



An ISO 9001
Company

Bharat Heavy Electricals Limited
(High Pressure Boiler Plant)
Tiruchirappalli – 620014, TAMIL NADU, INDIA

TITLE CARBON STEEL FORGED ROUNDS TO SPECIFICATION SA105 WANTED	Phone: +91 431 2574247/ 4354 Fax : +91 431 252 0719 Email : kjoe@bheltry.co.in
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	Reference Number: Enquiry 1301500025	Enquiry Date: 26.09.2015	Due date for submission of quotation: 17.10.2015
You are requested to quote the Enquiry number date and due date in all your correspondences. This is only a request for quotation and not an order			

Sealed Tenders are invited by the MM / Steel for 205 MT of Carbon Steel Forged Rounds confirming to Spec SA105 and TDC:0:404 Rev 13.

BHEL commercial terms & conditions and all annexure can be downloaded from BHEL web site http://www.bhel.com or from the Government tender website http://tenders.gov.in (public sector units) Bharat Heavy Electricals Limited) under enquiry reference "1301500025 "	
Tenders should reach us before 14:00 hours on the due date Technical bid will be opened at 14:30 hours on the due date Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present.	Yours faithfully, For Bharat Heavy Electricals Limited DGM/ MM / Steel 3rd Floor, Bldg 24, BHEL, Tiruchirapalli-620014 Ph: 0431- 2574247/ 4354, Fax: 0431- 2520719 Email: kjoe@bheltry.co.in

Revision Record:

Rev 09: New materials F23, F91 & F92 requirements added in Cl.1.0, Cl.2.0, and Cl.4.0 to Cl.6.0. CE marking certification clarity included in Cl.10.
 Rev 10: Cl 1:F6a Class 2 added, Code case corrected. Cl 2: Steel makers names removed and requirement for creep testing added as per IBR Reg 4,
 Cl 4: Tempering temperature and soaking time modified for SA 182 F91, F92 & F23. Cl 4 & 10: Photomicrograph requirement added for F91 & F92 forgings, Cl 2, 6 & 10:
 modified for SS, Cl 5: Bend test Clarified, Cl 6: Wet MPI added.
 Rev 11: Cl 2 Pt 3, 4, 5 modified. Cl 6 – Wet MPI for CS, AS added, Cl 10.1 – IBR Forms indicated
 Rev 12: Cl 1, 2, 4, 6 and 7 – requirements for grades SA 182 F1, SA 336 F1, F12, F22 Cl 3 and F91 added (for Neyveli Project). Creep test criteria in-line with BHEL R&D
 included. Cl 2 Pt 8 modified. Cl 6 Pt 1 – SA388 changed to ASTM A 388 based on ASME Sec II Ed 2013.
 Rev 13: Cl 2 Cl 4 Cl 10 Cl 12 modified

1. MATERIAL

Specification: ASME {Latest on date of Purchase Order (PO)}: (ASTM also applicable for non pressure parts / Valves)

Carbon Steel (CS)	:	SA 105, SA 350 LF 2
Alloy Steel (AS)	:	SA 182 F6a Class 2, F6a Class 3, F12 Class 2, F22 Class 3, SA 182 F23 (Code case: 2199), SA 182 F91 & SA182 F92 (Code Case: 2179), SA 182 F1, SA 336 F1, SA 336 F12, SA 336 F22 Cl 3, SA 336 F9J
Stainless Steel (SS)	:	SA 182 Gr. F 304, 304L, 316, 316L, 316H, 321, 321H, 347 & 347H; AISI 410 for TOA Gland and bushings.
Additional Requirement	:	As listed below (supplementary to Specification)
Size and Qty	:	As per Purchase order & Drawing.

2. CHEMICAL COMPOSITION & PROCESS

- 1) Melting: fully killed.
Product analysis per heat: CS: C≤0.25%, AS: SA182 F23: Si: 0.25-0.50% & Cu: 0.25max
SA182 F92: Si: 0.10-0.50%, Ni: 0.30 max & Cu:0.25% max
- 2) Raw material Steel for IBR forging items to be inspected at Mill & test certificate countersigned by IBR approved Authority, if the mill is not approved under IBR as well known steel maker.
- 3) Forging: to ensure uniformity of structure & strength with reduction ratio in area 4:1 min from ingot to final forging, close to final size & shape. Flow lines to be parallel to axis of openings. Forged Items ordered to this TDC shall be forged to the nearest shape before machining to final dimensions as per respective drawing.
- 4) Blooms / Billets used for forgings (Side Length, Dia)≥ 50mm shall be UT tested. For Acceptance Norm refer Cl.6.0. For finished bars this can be done at Final stage.
- 5) SS: All raw materials used in steel making including incoming scrap shall be checked by supplier to ensure freedom from radioactivity

3. DIMENSIONS AND TOLERANCES

Tolerances as per Drawing. Untoleranced dimensions for valve components as per VL:STDC:023(latest). Others as per drawing

4. HEAT TREATMENT(HT)

- 1) CS: SA 105: Normalised, SA 350 LF 2: Normalised at 880-900 °C & Tempered at 620-640 °C
AS: Normalised and Tempered.
For SA 182 F91, F92 & F23, SA336 F91 Normalising temperature : 1050-1080 deg C & Tempering temperature :730-780 deg C.
AISI 410: Supply in Quenched & Tempered condition as below.
Quenching at 955-1010°C in air or water or oil or Polymer. Soaking 30 mts/inch maximum thk. Tempering at 663°C.min. Soaking :60 mts/inch maximum thickness and air cool.
- 2) Photomicrograph test for F91 & F92 forgings - one per heat treatment lot per size and reported in test certificate.
Acceptance – The material shall be free from any micro fissures. Microstructure shall show lathe tempered martensite and also to be examined for grain growth. Photomicrograph with 500x (Min) magnification along with Photomicrograph report to be provided. The actual magnification and result of actual microstructure shall be certified/indicated.

5. MECHANICAL TESTS

- 1) Extent of test: for each size/heat/HT batch from sample product or identical test coupon.
- 2) Additional requirements for SA182 F23, F91 & F92:
F91: Yield: (0.2% offset): Min 450MPa; Tensile: Min 630MPa, Max 850MPa; Hardness(HB): Min 191, Max 250
F92: Tensile: Min 655MPa, Max 850MPa; Hardness(HB): Min 196, Max 250
F23: Tensile: Min 510MPa, Max 850MPa; Hardness(HB): Min 150, Max 220
- 3) AISI 410: Hardness 197-235 BHN. No other mechanical test required.
Additional requirements of tests: (Other than AISI 410 Only)
- 4) **Bend test: Acceptance as per IBR**
CS: Sample 19mm.Thick(t) x 25.4mm width to be bent 180 deg. around mandrel of radius 6.35 mm.
AS, SS: Sample 19mm.Thick(t) x 25.4mm width to be bent 180 deg. Around mandrel of radius =1.5 x t
- 5) **Impact test for QCNR Valves & CRHNR Valves:** CS, AS and SS: 1 / HT batch. As per ASTM A 370, 2mm Charpy-U notch, at Room temperature. Acceptance: Avg of 3specimens: 36J, Single Min: 24J
- 6) **CE-marking items** Charpy- V impact test at 20 deg.C as per ASTM A 370,
Acceptance : Avg : 40 joules, Min. single value: 27 joules.

6. NON DESTRUCTIVE TEST

- 1) Extent of test: for each product. Stage of test : After heat treatment.
- 2) UT: As per ASTM A388 - All finished forgings of dia/WT = / > 50mm. All Body & yoke of special class valves.
All forgings of SA 182 F91, F92 & F23, SA 336 F91: Acceptance: ASME Sec.VIII Div. 2 Cl.3.3.4.
- 3) MPI : 100% : As per ASTM E 709. Linear Indications like cracks, folds & other injurious defects are unacceptable.
Dry MPI/ Wet MPI : CS, AS (other than SA182 F91, F92, SA 336 F91) : all sizes
Wet MPI : SA182 F91, F92, SA 336 F91: all sizes.
- 4) LPI: for SS: 100%: ASTM E165, No linear indications acceptable.
- 5) SS: Finished forgings shall be checked for radioactive contamination and reported. Survey meter shall be used to measure at 5cm near the surface. Acceptance limits: Shall be less than 0.1 milli Rontgen (MR) per hr or 1 micro Sievert per hr.

7. WORKMANSHIP AND FINISH

Forged items to spec SA336 shall be machined in the inside surface as it is meant for steam application. Items to be proof machined as per drawing or shot blasted for CS/AS, Pickled & passivated as per ASTM A 380 for SS, & be free from scales & defects like laps, seams, folds, cracks, etc. Machined items (except SS) to be coated with a layer of transparent rust preventive before despatch.

8. REPAIR

Repairs by fusion welding are prohibited. Surface defects can be removed by mechanical means and defective areas smoothly dressed up with the adjacent surface. Minimum thickness after repair to meet drawing / Specification.

9. MARKING AND PACKING

Details of stamping on each item with low stress stamps: Heat number, Specification & grade, Maker's emblem/code & Inspection Authority's seal. Forgings to be properly packed and despatched to avoid damage during transit.

10. INSPECTION AND CERTIFICATION

10.1 The inspection and tests to be witnessed by an IBR approved inspecting agency, in case the Forge shop is not recognised as a "Well known Forger" under IBR. IBR Form III G countersigned by applicable inspection agency and Test certificate with following details, shall accompany the product (including proof machined). Well known Forger shall provide IBR Form IIF and Test certificate with following details, shall accompany the product (including proof machined):

1. Purchase Order No.(BHEL),TDC No. & Test certificate number.
2. Specification, Grade with applicable year of code, Heat Number, Drawing No.,Quantity & Size
3. Supplier of the steel used in making the finished product – Well known steel maker IBR Form IV & others Form IVA
4. Melting & forging process, Chemistry including incidental elements - Heat wise.
5. Heat treatment details of the material and test bars. For F91, F92 supplies – Photomicrograph at 500x resolution.
6. Mechanical test results, NDE test results with reference & acceptance standard.
7. Repair details if any, Certified copy of TC for starting material.
8. **For SS:** Measured Radioactivity levels shall be reported in the Mill Test Certificate. (Not to be recorded in IBR Form)

10.2 For CE-marking items the TCs with details specified above shall be submitted as per EN-10204 (latest)



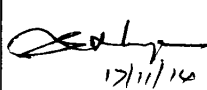


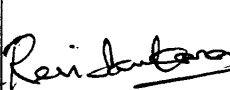
1. For pressure parts test certificates of type 3.1 or 3.2 is acceptable.
Type 3.1 – Suppliers shall have ISO 9001 certification certified by Notified Body recognized by European community and test certificate certified by suppliers authorized inspection representative.
Type 3.2 – Components inspected and test certificates certified by Notified Body recognized by European community.
2. For non pressure parts test certificates of type 2.2 is acceptable.
Type 2.2 – suppliers test certificates signed by suppliers authorized inspection representative with test results as required by TDC.

11. AUDIT CHECKS AT BHEL

BHEL reserves the right to carry out audit checks for chemistry, HT condition, mechanical test and NDT on representative test bars or job. Supplies found defective during check or subsequent processing at BHEL are liable for rejection.

12. END USE

Valve bodies, bonnets, discs, socket ends, body guides etc., Pressure part fittings in boilers & low, high temperature service like discs, socket weld tees, ells, weld neck flanges & stubs (except drum nozzles) meeting IBR, ASME Section I, ASME B16.34 and API. Non pressure part items in boilers and valves: For these, requirements on starting material, bend test and inspection by IBR are not required.

	 17/11/2014	 17/11/14	 17/11/14	 MM 17/11/14	
Haritha.C QA	Kalyanaraman.V QA	Selvarajan.S QA	Jayaraman.T MM	Raguraman.P MM	Revisankaran.U QA
Prepared	Reviewed			Approved	



BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPPALLI - 620014
Forged Supplier Facility Report

Annexure-C

SL	Description	Details	
1	Name of Company		
	1	Address of Registered Office	
		Telephone	
		email	
		Fax	
	2	Factory Location(s) and address	
		Telephone	
		email	
		Fax	
	2	Type & No. of Forging Press : Forging hammer Capacity - (Tonnes)	
3	Max. size of Material that can be handled, dimensions, weight and type of materials.		
4	<u>Production (for last three years)</u>		
	Carbon steel		
	Stainless Steel		
5	Heating Facilities		
	1.	Furnace - No. and capacity	
		1. Type - Oil Fired, Gas Fired, Electric heating	
		2. Dimensions	
		3. Mode of Temperature control & extent of automation.	
	4. Temperature recording facilities		
	2.	Distance of heating furnace from Forging Press	
	3.	Handling Facilities - Crane/Truck/Manual/ any other indicate list of such facility.	

6	Availability of in-house Heat Treatment facility		Yes/No
	1	If yes: Type of heat treatment possible	
	2	If no, source of Heat Treatment with relevant details.	
		1. Annealing	
		2. Normalising	
		3. Stress Relieving	
		4. Quenching :- Water/Oil	
		5. Type & No. of Furnace	
6. Dimensions, Type of Temp. Control, Temp - Time Recording facilities.			
7	Source of Raw Materials - Indigenous/imported (Indicate source and quantity of material procured during last three years)		
8	Machining Facilities - List of machines installed		
9	Cutting facilities - Type & No. of Machine		
10	Availability of testing facilities		Yes/No
	1	If no - Indicate source of testing with relevant details	
	2	1	Chemicals analysis: Method
		2	Mech. Testing
			1. Hardness testing
		2. Metallography	
		3. Universal Tensile Testing M/C - Ambient Low Temp.	
		4. Any other	
	3	<u>Non-destructive</u>	
		1. Radiography	
		2. Ultrasonic Test	
3. Dye Penetration			
4. MPI			
5. Any other			

11	Experience with Third Party/Statutory Agency : Indicate the agency	
12	Source of procurement of Dies & availability for Machining of such dies.	
13	Quality Management	
1	General	
1	Are written Quality control instruction Sheets prepared and properly used?	
2	Are records generated during inspection maintained & available for review?	
3	Are final inspection areas clean, adequately lighted & of suitable size?	
4	Head of Q.C. Department reports to	
5	Are written procedure defining stage wise operations and functions on shop floor established & followed?.	
6	Are Quality Control checks adequate to maintain desired quality right from incoming stage to final operation?	
7	Is 100% or adequate sampling inspection used?	
8	Are statistical QC techniques used?	
2	Corrective action	
1	Does the system provide for prompt detection of inferior quality and for correction of its assignable cause.	
2	Is adequate action taken to correct the causes of defects in products?	
3	Are analysis made to identify trends towards product deficiencies?	
4	Does corrective action extend to products?	
3	Documentation control	
1	Does the system provide for clear & precise stipulation of responsibilities for documentation issue & change control?	
2	Are changes made in writing?	
4	Control of inspection measuring & testing equipments	
1	Are necessary gauges, testing & measuring equipments available & used?	
2	Are test & measuring equipments properly maintained?	
3	Is there recorded control on calibration of equipments?	
4	Whether furnaces are calibrated?	
5	Whether Temperature measuring instruments and other instruments & gauges are calibrated?	
6	Whether the calibration certificates of above are valid up to date?	

13	5	Control of procured supplies & Services	
		1	Do the vendor purchasing documents refer to specific design, manufacturing & testing requirements?
		2	Do purchasing documents also contain special requirements?
		3	Are requirements for necessary tests & inspection of raw material specified in purchasing document?
14	Familiarity with material codes & Specifications		
	ASTM		
	IS		
	BS		
	DIN		
	OTHER		
15	Consistency in supply		
	1	Has vendor produced items of similar nature in past?	
	2	Has vendor maintained delivery commitments in past?	
	3	Has there been frequent labour trouble in past?	
	4	Has there been major upset due to faulty material management?	
	5	Is the system of planning & scheduling resilient enough to overcome temporary setbacks and make up lost time?	
	6	Has vendor got standby arrangement for power?	
	7	Can the vendor quickly offload the work to other reliable sub-vendor?	
	8	Total order booked till date.	
16	Remarks:		

Place:

Date :

Signature with seal

BHEL recently received guidelines from Govt. Of India and Central Vigilance Commission and we have been asked to comply with the guidelines with regard to dealings with Indian Agent/Foreign Agent of Foreign Suppliers.

1. Mandatory submission of an Agency Agreement

- 1.1 It shall be incumbent on the Indian agent and the foreign principal to adhere to the relevant guidelines of Government of India, issued from time to time.
- 1.2 The Agency Agreement should specify the precise relationship between the foreign OEM/foreign principal and their Indian agent and their mutual interest in the business. All services to be rendered by agent/associate, whether of general nature or in relation to the particular contract, must be clearly stated by the foreign supplier/Indian agent. Any payment, which the agent or associate receives in India or abroad from the OEM, whether as commission or as a general retainer fee should be brought on record in the Agreement and be made explicit in order to ensure compliance to laws of the country.
- 1.3 In the absence of any agency agreement, BHEL shall not deal with any Indian agent (authorized representatives / associate / consultant, or by whatever name called) and shall deal directly with the foreign principal only for all correspondence and business purposes.
- 1.4 Agents will file an authenticated Photostat copy duly attested by a Notary Public / Original certificate of the Principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission / remuneration / salary / retainer ship being paid by the principal to the agent.
- 1.5 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the Foreign Principal.

2. Disclosure of particulars of agents / representatives in India

2.1 Tenderers of Foreign nationality shall furnish the following details:

2.1.1 The Bidder(s) / Contractor(s) of foreign origin shall disclose the name and address of the agents / representatives in India if any and the extent of authorization and authority given to commit the Principals. In case the agent / representative be a foreign Company, it shall be confirmed whether it is existing Company and details of the same shall be furnished.

2.1.2 The amount of commission / remuneration included in the quoted price(s) for such agents / representatives in India.

2.1.3 Confirmation of the Tenderer that the commission / remuneration, if any, payable to his agents / representatives in India, paid in Indian Rupees only.

2.2 Tenderers of Indian Nationality shall furnish the following details:

2.2.1 The Bidder(s) / Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any, indicating their nationality as well as their status, i.e. whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents / representatives.

2.2.2 The amount of commission / remuneration included in the price(s) quoted by the Tenderer for himself.

2.2.3 Confirmation of the foreign principals of the Tenderer that the commission / remuneration, if any, reserved for the Tenderer in the quoted price(s), paid in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.

2.3 Failure to furnish correct and detailed information as called for in paragraph 2.1 & 2.2 above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by BHEL Besides this there would be a penalty of banning business dealings with BHEL or damage or payment of a named sum.

Please furnish the above information immediately

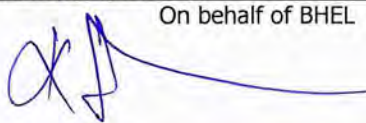
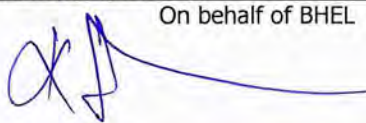
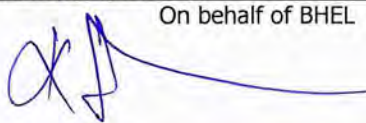
Annexure-A (Enquiry Terms conditions)

SL	BHEL Requirements	Supplier Comments (Acceptance or otherwise for each point to be given)																																				
1	<p>TDC requirement</p> <p>1. Carbon steel Forged rounds shall be supplied as per Specification SA105 and confirming to TDC: 0:404 Rev 13.</p> <p>For info:</p> <p>a) Acceptance to this requirement will be construed that Supplier have gone through the TDC, clause by clause, understood and confirmed their acceptance.</p> <p>b) Any Deviation against specification and TDC shall be clearly indicated in the Techno-commercial bid (Part -1).</p> <p>2. Indicate the deviations (If any) here under against TDC: 0: 404 Rev 13. Other points in TDC which are specifically not mentioned below by the supplier will be treated as they are accepted by the supplier.</p>																																					
2	<p>Material Specification, Size and Quantity</p> <p>Supply of Carbon steel Rounds shall be made strictly as per material Specification and size in forged condition as indicated below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Specification</th> <th style="text-align: center;">Diameter</th> <th style="text-align: center;">IBR / Non-IBR</th> <th style="text-align: center;">Weight (MT)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">SA105</td> <td style="text-align: center;">125 mm</td> <td style="text-align: center;">IBR</td> <td style="text-align: center;">40</td> </tr> <tr> <td style="text-align: center;">SA105</td> <td style="text-align: center;">165 mm</td> <td style="text-align: center;">IBR</td> <td style="text-align: center;">70</td> </tr> <tr> <td style="text-align: center;">SA105</td> <td style="text-align: center;">225 mm</td> <td style="text-align: center;">IBR</td> <td style="text-align: center;">30</td> </tr> <tr> <td style="text-align: center;">SA105</td> <td style="text-align: center;">250 mm</td> <td style="text-align: center;">IBR</td> <td style="text-align: center;">20</td> </tr> <tr> <td style="text-align: center;">SA105</td> <td style="text-align: center;">300 mm</td> <td style="text-align: center;">IBR</td> <td style="text-align: center;">45</td> </tr> <tr> <td colspan="3" style="text-align: center;">TOTAL</td> <td style="text-align: center;">205 MT</td> </tr> </tbody> </table>	Specification	Diameter	IBR / Non-IBR	Weight (MT)	SA105	125 mm	IBR	40	SA105	165 mm	IBR	70	SA105	225 mm	IBR	30	SA105	250 mm	IBR	20	SA105	300 mm	IBR	45	TOTAL			205 MT									
Specification	Diameter	IBR / Non-IBR	Weight (MT)																																			
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TOTAL			205 MT																																			
3	<p>Length</p> <p>Rounds shall be supplied in length of 2000 mm to 4000 mm.</p>																																					
4	<p>Quantity Tolerance : - Nil / + 10 % on each individual item.</p>																																					
5	<p>Pre-Qualification Criteria</p> <p>1. Only Original Manufacturers/Mill (import or indigenous) need to respond this enquiry. Offer of Traders or Stockists will be summarily rejected</p> <p>2. Manufacturer shall have in-house Forging facilities to produce rounds. In case of deviation, offer will not be considered.</p> <p>3. Manufacturer shall have in-house Heat Treatment facilities to perform Heat-treatment. In case of deviation, offer will not be considered</p> <p>4. Manufacture shall have their own in-house testing facilities. In case of deviation, offer will not be considered. Supplier has to submit relevant procedures and qualification records for the testing requirements as indicated in TDC and specification</p> <p>5. In addition, vendors who are not in the BHEL,Trichy vendor list as permanent vendors for this material category (for supply of Carbon steel rounds to specn:SA105) should submit an experience certificate detailing the quantity supplied specification wise year wise along with the unpriced PO copies and proof of supply (such as Invoice & Test certificates) along with the offer for the specification SA105 or similar specification of carbon steel. Technical acceptance of offer by BHEL, shall be only after the evaluation of offer and the submitted documents.</p>																																					
6	<p>For the Suppliers who are already registered with any other unit of BHEL (but not with BHEL,Trichy)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">a</th> <th style="text-align: center;">SL</th> <th style="text-align: center;">Name of the BHEL Unit</th> <th style="text-align: center;">Registered vendor code</th> <th style="text-align: center;">Year of registration</th> <th style="text-align: center;">Registered for supply of</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">01</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">02</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">03</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">04</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">05</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>b For registration with BHEL-Trichy, Suppliers Shall register on line (for the material group item code "STRD1") at our web page: https://suppliers.bheltry.co.in/</p> <p>c Provide Application ID provided by our new supplier registration portal.</p> <p>d One set of SRF documents generated after registration shall be uploaded while submitting the techno-commercial bid.</p> <p>e Suppliers shall submit filled in "Forging supplier facility report" attached herewith.</p>	a	SL	Name of the BHEL Unit	Registered vendor code	Year of registration	Registered for supply of		01						02						03						04						05					
a	SL	Name of the BHEL Unit	Registered vendor code	Year of registration	Registered for supply of																																	
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	04																																					
	05																																					

7	For the Suppliers who are already registered with BHEL Trichy for any other item (but not for supply of Carbon steel forged rounds, for the material group item code: STRD1)		
a	Registered vendor code with BHEL, Trichy		
b	Provide details of registration here under		
	SL	Material group item code	Registered for supply of
	01		
	02		
	03		
	04		
	05		
c	Suppliers Shall register their request on line for addition of material group item code "STRD1" at our web page: https://suppliers.bheltry.co.in/		
d	Suppliers shall submit filled in "Forging supplier facility report" attached herewith.		
8	For the suppliers who are not already registered with any of the BHEL Unit		
a	For registration with BHEL-Trichy, Suppliers Shall register on line (for the material group item code "STRD1") at our web page: https://suppliers.bheltry.co.in/		
b	Provide Application ID provided by our new supplier registration portal.		
c	One set of SRF documents generated after registration shall be uploaded while submitting the techno-commercial bid.		
d	Suppliers shall submit filled in "Forging supplier facility report" attached herewith.		
9	For New Supplier (Not registered with BHEL-Trichy) :		
	1. Following details/documents are to be ensured.		
	<ul style="list-style-type: none"> a) Details such as mill capacity and capability, credentials. b) Previous purchase orders executed for blue chip companies in abroad and India. c) ISO certification. d) Details of Manufacturing, Heat Treatment and Testing facilities installed in-house. e) Filled in forging supplier facility report. f) Detailed Quality Assurance Plan for manufacturing of tender items. g) Quality manual. h) Agency agreement from foreign principal. i) Spot evaluation at supplier's works may be done at BHEL discretion. 		
	Following additional details/documents are to be submitted by Import/Foreign suppliers along with above-mentioned documents		
	<ul style="list-style-type: none"> j) D&B report for Mill/Manufacture. k) Port of loading, country of origin in case of foreign sources. l) Collaboration if any with suitable supporting documents. m) Details of Indian Office / Liaison office / Liaison Agent n) Acceptance to INCO-Terms 2010. 		
10	2. If the supply of Carbon steel forged rounds to specification SA105 is first time to BHEL/Trichy, then supplier has to supply minimum quantity on mutually agreed basis. After acceptance of material at our end and after testing by BHEL, clearance for the balance quantity shall be given.		
11	Invoicing Invoicing shall be done on actual weight basis. Invoice & TC shall indicate Number of pieces & weight. BHEL weighment is final. In case BHEL weighment exceeds to the invoice weight and then it will be restricted to invoice weight only.		
12	Inspections & Testing:		
	a) Inspection and certification shall be carried out as per clause 10 of TDC: 0:404 Rev 13 . Mill TC and applicable IBR Forms are to be submitted as per clause 10 of TDC:0:404 rev 13.		
	b) New Suppliers for supply of Carbon steel forged rounds to BHEL, Trichy has to submit Draft Mill Test Certificates and Draft IBR FORM as applicable as per TDC for BHEL approval before supply of material		

13	<p>Payment terms for Import suppliers</p> <p>A. For new Import suppliers not registered with BHEL, Trichy for supply of Carbon steel forged rounds, the payment shall be made after 45 days after receipt & acceptance of materials after testing at BHEL lab.</p> <p>B. For already registered import suppliers</p> <p>1. BHEL Payment term is 100% payment on CAD basis after 45 days from the date of receipt of documents, specified in PO, at BHEL bank. Respective bank charges to respective account.</p> <p>For info:</p> <ul style="list-style-type: none"> ➤ Any deviation in the above payment term will attract loading as mentioned below. <ul style="list-style-type: none"> ○ Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidders. ➤ In the case of Usance LCs (45 days from the date of receipt of documents, specified in PO, at BHEL bank) the loading will be considered @ 1.5% on the offered Value. ➤ For LC at sight the loading will be considered @ 3.5% on the offered Value. ➤ Normally CAD at sight and Confirmed LCs are liable for rejection. <p>2. If the LC payment is insisted, TWO sets of original TCs to be submitted prior to dispatch and a certificate to that effect from BHEL should form a part of the documents to be negotiated. Acceptance to this condition is must in case of LC payment, Deviation not acceptable.</p>	
14	<p>Payment terms for Indigenous suppliers</p> <p>1. For new Indigenous suppliers not registered with BHEL, Trichy for supply of Carbon steel forged rounds, payment shall be made 45 days after receipt and acceptance of materials after testing at BHEL lab.</p> <p>2. for already registered Indigenous suppliers</p> <p>a) Payment term is 100% direct EFT payment after 45 days from the date of receipt and acceptance of materials.</p> <p>For info:</p> <ul style="list-style-type: none"> ❖ Any deviation in the above payment term will attract loading as mentioned below. <ul style="list-style-type: none"> ➤ "Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidders. ❖ Offers of indigenous Suppliers with payment terms as LC / Advance Payment are liable for rejection 	
15	<p>Delivery requirement:</p> <p>Our delivery requirement is 8 weeks from the date of Purchase order. Specify the quoted delivery period in fixed number of weeks from the date of purchase order.</p>	
16	<p>Confirm acceptance for Liquidated Damages (LD) clause</p> <p>For delay in delivery Liquidated damages shall be 0.5% of the total order value per week or part thereof subject to a maximum of 10% of the total order value.</p> <p>For Info:</p> <ul style="list-style-type: none"> ➤ Any deviation from the above LD clauses, loading will be applied to the extent to which it is not agreed by the bidder (at offered value). <p>For Imports:</p> <ul style="list-style-type: none"> ➤ FOB order- LD will be calculated based on the TC date/final inspecting agency signing date whichever is later. ➤ In case of CFR - LD will be calculated based on the B/L date <p>For Indigenous:</p> <ul style="list-style-type: none"> ➤ FOR order - LD will be reckoned from the date of LR. 	
17	<p>Confirm acceptance for Risk Purchase Clause:</p> <p>BHEL at its 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 dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute thereof. The supplier shall be liable for any loss which BHEL may sustain by reason of such risk purchases in addition to LD at the maximum rate mentioned in the LD clause above. Confirm your acceptance.</p>	
18	<p>Offer Validity</p> <p>Offer validity of 30 days is required after priced bid opening (normally price bid will be opened within 60 days from technical bid opening) in case you are technically qualified.</p>	

19	<p>Offer submission(Indigenous & Import suppliers)</p> <ol style="list-style-type: none"> 1. Offer will be evaluated on individual item basis only. Hence confirm your acceptance for part item ordering. 2. Offers shall be submitted in TWO PART bids system (TECHNO-COMMERCIAL BID + PRICE BID). 3. Technical Bid & Priced Bid to be submitted separately on the same day. 4. Submit your FIRM competitive offer rate per MT with inclusive of all charges if any (like inspection (TPI), UT charges, etc). <p>For info</p> <ul style="list-style-type: none"> ➤ Price Variation Clause (PVC) is not applicable. Offers with price variation clause will be rejected. 							
20	<p>Offer Submission(for Indigenous suppliers)</p> <ol style="list-style-type: none"> 1. Submit your FIRM competitive offer rate per MT with best possible delivery on FOR BHEL-Trichy basis ONLY with inclusive of all charges if any (like inspection (TPI), UT charges, etc.) 2. Service tax, Octroi, Entry tax etc to be indicated in offer and is payable extra only on submission of documentary proof. 3. Any other extra charges like ED, CST/VAT etc. are to be indicated clearly. 4. The offer will be evaluated on total landed cost to BHEL, Trichy as below, Total landed cost = FOR, BHEL Trichy + applicable taxes+ commercial loading as applicable – applicable tax credits. <p>For Info: For interstate supplies C-Form will be issued.</p>							
21	<p>Offer Submission(for Import suppliers)</p> <table border="1" data-bbox="199 772 1157 940"> <tr> <td data-bbox="199 772 821 817">1. Specify Port of shipment and type of loading & Sea freight</td> <td data-bbox="821 772 1157 817">Port of shipment</td> </tr> <tr> <td></td> <td data-bbox="821 817 1157 884">Type of Loading (FCL/LCL/BB)</td> </tr> <tr> <td></td> <td data-bbox="821 884 1157 940">Sea freight (Either in value or in % of FOB value)</td> </tr> </table> <p>Note:</p> <ol style="list-style-type: none"> a) Suppliers to quote their rates on FOB/Load Port basis (refer clause 15.1.b to 15.1.e) clearly mentioning their preferred type of loading (FCL/BB). The quote should be all inclusive of all charges, including testing packing, inspection etc. Additionally ocean freight (LILO basis) for CFR, Chennai/Karaikal/Tuticorin shall also be quoted separately. Offer on CFR (without price breakup)/ FOB only is not acceptable, both FOB & ocean freight to be quoted separately. b) The available load ports for FCL (Full Container Load) Cargo in Freight Contract are Antwerp, Hamburg, Genoa, Rotterdam, Bilbao, Gothenberg, Felixstowe, St.Petersberg, Busan, Dalian, Shanghai, Kobe, Osaka and Yokohama. c) The available load ports for LCL (Less than Container Load) Cargo in Freight Contract are Antwerp, Hamburg, Genoa, Rotterdam, Bilbao, Gothenberg, Felixstowe, Thamesport, Tilbury, Le Harve, St.Petersberg, Busan, Masan, Dalian, Shanghai, Tianjin, Kobe, Osaka, Yokohama, Singapore and Durban, d) The available load ports for BB (Break Bulk) Cargo in Freight Contract are Antwerp, Hamburg and Genoa e) In case if the suppliers are unable to execute through the above ports with the available types of cargo loading (Reasons for the same to be mentioned), FOB rate along with ocean freight (LILO basis) applicable upto Chennai to be quoted. <ol style="list-style-type: none"> 2. For CFR terms, moved through Containers (Suppliers should clearly specify this in their offer) it would be presumed by BHEL that the freight charges quoted is on LILO (LINER IN LINER OUT) basis including extra charges, if any, like Container Imbalance Charges, Trade Imbalance charges or any other charges payable to the Liner. No other charges other than the quoted Freight rate will be paid by BHEL excepting applicable Terminal Handling Charges, Container cleaning Charges, DO charges to Shipping Liner at Discharge Port. If any deviation is taken by Tenderer, a loading of 22% on the freight rate per MT shall be considered by BHEL for arriving at the Total landed Cost. 3. In case of shipment through Containers on CFR basis, the BL should bear the endorsement that "14 free days for Container Detention is applicable". 4. Port of discharge Chennai/ Karaikal/ Tuticorin Sea Port (in case of CFR) 5. For CFR terms, moved through Break Bulk basis (Suppliers should clearly specify this in their offer) it would be presumed by BHEL that the freight charges quoted is on LILO (LINER IN LINER OUT) basis. 6. Service charges, commission charges and any other incidentals will NOT be paid extra. 7. Agency commission, if any should be clearly given in the offer (% on FOB, % on CFR Chennai inclusive). 8. Mill & Country of origin to be indicated in the offer. 9. Specify the quoted currency 	1. Specify Port of shipment and type of loading & Sea freight	Port of shipment		Type of Loading (FCL/LCL/BB)		Sea freight (Either in value or in % of FOB value)	
1. Specify Port of shipment and type of loading & Sea freight	Port of shipment							
	Type of Loading (FCL/LCL/BB)							
	Sea freight (Either in value or in % of FOB value)							

	<p>For info:</p> <ul style="list-style-type: none"> ➤ One Indian agent can represent one foreign principal only and submit one offer for these tender items. Offer shall be rejected in case of deviation. ➤ The offer will be evaluated on total landed cost to BHEL-Trichy as below: Total landed cost = [(FOB +sea Freight) or CFR rate] +Customs duty as applicable + LC Charges (In case LC payment) + 22% loading on Freight in case of deviation mentioned in clause 21.2 above + Import Incidentals + Commercial loading as applicable ➤ For conversion of foreign currency into INR, foreign exchange rate (TT selling rate of SBI) on the date of technical bid opening will be considered. 		
22	<p>Material Warranty Free replacement of whole material in case of notification of defect in material within the period of One year from TC/Invoice date. Warranty certificate to be produced.</p>		
23	<p>Defective Material replacement Supplier shall replace defective material free of cost (inclusive of all Testing, Inspection, TPI, Service charges etc.) up to destination within two months from defect notification date.</p>		
24	<p>Pre Despatch inspection If required, BHEL will have stage inspection (at any stage) and quality audit of the mill with prior intimation.</p>		
25	<p>The due date mentioned in the enquiry is the date of opening of techno-commercial bid. After the scrutiny of technical bids, price bids of only technically accepted offer shall be opened with prior intimation.</p>		
26	<p>BHEL Reserves the right to negotiate and re-float the tender if the lowest offered price is not found competitive.</p>		
27	<p>BHEL will consider the ranking after the loading is applied as referred above wherever deviations are observed.</p>		
28	<p>BHEL reserves the right to revise either in full or part thereof or short close the tender at our discretion without assigning any reasons considering BHEL's commercial interest. This is for information.</p>		
29	<p>Any other conditions which might have been quoted by the seller and are in contravention to the terms prescribed in the order and which have not been specifically accepted in by purchaser will not be applicable to the contract.</p>		
30	<p>The bidder shall submit his response through bid submission to the tender on e-procurement platform at https://bheleps.buyjunction.in within 14:00 Hrs (IST) of the due date of this tender. The bidder would be required to register on the e-procurement market place https://bheleps.buyjunction.in and submit their bids online. SEALED COVER BIDS/ E-MAILS / FAX / MANUAL OFFERS WILL NOT BE ACCEPTED. Supplier shall upload any other tender documents in the E-Procurement Portal only.</p>		
<table border="1" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p style="text-align: center;">On behalf of BHEL</p>  </td> <td style="width: 50%; vertical-align: top;"> <p>To be filled & Signed by supplier Name of the mill / Principal: Signature: (Affix Seal)</p> </td> </tr> </table>		<p style="text-align: center;">On behalf of BHEL</p> 	<p>To be filled & Signed by supplier Name of the mill / Principal: Signature: (Affix Seal)</p>
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K. JOSEPH REGIS
 Deputy General Manager
 MM / RM / Steel (Purchase)
 BHEL, TIRUCHY - 620 014.

GENERAL TERMS AND CONDITIONS - INDIGENOUS

1. QUOTATIONS:

- a. Tenders should be free from CORRECTION AND ERASURES. Corrections if any must be attested; all amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.
- b. If any sales tax is payable as extra to the quoted price it should be specifically stated in quotations along with CST & TIN numbers falling which the purchaser will not be liable for payment of sales tax. Our TIN number: 332433560005 dt. 01/01/2007, CST Number: 239383 dt, 11.06.1991
- c. No revision of prices will be entertained after tenders are opened.
- d. **Manufacturer's name trademark or patent number** if any should be specified. Illustrative leaflets giving technical particulars are required along with quotation wherever necessary.
- e. Products with I.S.I certification marks will be preferred.

2. SAMPLES:

Wherever possible sample should be submitted separately whether specifically requested or not so as to reach the purchaser on or before the due date of the enquiry. They should be clearly marked with the enquiry number and the date on the outside cover to facilitate identification.

3. PACKING AND MARKING:

The supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit.

4. TERMS OF PAYMENT:

Payment will be made after 45 days on acceptance of materials. Wherever required by the purchaser, the successful tenderer must send the Operation and Maintenance manuals, Test Certificates, drawings, etc., for the materials ordered. These should be sent along with materials and a statement to that effect should be made in the invoice. Failure to comply with this provision will result in delay in payment of the bills. Goods dispatched either by V.P.P or by the document presented through bank will not be accepted unless agreed to by the purchaser.

5. The duplicate copy of the invoice meant for the transporters should accompany the material as stipulated under C.E. rules 52a and 173 c (or) 57gg. A Photostat copy of the above invoice for each Delivery Chelan should be submitted along with the original bills routed through bank or submitted directly to BHEL finance department.

6. LIQUIDATED DAMAGES PENALTY AND INTEREST ON ADVANCES FOR DELAY IN DELIVERY:

If the supplier fails to deliver the raw material equipment components within the period specified in the contract the purchaser shall deduct liquidated damages a sum equivalent to 0.5% of the total order value for each week of delay up to maximum of 10% of the total order value.

7. RISK PURCHASE:

BHEL at its 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 dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute thereof. The supplier shall be liable for any loss which BHEL may sustain by reason of such risk purchases in addition to LD at the maximum rate mentioned in the LD clause above.

8. MODVAT CREDIT:

If any Excise Duty is payable, the chapter head / Sub-head reference and the rate of the duty should be quoted. If the tender is availing MODVAT credit for this input material, the effect of Proforma credit should be passed on to the purchaser. **Tenderer under "MODVAT" shall be preferred.**

9. GENERAL:

The purchaser reserves the right to split up the tender and place order for individual items with different tenderers and also increase or decrease the quantity.

Any other conditions which might have been quoted by the seller and are in contravention to the terms prescribed in the order and which have not been specifically accepted in by purchaser will not be applicable to the contract.

GENERAL TERMS & CONDITIONS
(For OVERSEAS SUPPLIERS)

1. The technical requirements are clearly indicated in the Technical Delivery Conditions enclosed with tender. Tenderers are requested to confirm their acceptance clause by clause of TDC, in their offer, without fail.
2. In the event of any tenderer indicating in their offer that the materials of tender will be supplied as per TDC of tender, it will be construed that they have gone through the TDC clause by clause, understood and confirmed their acceptance.
3. In the case of two bid tender system, clarification on Technical & Commercial points will be sought for if not clearly indicated in offer. After tender price bid opening, any voluntary / **unsolicited information's / confirmations / clarifications / interpretations by the tenderers** will not be entertained as a policy and tender will be finalized only with available data / **information's given in offer.**
4. The prices to be contracted against this tender are to be kept firm till completion of supplies against the contract. Tenderers are requested to give a minimum of 30 days (Thirty days) validity of their offer from the date of price bid opening as the same is essentially required by the Purchaser to finalize tender.
5. **In case of an order, BHEL reserves the right to depute their representative to Seller's** works either during the manufacture or prior to that for overseeing the order status. The expenditure in this regard will be borne by BHEL.
6. After inspecting, testing and clearance by IBR approved third party inspection agency, the accepted materials may be inspected and cleared by BHEL inspector **at Seller's works, if** required. The expenditure for BHEL inspector for this purpose will be borne by BHEL and **all expenditure in connection with third party inspection agency will be to seller's A/c.**
7. The standard LIQUIDATED DAMAGE clause and RISK PURCHASE clause of BHEL will be applicable.
8. BHEL reserve the option to transport the materials through TRANSCHART / MINISTRY OF **SURFACE TRANSPORT, Govt. of India thro' SCI/their agents / or any other shipper as** nominated by TRANSCHART if the sea freight charges of the seller is high.
9. In FOB contract, the shipment will be through TRANSCHART / MINISTRY OF SURFACE **TRANSPORT, Govt. of India thro' SCI/their agents / or any other shipper as nominated by** TRANSCHART Seller has to keep SCI/ or any other nominated shipper / their load port agent informed, at least 21 days in advance regarding the readiness of the materials for shipment to enable them to arrange for the vessel.
10. In case of C.F.R.Contract, the shipment shall be done by Seller. However, Seller shall ensure that the age of the vessel is less than 25 years.
11. Indian Agency Commission, if any, has to be clearly expressed in the offer itself.
12. In case of an order, a quantity allowance of **+10%/ -Nil** on the item wise ordered quantity shall be applicable.
13. **DELIVERY:**
In the event of an FOB contract, the Seller shall coordinate with TRANSCHART/SCI/or any other nominated agent /their agents for the supply of required containers / booking space in break bulk vessels and stuff the material and move to the port, the loaded containers / break bulk cargo after taking confirmation from them on the vessel arrival at load port. The correspondence/communications with them in this regard shall be maintained by the Seller and forwarded to Purchaser along with our advance copy of the shipping documents.

14. **MARINE INSURANCE:**

This will be arranged by BHEL. Once the shipment is made, the details such as Bill of Lading No., & date, name of the vessel, name of shipping line, quantity shipped (no. of containers + tonnage) shall be communicated by Seller to Purchaser either by e-mail or by fax to enable Purchaser to arrange for Marine Insurance.

15. PURCHASER reserves the option to alter the specific delivery schedules from time to time within the terminal due date of contract for specific quantity. .

16. The prices OFFERED/TO BE CONTRACTED finally have to be kept firm till successful completion of the contract and any price increase on any account whatsoever may be the reasons will not be permitted under any circumstances.

17. **If no comments are made specifically in the tenderer's offer**, on the above conditions of tender, it will be construed that the tenderer is in full agreement with the above clauses and will be binding on them, in case of an order.

18. Packing :

The Rounds shall be suitably painted for tropical conditions (to withstand marine corrosion) -- **shipped in bare bundles of Metric Tonnes gross Maximum / shipped loose (preserved and packed in sea worthy packing)**, duly ensuring prevention of damage or loss during transit and storage. Packing shall be done in such a way, as to ensure easy removal for **check at Port of destination and at Purchaser's works. The packages shall be provided** with facilities for easy handling by mechanical means, if need be. For this, the packing specification adopted is also to be such as to obtain a clean BILL OF LADING / AIR WAY BILL.

19. Dimension and Weight :

Specification of dimensions and weights in all places, shall be in Metric system and in English language.