



BHEL PIPING CENTRE, CHENNAI

TECHNO-COMMERCIAL MEMORANDUM OF UNDERSTANDING FOR SUPPLY OF FITTINGS

BETWEEN

M/s. BHEL PIPING CENTRE, CHENNAI

&

M/s.

**DOC NO- BHEL: PC: MOU: FITTINGS
REVISION NO- 00
PRODUCT- FITTINGS**

RECORD OF REVISION

REV No	DATE OF REVISION	RECORD OF REVISION
00	28.05.2018	ORIGINAL ISSUE

VENDOR'S SIGNATURE WITH SEAL

BHEL PIPING CENTRE

GENERAL:

- This Techno-Commercial MoU is signed between M/s BHEL Piping Centre, Chennai and M/s to finalize the Technical and Commercial terms (except price, delivery period and LD term) for the supply of Fittings. All terms and conditions agreed thru this MoU shall stand valid for all tenders and Purchase Orders floated for the supply of Fittings.
- List of applicable products for which MoU is being entered to is indicated below-

SI No	Material Group	Product description
1	FITCS	Fittings- Carbon Steel
2	FITAS	Fittings- Alloy Steel
3	FITSS	Fittings- Stainless Steel
4	FIT91	Fittings- WP91
5	FITSW	Fittings- Socket Weld
6	FITFG	Forgings- CS & AS (Except F91)
7	FIF91	Forging- SA182F91
8	FIF92	Forging- SA182F92

SI No	Material Group	Product description
9	FITFLG	Flanges- CS, SS & AS (Except F91)
10	FIF91NIB	Non-IBR F91 Forgings
11	FITWC	Fabricated Fittings- CS
12	FITWA	Fabricated Fittings- AS
13	FITW9	Fabricated Fittings- F91
14	FORYC	Forged Y Piece- Carbon Steel
15	FORY9	Forged Y Piece- F91

- This MoU will be applicable for all Single, Limited and Open Tender Enquiries floated by BHEL Piping Centre, Chennai.
- The MoU will stand valid till **31.12.2019**. The MoU validity may be extended even after the initial period if required by M/s BHEL with the consent of the supplier. However, if any change is required within the validity of the MOU, the MoU will be amended with mutual consent.
- By signing this MoU, the following terms and conditions are agreed by BHEL and the supplier in toto.

MoU TERMS:

SI No	MoU Terms
1	<u>Type of Bid:</u> Enquiry can be either 'Single part bid type' or 'Two part bid type'. The bid type to which an Enquiry will be resorted to will be indicated in the tender itself and vendors have to submit their bids suitably. Generally E-Tenders thru BHEL's Procurement portal will be resorted to. In case tender is addressed in conventional manner, the same will be indicated in the NIT. Suppliers will have to submit the quote accordingly.
1.1	<u>Single Part Bid:</u> In case of Single part bid, only "One bid" has to be submitted. Bid must consist of the following- - Supplier has to confirm for supply as per agreed MoU terms in the format which will be sent along with the Enquiry. Bids deviating from the MoU terms will be liable for rejection. - Price has to be submitted in the format which will be sent along with the Enquiry.

1.2	<u>Two Part Bid:</u> In case of Two part bid, two bids (Part I & Part II) have to be submitted: <u>Part I-</u> a) Supplier has to confirm to supply as per terms of MoU in the format forwarded with Enquiry. b) Unpriced bid shall be submitted to know the items for which the supplier has quoted. c) Applicable tax and duty shall be indicated explicitly. d) Technical deviations if any shall be indicated in a separate sheet. Any deviations indicated elsewhere will not be evaluated by BHEL. <u>Part II-</u> Price bid has to be submitted in the template available in E-Procurement portal. In case of conventional bid submission, price bid has to be sent along with the Enquiry in a separate cover.
2	<u>General Requirements (applicable for all suppliers):</u> a) Suppliers shall not alter the description, size detail and Techno-Commercial / Price bid formats of the tender. Alteration of the any of the details as indicated above shall be treated as “Tampering” of the bid and will invite action as per existing guidelines in vogue. b) All fittings shall be painted, marked and packed as per respective TDC requirement. Latest TDC revision shall be referred in this regard. c) Suppliers shall quote only for the sizes that are within their manufacturing range approved by BHEL Piping Centre and fittings shall be manufactured only at the works / mills approved by BHEL Piping Centre. d) Packing shall be as per Packing Procedure PC:PKG:01 Rev 00. e) Melt number should be punched on the material without fail. All dimensions indicated in the documents should be hard punched on the material as per Purchase Order (in 'mm' and not in 'inch'). f) Serial number shall be "per size for PO quantity" and shall be continuous numeric only. Identified serial number shall be written on Manufacturing Test Certificate (MTC) only for future reference and correlation. Same shall not be written on IBR forms. All the individual test reports like dimensional report etc shall be indicated with serial number for correlation. For example, PO quantity is 100 nos in which 50 nos were offered and cleared by inspection, then MTC & all relevant test reports shall be indicated with 1 to 50 as serial numbers. For remaining PO quantity serial number shall start from 51 to 100. SI No shall be hard punched on the external surface. g) Any cost implication arising due to non-compliance to TDC conditions will be debited from suppliers account after due intimation of the same.
3	<u>Technical Requirements:</u> Product wise technical requirement is indicated below. Even though the full list of technical requirements is indicated below, the applicable products are as indicated in Page 2 of the MoU.

3.1	<u>Butt Welded (BW) Fittings conforming to SA234 (WPB, WPC, WP11, WP22, WP91)</u> <i><u>Materials Groups- FITCS, FITAS, FITSS, FIT91</u></i> <i><u>Technical Delivery Condition (TDC)- TDG 102 Rev 08</u></i> a) BHEL TDC No TDG 102 Rev 08 has been agreed in toto and shall be followed for manufacturing and supply of BW Fittings. Fittings shall be supplied as per BHEL drawings (if any) sent along with Enquiry. Any clarification with regard to drawings shall be obtained during tender stage itself. Manufacturing drawings need not submitted for BHEL approval until otherwise explicitly indicated in the Enquiry / PO / drawings. b) Raw material sources conforming to SA234 WP91 shall be as per QCP 18 Rev 01 (Forgings- F91) or QCP 19 Rev 02 (Seamless Pipes- P91 / P92) as applicable. c) Quality Plan QPG 46 Rev 01 shall be followed for inspection. d) Edge Preparation (EP) shall be done as per BHEL drawing no 3-80-300-19825 Rev 04 as applicable if not explicitly indicated in the item drawing in Enquiry. D1 value shall be as mentioned against each item in the Enquiry / PO. e) Tolerance shall be maintained as per BHEL drawing no 4-80-301-26192 Rev 01. f) Bid shall be submitted for Seamless / Welded construction as applicable indicated against each item in the Enquiry. g) Seamless construction is acceptable in place of Welded construction. However Welded construction is not acceptable in place of Seamless construction. h) All the reducers are concentric, unless otherwise specified as eccentric. All the elbows are LR, unless otherwise specified as SR. i) For SS items, IBR inspection is not applicable.
3.2	<u>Socket Welded (SW) Fittings conforming to SA105 & SA182 (F11, F12, F22, SS304, SS403)</u> <i><u>Materials Groups- FITSW</u></i> <i><u>Technical Delivery Condition (TDC)- TDG 103 Rev 02</u></i> a) BHEL TDC No TDG 103 Rev 02 has been agreed in toto and shall be followed for manufacturing and supply of SW Fittings. Fittings shall be supplied as per BHEL drawings (if any) sent along with Enquiry. Any clarification with regard to drawings shall be obtained during tender stage itself. Manufacturing drawings need not submitted for BHEL approval. b) Post order, vendor shall submit Quality Plan for BHEL / customer approval. Vendors who have already obtained approval shall confirm to manufacture as per the same. c) For SS items, IBR inspection is not applicable.

3.3	<u>Forgings and Forged Fittings conforming to SA105 & SA182 (F11, F22, F91, F92)</u> <u>Material Groups- FITFG, FIF91, FIF92, FITFLG, FIF91NIB, FORYC, FORY9</u> <u>Technical Delivery Condition (TDC)- TDG 104 Rev 09</u> a) BHEL TDC No TDG 104 Rev 09 has been agreed in toto and shall be followed for manufacturing and supply of Forgings. Forgings shall be supplied as per BHEL drawings (if any) sent along with Enquiry. Any clarification with regard to drawings shall be obtained during tender stage itself. Manufacturing drawings need not submitted for BHEL approval. b) Raw material sources conforming to SA182 F91 shall be as per QCP 18 Rev 01. c) Edge Preparation (EP) shall be done as per BHEL drawing no 3-80-300-19825 Rev 04 as applicable if not explicitly indicated in the item drawing in Enquiry. D1 value shall be as mentioned against each item in the Enquiry / PO. d) Post order, vendor shall submit Quality Plan for BHEL / customer approval. Vendors who have already obtained approval shall confirm to manufacture as per the same. e) Plain Forgings (Forged Stubs) for which drawings are not given by BHEL shall be supplied as proof machined with square ends only with tolerance OD +2 /-0, ID +0/-2, L +2/-2 mm. f) IBR is not required for FIF91NIB requirements.
3.4	<u>Fabricated Tees, Y-Pieces & Pipe with attachments (FITW9, FITWA, FITWC)</u> <u>Material Groups- FITWC, FITWA, FITW9</u> <u>Technical Delivery Condition (TDC)- TDG 108 Rev 07 & 109 Rev 00</u> a) BHEL TDC Nos TDG 108 Rev 07 and TDG 109 Rev 00 have been agreed in toto and shall be followed for manufacturing and supply of Fabricated Tees, Y Pieces & Pipe with attachments. Fittings shall be supplied as per BHEL drawings (if any) sent along with Enquiry. Any clarification with regard to drawings shall be obtained during tender stage itself. Manufacturing drawings need not submitted for BHEL approval until otherwise explicitly indicated in the Enquiry / PO / drawings. b) Welding Procedure Specifications (WPS), Procedure Qualification Records (PQR) and NDE procedures shall be approved by BHEL and shall be followed for manufacturing. c) Post order, vendor shall submit Quality Plan for BHEL / customer approval. Vendors who have already obtained approval shall confirm to manufacture as per the same. d) Edge Preparation (EP) shall be done as per BHEL drawing no 3-80-300-19825 Rev 04 as applicable if not explicitly indicated in the item drawing in Enquiry. D1 value shall be as mentioned against each item in the Enquiry / PO.
4	<u>Response to Enquiries / NIT's:</u> If the supplier is not interested / not in a position to participate in the tender, a regret letter / mail / response in E-Procurement portal for not participating in the tender shall be submitted to BHEL before the tender due date.
5	<u>Price:</u> Quoted price shall be FIRM till the completion of supply until otherwise specified in the Enquiry / PO. Bidders shall submit their bid on "FOR BHEL Trichy stores / any project site" basis. Quoted rates shall be all inclusive of testing, IBR inspection charges (if applicable), packing and forwarding charges and freight & insurance. Tax and duty are extra at actuals and applicable rates shall be indicated explicitly.

6	<u>Offer & Price Validity:</u> Offer shall be valid for 3 months from the date of Techno-Commercial bid opening or 60 days from Reverse Auction / E-Price Bid opening whichever is later. Quoted rates shall be FIRM till completion of supplies until otherwise specified in the Enquiry / PO.
7	<u>Taxes & Duties:</u> Applicable tax and duty in percentage shall be indicated explicitly in the offer.
8	<u>Delivery Terms:</u> a) 'FOR' BHEL Trichy stores / any project site in India as per BHEL's dispatch instruction. b) Wherever Direct to Site (DTS) advice is given, materials shall be dispatched directly to respective project sites. The remaining items shall be dispatched to BHEL Trichy stores after obtaining dispatch clearance from BHEL.
9	<u>Tender Process:</u> Tender shall be processed by opening E-Price bids submitted thru E-Procurement portal or thru Reverse Auction. The mode of tender process will be informed by BHEL after evaluation of Techno-Commercial bids. BHEL reserves the right to go for Reverse Auction (RA) instead of opening the sealed envelope price bid submitted by the bidder and the same will be decided after Techno-Commercial evaluation of the bids. Reverse Auction guidelines shall be as per Annexure I to the MoU. Any revision to the same shall be communicated along with the tender. In case both indigenous and import suppliers are participating in the tender, price comparison will be made by considering Exchange Rate as on the date of Part I opening date (State Bank of India's TT selling rate will be considered). In such case, ranking will be done based on "Net Cash Outflow to BHEL" on "FOR BHEL Trichy stores" basis. In case only indigenous suppliers have quoted for the tender, ranking will be based on "Net Cash Outflow to BHEL" on FOR BHEL Trichy stores / any project site in India basis. Any loading based on deviations taken by vendors will be considered for arriving Net Cash Outflow to BHEL. Ordering will be done only on item level L1 vendor and "NOT" as a total package. Hence Minimum Order Quantity (MOQ) / Minimum Order Value (MOV) condition will not be accepted. However, in case of emergency requirements, package ordering may also be resorted to. In such cases, the basis of evaluation will be explicitly indicated in the NIT.
10	<u>Delivery:</u> Delivery is tender specific and shall be indicated in the respective tenders.
11	<u>Inspection:</u> Inspection shall be by IBR (if applicable), NTPC (if applicable) and BHEL / BHEL authorized TPI.

12	<u>Inspection Charges:</u> Inspection charges of BHEL / BHEL authorized TPI or customer is to BHEL a/c. However any other testing charges and IBR inspection (if applicable) should be included in the quoted rates.
13	<u>Forwarding of Test Certificates & Inspection Reports:</u> Test certificates (TC) along with Inspection Reports (IR) as called for in the TDC (Three ink signed originals) / approved Quality Plan shall be sent to Sr.Manager / Purchase (Fittings), BHEL Piping Centre immediately after the shipment / dispatch of items. TC & IR shall be furnished for each batch of shipment / dispatch. If entire PO quantity is manufactured in one lot but dispatched in phased manner, original “IBR Form” should be submitted with the first consignment. For subsequent consignments, attested Xerox copy of IBR along with copies of TC and IR indicating invoice detail against which original TC and IR was handed over to BHEL shall be submitted. Soft copies of the all the test certificates shall also be submitted through email. Year of code for the technical standards shall be latest and the specific year shall be indicated in the MTC’s as well as applicable IBR Forms.
14	<u>Payment Term:</u> 100% payment after 45 days after receipt of materials. No advance payment shall be made by BHEL. Payment shall be made against presentation of the following documents to BHEL. However a copy of Invoice and LR shall be sent to Purchase department immediately after physical dispatch. - Original GST compliant invoice and 2 copies of the same. - Original site acknowledged Lorry Receipt (Goods Receipt (GR) date for in case of BHEL Trichy stores). - Original inspection report, works test certificate, IBR forms, raw material test certificate, Heat Treatment (HT) chart, NDT reports (PT/ MPI / UT / RT as applicable wrt TDG / approved QP). - Dimensional report, thickness measurement report (for Elbows, Tees) and any other reports as called for in TDC / approved QP. If one original certificate / LR is applicable for more than one invoice quantity / invoice, Xerox copy is acceptable with original correlation details on the Xerox copy with attestation by suppliers Quality in charge. Dispatches shall be on “Door delivery CC attached” basis only. Road Permit (if any) will be provided by BHEL during dispatch clearance. <u>GST compliance:</u> - GSTN registration number shall be indicated in all the invoices and invoices shall be in the format as specified / prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice no, commercial invoice no etc., then the Invoice No which is linked / uploaded in GSTN network shall be clearly indicated), item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN / SAC Code, etc. - All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature) / SAC code (Services Accounting Code).

14	c) A declaration to the effect that all invoice particulars are / were uploaded in the GSTN network / portal & all tax liability as per GST rules and regulations have been and will be discharged, shall be mentioned in the invoice. If not mentioned in the invoice, a separate declaration shall be submitted as per the requirement of BHEL. d) In case of discrepancy in the data uploaded by supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note (details to be uploaded in GSTN portal) for the shortages or rejections in the suppliers, within the calendar month notified by BHEL. e) For any such delay in availing of tax credit for reasons attributable to supplier (as mentioned above), interest (calculated @ SBI Base Rate + 6%) along with penalty (if any) will be deducted / recovered for the delayed period i.e. from the month of receipt till the month tax credit is availed, from the running bills. Incase GST credit is denied to BHEL due to any reason not attributable to BHEL, GST amount along with interest levied or leviable on BHEL will be recovered from payment due to vendor.
15	<u>BHEL Standard Guarantee Clause:</u> The materials are to be guaranteed for satisfactory performance for a period of 24 months from the date of dispatch or 18 months from the date of commissioning / putting into use whichever is earlier and if any defect is noticed during the above period, the same shall be rectified / replaced free of cost on FOR destination basis within a reasonable time, maximum limited to the agreed delivery period. To this effect a guarantee certificate should be sent along with the dispatch documents in the event of an order.
16	<u>LD Clause:</u> If the supplier fails to deliver the items within the delivery date as applicable for the PO, the purchaser shall deduct Liquidated Damages, a sum equivalent to 0.5% of the price for each week of delay up to a maximum of 10% of the price of delayed / undelivered portion. For the purpose of LD calculation, LR date will be reckoned as the delivery date.
17	<u>LD Calculation & Loading:</u> LD will be calculated for the number of days delayed from the PO delivery date. % LD per day and LD value calculation is indicated below- - No of days delayed = LR date - PO delivery date % LD per day = (No of days delayed) * (0.5 / 7) * contractual LD agreed [% LD will be rounded to nearest two decimals] - LD value = % LD calculated above * Value of the delayed supply If deviating with respect to BHEL's standard LD clause, loading will be applicable to the extent to which the bidder has not agreed (for eg. if supplier agrees for maximum LD of 6%, then the remaining portion ie. 4% shall be loaded on the quoted rate during price evaluating of the offer). Applicable LD percentage shall be explicitly indicated in the bid for respective Enquiry.
18	<u>Risk Purchase Clause:</u> Alternatively the purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or despatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases in addition to penalty at the rate mentioned under liquidated damages.

19	<u>MSE Preference:</u> a) In case the supplier belongs to MSE's (Micro Small Enterprises), registration copy in this respect shall be submitted along with the offer. MSE suppliers can avail the intended benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (5 years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (where deemed validity of EM II certificate of 5 years has expired) applicable for the relevant FY (latest audited). b) Further if MSE's are owned by the Scheduled Caste or the Scheduled Tribe entrepreneurs, the same may be intimated. c) Small Enterprises that has graduated to a higher category are also eligible for intended benefits for 3 years from the date of such graduation. Certificates to this effect shall be submitted along with the offer for availing MSE preference. d) In tender, participating MSE's quoting price within price band of L1 + 15% shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a MSE and such MSE shall be allowed to supply up to 20% of quantity (item level). In case of more than one such MSE, the supply shall be shared proportionately within this 20%. MSE preference shall be operated only for items where quantity is more than 10 nos. e) Out of the 20% reserved for MSE vendors, 4% is earmarked for MSE owned by SC / ST entrepreneur (supporting documentary proof to be submitted along with the tender). f) If MSE vendor/s do not match the counter offered price, the quantity will be ordered on L1 vendor.
20	<u>Suspension of Business Dealing:</u> In order to protect the commercial interests of BHEL, it becomes necessary to take action against suppliers / contractors by way of suspension of business dealings, who either fail to perform or are in default without any reasonable cause, cause loss of business / money / reputation, indulge in malpractices, cheating, bribery, fraud or any other misconduct or formation of cartels so as to influence the bidding process or influence the price etc. Suspension of Business Dealings could be in the form of "Hold" or "Banning" a supplier / contractor or a bidder or an applicant for registration as a registered supplier. For this purpose, the abridged version of guidelines hoisted at website http://www.bhel.com/vender_registration/vender.php (Suspension of business dealings with suppliers / contractors) is being followed across all BHEL units. Vendors shall keep themselves aware of these guidelines before submission of their bid.

21	Note: • Revisions indicated are as on date of issue. Any revision any of the documents indicated in the MoU shall be communicated along with the Enquiry and PO. • Evaluation and ordering will be done on item level and not on package basis unless otherwise indicated in the Enquiry. • PO copy with all details will be forwarded to successful supplier/s and acknowledgement for receipt of PO shall be sent within 5 days from the date of receipt. • During the Contract period, any of our sister units of BHEL Piping Centre will be entitled to place order for this item on the same terms and conditions with the consent of the supplier. • BHEL reserves the right to cancel the tender without assigning any reasons what so ever. • Deviation taken after placement of order will not be accepted (Technical, delivery & payment term). • Lowest prices received against BHEL tenders do not mean order will be placed on that Supplier. BHEL reserves the right not to consider the same. • BHEL reserves the right to negotiate or re-float the tender opened if L1 price or other details are not acceptable to them. • BHEL reserves the right to order on more than one vendor at the lowest acceptable price to BHEL. • Suppliers are requested to make themselves aware of "BHEL Fraud Prevention Policy" and "Suspension of Business Dealings with Suppliers / Contractors) available at www.bhel.com. • Annexure I form an integral part and shall be read along with the MoU. • Signing of this MoU doesn't guarantee neither the Enquiry nor order from BHEL. • Any conditional if specifically indicated in the Enquiry or PO will override the MoU conditions.
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Annexure I – Reverse Auction Guidelines

BHEL reserves the right to go for reverse auction (RA) (guidelines as available on www.bhel.com) instead of opening the sealed envelope price bid submitted by the bidder. This will be decided after Techno-Commercial evaluation. Bidders to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case bhel decides to go For RA.

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit 'Process Compliance Form' (to the designated service provider) as well as 'Online Sealed Bid' in the Reverse auction. Non-submission of 'Process Compliance Form' or 'Online Sealed Bid' by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant Guidelines for suspension of Business Dealings with Suppliers / Contractors (as available on www.bhel.com).

The bidders have to necessarily submit Online Sealed Bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates.

If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant Guidelines for Suspension of Business Dealings with Suppliers / Contractors (as available on www.bhel.com).