Rev High-strength structural bolting assemblies for preloading
– Part 6: Plain chamfered washers

5.1 DIMENSIONS OF PLAIN CHAMFERED WASHERS

Dimensions see Figure 6 and Table 6.

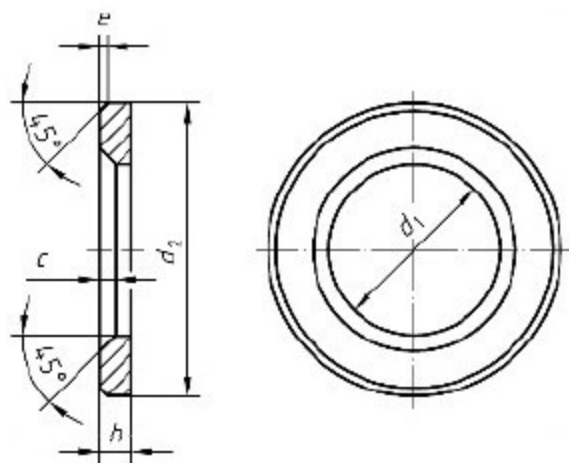


Figure 6 --- Dimensions

For coated washers the above dimensions apply prior to coating.

Table 6 --- Dimensions

Dimensions in millimetres

Nominal size d (nominal thread diameter of associated bolts)		12	(14) ^a	16	(18) ^a	20	22	24	27	30	36
d_1	min.	13	15	17	19	21	23	25	28	31	37
	max.	13,27	15,27	17,27	19,33	21,33	23,33	25,33	28,52	31,62	37,62
d_2	min.	23,48	27,48	29,48	33,38	36,38	38,38	43,38	49,00	54,80	64,80
	max.	24	28	30	34	37	39	44	50	56	66
h	nom.	3	3	4	4	4	4	4	5	5	6
	min.	2,7	2,7	3,7	3,7	3,7	3,7	3,7	4,4	4,4	5,4
	max.	3,3	3,3	4,3	4,3	4,3	4,3	4,3	5,6	5,6	6,6
e	nom. = min.	0,5	0,5	0,75	0,75	0,75	0,75	0,75	1	1	1,25
	max.	1,0	1,0	1,5	1,5	1,5	1,5	1,5	2,0	2,0	2,5
c	min.	1,6	1,6	1,6	2,0	2,0	2,0	2,0	2,5	2,5	2,5
	max.	1,9	1,9	1,9	2,5	2,5	2,5	2,5	3,0	3,0	3,0

^a Sizes in brackets are non-preferred sizes.

5.2 SPECIFICATION AND REFERENCE STANDARDS FOR PLAIN CHAMFERED WASHERS

Plain chamfered washers shall be hot dip galvanized.

Table 7 --- Specification and reference standards for plain chamfered washers

Material		Steel
General requirements		EN 14399-1 and EN 14399-2
Mechanical properties	Hardness range	300 HV to 370 HV
Tolerances	Product grade	A
	European Standard	EN ISO 4759-3
Finish — Coating ^a	Uncoated	as processed ^b
	Hot dip galvanized	EN ISO 10664
	Others	to be agreed ^c
Workmanship		Parts shall be uniform and free of irregularities or detrimental defects. No protruding burrs shall appear on the washer.
Acceptability		For acceptance procedure, see EN ISO 3269.

^a Attention is drawn to the need to consider the risk of hydrogen embrittlement when selecting an appropriate surface treatment process (e.g. cleaning and coating), see the relevant coating standards.

^b "As processed" means the normal finish resulting from heat treatment with a light coating of oil.

^c Other coatings may be negotiated between the purchaser and the manufacturer provided they do not impair the mechanical properties or the functional characteristics. Coatings of cadmium or cadmium alloys are not permitted.

5.3 DESIGNATION

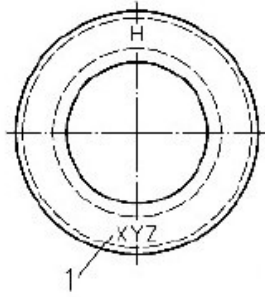
EXAMPLE A hardened and tempered chamfered plain washer for high-strength structural bolting for preloading, of nominal size $d = 16$ mm, with hot dip galvanized coating(tZn), is designated as follows:

Washer EN 14399-6 --- 16 --- tZn

5.4 MARKING

Hardened and tempered chamfered washers shall be marked with at least the manufacturer's trade (identification) mark and the letter H. The manufacturer may decide to mark washers with HR or HV (instead of H marking) when they are supplied as component of bolting assemblies of system HR or HV respectively.

The marking shall be indented on the non-chamfered side.



Key

- 1 identification mark of the manufacturer of the assembly

Figure 7 --- Example of marking

6.0 REFERRED STANDARD FOR BOLT FACE WASHERS FOR BOLT AND NUT ASSEMBLIES (CURRENT VERSION IS APPLICABLE)

BS EN 14399-9: Latest Rev High-strength structural bolting assemblies for preloading - System HR or HV.

Direct tension indicators for bolt and nut assemblies

6.1 DIMENSIONS OF BOLT FACE WASHERS (HB)

Dimensions see Figure 6 and Table 6.

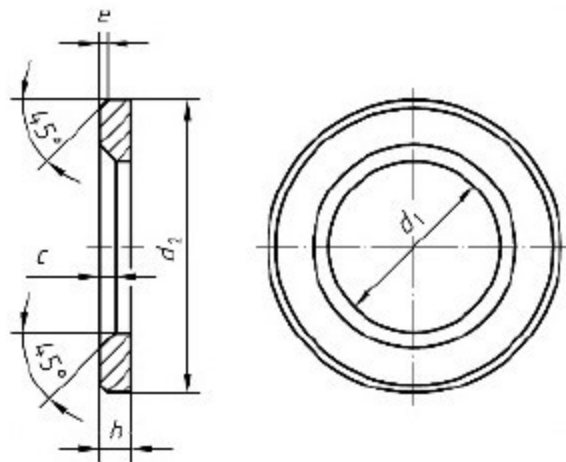


Figure 6 --- Dimensions of bolt face washers (HB)

For coated washers the above dimensions apply prior to coating.

Table 7 — Dimensions of bolt face washers (HB)

Dimensions in millimetres

Nominal size <i>d</i> (nominal thread diameter of associated bolt)	Internal diameter		External diameter		Thickness		Inside chamfer		Outside chamfer	
	<i>d</i> ₁ min.	<i>d</i> ₁ max.	<i>d</i> ₂ min.	<i>d</i> ₂ max.	<i>h</i> min.	<i>h</i> max.	<i>c</i> min.	<i>c</i> max.	<i>e</i> min.	<i>e</i> max.
M12	13	13,27	23,48	24	2,7	3,3	1,6	1,9	0,50	1,0
M16	17	17,27	29,48	30	3,7	4,3	1,6	1,9	0,75	1,50
M20	21	21,33	36,38	37	3,7	4,3	2,0	2,5	0,75	1,50
M22	23	23,33	38,38	39	3,7	4,3	2,0	2,5	0,75	1,50
M24	25	25,33	43,38	44	3,7	4,3	2,0	2,5	0,75	1,50
M27	28	28,52	49	50	4,4	5,6	2,5	3,0	1,0	2,0
M30	31	31,62	54,80	56	4,4	5,6	2,5	3,0	1,0	2,0
M36	37	37,62	64,80	66	5,4	6,6	2,5	3,0	1,25	2,50

6.2 SPECIFICATION AND REFERENCE STANDARDS FOR WASHERS

Bolt face washers shall be Sherardized / Zinc flake coating

Table 8 — Specifications and reference standards for nut face washers (HN) and bolt face washers (HB)

Material		Steel
General requirements		EN 14399-1 and EN 14399-2
Heat treatment		hardened and tempered
Hardness ^a	Rockwell hardness	38 HRC to 45 HRC
	European Standard	EN ISO 6508-1
	Vickers hardness	372 HV30 to 448 HV30
	European Standard	EN ISO 6507-1
Tolerances	Product grade	C ^b
	Standard	EN ISO 4759-3
Finish — Coating ^c	Uncoated	as processed ^d
	Sherardized	EN ISO 17668
	Others	to be agreed ^e
Associated bolts and nuts		EN 14399-3, EN 14399-4, EN 14399-7 or EN 14399-8
Associated washers		EN 14399-5 or EN 14399-6
Acceptability		For acceptance procedure, see EN ISO 3269:2000.
^a In case of dispute, the Vickers hardness test shall be the referee test method. ^b Except as otherwise specified in Tables 6 and 7. ^c These washers shall not be electroplated or subjected to any process that could result in hydrogen embrittlement. ^d "As processed" means the normal finish resulting from manufacture with a light oil coating. ^e Other coatings may be negotiated between the purchaser and the manufacturer providing they do not impair the mechanical properties or functional characteristics. Coatings of cadmium or cadmium alloys are not permitted.		

6.3 DESIGNATION

Example 1: A bolt face washer (HB) for high-strength structural bolting assemblies, of nominal size $d = 20$ mm, processed, is designated as follows:

Washer HB EN 14399-9 — M20

6.4 MARKING

Bolt face washers (HB) shall be marked with the identification mark of the manufacturer of the bolting assembly and the letters HB. The marking shall be indented into one face.

6.5 COATING

Type / Category	Consists of	Coating
Bolt Assembly	1 Bolt + 1 Nut	Hot Dip Galvanization
	2 Plain washers	
Bolt Assembly with DTI	1 Bolt + 1 Nut	Hot Dip Galvanization
	1 DTI + 1 Bolt face washers	Sherardized / Zin Flake Coating

For Hot Dip Galvanization:

- 1) Cleaning and pickling shall be alkaline or mechanical process as per clause 5.2 of ISO 10684. Avoid acid cleaning.
- 2) Galvanizing temperature shall be as per clause 5.5 of ISO 10684.
- 3) Nuts tapped oversize to tolerance class 6AZ after coating as per clause 6.2.2 of ISO 10684. Nuts tapped oversize shall be marked with the letter Z immediately after the property class
- 4) Nuts (tapped to 6AZ tolerance) must be supplied with factory applied lubricant. Based on the lot size, additional lubricant should be supplied to site along with bolt assembly.
- 5) Zinc coating thickness shall be minimum of 50 μm and maximum of 60 μm .

For Sherardized coating ISO 17668 and for Zin flake coating ISO 10683 to be followed.

7.0 FUNCTIONAL CHARACTERISTICS OF THE BOLT/NUT/WASHERS ASSEMBLY

The Bolt Assembly / Bolt Assembly with DTI shall be obtained from a single vendor source.

The nut of the bolting assembly shall be suitably lubricated in the as delivered condition, to ensure that seizure will not take place during tightening of the assembly and that the required preload is obtained.

The manufacturer of the bolting assemblies shall state the suitable methods for tightening in accordance with EN 1090-2 in relation the declared k-class. The necessary information for at least one relevant tightening method as mentioned in the below Table shall be stated on the label or packaging.

Information related to tightening methods for the required preload, $F_{p,C} = 0.7f_{ub}A_s$

Tightening method according to EN 1090-2	Minimum information to be supplied	k-class
Torque method	$k_m = \dots\dots\dots$ 1 st step: Torque = Nm 2 nd step: Torque =Nm	K2
Combined method	1 st step: Torque = Nm 2 nd step: Further rotation	K1 ^a
Direct tension indicator method	-	K0 ^b
^a K2 can also be used. ^b K1 or K2 could also be used, but declared as K0		

where

f_{ub} is the nominal ultimate tensile strength of the bolt material

A_s is the nominal stress area of the bolt

Eg: For M30 10.9 grade bolt

$$f_{ub} = 1000 \text{ MPa}; A_s = 561 \text{ mm}^2$$

Required preload $F_{p,C} = \mathbf{393 \text{ kN}}$

7.1 INDIVIDUAL VALUES OF THE k-factor (k_i), MEAN VALUE OF THE k-factor (k_m) AND COEFFICIENT OF THE k-factor (V_k)

7.1.1 Individual values of the k-factor (k_i) for k-class K1

For k-class K1, the k_i values shall be within the range of $0.1 \leq k_i \leq 0.16$

7.1.2 Mean value of the k-factor (k_m) and coefficient of the k-factor (V_k) for k-class K2

The mean value (k_m) of the k-factor shall be calculated as follows:

$$k_m = \frac{\sum_{i=1}^n k_i}{n}$$

with

$$k_i = \frac{M_{pi}}{F_{p,C} \times d}$$

where

M_{pi} is the individual value of the applied torque;

$F_{p,C}$ is the required preload;

d is the nominal bolt diameter

The coefficient of variation of the k-factor (V_k) shall be calculated as follows:

$$V_k = S_k / k_m$$

where

S_k is the standard deviation

$$S_k = \sqrt{\frac{\sum (k_i - k_m)^2}{n - 1}}$$

For k_m and V_k the following values apply:

$$0.1 \leq k_m \leq 0.23$$

$$V_k \leq 0.06$$

NOTE: Please get quality plan from vendors/suppliers.

MANDATORY BID COMPLIANCE CHECKLIST**Procurement of HDG Fit Bolt Assemblies (EN 14399-8, Class 10.9)****Bidder Name:** _____**Address:** _____**Tender Reference:** _____

Sl. No.	Requirement	Bidder's Response (Yes / No)
1	Bidder is Original Manufacturer of complete bolt-nut-washer assembly & manufacturing scope includes bolts, nuts and washers	
2	Bidder has valid BIS license for IS 3757 and the fasteners for the subject tender shall be manufactured at that facility (submit copy of certificate)	
3	Bidder has valid ISO 9001:2015 certification covering manufacture of high strength structural fasteners or equivalent (submit copy of certificate)	
4	Experience of minimum 3 similar supplies during last 5 years (PO copy)	
5	Availability of qualified Metallurgist/ Materials Engineer having minimum 5 years' experience in fastener heat treatment (submit CV)	
6	Cold/ Hot Forging facility available in-house & will not be subcontracted	
7	Heat Treatment facility (controlled heat treatment furnace) available in-house & confirmation that Heat Treatment will not be subcontracted (submit TUS & calibration certificate from NABL accredited agency)	
8	Oil quenching facility available and oil quenching shall be used for fasteners under this tender	
9	Hot Dip Galvanizing facility available in-house & Confirmation that HDG process will not be subcontracted	
10	forging/ cold heading machines & thread rolling machines available inhouse	
11	CNC machining facilities for fit bolts machining is available inhouse	
12	Bidder has following inhouse testing facilities & all testing equipment are under valid NABL calibration traceability: (submit copy of valid calibration Certificate)	
	a) UTM (minimum 100 Ton capacity) available	
	b) Rockwell and Vickers hardness testing facilities available	
	c) Metallurgical microscope available	
	d) Spectrometer available	
	e) Bolt tension calibrator (Skidmore-Wilhelm or equivalent) available	
	f) Thread gauge, Coating thickness gauge available	
	g) Suitability for Preloading (SUT) testing	
13	Raw material shall be procured only from original steel producers having BIS licence for IS 5517	
14	Material shall not be sourced from traders/stockists/service centres	

MANDATORY BID COMPLIANCE CHECKLIST**Procurement of HDG Fit Bolt Assemblies (EN 14399-8, Class 10.9)**

Sl. No.	Requirement	Bidder's Response (Yes / No)
15	Confirmation of compliance with Cr-Mo alloy steel requirements & compliance with Boron, Sulphur and Phosphorus limits	
16	Confirmation of use of Vacuum Degassed material for M24 & above bolts	
17	De-embrittlement baking facility available	
18	Ability to provide time-temperature records for baking	
19	System available for heat-wise traceability from raw material up to finished product and the same shall be strictly followed	
20	System available to provide Steel MTC from original steel producer, heat treatment records, galvanizing and baking records, SUT/k-factor reports, NDT reports & salt water spray reports	
21	No deviation from TCC and Annexure-A	
22	Acceptance of BHEL pre-award and post-award factory assessment	
23	Rejection criteria specified in TCC is understood and replacement obligations for rejected lots is accepted	
24	Risk purchase clause, Blacklisting/ termination provisions in TCC for falsification of records or unauthorized subcontracting is understood and is accepted	

We hereby certify that:

1. We have carefully read and understood all requirements of the Tender, including the Technical Conditions of Contract (TCC), Annexure-A (Technical Specification), and all other tender documents.
2. All supporting documents submitted against the checklist are valid as on the date of bid submission and are traceable to their original source.
3. We understand that submission of false, forged, misleading, incomplete, or fabricated information/documents may result in rejection of our bid, cancellation of the contract, forfeiture of applicable securities, suspension of business dealings, blacklisting, and any other action deemed appropriate by BHEL.
4. We authorize BHEL or its representatives to verify the authenticity of any information, document, certificate, facility, personnel qualification, manufacturing capability, testing capability, or quality system submitted in support of this bid.
5. We accept that the Bid Compliance Checklist and supporting documents shall form part of the contractual obligations upon placement of order.

Authorized Signatory

Name of Authorized
Signatory:

Designation :

Mobile No. :

E-mail ID :

Place :

Date :

Signature :

Company Seal :

SPECIAL CONDITION OF CONTRACT (SCC)

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This volume shall be construed as part of tender document and shall be read along-with others volumes of tender. Unless otherwise specified, in case of any confusion of any clause/ provision of this volume or any conflict/ inconsistency of any clause/ provision of this volume with that of other volume, the same shall be brought out by the bidder in writing to BHEL for clarification or during pre-bid discussions, if applicable, failing which most stringent interpretation in favour of BHEL shall be adopted and the same shall be binding to the bidder. Unless otherwise specified, all terms & conditions shall be applicable for entire scope and for each part/ package of the tender.

CLAUSE NO	DESCRIPTION
1.0	PROJECT SYNOPSIS AND GENERAL INFORMATION
1.1	GENERAL INFORMATION DVC Koderma Stage-II Thermal Power Project (2x800 MW) is located near Benjhidi, Koderma district of Jharkhand Owner- DVC
2.0	SCOPE OF SUPPLY The scope of supply broadly covers material procurement, Fabrication, Supply, Inspection & Testing at supplier's works or at approved laboratory, packing and transportation of HSFG Fit bolt assembly to Koderma Site on FOR destination basis as per technical specification and terms & conditions of tender considering all clarifications, confirmations and agreements till date, for 2x800MW DVC Koderma Stage-II Project.
3.0	EXCEPTION Unloading of materials at destination site shall be in BHEL's scope.
4.0	CONSIGNEE
4.1	Construction Manager / Project Director 2X800 MW DVC Koderma Super Thermal Power Plant PO – Benjhidi, Distt. – Koderma, Jharkhand – 825421
4.2	Successful bidder shall obtain confirmation on consignee details from BHEL prior to despatch of consignment. Any change in above consignee details will be intimated at appropriate juncture prior to despatch.
5.0	INSURANCE
5.1	Transit Insurance shall be in BHEL scope. Details of the insurer shall be provided by BHEL at a later date.
5.2	It is the responsibility of successful bidder to send written intimation to the insurer before despatch of each consignment. If the same is not intimated by the successful bidder, the successful bidder shall be responsible for replacement of such items at their own cost in case of damage/ loss/ theft of materials during transit.
6.0	COMPLETION PERIOD 2 (two) months, starting from the approval of MQP or from the placement of PO, whichever is later.
7.0	DELIVERY SCHEDULE
7.1	Agency to deliver first Lot of materials (50% of PO quantity) within 45 (forty-five) days from approval of MQP and balance to be supplied within the contractual period.
8.0	INTEREST BEARING RECOVERABLE ADVANCE/ MOBILISATION ADVANCE Not applicable for this tender.
9.0	PRICE VARIATION CLAUSE/ ESCALATION
9.1	PVC shall not be applicable for the subject tender
10.0	PERFORMANCE SECURITY
10.1	The successful bidder shall submit performance security for an amount of 5% of the Purchase order value for the satisfactory execution of the contract. Modes of deposit: a) Performance security may be furnished in the following forms: (i) Local cheques of Scheduled Banks (subject to realization)/ Pay Order/ Demand Draft/ Electronic Fund Transfer in favour of BHEL.

	(ii) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL. (iii) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL). (iv) Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL). (v) Insurance Surety Bond. (Note: BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith) Performance Security is to be furnished within 14 (fourteen) days from the date of Purchase Order and it should remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the supplier, including warranty obligations. Note: a) The performance security will be forfeited and credited to BHEL's account in the event of a breach of contract by the supplier. b) The Performance Security shall not carry any interest.
10.2	RELEASE OF PERFORMANCE SECURITY Performance security shall be refunded to the contractor without interest, after he duly performs and completes the contract in all respects but not later than 60 (sixty) days beyond the date of completion of all such obligations including the guarantee /warranty under the contract.
11.0	TERMS OF PAYMENT
11.1	100% of Payment shall be released within 90 days (45 days for MSE, 60 days for Medium Enterprises) from the date of receipt of materials at site (as per MRC/SRV/CRAC) and subject to receipt of the following documents – - GST Compliance Invoice (1 Original/e-invoice + 2 copies) - Copy of insurance intimation letter / e-mail. (Intimation to Insurance agency to be sent on the same day of dispatch.) - LR copy (consignee address shall be BHEL Lara site) - Packing List indicating item description/quantity/Net Weight against each item dispatched – wherever applicable. - Original Material Dispatch Clearance Certificate issued by BHEL/BHEL's Customer. - Guarantee Certificate –Original - Material Receipt certificate by BHEL/site. - Material test Certificate (MTC) (for raw material supplied by Vendor)
11.2	Applicable GST shall be released to bidder upon compliance with the following conditions: - The goods or services covered under the invoice must be received in full, along with the corresponding valid tax invoice by BHEL. - Following GST compliances must be ensured within the timelines prescribed for availing Input Tax Credit (ITC) under GST law: - Bidder declaring such invoice in FORM GSTR-1, and it being auto-populated into FORM GSTR- 2B of BHEL through the common portal. - Confirmation of GST payment by bidder to the government, verified through the filing of your FORM GSTR-3B for the corresponding month or quarter. (c) Notwithstanding anything contained above, GST amount may be released along

	with the payment against Tax Invoice, provided: (i) Exposure of BHEL against such GST amount is sufficiently covered by the security deposit / Bank Guarantee / any other amount due to the vendor/contractor at the time of releasing such GST payment. (ii) Such relaxation to be allowed till the subsequent month i.e. till the GST compliances are done by the vendor / contractor against the given Tax Invoice. (iii) As long as the GST compliances are ensured on the part of the vendor / contractor, this practice of releasing GST payment may be continued.
11.3	Paying Authority: RAO/Finance, BHEL-Koderma Site . No advance shall be paid. Payment shall be made on the basis of actual quantity of material received at delivery location.
11.4	No extra payment as claim or compensation shall be made in the event of delay in release of payment.
12.0	TAXES & DUTIES
12.1	Bidder's quoted/ accepted rates/ price shall be inclusive of all taxes including GST, Charges, Royalties, any State or Central Levy and other taxes for materials if any obtained for the work and for execution of the contract. Any increase of above at any stage during execution of contract, including extension of the contract, shall have to be borne by successful bidder contractor. However, any increase of GST subsequent to due date of offer submission as per NIT & TCN, by statutory authority during contract period (including extension, if the same is not attributable to you), shall be reimbursed by BHEL on production of relevant supporting document to the satisfaction of BHEL. Benefit of any decrease of taxes including GST, Charges, Royalties, any State or Central Levy and other taxes for materials if any obtained for the work and for execution of the contract; subsequent to due date of offer submission as per NIT & TCN, by statutory authority shall be passed on to BHEL.
12.2	DELETED
12.3	Successful bidder shall furnish proof of GST registration with GSTN Portal covering the services under this contract. Registration should also bear endorsement for the premises from where the billing shall be done by successful bidder on BHEL for this project / work.
12.4	Since GST on output will be paid by BHEL separately as enumerated above, bidder's your quoted rates / price should be after considering the Input Credit under GST law at bidder's end.
12.5	TDS under Income Tax Act shall be deducted as per prevailing IT rules from the bills.
12.6	TDS under GST shall be deducted as per prevailing GST rules from the bills.
12.7.1	You may collect TCS under section 206C(1H) of Income Tax Act, 1961 if applicable.
12.7.2	In case, you collect TCS under section 206C(1H) of Income Tax Act, 1961, following compliance is required.
12.7.2.1	TAN and PAN of vendor should appear in all invoices/claims. Copy of TAN /TCS registration is to be submitted.
12.7.2.2	Amount of TCS and Assessable value on which TCS has been calculated should be specified clearly in the invoice.
12.7.2.3	You shall be required to submit certificate of TCS in Form no. 27D within 15 days from the due date for furnishing the statement of tax collected at the source.
12.7.3	In case, you do not collect TCS under section 206C(1H) of Income Tax Act, 1961, following declaration is to be submitted alongwith each invoice: - "I/We hereby declare that I/We are not required to collect TCS under section 206C(1H) of Income Tax Act, 1961, on this bill.
12.7.4	In event of failure to comply with the provisions of the Act, or proper certificate not issued, or if tax collected but not remitted to the Government, or for any other reason and thereby causing loss to BHEL, the same shall be recoverable from the

	vendor with applicable interest.
12.7.5	You shall comply with all statutory amendment/notifications in this respect.
12.8	Bidder shall note that GST Tax Invoice complying with GST Invoice Rules (Section 31 of GST Act & Rules referred thereunder) wherein the 'Bill To' details shall encompass following. BHEL GSTN – 20AAACB4146P5ZP NAME – BHARAT HEAVY ELECTRICALS LIMITED ADDRESS – BHEL SITE OFFICE, 2X800 MW DVC KODERMA TPS PH-II PO-KODERMA TPS, VILLAGE- BENJHIDIH DIST – KODERMA, JHARKHAND 825421.
12.9	Successful bidder to intimate immediately on the day of removal of goods (in case of any supply of goods) to BHEL along with all relevant details and send a scanned copy of Tax Invoice to BHEL through following communication mode for enabling BHEL to meet its GST related compliances. Portal address. and Email address – Shall be intimated later. Specific details of above shall be intimated to successful bidder by BHEL at appropriate juncture.
12.10	In case of delay in submission of above-mentioned documents on the date of dispatch, BHEL may incur penalty / interest for not adhering to Invoicing Rules under GST Law. The same will be liable to be recovered from successful bidder, in case such delay is not attributable to BHEL.
12.11	In case of raising any Supplementary Tax Invoice (Debit / Credit Note), successful bidder shall issue the same containing all the details as referred to in Section 34 read with Section 31 of GST Act & Rules referred there under.
12.12	Successful bidder shall comply with the Time Limit prescribed under the GST Law and rules thereof for raising of the Tax Invoice. If any supply of goods is applicable, successful bidder shall also ensure prompt delivery of goods after dispatch.
12.13	Bidder shall note that in case GST credit is delayed / denied to BHEL due to delayed / non-receipt of goods and / or Tax Invoice or expiry of the timeline prescribed in GST Law for availing such ITC, or any other reasons, not attributable to BHEL, GST amount shall be recoverable from successful bidder along with interest levied/ leviable on BHEL, as the case may be.
12.14	Successful bidder shall upload the invoices raised on BHEL in GSTR-1 within the prescribed time as given in the GST Act, and the same shall be available to BHEL in FORM GSTR-2A/2B electronically through the common portal. Bidder shall note that in case of delay in declaring such invoice in your return and GST credit availed by BHEL is denied or reversed subsequently as per GST Law, GST amount paid by BHEL towards such ITC reversal as per GST law shall be recoverable from the successful bidder along with interest levied / leviable on BHEL.
12.15	Way Bill: Successful bidder to arrange for way bill / e-waybill for any transfer of goods for the execution of the contract. Successful bidder has to make their own arrangement at their cost for completing the formalities, if required, with Issuing Authorities, for bringing materials, plants & machinery at site for execution of the works under this contract, Road Permit / Way Bill, if required, shall be arranged by successful bidder and BHEL will not supply any Road Permit/ Way Bill for this purpose.
12.16	Any new taxes & duties, if imposed subsequent to due date of offer submission as per NIT & TCN, by statutory authority during contract period (including extension, if the same is not attributable to you), shall be reimbursed by BHEL on production of relevant supporting document to the satisfaction of BHEL. However, you shall obtain prior approval from BHEL before depositing new taxes and duties.
12.17	Benefits and / or abolition of all existing taxes must be passed on to BHEL against new taxes, if any, proposed to be introduced at a later date.
13.0	MANUFACTURING, INSPECTION & TESTING
13.1	The material is to be fabricated & supplied in line with technical specification & TCC provided by BHEL & approved MQP.
13.2	Successful bidder has to raise inspection call along with relevant documents on BHEL as per approved MQP for issuance of Material Dispatch Clearance Certificate (MDCC).
13.3	The material shall confirm to dimensions & tolerances given in various drawings & documents. If any portion of material is found to be defective and not conforming to

	drawings/ documents or other stipulations, the successful bidder shall rectify/replace the defective materials at their own cost, failing which recoveries, as determined by BHEL, shall be affected from successful bidder.
14.0	LIQUIDATED DAMAGE
14.1	Subject to force majeure, if vendor fails to supply material as per aforesaid completion period, BHEL shall have the right to recover as penalty as below: Penalty on delay in supply will be applicable to the delays attributable to the vendor. The rate of penalty shall be @0.5% per week of delayed material value as applicable subject to maximum of 10% of total PO value. In case of LD recovery, the applicable GST shall also be recovered from vendor (if applicable).
15.0	GUARANTEE/ WARRANTY
15.1	The successful bidder shall guarantee the materials for a period of 12 months from the date of receipt of material, as per MRC/SRV/CRAC, at site. The warranty / guarantee shall be for good material & workmanship and vendor shall replace free of cost, due to faulty material and/ or workmanship. In case successful bidder fail to make good the defective works within the time specified by the engineer, BHEL may proceed to undertake the remedial actions for such defective works at successful bidder's risk & cost without prejudices to any other rights and recover the same from SD/ other dues.
16.0	CONTRACT RATE/ PRICE
16.1	Bidder shall quote their rates strictly in accordance with prescribed price schedule, Volume-III (latest revision).
16.2	The quantities of the various items mentioned in the rate schedule are approximate, based on very preliminary information and may vary to any extent or to be deleted altogether. The accepted rates of each item will remain firm throughout the period of execution including extension, for reasons whatsoever, as long as variation in the total value of the work executed under any part of this contract including extra items, if any, but excluding any price variation remains within +/- 15 % (Plus/ minus fifteen percent) of the awarded price.
16.3	The work executed will be priced at the unit rate quoted/ accepted by the successful bidder. For the purpose of payment, the gross weight indicated in MRC/SRV/CRAC will be considered for calculating the weight/ quantity handled.
17.0	BREACH OF CONTRACT, REMEDIES AND TERMINATION
	In case of breach of contract, wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is atleast 10% of the contract value, the same be encashed. In case the value of the security instruments available is less than 10% of the contract value, the balance amount be recovered from other financial remedies (i.e. available bills of the contractor, retention amount, etc. with BHEL) or legal remedies be pursued. The balance scope shall be got done independently without Risk & Cost of the failed supplier/ contractor. Further, levy of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract.
18.0	EVALUATION CRITERIA
	Evaluation shall be done on "All-Inclusive Total F.O.R Destination Price excluding GST"
19.0	SPLITTING OF CONTRACT
	Not applicable
20.0	QUANTITY VARIATION
	+/- 15% of Contract Value
21.0	ALL OTHER TERMS & CONDITION
	As per TCC & NIT

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TECHNICAL CONDITIONS OF CONTRACT (TCC)
FOR PROCUREMENT OF HDG FIT BOLT ASSEMBLIES (EN 14399-8, CLASS 10.9)

1.0 SCOPE OF WORK

1.1 This document covers **design, manufacture, testing, inspection, packing, supply and delivery** of **Hot-Dip Galvanized (HDG) Fit Bolt Assemblies** conforming to:

- EN 14399-1, EN 14399-2, EN 14399-8 (Fit Bolts)
- EN 14399-6 (Washers)
- EN ISO 898-1 (Mechanical Properties)
- ISO 10684 (HDG Fasteners)

1.2 Scope includes:

- Fit bolts (precision shank)
- Nuts
- Hardened washers
- Associated accessories

1.3 The attached **Technical Specification (Annexure-A)** shall form an integral part of this contract.

2.0 APPLICABLE DOCUMENTS & ORDER OF PRECEDENCE

Order of precedence:

1. Purchase Order / LOA
2. Annexure-A (Technical Specification)
3. This TCC
4. Applicable Standards (latest revision)

3.0 ELIGIBILITY CRITERIA (MANDATORY)

3.1 Bidder shall be **original manufacturer** (no traders/agents permitted) of the complete fastener assembly (bolts, nuts & washers). Agencies who manufacture sub-components only (e.g. bolts only, nuts only, washers only) shall not be accepted.

3.2 Manufacturer shall possess:

- ISO 9001:2015 certification : current ISO 9001:2015 QMS certification from an NABCB/IAF-accredited certification body. The scope of the certificate shall explicitly cover the manufacture of high strength structural fasteners.
- Minimum 3 similar project supplies (last 5 years)
- NABL-traceable testing facility (in-house) – refer clause 4.0

3.3 Mandatory Technical Personnel Requirement

The manufacturer shall have:

- **Minimum one qualified Metallurgist**
- Qualification: Degree/Diploma in Metallurgy/Materials Engineering
- Experience: **≥ 5 years in heat treatment of fasteners**

Documentary proof shall be submitted.

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3.3 BHEL reserves the right to:

- Conduct **pre-award and post-award audits**
- Reject vendors without assigning reasons (as per procurement norms)

3.4 BID COMPLIANCE CHECKLIST (MANDATORY SUBMISSION)

- The Bidder shall submit, along with its Techno-Commercial Offer, the duly filled, signed and stamped Bid Compliance Checklist enclosed as Annexure-B to this TCC. The checklist shall be completed in all respects and shall clearly indicate compliance against each requirement stipulated in this TCC.
- The Bid Compliance Checklist and supporting documents shall form the primary basis for techno-commercial evaluation of the Bidder's offer. Submission of incomplete, unsigned, unstamped or unsupported checklists may be treated as non-compliance with tender requirements.
- Offers not accompanied by the duly filled, signed and stamped Bid Compliance Checklist, along with the requisite supporting documentary evidence, shall be considered non-responsive and shall be liable for rejection during techno-commercial evaluation without any further reference to the Bidder
- Submission of the Bid Compliance Checklist shall not relieve the Bidder of its responsibility to comply fully with all requirements of the Tender. BHEL reserves the right to conduct pre-award and post-award audits, inspections and verifications to establish compliance with the requirements of this TCC.

4.0 MANUFACTURING & TESTING FACILITY REQUIREMENTS (MANDATORY)

4.1 The following facilities shall be **IN-HOUSE (OWN FACILITY ONLY)**:

- Cold / Hot Forging Facility
- Heat Treatment Facility
- Hot-Dip Galvanizing Facility

Subcontracting of these two processes is **strictly prohibited**.

4.2 Production Facilities:

- Forging / cold heading machines
- CNC machining for fit bolts
- Thread rolling machines
- Controlled heat treatment furnace

4.3 Testing Facilities (MANDATORY):

- **Universal Testing Machine (UTM) – Minimum 100 Ton capacity**
- Spectrometer
- Hardness tester (Rockwell & Vickers)

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-
- Metallurgical microscope
 - Bolt tension calibrator (Skidmore-Wilhelm type or equivalent) to test Suitability for Preloading
 - Coating thickness gauge
 - Salt spray chamber
 - All equipment must have valid NABL calibration

5.0 RAW MATERIAL REQUIREMENTS (CRITICAL)

5.1 Source of Steel

- Input steel for all fit bolt assemblies shall be sourced exclusively from **original** steel producers having valid BIS licence for IS 5517— not from traders, stockists, service centres, or intermediaries. The fastener manufacturer itself may not self-certify the input steel.

5.2 Steel Grade & Chemical Composition

The following chemical composition requirements are mandatory and shall be evidenced by actual numerical values on the Material Test Certificate (MTC) issued by the steel producer for every heat of steel received. Pass/ Fail statements are not acceptable.

- **Steel Grade & Alloy Selection:** Input steel shall be an Alloy Structural Steel with sufficient Chromium (Cr) and Molybdenum (Mo) content to achieve the through-hardening requirements. While grades like 42CrMo4 (per EN 10083-3) or SAE 4140 are acceptable, the manufacturer must ensure at their end the specific alloy chemistry is capable of achieving approximately 90% martensite in the core of the threaded section in the "as-hardened" condition (before tempering).
- **Designation:** The MTC shall explicitly state the standard grade designation. Where international equivalents (EN/SAE/AISI) are used in lieu of IS 5517:1993, prior approval from BHEL-PSER is required.
- The limits for Sulphur (S), Phosphorus (P) and Boron (B) content shall be strictly maintained as per IS 1367-3 (latest). If Boron exceeds 0.001%, Aluminium (Al) shall be suitably added to achieve the desired metallurgical properties. In case of Steels with boron, the content of Boron must be clearly declared on the MTC.
- **Enhanced Alloying for Large Diameters:** For bolt diameters M30 and above, the manufacturer shall ensure enhanced alloying (specifically Cr and Mo) to guarantee uniform through-hardening and prevent brittle "snapping" in the core.
- **Carbon Equivalent (C_{eq}):** The actual C_{eq} value shall be calculated and reported on the MTC.
- **Vacuum Degassing (VD):** For steel processed via the VD route, the Hydrogen (H_2) content shall be measured and reported on the MTC.
- **Precedence:** The Specific chemical limits and hardenability requirements stated in this TCC clause shall take precedence over general limits provided in IS 5517 or any other international standards for raw material.

5.3 Steelmaking Route –

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The steelmaking route and supply chain model shall be declared on every Material Test Certificate. The following requirements apply:

- Accepted steelmaking routes: Electric Arc Furnace (EAF) + Ladle Refining Furnace (LRF) + Continuous Casting (CC); or Basic Oxygen Furnace (BOF) + LRF + CC.
- Induction Furnace (IF) route is NOT permitted for Class 10.9.
- Vacuum Degassing: **mandatory** for all Class 10.9 bolts of diameter M24 and above. The MTC shall confirm vacuum degassing was applied to that specific heat.

5.4 Material Test Certificate : Format & Content

The Material Test Certificate submitted with each consignment shall meet the following requirements:

- Certificate type: MTC issued by the steel producer's Authorised Inspector who is independent of the production department. The fastener manufacturer shall not re-issue, reproduce, or re-certify the steel MTC under any circumstances.
- The testing laboratory whose results are reported on the MTC shall hold current NABL accreditation under ISO/IEC 17025:2017 or at least shall have all equipment calibrated to NABL traceability.
- The following parameters shall be reported with actual numerical values on every MTC: chemical composition (C, Mn, Si, Cr, Mo, Ni, P, S, B, Al, V, Cu as applicable); non-metallic inclusion rating per IS 4163 / ISO 4967 - numerical ratings for series A, B, C, D (thin and thick) are mandatory; decarburization depth - total decarburization and free-ferrite depth in mm; Hydrogen Content ≤ 2 ppm (for larger diameters); mechanical properties (UTS, YS, elongation, reduction of area) where applicable.
- The heat number on the MTC shall exactly match the heat number on the physical material tag attached to the consignment and on the despatch note. Any mismatch shall be treated as a non-conformance and the consignment shall be quarantined pending clarification.
- For Class 10.9 bolts, the free-ferrite decarburization depth on the incoming bar or rod shall not exceed 0.05 mm absolute.
- **Ultrasonic Testing (UT)** of bar stock: for all alloy steel bar of diameter 30 mm and above used for HSFG bolt manufacture and carbon steel bars of diameter 40 mm and above used for foundation bolt manufacture, 100% ultrasonic testing shall be mandatory. UT shall be conducted per IS 3664:1981 or equivalent international standard with acceptance criteria per EN 10308:2002. The UT test result — 'Done OK' or equivalent with defect classification — shall be reported on the MTC or on a separate UT certificate cross-referenced to the MTC heat number. Bar lots for which UT has not been conducted or reported by steel producer shall not be used for BHEL supply of Class 10.9 bolts of M30 diameter and above.

6.0 MANUFACTURING PROCESS REQUIREMENTS

6.1 Forging

- Closed-die forging with **induction heating (preferred)**
- Controlled temperature to prevent grain growth

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6.2 Heat Treatment (MANDATORY IN-HOUSE)

- Continuous/controlled furnace (mesh belt preferred)
- Oil quenching with agitation control
- Hardness monitoring per batch

6.3 Threading

- Thread rolling **before heat treatment (preferred)**
- No laps, cracks, or thread defects

6.4 Fit Bolt Machining

- Shank tolerance: as per EN 14399
- Precision machining and inspection (air gauge preferred)

6.5 Hot-Dip Galvanizing (CRITICAL FOR 10.9)

- As per ISO 10684
- Strict process control for:
 - o Pickling time – to avoid potential hydrogen embrittlement
 - o Bath temperature – to avoid potential LME
 - o Fluxing
- **Mandatory de-embrittlement baking:**
 - o 200°C ±10°C for minimum 4 hours
 - o Within 1 hour of pickling/ galvanizing (log sheet/ reports to be submitted to substantiate the same)

7.0 TESTING & ACCEPTANCE CRITERIA

- 7.1** Within seven (07) days of issue of Purchase Order/Letter of Award, the successful bidder shall submit a detailed Manufacturing Quality Plan (MQP) for BHEL review and acceptance.
- 7.2** The Manufacturing Quality Plan shall be prepared in accordance with the requirements of the applicable standards, Annexure-A (Technical Specification), this TCC, and the bidder's approved manufacturing processes and quality management system.
- 7.3** The MQP shall, as a minimum, identify the sequence of manufacturing operations, stage-wise inspections, testing requirements, acceptance criteria, applicable standards, inspection and test records, traceability requirements, hold points, witness points, review points and the responsibility of inspection agencies, wherever applicable.
- 7.4** Manufacturing and testing activities for BHEL orders shall be carried out in accordance with the approved MQP. Any subsequent deviation from the approved MQP shall require prior written approval from BHEL.
- 7.5** Submission and acceptance of the MQP by BHEL shall not relieve the supplier of its responsibility to comply fully with all contractual, technical, quality and statutory requirements of the Purchase Order.

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7.2 Mandatory Tests

Test	Standard
Tensile / Proof load	ISO 898-1
Hardness & Hardness traverse	ISO 6508 / 6507
Impact test	ISO 898-1
Metallography	Martensitic structure
Decarburization	ISO 3887
Coating thickness	ISO 10684
Hydrogen embrittlement	As applicable
Torque–Tension (k-factor) Test (for K2 type)	• As per EN ISO 16047 • Each lot shall be tested • Acceptance: as per Tech. Specification (Annex-A)
Suitability for Preloading (SUT)	• As per EN 14399-2 • Mandatory for each size & class
Additional Mandatory Tests (document review)	• Non-metallic inclusion rating • Hydrogen content (for large dia bolts) • Microstructure documentation

8.0 TRACEABILITY

8.1 Identification: The manufacturer shall maintain a robust traceability system. Each finished product must be uniquely traceable back to the specific **Heat Number** and the original **Steel Melt**.

8.2 Marking: All Fit Bolts shall bear the manufacturer's identification mark and Property Class as requirement of Annexure-A.

9.0 DOCUMENTATION & QUALITY RECORDS

9.1 Certification: Each dispatched lot must be accompanied by a comprehensive Quality Dossier containing:

- **Steel MTC:** Mill Test Certificate from a original steel producer.
- **Heat Treatment Records:** Time-Temperature charts for quenching and tempering.
- **Galvanizing Records:** Including certificate of post-coating de-embrittlement (baking).
- **Mechanical & chemical properties of fasteners,** including impact strength
- **SUT/k-factor Report:** Torque-tension test results for the specific lot.
- **NDT Reports:** Surface/ Ultrasonic test reports as per the Quality Plan.
- **Salt-spray** test report

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10.0 DEVIATION & CONFIDENTIALITY

10.1 Deviation: Strictly **No Deviation** is permitted from the TCC or annexed specifications without prior written approval from BHEL.

10.2 Confidentiality: The Supplier shall not disclose BHEL drawings, specifications, or project-specific details to any third party.

11.0 NON-CONFORMANCE & REJECTION

11.1 Rights: BHEL reserves the right to reject any lot failing to meet the requirements specified in this TCC and **SSFIT-001 Rev.02**.

11.2 Replacement: Vendor shall replace rejected material within 4 weeks at their own absolute cost.

11.3 Recovery: BHEL shall recover all costs related to re-testing, handling, and - if already installed - site dismantling and re-erection.

12.0 BREACH OF CONTRACTING

12.1 Material Breach: The following constitute a fundamental breach:

- Sub-contracting of manufacturing, HT or HDG processes (Mandatory In-house).
- Use of non-complying raw material or falsification of documents/ MTCs.

12.2 Remedies: BHEL may terminate the contract, forfeit Security Deposits, Blacklist the vendor, and recover all consequential losses.

13.0 RISK PURCHASE

13.1 Default Provision: Upon vendor default, BHEL may procure from an alternate source. The cost difference plus **5% administrative overheads** shall be recovered from the vendor's outstanding bills or Security Deposit.

14.0 ANNEXURES

- **Annexure-A:** Technical Specification (SSFIT-001 Rev.02)
- **Annexure-B:** Mandatory Bid Compliance Checklist

