



## Bharat Heavy Electricals Limited

(Seamless steel Tube Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

<b>TITLE:</b> SUPPLY OF "Dual Gear Unit (stand-7,8) & (stand 19,20) as per Drg" – 2 Items	Phone: +91 431 257 8439 Email : pcsn@bheltry.co.in Web : <a href="http://www.bhel.com">www.bhel.com</a>
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Enquiry Number: 9441164E	Date: 29.12.2014	Due date for submission of application: 19.01.2015
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**BHEL/SSTP, Trichy is looking for offers to supply "Dual Gear Unit (stand-7,8) & (stand 19,20) as per Drg" – 2 Items**

**Pl refer the NIT Notification/Enquiry number for any further communication/correspondence .**

### **Important Note to New Vendors (VIEWERS THROUGH BHEL WEB SITE)**

The new vendors will be required to furnish the following documentary proof/ information (whichever applicable) along with their offers:

1. Certificate of registration (copy of certificate to be submitted).
2. Banker's information (copy of bank pass book first page to be submitted).
3. MSME vendor certificate (if applicable).
4. Address of your organization (complete postal address with PINCODE).
5. Contact person's Phone No. /Mobile No. / FAX No. /E-mail ID.
6. Statutory documents – VAT/TIN/EXCISE REGISTRATION/CST REGN /SERVICE TAX REGISTRATION etc. (copy to be furnished)
7. NSIC/SSI Certificate (if applicable)
8. ISO Certificate (if applicable)
9. Experience certificate as proof of supply of similar items to any Govt. agencies / PSU / Organisations (copy of PO's to be furnished).
10. Audit Report/ IT Return (if applicable)
11. Agency agreement with manufacturer (if applicable)
12. Partnership Deed (if applicable).

**If the new vendors failed to submit the above documentary proof/information, their offer will not be considered for this enquiry.**

Purchase Officer / SSTP  
Phone: 0431-257 8439  
Mail: pcsn@bheltry.co.in



**BHARAT HEAVY ELECTRICALS LIMITED**  
 (A GOVERNMENT OF INDIA UNDERTAKING)  
 SEAMLESS STEEL TUBE PLANT  
 TIRUCHIRAPALLI - 620 014.  
 TAMILNADU (INDIA)

PHONE : 0431-2578480/8491  
 : 0431-2578406/8419  
 : 0431-2578568  
 FAX : 0431-2576828

TIN : 33243560005  
 CST. No. : 239383  
 Dated : 11.06.1991

Corp. Identity No:  
 L74899DL1964GOI004281  
**PURCHASE ENQUIRY**

VENDOR CODE  
 19030

ENQUIRY NUMBER  
 9441164E

ENQUIRY DATE  
 29/12/2014

ENQUIRY DUE DATE  
 19/01/2015

No. OF ITEM  
 02

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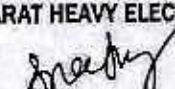
- IMPORTANT POINTS :**
1. Tender Closing Time : 14.00 Hrs.
  2. Tender Opening Time : 15.00 Hrs.
  3. Tender should be submitted in a sealed cover, duly indicating enquiry No. Enq date & Enquiry Due Date on the cover.
  4. Offer(s) received through Courier Services after 14.00 Hrs. on Enquiry Due Date will not be considered.
  5. Late Tender(s) is/are liable for rejection.
  6. Offer(s) shall be valid for 60 days from Enquiry Due Date.
  7. Offer(s) in Vendor's Letter head shall contain.
    - a. Offer No. and Date
    - b. Delivery Period
    - c. Delivery Terms
    - d. Payment Terms
    - e. Excise Duty with Tariff Heading Sales Tax (against form-XVII/Form-C), etc.
    - f. Excise Regn. No. and SSI Regn. No.

Kindly arrange to submit your **COMPETITIVE OFFER** for the following item(s)  
 If you are not in a position to submit your Offer, kindly arrange to send your **REGRET LETTER**.

**THIS IS ONLY A REQUEST FOR OFFER AND NOT AN ORDER**

Sl.No.	BHEL Material Code and Description	Unit	Requirement	
			Quantity	Delivery
01	<p>BHEL Material Code : SP9115542004</p> <p>DUAL GEAR UNIT-4th POSITION(STAND 7&amp;8) FOR SRM 380 AS PER DRG.NO.0-7-1155-15-11046 Rev.02</p> <p>NOTE:            1.SUPPLY IS TO BE DONE AS A SINGLE UNIT INCLUDING SL_NO:44 TO 54,57 TO 101 ,122 TO 125,160 TO 163 AND 165 TO 178,181 &amp; 182 AS PER THE ABOVE ASSEMBLY DRAWING.            2.MANUFACTURING OF THIS GEARED UNIT SHOULD BE AS PER THE INSTRUCTION GIVEN IN TDC ENCLOSED.            3.FOR OTHER DETAILS LIKE LUBRICATION &amp; PIPING SCHEME REFER SPEED CHART DRG.NO:1-7-1155-15-10079 AND DRG.NO.0-7-1155-15-11047.</p>	Nos.	01 1.000	30/04/2015
02	<p>BHEL Material Code : SP9115542010</p> <p>DUAL GEAR UNIT NO.10 th POSITION (STAND 19 to 20)FOR SRM 300 AS PER DRG.NO.0-7-1155-15-11046 Rev.02</p> <p>NOTE:            1.SUPPLY IS TO BE DONE AS A SINGLE UNIT INCLUDING SL.NO.44 to 69,75 to 79,81 to 95,97 to 101,150 to 153,160 to 162,164 to 178 AND 181 TO 182 AS PER THE ABOVE ASSEMBLY DRAWING.            2.MANUFACTURING OF THIS GEARED UNIT SHOULD BE AS PER THE INSTRUCTION GIVEN IN TDC ENCLOSED.            3.FOR OTHER DETAILS LIKE LUBRICATION UNIT PIPING SCHEME AND SPEED CHART</p>	Nos.	01 1.000	30/04/2015

- IMPORTANT NOTE :**
1. Delivery Terms : \*Free Delivery at BHEL-SSTP STORES\*is preferable.
  2. Payment Terms : 100% payment after 45 days after receipt and acceptance of materials by BHEL.
  3. Terms and Conditions of Tender : Please see reverse.
  4. The Technical Requirements/Specification Detail & Quality Requirements/Commercial Terms & Conditions are clearly furnished in the Tender. If Deviation(s) is/are not explicitly brought out in the Offer, it will be construed that the Tenderer is complying with the requirement of BHEL in full without any deviation(s).

For and on behalf of  
**BHARAT HEAVY ELECTRICALS LTD.**  
  
**PURCHASE EXECUTIVE**



**BHARAT HEAVY ELECTRICALS LIMITED**  
 (A GOVERNMENT OF INDIA UNDERTAKING)  
**SEAMLESS STEEL TUBE PLANT**  
 TIRUCHIRAPALLI - 620 014.  
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PHONE : 0431-2578480/8491  
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TIN : 33243560005  
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Corp. Identity No:  
**L74899DL1964G01004281**

**PURCHASE ENQUIRY**

VENDOR CODE 19030	ENQUIRY NUMBER 9441164E	ENQUIRY DATE 29/12/2014	ENQUIRY DUE DATE 19/01/2015	No. OF ITEM 02
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- IMPORTANT POINTS :**
1. Tender Closing Time : 14.00 Hrs
  2. Tender Opening Time : 15.00 Hrs.
  3. Tender should be submitted in a sealed cover, duly indicating enquiry No., Enq. date & Enquiry Due Date on the cover.
  4. Offer(s) received through Courier Services after 14.00 Hrs. on Enquiry Due Date will not be considered.
  5. Late Tender(s) is/are liable for rejection.
  6. Offer(s) shall be valid for 60 days from Enquiry Due Date.
  7. Offer(s) in Vendor's Letter head shall contain,
    - a. Offer No. and Date
    - b. Delivery Period
    - c. Delivery Terms
    - d. Payment Terms
    - e. Excise Duty with Tariff Heading Sales Tax (against form-XVI/Form-C), etc.
    - f. Excise Regn. No. and SSI Regn. No.

Kindly arrange to submit your **COMPETITIVE OFFER** for the following item(s)  
 If you are not in a position to submit your Offer, kindly arrange to send your **REGRET LETTER**.

**THIS IS ONLY A REQUEST FOR OFFER AND NOT AN ORDER**

Sl.No.	BHEL Material Code and Description	Unit	Requirement	
			Quantity	Delivery
	REFER DRG.NO.1-7-1155-15-10079 AND 0-7-1155-15-11047.			
	<p>Foot Note ::</p> <p>1)Tendrrers are requested to submit their offers on 2 BID basis (Ref.annex.A,B,C,D) viz.            (a) Part-I Technical and Un-Priced Bid &amp; (b) Part-II Price Bid.Both of the above Bids            are to be submitted before 14.00 hours (Indian Time) on Tender Due date</p> <p>2)Annexure-C &amp; D(if applicable) must be filled and submit offer with Part-I bid.</p> <p>3)Supply is to be made as per TDC enclosed.</p> <p>4)Kindly read all the Drawings through our BHEL WEB SITE 'www.bhel.com' before submitting            the offer letter.</p> <p>5)If the new vwndors fails to submit the documentary proof/informations as per NIT            notification,their offer will not be considered for this enquiry.</p>			

**IMPORTANT NOTE :**

1. Delivery Terms : 'Free Delivery at BHEL-SSTP STORES'is preferable.
2. Payment Terms : 100% payment after 45 days after receipt and acceptance of materials by BHEL.
3. Terms and Conditions of Tender : Please see reverse.
4. The Technical Requirements/Specification Details/Quality Requirements/Commercial Terms & Conditions are clearly furnished in the Tender. If Deviation(s) is/are not explicitly brought out in the Offer, it will be construed that the Tenderer is complying with the requirement of BHEL in full without any deviation(s).

For and on behalf of  
**BHARAT HEAVY ELECTRICALS LTD.**

*[Signature]*  
**PURCHASE EXECUTIVE**

**TECHNICAL DELIVERY CONDITION FOR DUAL GEAR UNIT**  
**( SRM 380 -4<sup>th</sup> GEAR BOX )**

Ref : SSTP:HMM:TDC:SRM

Date :13-10-2014

BHEL Material Code : SP 9115542004

Assembly Drawing Number : 0-7-1155-15-11046 Rev.02

**Scope of Supply :**

Manufacturing and supply of Dual Gear Unit for SRM (Gear box No.4<sup>th</sup>) as per drawing No. :0-7-1155-15-11046 Rev 02, Including SL.Nos :44 to 54 , 57 to 101,122 to 125 ,160 to 163 ,165 to 178 and 181 to 182 .

**Raw Material :**

Raw material selection shall be strictly adhered as per specification given in the drawing. Any deviation or clarification if the same is not mentioned in drawing shall be brought to SSTP / BHEL for wetting. The selected raw material shall be free from defects like lap, lamination, crack etc.

**Fabrication and Machining Requirements:**

For fabrication and machining of components the following conditions are to be fulfilled. All weldments should be free from weld defects. All machining have to be carried out after completion of welding and stress relieving, where ever required. The overall dimensions, tolerances and machining allowances indicated in the drawings are to be strictly adhered.

**Fabrication and Machining of Gear Box items as per**  
**Drg.No : 0-7-1155-02-10217 .**

1. The Manufacturer shall follow good engineering practice for fabrication like preheating ,adhering proper sequence of welding without any weld distortion.
2. All weld joints shall be tested with Liquid Penetrate testing to ensure defect free welding.
3. Use welding electrode E7018 for all welds and fillet size shall be 6mm or higher respect to the thickness of material used.
4. The total GB housings shall be stress relieved before machining. The overall dimensions, tolerances and machining allowances indicated in the drawings are to be strictly adhered.
4. Machining to be done only on Horizontal Boring Machine, having DRO / CNC facility or on CNC Machining Center.
6. The machining to be done in single setting preferably together with the components as per Drg.No:0-7-1155-02-10217 to achieve the required dimensional and centre line alignment requirements.
7. The instructions / caution notes given in each of these drgs. to be followed.
8. The machining is to be done as a single unit (after assembling housing, Cover etc. to form as a single, integral unit) in order to achieve Dimensional and relative positional alignment accuracy of the Matching parts.
9. Machining of dimension  $\varnothing 180$  J6 ,  $\varnothing 160$  J6 would be in Parallel Axis with respect to  $\varnothing 230$  J6 ,  $\varnothing 215$  J6 &  $\varnothing 180$  J6 from stage 1 at the Top to stage 4 at the bottom and the center of 235 +or-0.05 as shown in the drawing (0-7-1155-02-10217) shall be done, maintaining the  $\perp$  of 0.05 mm.
10. The bearings should be of reputed make like SKF / FAG / NTN / NSK / TIMKEN ,KOYO only
11. All the fasteners should be of reputed make like TVS, GKW and Unbrako only.
- 12 Where ever match-machining with other components and caution notes (instruction) given in drawing, should be strictly adhered .

13. All other dimensions shall be maintained as per drawing.
14. The manufacturer shall confirm the type of machine planned for this job along with offer.
15. All unmachined surfaces shall be cleaned and painted with Red Oxide Primer and two coats of Opalene Green synthetic enamel paint.

**Lubrication Assembly :**

Refer chart shown in Drawing No: 1-7-1155-15-10079 for provision of forced lubrication with Copper tube lines.

The forced lub. system is as follows :

By connecting to control lub. oil volume with preceding gear unit : 55lit/min.

Oil volume without preceding gear unit : 40 lit/min.

Oil pressure in distributor : 1.5 bar and temp. 45 deg C

The nozzle (Type : FU 1/652/606/30) is to be fixed in a screw plug which is having 3/4" BSP male thread to fix in the body of gear box cover and 1/4" BSP internal thread, for the nozzle having 1/4" BSP male thread to be screwed into plug and free flow oil all nozzles is to be ensured

**Inspection , Test Certificate & Guarantee :**

1. TC for All Gear's, Pinion's and Alloy Steel Material's Chemical Composition should be sent along with supply .
2. All the components should be offered for inspection by BHEL at Suppliers works before taking up for assembly work.
3. The gearbox and its associated items shall be guaranteed for satisfactory performance against manufacturing defect, workmanship etc for a period of 18 months from the date of dispatch or 12 month from date of actual usage.

**Packing :**

The component shall be applied with lubricating Oil on all machined area.

The unit shall be packed in such a manner that no transit damage occurs.

**Note :**

1. The supplier may visit **SSTP / BHEL** to inspect & to get clarity about the job before submitting the offer
2. The manufacturer shall establish the method of inspection of all the dimensions and the requirements of various perpendicular and parallelisms asked for in the drawing and indicate the method of measuring facilities available along with the offer.
3. The manufacturer shall make a written down procedure for manufacture of Dual Gear Unit on receipt of order, indicating the manufacturing sequence, inspection procedure, and packing method.



**S. FRANCIS LAVIER**  
Dy. Engineer  
Hot Mill Mech. Maintenance  
SSTP / BHEL  
TRICHY - 620 014



**P. PANDIYAN**  
Senior Manager  
Hot Mill Mech. Maintenance  
SSTP. BHEL. TRICHY - 14.

**TECHNICAL DELIVERY CONDITION FOR DUAL GEAR UNIT**  
**( SRM 300 - 10<sup>th</sup> GEAR BOX )**

Ref : SSTP:HMM:TDC:SRM

Date : 26-11-2014

**BHEL Material Code : SP 9115542010**

**Assembly Drawing Number : 0-7-1155-15-11046 Rev.02**

**Scope of Supply :**

Manufacturing and supply of Dual Gear Unit for SRM(Gear box No.:10<sup>th</sup>) as per drawing No. :0-7-1155-15-11046 Rev 02, **Including SL.Nos :44 to 69,75 to 79,81 to 101,150 to 153,160 to 162,164 to 178 ,181 to 182.**

**Raw Material :**

Raw material selection shall be strictly adhered as per specification given in the drawing. Any deviation or clarification if the same is not mentioned in drawing shall be brought to SSTP / BHEL for wetting. The selected raw material shall be free from defects like lap, lamination, crack etc.

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For fabrication and machining of components the following conditions are to be fulfilled. All weldments should be free from weld defects.

All machining have to be carried out after completion of welding and stress relieving, where ever required. The overall dimensions, tolerances and machining allowances indicated in the drawings are to be strictly adhered.

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Drg.No : 0-7-1155-15-10217 .

1. The Manufacturer shall follow good engineering practice for fabrication like preheating ,adhering proper sequence of welding without any weld distortion.
2. All weld joints shall be tested with Liquid Penetrate testing to ensure defect free welding.
3. Use welding electrode E7018 for all welds and fillet size shall be 6mm or higher respect to the thickness of material used.
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4. Machining to be done only on Horizontal Boring Machine, having DRO / CNC facility or on CNC Machining Center.
6. The machining to be done in single setting preferably together with the components as per Drg.No:0-7-1155-15-10217 to achieve the required dimensional and centre line alignment requirements.
7. The instructions / caution notes given in each of these drgs. to be followed.
8. The machining is to be done as a single unit (after assembling housing, Cover etc. to form as a single, integral unit) in order to achieve Dimensional and relative positional alignment accuracy of the Matching parts.
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13. All other dimensions shall be maintained as per drawing.
14. The manufacturer shall confirm the type of machine planned for this job along with offer.
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3. The manufacturer shall make a written down procedure for manufacture of Dual Gear Unit on receipt of order, indicating the manufacturing sequence, inspection procedure, and packing method.

  
**S. FRANCIS XAVIER**  
Dy. Engineer  
Hot Mill Mech. Maintenance  
SSTP / BHEL  
TRICHY - 820 014

  
**P. PANDIYAN**  
Senior Manager  
Hot Mill Mech. Maintenance  
SSTP. BHEL. TRICHY - 14.