BHARAT HEAVY PLATE & VESSELS LIMITED., (A Subsidiary Bharat Heavy Electricals Limited) A Government of India Enterprises Visakhapatnam – 530 012 INDIA.

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NOTICE INVITING TENDER(NIT)

Category of Tender: TWO BID SUB: Retrofit and Reconditioning of 25mm & (PRICED + UN - PRICED) 22mm Plate Roll Bending Machines

DATE: 10.08.2012 Our Ref: MM/2/10/2045/CAP/W-096/5100

Sealed quotations in duplicate are invited from suppliers on or before 13.09.2012 SUPERSCRIBING OUR **REFERENCE AND CATEGORY OF TENDER** on the cover, for supply of the under mentioned stores within the above due date, otherwise send **REGRET LETTER**, strictly subject to the Terms & Conditions attached herewith.

LATE TENDERS ARE NOT ACCEPTABLE.

ITEM No.	DESCRIPTION / SPECN. / SIZE	QTY
1.	Retrofit and Reconditioning of 25mm & 22mm Plate Roll Bending Machines (Estimated Cost of wok is Rs. 20 Lakhs for each Machine)	
	Encl: 1. Qualifying Criteria PART A 2. Technical Specifications PART B 3. General Terms/ commercial terms and conditions (INCLUDING CHECK LIST)	

For BHARAT HEAVY PLATE & VESSELS LIMITED,

1 h lude

For Dy. GENERAL MANAGER (MM)

SPECIFICATIONS FOR RETROFIT AND RECONDITIONING OF 25mm and 22mm PLATE BENDING MACHINES (1 No each)

PURPOSE:

Complete retrofit and reconditioning mechanical, electrical and electronics items of 25mm and 22mm Three / Four roll plate bending Machines (1 No each) with prove-out of geometrical and job accuracies, complete painting and handing over to Production at BHPV works by the vendor.

NOTES:

- 1. Vendor must submit complete information for all the clauses mentioned below. The offers meeting this clause would only be processed.
- 2. The column "BIDDER'S OFFER WITH CONFIRMATION & COMPLETE TECHNICAL DETAILS" of this format shall be filled in by the Vendor and submit along with the offer. Inadequate / incomplete, ambiguous, or unsustainable information against any of the clauses of the specifications / requirements shall be treated as non-compliance and lead to disqualification of the offer without asking queries.
- 3. The offer and all documents enclosed with offer should be in English language only.
- 4. Vendors MUST visit BHPV, Visakhapatnam and study the existing machine before submission of quotation. The cut-off date for visit to BHPV for inspection of bending roll Machines, clarification to the vendors to be completed 7 days prior to the tender due date. There will be no further extension of due date.
- 5. Reconditioning of both the machines should be completed with in 5 Months from the date of receipt of PO. Vendor to mobilize resources accordingly to complete the job in 5 Months in all respects. These machines will be given for retrofit one after the other and each machine must be completed with in 2 ½ Months.
- 6. Vendors must indicate makes of all components that are being supplied as a part of this tender shall be clearly indicated in a separate sheet.

ADDRESS OF THE SUPPLIER :	ADDRESS OF THE INDIAN AGENTS:
TELEPHONE NOS.:	TELEPHONE NOS.:
FAX NOS.:	FAX NOS.:
E-MAIL ADDRESS:	E-MAIL ADDRESS :

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PART A QUALIFICATION CRITERIA FOR RECNDITIONING OF 25mm and 22mm PLATE BENDING MACHINES

SL	PRE-QUALIFICATION	
NO		Offer
A.1.	PRE-QUALIFICATION REQUIREMENTS(Proofs to be enclosed for verification)	
	All the following conditions are to be satisfied by the bidder. Documentary proof	
	is to be enclosed with techno-commercial bid satisfying all these conditions. In	
	case the bidder fails to enclose the same, the offer will be liable for rejection.	
1.	1. The party must be a reputed Manufacturer / Reconditioner of Bending roll Machines with at least 7 Years of experience in this field (by 30.09.2011). The experience reference shall be for a period preceding immediately to the date given above. Party must submit at least one satisfactory performance certificate issued by customer during the above period. Copies of purchase orders/work orders and corresponding completion certificates should be submitted as proof for verification. The dates of the P.O / certificates should be with in this period only. Offers with out these documents are liable for rejection. List of the customers along with respective contracting officers addresses (including Phone no. / E-Mail ID) for whom machines were manufactured / rebuilt should be	
2.	enclosed with the offer. The annual turnover during the last three Years ending March 31 st 2011 should be at least Ra 80 Lakhs (CA certified copy of balance sheet / P&L statements to be enclosed).	
3.	Latest Bankers' solvency (not later than six months from the date tender notice) for an amount of Rs 60 Lakhs from any Nationalized bank.	
4.	Experience of having successfully completed similar works during the last 7 Years (by 31.08.2011) should be either of the following.	
	Three similar completed works costing not less than the amount each equal to 40% of the estimated cost of the tender.	
	Or	
	Two similar completed works costing not less than the amount each equal to 50% of the estimated cost of the tender.	
	Or	
	One similar completed work costing not less than the amount each equal to 80% of the estimated cost of the tender.	

QUALIFICATION CRITERIA FOR RECNDITIONING OF 25mm and 22mm PLATE BENDING MACHINES

A.2	<u>Definition of similar works</u>	
	Manufacture / reconditioning of heavy / medium capacity Hydraulic machines	
	(conventional or CNC) of the following types and sizes	
	1. Minimum 3 Roll Plate bending Machines with Hydraulic system.	
	2. General purpose heavy machines with Major Hydraulic / CNC / PLC Systems.	
A.3	BHPV reserves the right to verify the information provided by vendor (including	
	visit by a team of BHPV Officials to the Customer Works of the Vendor). In case	
	the information provided by vendor is found to be false/ incorrect, the offer shall	
	be rejected.	

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PART B

1.0 General:

BHPV is having two numbers of 25mm four roll plate bending machine XZC 3000/25 and 22mm three roll Pyramid type plate bending Machine XZM 4000/22 of Czechoslovakian make commissioned during the Year 1967. At present both the machines are in use with breakdowns in between. It is proposed to retrofit these machines with latest Technology Electronics control system and complete reconditioning.

Technical description of 22mm plate bending Machine (XZM 4000/22):

The 22mm three roll Pyramid type bending machine with a vertically adjustable upper roll serves for cold bending of cylindrical and conical pipes.

When bending the plate, it is forced to pass between three rolls, of which the two lower rolls are in one plane, their axial distance does not vary and they are driven alternately in either direction. The upper roll can be vertically adjusted and is driven by friction of the bent plate. While the plate is being fed between the rolls, the upper roll is subsequently moved down with a pressure exceeding the yield point of the bent plate and thus permanent deformation of material is obtained.

The working rolls are seated in two housings fitted to a common welded frame carrying also the gear box for drive of the lower rolls. In the two housings there are worm gearings for vertical resetting of the upper roll interconnected by means of a shaft and with a separate gear box also fitted to the frame. The two gear boxes each have their own separate driving motor. When bent plates are taken out of the Machine the overhung upper roll is supported hydraulically. The swing down housing is also operated by means of hydraulics.

$2.0\ {\rm The\ Technical\ data\ of\ existing\ }\ {\rm 25mm\ plate\ bending\ Machine\ is\ as\ follows.}$

SNO	DESCRIPTION	DIMENSIONS	
	TECHNICAL DETAILS OF EXISTING 25mm BENDING ROLL MACHINE:		
2.1	Input supply	415V +-10%, 3Phase, 50Hz	
2.2	Maximum working width	3000mm	
2.2	Maximum Thickness of plate of 40 kg/mm ² strength and 22kg/mm ² yield point for bending	25mm	
2.3	Maximum Thickness of plate of 40 kg/mm ² strength and 22kg/mm ² yield point for pre bending	18.5mm	
2.4	Minimum inside dia of cylinder bent	600mm	
2.5	Diameter of top roll	430mm	
2.6	Diameter of bottom roll	430mm	
2.7	Diameter of side rolls	430mm	
2.8	Bending Speed	5m/min	
2.9	Bottom roll adjustment speed	22mm/min	
2.10	Side roll adjustment speed	36mm/min	
2.11	Input of electro motor	35KW	
2.12	Electric motors	3x380/220v, 50Hz	
2.13	Slip ring motor for Bending	30KW, 1450 r.p.m	
2.14	Main motor, Slip ring motor -1No.	30KW,415V,55Amps,1465 r.p.m	
2.15	Side rollers, Squirrel cage ,Motor-2Nos.	10KW,415V,18.6 Amps, 976 r.p.m	
2.16	For Resetting (Slip ring motor-1No)	21KW, 1450 r.p.m	
2.17	For Hydraulic pump	0.8 KW, 1400 r.p.m	
2.18	Working height of machine	800mm	
2.19	Total input of electric motors	51.8 KW	

3.0 The Technical data of existing 22mm plate bending Machine(XZM 4000/22) is as follows.

SNO	DESCRIPTION	DIMENSIONS
3.1	Input supply	415V +-10%, 3Phase, 50Hz
3.1	Maximum working length	4000mm
3.2	Thickness of plate of 50 kp/mm ² Tensile strength and	22mm
	28kp/mm2 yield point	
3.3	Diameter of Upper roll	450mm
3.4	Diameter of lower roll	350mm
3.5	Minimum Diameter of bending /Inner diameter	575mm
3.6	Speed of Bending	7.3m/min
3.7	Speed of Resetting the upper roll	90mm/min
3.8	Electric motors	3x380/220v, 50Hz
3.9	For Bending (Slip ring motor-1No.)	30KW, 1450r.p.m
3.10	For Resetting (Slip ring motor-1No)	21KW, 1450r.p.m
3.11	For Hydraulic pump	0.8 KW, 1400r.p.m
3.12	Working height of machine	800mm
3.14	Total input of electric motors	51.8 KW
3.15	Control voltage	24 Volts

SCOPE OF WORK for 25mm and 22mm plate bending Machines:

S.No.	PARTICULARS	SPECIFICATION / DESCRIPTION	BIDDER'S OFFER (WITH CONFIRMATION & COMPLETE TECHNICAL DETAILS)
4.0	The following items	have to be supplied new and to be commission	
4.1	Bearings	All bearings must be replaced with new ones.	
4.2	Control panel	New operating panel with operator friendly	
		push buttons and switches must be provided.	
		All indicators and displays must be provided	
		for control of the rollers / machine.	
4.3	Main and side drive	Main and side drive motors have to be	
	motors	checked and reconditioned. And also to be	
		quoted as optional for supply of new main	
		and side drive motors with equivalent drives	
		and commissioning.	
4.4	Panel AC	The new CNC control panel shall be equipped	
		with Panel AC.	
4.5	Wiring	New wiring with new power cables, control	
		cables, reference cables shall be provided	
4.6	Switch gears,	New switch gears, contacts, overload relays,	
	contacts etc	limit switches shall be supplied and installed	
		in the new control panel.	
4.7	Motor resistance	Motor resistance to be replaced.	
4.8	Solenoid valves	All solenoid valves shall be replaced with new	
		ones.	
4.9	Oil seals, O-Rings	All oil seals, O-Rings, pressure hoses, joint	
	etc	leaks and rubber packings shall be replaced	
4.40	II. das Pas	with new ones.	
4.10	Hydraulics	The Hydraulic system / buckets are to be	
		replaced. All hydraulic components are to be	
		replaced with the following makes Make: Vickers / Rexroth / Yuken	
4.11	Pressure pipes	All pressure pipes shall be replaced with new	
4.11	riessure pipes	ones.	
4.12	Cable glands,	New cable glands, conduits shall be provided	
4.12	conduits	and replaced with old ones.	
4.13		All Mechanical worn out parts are to be	Vendor to confirm
7.13	out parts	replaced with new ones by vendor	Vehicle Committee
4.14	Interface cables,	Make: LAPP / Finolex / BCH / L&T / Siemens	Vendor to confirm and
7.14	connectors, Switch	Widec. Extra / Finolexy Berry Extra Stemens	specify
	gears		-11
4.15	Bearings	Make: SKF/ FAG/ RHP / TIMKEN	Vendor to confirm and
			specify

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S.No.	PARTICULARS	SPECIFICATION / DESCRIPTION	BIDDER'S OFFER (WITH CONFIRMATION & COMPLETE TECHNICAL DETAILS)
4.16	Contactors	Make: Siemens / BCH / Schenider	Vendor to confirm
4.17	Relays, Timers	Make: BCH / Siemens/ OMRON / L&T	Vendor to confirm and specify
4.18	Precision linear metallic scales	Make: Givi Misure / Heidenhain / Siemens	Vendor to confirm and specify
4.19	Limit switches	Make: Teknic / BCH / L&T	Vendor to confirm and specify
4.20	DRO	Make: SONY / FANUC / FAGOR / Heidenhain	Vendor to confirm and specify
5.0	The following items I	have to be overhauled/ reconditioned.	
5.1	Guide block	Guide block for rolling cones shall be refurbished.	
5.2	Rollers surface finish / alignment	All rollers surface finish / Alignment shall be done. Any inclination during the operation of roller shall be overhauled and the problem to be rectified.	
5.3	Hydraulic motor and power pack	Hydraulic motor and power pack shall be reconditioned.	
5.4	Inclination of side and bottom rollers	The inclination during the operations of side and bottom rollers should be rectified.	
5.5	Opening Hinge	Opening hinge shall be overhauled	
5.6	Guide block	Guide block for rolling cones shall be reconditioned.	
5.7	Gear box	Complete gear box should be overhauled. Guide ways slackness shall be rectified. In gear boxes any defective components are to be replaced with new ones. Gear box shall be lubricated completely.	
5.8	Gear wheel	Gear wheel shall be overhauled and aligned for smooth functioning	
5.9	Safety guards	Safety guards and floor platforms shall be overhauled.	
5.10	Pressure balancing system	Pressure balancing system shall be re aligned properly.	
5.11	Hydraulics	Total hydraulic system including hydraulic tank, buckets, pump and motor, solenoid valves, pipes etc shall be overhauled and the existing problems shall be rectified.	

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S.No.	PARTICULA	ARS / SPECIFICATION / DESCRIPTION	BIDDER'S OFFER (WITH CONFIRMATION & COMPLETE TECHNICAL DETAILS)
5.12	Lubrication and fittings	Lubrication has to be applied for all the parts and fittings.	
5.13	Oiling points	Oiling points with periodicity, type of oil to be used must be indicated on the machine.	
5.14	Modifications	Any modifications carried out shall not sacrifice original traverses, speed and feed ranges.	
6.0	be painted with two Apple Green color p be painted with two by BHPV at the time interior of the boonumerals etc. will required / as indicate electrical panel box of white enamel painthe standard procuremoving old paint,	chine: Machine and table outside body shall o coats of reputed brand of Premium enamel paint. Interior of the machine and table are to o coats of enamel paint(Color to be specified e of PO). Wherever oil comes in contact with dy, oil resistant paint to be used. Letters, have to be painted with a different color as ted by BHPV at the time of final painting. For es inside area is to be painted with two coats nt. Painting should be carried out according to redure for painting including cleaning and applying metal primer putty etc. Good finish. Overall Machine aesthetic view should be	Vendor to confirm.

S.No.	PARTICULARS / SPECIFICATION / DESCRIPTION	BIDDER'S OFFER (WITH CONFIRMATION & COMPLETE TECHNICAL DETAILS)
7.0	1. Complete dismantling of the machine assemblies into individual parts, degreasing, chemically cleaning, pre-painting of structural parts, joint inspection to finalize the detailed list of	Vendor to confirm
	a. Spares to be bought outb. Spares to be manufactured	
	The list should be approved by BHPV. Drawings of spares to be manufactured and specifications for bought out items shall be submitted to BHPV by the vendor for approval.	
	SPARES : For the above mentioned spare parts (electrical/mechanical / hydraulic/ electronics) required to be replaced beyond the spares quoted by the vendor along with offer, approved by BHPV after joint inspection, BHPV will supply spares available with them or procuring the spares.	
	2. A separate tender will be floated for these spares (bought out spares and spares to be manufactured). The vendor shall also compulsorily participate in the above tenders quoting for all the spares. The spares will be ordered on the lowest party and the spares will be given to the vendor for assembly into the machine. No extra cost will be paid for the fitment and assembly of these spares.	
	a. Spares required to be replaced other than those agreed to during joint inspection will have to be approved by BHPV before such replacement is affected. Cost of such spares shall be absorbed by the Contractor. BHPV will not pay for these items.	
	 Prior intimation has to be given to BHPV by the contractor for deputing the team for joint inspection at BHPV / contractor works. 	
7.1	Operational spares for 2 Years should be quoted separately.	Vendor to confirm
7.2	Spare parts manual should be provided along with the parts list.	Vendor to confirm

S.No.	PARTICULARS / SPECIFICATION / DESCRIPTION	BIDDER'S OFFER (WITH CONFIRMATION & COMPLETE TECHNICAL DETAILS)
8.0	Prove-out test	
8.1	Complete assembly and Geometrical testing (jointly), job trails etc to be carried out. A test chart performance report has to be made. The tests to be carried out in presence of contactor, maintenance personnel and production personnel.	Vendor to confirm
8.2	After successful geometrical and job tests the machine would be handed over to production division for their trail run and regular production would begin on the machine. After completely satisfying themselves with regards to the accuracies, loading capacity etc. of the machine by manufacturing few production items the Production and maintenance personnel would then release the satisfactory performance certificates for the machine. Only on receipt of such certificate the work would be deemed as completed and the final bill would be processed.	Vendor to confirm
9.0	BHPV's Scope of work:	
9.1	Material handling facilities will be given during retrofitting.	
9.2	Provide all utilities like air, light, power and gas required for retrofitting and testing/trail runs.	
9.3	All necessary documents available with BHPV related to Machine will be given to vendor	
10.0	Miscellaneous	
10.1	The supplier should give a point-by-point reply to the specifications	Vendor to specify
10.2	 The following manuals should be supplied along with the supply of each Machine. 1. Electrical Block diagrams – 3 sets 2. Circuit diagrams of all PCBS – 3 Sets 3. O&M Manuals (hard copy & Soft Copy) of the above – 3 sets 4. Operational Manual – 3 sets 5. Details of all Mechanical modifications & fittings with drawings – 3 sets 6. Spare parts manual – 3 sets 	Vendor to confirm

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S.No.	PARTICULARS / SPECIFICATION / DESCRIPTION	BIDDER'S OFFER (WITH CONFIRMATION & COMPLETE TECHNICAL DETAILS)
10.3	The maintenance manual should contain the system description and its working, trouble shooting, circuit diagrams, waveforms, test points etc along with the diagnostic features. Error codes of display, explanation of code and action to be taken.	Vendor to confirm
10.4	The supplier should provide at least 3 days training in operation, programming and interfacing and maintenance at supplier's works/BHPV in each area for production and maintenance personnel.	Vendor to specify
10.5	The supplier should provide 1 Year warranty from the date of acceptance of reconditioning the Machine.	Vendor to specify
10.6	Place of Work: The supplier can execute the complete reconditioning and retro fitment activity at BHPV, Visakhapatnam or at supplier's works. If the machine/parts are to be taken to the supplier's works, the transportation cost (to & fro, insurance) has to be borne by the supplier.	Vendor to specify
10.7	All levers and handles shall be Nickel-plated.	Vendor to specify
10.8	Name plates, instruction plates shall be replaced with new ones. One plate with machine specifications in full, name & address of reconditioning party, year of reconditioning etc. should be riveted in front / side of the machine surface.	Vendor to specify
10.9	Oiling points with periodicity, type of oil to be used shall be indicated on the machine.	Vendor to specify
10.10	Bar chart showing the time required for the following elements to be given covering the period of delivery quoted a) Dismantling of machine at BHPV works b) Complete cleaning and joint inspection of components at BHPV works to identify parts for replacement and rework. c) Manufacturing, rework/repairing etc. of the components, completion of scraping work and sub-assemblies d) Complete reconditioning / retrofit work e) Assembly of the machine f) Re-erection & re-commissioning at BHPV works g) Geometrical, positional accuracy testing, h) Job trial and prove out	Vendor to confirm

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S.No.	PARTICULARS / SPECIFICATION / DESCRIPTION	BIDDER'S OFFER (WITH CONFIRMATION & COMPLETE TECHNICAL DETAILS)
10.11	Any modifications carried out shall not sacrifice original traverses, speed and feed ranges	Vendor to specify
10.12	REWORK IN LIEU OF REPLACEMENT: Reworks in lieu of replacement on all parts (guide ways, bushes, box nuts, screw rods etc.) by machine grinding preferably/chrome plating / welding / machining etc. to be identified initially and also during joint inspection. For such works, BHPV will not pay extra.	Vendor to confirm
10.13	BHPV reserves the right to inspect the progress as well as workmanship at any stage of the work. Decision of BHPV Representative shall be final in the matter of inspection at any stage. Contractor shall extend necessary co-operation to enable such inspection.	Vendor to confirm
10.14	All discarded / replaced parts shall be returned to BHPV.	Vendor to confirm
10.15	The price for each machine shall be quoted separately in the same price bid.	Vendor to confirm
10.16	Any work (mechanical and electrical) not mentioned in this scope of work to keep the machine in working condition with all features and accuracies are in the scope of the contractor.	Vendor to specify
10.17	The contractor is required to study the machine, the scope of supply and certify the completeness of scope in order to execute the work. In case of any discrepancies in the scope of work, the contractor is required to highlight the same to BHPV before submission of the offer.	Vendor to specify
10.18	Lodging & Boarding facilities for the contractor personnel are at Contractor's scope (during dismantling period, re-erection & recommissioning period and for troubleshooting during performance guarantee period). BHPV is not responsible for this.	Vendor to confirm
10.19	BHPV reserves the right to place split order (i.e separate orders for 25mm and 22 mm machines) for each of the Machines. Vendor to confirm for accepting part order.	Vendor to confirm

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S.No.	PARTICULARS / SPECIFICATION / DESCRIPTION	BIDDER'S OFFER (WITH CONFIRMATION & COMPLETE TECHNICAL
10.20	Termination of contract: If as a result of difficulty in procurement of raw materials or due to force majeure reasons or any other reasons whatsoever the contractor is unable to keep the delivery schedule of the Contract, extension of time may be granted by the Contractee to the extent considered necessary at the request of the vendor. Should there be delay in supply beyond the extended date of delivery, it shall be open to the Contractee to terminate the contract in part or full and make other arrangements for executing the work elsewhere at the cost and risk of the vendor.	Vendor to confirm
10.21	Interpretation: Any dispute of difference of opinion in respect of the interpretation, effect or application of this particular condition of the Contract or of the amount recoverable hereunder from the vendor shall be decided by the Contractee and the decision shall be final and conclusive.	
10.22	Subletting: The vendor shall not sublet or assign this work or any part thereof without the written permission of BHPV. In the event of the vendor subletting or assigning this work or any part thereof without such permission, BHPV shall be entitled to cancel the contract and execute the contract elsewhere at the risk and account of the vendor and the vendor shall be liable for any loss or damage which BHPV may sustain in consequence of or arising out of such contract elsewhere.	

COMMERCIAL TERMS AND CONDITIONS FOR SUBMISSION OF OFFER

1.0 QUOTATIONS

Bidders shall submit the offer in TWO INNER ENVELOPES as indicated below which shall be sealed in one outer envelope.

<u>Envelope I:</u> This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked "**Part I – Technical and Un-priced commercial bid**" Indicating Tender No., Due Date and Address & Reference of the Bidder.

<u>Envelope II:</u> This sealed envelope should contain price details this envelope should be clearly marked "**Part II - Price bid**" indicating Tender No., Due Date and Address & Reference of the Bidder.

Both the envelopes (Part I & II) shall be put in one cover, duly sealed, super scribing as Part I and Part II of Tender No., due date of opening and the address and reference of the Bidder

The above offer should reach this office on or before the due date by 14.00 Hrs (IST) Tender should not be addressed to any Individuals name but only designation to

<u>Dy. General Manager (MM)</u> <u>BHARAT HEAVY PLATE & VESSELS LIMITED</u> <u>VISAKHAPATNAM - 530 012 (A P), INDIA.</u>

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.

Offers should be in ENGLISH and accompanied by technical literature catalogue and detailed dimensional drawings in ENGLISH or otherwise the offers will not be considered.

2.0 PART I (TECHNICAL & UN-PRICED COMMERCIAL BID)

- 2.1 Technical
 - This part shall include / indicate the following:
- 2.1.1. Offer should contain complete scope of supply with all technical details, specifications, delivery and other commercial terms and conditions.
- 2.1.2 Point by point confirmation for the Technical Specification enclosed is to be provided. If there are any deviations the same should be clearly specified. Offers received without conformation to our specification will be rejected.
- 2.1.3 List of customers to whom same or similar equipment have been supplied along with performance certificates to be enclosed.
- 2.1.4. Relevant catalogue to be attached.
- 2.1.5. List of spares parts (with part numbers) for two years operation and maintenance should be attached.
- 2.1.6. Information on shipping weight and cubage (length, width & height) to be provided
- 2.1.7. In case of foreign bidder offer, the Principal's technical offer only should be enclosed.
- 2.2 Un-Priced Commercial

This part shall include / indicate the following

- 2.2.1. Port of shipment / Station of dispatch
- 2.2.2. Terms of payment

- 2.2.3. FOB/FCA price along with fright charges up to Chennai port (for foreign bidders) Ex-works/FOR Dispatch Station price along with freight charges up to BHPV Visakhapatnam (for Indian bidders)
- 2.2.4. Taxes, Service tax & duties including Cess applicable.
- 2.2.5 Delivery Schedule
- 2.2.6. Filled-in check list to be enclosed
- 2.2.7. Offer validity
- 2.2.8. Country of origin
- 2.2.9. Percentage of agency commission if any along with a copy of Agency agreement The FOB/FCA/CFR Prices quoted shall include the agency commission.
- 2.2.10. A copy of "Un-Priced Part II 'i.e., a copy of the Price Bid without the price details to be enclosed.
- 2.2.11 BHPV is eligible for availing CENVAT / VAT credit on both inputs and capital inputs. The suppliers invoice should separately indicate the amount of duty / taxes and should invariably mention the following details:
 - 1. The Central excise registration number, range division and commission rate of the supplier's jurisdiction.
 - 2. The rate of duty and 8 digit central excise tariff heading of the item supplied.
 - 3. The TIN, VAT, CST registration number of the supplier.

The duplicate copy of the invoice is required for availing CENVAT credit and original copy for availing VAT credit, if purchased within the state.

In case of foreign bidders the duplicate copy of the electronic Bill of Entry along with TR6 challan should be made available for availing CENVAT credit on CVD, Cess (S) and SAD.

3.0 **PART II (PRICE –BID)**

This part should contain the schedule of price particulars and to be co-related to the technical details provided in Part-I

4.0 **OPENING OF TENDERS**

The Part I – Technical & un-priced commercial bid alone would be opened on the Tender opening date.

The Part II – Price bid of technically suitable Bidders alone would be opened. The Technically suitable Bidders would be informed about the Price Bid opening date. Clarifications if any required by BHPV FOR Technical evaluation / commercial evaluation would be sought from Bidders before opening of Part II – price bid. GENERAL

- 5.1 Incomplete offers will not be considered.
- Fixed priced: Prices quoted by the bidder shall be fixed and not subject to any escalation whatsoever during the period of bid validity and execution of the Purchase Order A bid submitted with an adjustable price will be treated as non- responsive and rejected Prices shall be written in words and figures. In the event of difference, the price in words shall be valid and binding. Unit prices shall be considered correct in the event of any discrepancy with regards to total price.
- 5.3 **<u>Bid currency</u>:** Indian bidders should submit the prices only in Indian Rupees. Foreign bidders may submit their bid in their home currency, which should be clearly indicated in the un-priced commercial bid as well as in the price bid.
- 5.4 <u>Terms of Delivery:</u> Bidders are required to quote their best delivery period. Foreign Bidders should submit their offer for net FOB/ FCA Nearest Sea Port / Air Port as well as CFR / Chennai Seaport/ Airport. Freight charges up to Chennai port to be indicated separately. Indian Bidders should submit their offer for Dispatching station as well as FOR BHPV Visakhapatnam basis. Freight charges from works to BHPV Visakhapatnam to be indicated separately. Delivery from the date of Letter of Intent to be mentioned in the offer.

- 5.5 <u>Taxes and Duties:</u> All Taxes and Duties payable as extra to the quoted price should be specifically stated in offers along with CST & TIN No/ Tariff No. etc, failing which the purchaser will not be liable for payment of such Taxes and Duties (Our TIN No.28280189432, APGST No. VSP/04/1/1023 dated 24.08.1968. CST No.VSP/04/1/1012 dated 24.08.1968 & BHPV ECC No AAA CB 7076 N-XM001. Assessment circle Visakhapatnam.)
- 5.6 **<u>Validity:</u>** The offers for main equipment and spares shall be kept open for acceptance for a period of 120 days (one hundred and twenty days) from the dates of opening of the tender (part I)

5.7 <u>Terms of Payment:</u>

5.7.1 Indian Bidders:

5.7.1.1 BHEL, Trichy on behalf of BHPV (Subsidiary of BHEL) will arrange for an irrevocable, usance Letter of Credit (60 days from date of dispatch) after receipt of Inspection release note and against presentation of documents for 80% of payment (80% of basic price + 100% Taxes). And balance 20% of payment will be made after acceptance of material/commissioning of the equipment at BHPV, Visakhapatnam and on submission of Performance Bank Guarantee.

5.7.1.2 <u>Documents to be submitted by Indian Bidders for negotiating LC:</u>

- 1. Original Invoice in triplicate in the name of BHPV.
- 2. Original LR in the name of the LC issuing Bank
- 3. Original packing list in triplicate in the name of BHPV.
- 4. Original Test certificate in triplicate in the name of BHPV.
- 5. Inspection release Note.
- 6. One original Bank guarantee, if applicable in favour of BHPV.
- 7. Certificate issued by the beneficiary certifying that the materials dispatched and shown in the packing list are not less than that invoiced.
- 8. Insurance for 100% of the commercial invoice value made out in the name of LC issuing bank, covering all risks.
- 9. Any other conditions/documents as mentioned in the Purchase Order.

5.7.1.3 Additional conditions for Indian Bidders:

- 1. <u>Liquidated damages:</u> Delivery of the goods specified in the purchase order should be made within the time prescribed. Failure to dispatch the materials in the time as per the delivery quoted in our Purchase Order would make the supplier liable to an un-conditional penalty at the rate of ½% of the value of goods for each week of delay subject to a maximum of 10% of the Purchase Order value.
- 2. In the event of delayed presentation of documents beyond the validity for negotiation(Subject to acceptance of documents by Applicant), 5% of invoice value will be retained towards demurrage and other charges and the difference if any between actual charges and recovery will be settled between BHPV and beneficiary outside the purview of LC terms.

5.7.2 Foreign Bidders

An Irrevocable letter of Credit shall be established by BHEL, Trichy on behalf of BHPV (Subsidiary of BHEL) for 80% of FOB/FCA/CFR/ (excluding Indian Agent's commission) 2 months prior to shipment with a validity of 3 months and negotiation after shipment against shipping documents. Letter of Credit shall be opened through an authorized bank of BHEL in India. Balance 20% of FOB/FCA/CFR value shall be paid through sight draft on Commissioning & acceptance of the equipment at BHPV Visakhapatnam, against submission of 10% performance bank guarantee. All Bank charges outside India are to supplier's account. Lump sum erection and commissioning charges if any shall be payable after satisfactory erection & commissioning of the equipment by sight draft against certificate issued by the competent authority.

5.7.2.1 Documents to be submitted by Foreign Bidders for negotiating LC:

- 1. Original Invoice in triplicate in the name of BHPV.
- 2. Original bill of lading in triplicate in the name of the LC issuing bank.
- 3. Original packing list in triplicate in the name of BHPV.
- 4. One original certificate of origin.
- 5. Original Test certificate in triplicate in the name of BHPV.
- 6. Inspection release Note.
- 7. One original Bank guarantee, if applicable in favour of BHPV.
- 8. Certificate issued by the beneficiary certifying that one copy of non-negotiable documents comprising Bill of Lading, Invoice, Packing List, Certificate of country of origin and Test certificate sent to Port consignee.
- 9. Certificate issued by the beneficiary certifying that the materials shipped and shown in the packing list are not less than that invoiced.
- 10. Insurance for 110% of the commercial invoice value made out in the name of LC opening bank, covering all risks, clearly mentioning the name of claim settling agent in India. The claims will be settled in the same currency as that of LC.
- 11. Any other conditions/documents as mentioned in the Purchase Order.

5.7.2.2 Additional conditions for Foreign Bidders:

- 1. <u>Liquidated damages:</u> Delivery of the goods specified in the purchase order should be made within the time prescribed. Failure to dispatch the materials in the time as per the delivery quoted in our Purchase Order would make the supplier liable to an un-conditional penalty at the rate of ½% of the value of goods for each week of delay subject to a maximum of 10% of the Purchase Order value.
- 2. In the event of delayed presentation of documents beyond the validity for negotiation(Subject to acceptance of documents by Applicant), 5% of invoice value will be retained towards demurrage and other charges and the difference if any between actual charges and recovery will be settled between BHPV and beneficiary outside the purview of LC terms.

5.7.3 Common to both India & Foreign Bidders.

Erection & Commissioning (E&C) charges will be released after deduction of Income Taxes as per the Govt. of India rules. The TDS certificate will be issued by BHPV. Applicable service tax on E&C charges will be payable extra. The liability of depositing the same to the Govt. will be of the supplier.

5.7.4 **Loading criteria common to both Indian and foreign bidders:** Vendor should accept the payment terms specified above. However for any deviation to the payment terms offered with reference to the above criterion will be loaded with prime lending rate of SBI prevailing on date of opening of price bid + %, which shall be computed for the differential period between BHPV terms of payment and the offered payment terms by vendor.

- 5.8 DUNS number (allotted by M/s. DUN & Bradstreet) shall be mentioned in your offer.
- 5.9 <u>Guarantee:</u> The equipment shall be guaranteed for a period of 18 months from the date of supply or 12 months from the date of commissioning and acceptance whichever is earlier.
 - Offers from vendors not accepting to the requested guarantee period will be rejected.
- 5.10 Contract Execution Bank Guarantee (CEBG): The successful tenderer shall furnish a Bank Guarantee from any Nationalized Bank for 5% of Purchase Order value (FOR Dispatching station value Excluding taxes, duties, freight & insurance for Indian bidders) & (FOB/FCA value excluding freight & insurance for foreign bidders) confirming that the order will be executed as per the terms and conditions and this should be valid till final dispatch date (LR/GR/BL/AWB) with additional 2 months claim period. Letter of Credit will be processed only after receipt of CEBG. The CEBG is to be furnished within 3 weeks from the date of Purchase order.

Offers from vendors not accepting to submit CEBG will be rejected.

Performance Bank Guarantee (PBG): The supplier shall furnish a Bank guarantee from any Indian Nationalized Bank approved by BHPV in the format, given by BHPV along with purchase order for 10% of the Purchase Order value (FOR Dispatching station value – Excluding taxes, duties, freight & insurance – for Indian bidders) & (FOB/FCA value – excluding freight & insurance – for foreign bidders) valid for period of guarantee with additional claim period of 2 months.

Offers from vendors not accepting to submit PBG will be rejected. The CEBG & PBG shall be obtained from any Indian Nationalized Bank

- Liquidated damages: Delivery of the goods specified in the purchase order should be made within the time prescribed. Failure to dispatch the materials in the time as per the delivery quoted in our Purchase Order would make the supplier liable to an un-conditional penalty at the rate of ½% of the value of goods for each week of delay subject to a maximum of 10% of the Purchase Order value.
- 5.12.1 **Loading Criteria for Liquidated Damages:** Any deviation from above LD Clause to the extent for which LD is not agreed by the vendor i.e., differential % value will be loaded on basic price, e.g. If some vendor agrees for say maximum of 6% LD then his price will be loaded by 4% (10 6) of his quoted basic price.
- 5.13 **Risk purchase:** If the supplier fails to deliver the goods within the delivery specified in the Purchase Order, BHPV 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 delivery period mentioned in the Purchase Order.

Offers from vendors not accepting the above Risk Purchase terms will be rejected.

- Indian Agent & Agency commission: An Indian Agent can represent only one Foreign Manufacturer against a particular Tender. The FOB/FCA/CFR price quoted by the Foreign bidder shall include the agency commission. However, the agency commission component payable to their Indian Agents shall be shown separately in the offer. This will be paid by BHPV in India Rupees, on satisfactory commissioning & acceptance of the equipment. Copies of current Agency Agreement / Authorization Letter in respect of Agency Commission shall be furnished along with offer. For calculation of Rupee equivalent of Agency Commission exchange rate as prevailing on the date of Purchase Order will be taken.
- 5.15 **Short shipment / Warranty replacement:** In case of any short shipment in the main equipment / spares, customs duty levied on such supplies, shall be borne by the supplier. Any warranty replacement during the warrantee period shall be on FOR, BHPV Visakhapatnam, basis.

- 5.16 <u>Inspection & Testing:</u> All goods shall be subject to inspection by BHPV or its authorized representatives at supplier's works or at BHPV stores. The supplier will not charge for the facilities provided for inspection of goods. In case of machine tools the machine would be inspected and proved at supplier's works prior to dispatch however, final inspection and acceptance of the machine will be carried after installation of the machine at BHPV, Visakhapatnam.
- 5.17 <u>Operating and Maintenance manuals:</u> The Bidders shall clearly mention in their offer that Operating Maintenance Manuals as called for in the Technical Specification in the required number of copies will be provided.
- 5.18 <u>Cenvat & VAT credit. (for Indian Bidders only):</u> The quotation must indicate Tariff item number and rate of Excise Duty applicable. The original Excise Duty Gate Pass will be required to be furnished in case charges to us. If the bidder is availing Cenvat credit for his input materials, the effect of proforma credit should be passed on to the purchaser.
- 5.19 **Packing:** The Supplier shall arrange for packing suitably in all respects considering the peculiarity of the material involves for normal transport by sea / air / rail road and suitably protected against effect of tropical salt laden atmosphere in the event of shipment being delayed at ports.
- 5.20 <u>Salient Points of HSE</u> (Health, Safety & Environment) that are to be considered while submissions of offer are:
- 5.20.1 Consumption benchmarks related to output shall be provided wherever applicable for key input resources (energy/fuels/chemicals)
- 5.20.2 Competency requirements for operation, maintenance and calibration, if any, shall be communicated
- 5.20.3 If any Hazardous chemicals as per MSIHC (Manufacturing, Storage and import of Hazardous Chemicals) Rules 1989/94/2000 are used, the MSDS shall be provided, along with on site & OFF site emergency plan (as applicable).
- 5.20.4 The noise level at operator level shall be within 90 Dba
- 5.20.5 OH&S (Occupational Health and Safety) control measures for safe working of machine as applicable shall be specified
- 5.20.6 The machine/equipment shall be fitted with guard for rolling and moving parts and shall comply with applicable OH&S legislations and Factories Act 1948
- 5.20.7 The supplier shall submit the layout drawing of operating controls, displays etc and operating instructions to enable ergonomics evaluation and approval
- 5.20.8 The recommended PPE (Personal Protective Equipment) for the equipment shall be furnished
- 5.20.9 Alarm System (both visual and audible) and Automatic switch off of the equipment shall be provided for any intrusion, overloading, short circuiting or any malfunctioning of the equipment.
- 5.20.10 Details of all hazardous / harmful substances discharges as by-products / wastes during operations of the machine / equipment, such as fumes, gases, dust particles, aerosols UV./IR (Ultra violet / Infra red) radiations, etc shall be furnished, along with their concentrations and their TLV, (Threshold Limit Value)

- 5.20.11 Appropriate pollution control measures shall be proposed to keep the emissions from the machinery / processes within the prescribed limit as stated in Environment Protection Rules 1986.
- 5.20.12 All furnaces, process units, DG sets, paint booths, shot blasting chambers, etc shall be provided with stack(s) of sufficient height as per guidelines laid down in the Environment Protection Rules 1986.
- 5.20.13 wherever industry specific standards are not available for control of pollutants, general emission standards shall be used
- 5.20.14 Chemicals banned due to their negative impact on the environment shall not be used on the process
- 5.20.15 Fuels with sulphur content less than 0.05% shall be proposed.
- 5.20.16 Details regarding nature of waste generated and appropriate disposal practices available shall be provided, along with the operation procedure of the plant / process.
- 5.20.17 Hazardous chemicals and flammable substances shall be transported only through authorized transporters and all safety practices as laid down in applicable legislative requirements such as Central Motor Vehicle Rules, Manufacture, Storage and Import of Hazardous Chemical 1989, etc. shall be followed.
- 5.20.18 Primary materials used in the equipment shall be specified and they shall be eco friendly.
- 5.21 Evaluation of offers shall be on the basis of delivered cost (Net cash outflow to BHPV).
- 5.22 BHPV also reserves its right to allow to the Public Sector Enterprises ordering and price preference facilities as admissible under the existing policy.
- 5.23 BHPV reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at another project / unit.
- 5.24 BHPV shall be at liberty to reject or accept any tender, part or in full, at their own discretion and any such action is not liable for any question or claim against BHPV.
- 5.25 BHPV reserves the right to go for a Reverse Auction (RA) instead of opening the submitted sealed bid, which will be decided after technical evaluation. Information and general terms and conditions governing RA are given below.

GENERAL TERMS AND CONDITIONS OF RA (REVERSE AUCTION)

Against this enquiry for the subject item/system with detailed scope of supply as per enquiry specifications. BHPV may resort to "REVERSE AUCTION PROCEDURE" i.e., ON LINE BIDDING ON INTERNET.

- 1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
- 2. BHPV will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
- 3. BHPV will inform the vendor in writing in case of reverse auction, the details of service provider to enable them to contact & get trained.

- 4. Business rules like event date, time, start price, bid decrement, extensions etc. also will be communicated through service provider for compliance.
- 5. Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of Reverse auction. Without this, the vendor will not be eligible to participate in the event.
- 6. BHPV will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHPV like Packing & Forwarding charges, taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHPV standard Commercial terms & conditions) for each of the vendor to enable them to fill-in the price and keep it ready for keying in during the Auction.
- 7. Reverse auction will be conducted on scheduled date & time.
- 8. At the end of Reverse Auction event, the lowest bidder value will be known on the network.
- 9. The lowest bidder has to Fax the duly signed Filled-in prescribed format as provided on case-to-case basis to BHPV through Service provider within 24 hours of Auction without fail.
- 10. Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with BHPV as per prevailing procedure.
- 11. In case BHPV decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHPV shall be opened as per BHPV's standard practice.
- Force Majeure clause: If at the time during the continuance of this contract the performance in whole or in part by either party of any obligations under this contract shall be prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events) then provided notice of happening of any such events is given by either party to other within twenty one days from the date of occurrence thereof neither party shall reason of such events be entitled to terminate this contract nor shall either party have any such non performance and delay is resumed as soon as practicable after such events has come to an end or ceased to exist, if the performance in whole or part of any obligation under this contract is prevented or delayed by reason or any such event claims for extension of time shall be granted for period considered reasonable by the purchaser subject to prompt notification by the seller to the purchaser of the particulars of the events and supply to the purchaser if required of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed to be a waiver of time in respect of remaining deliveries.

CHECK LIST

Bidder's acceptance to BHPV's Standard Commercial Terms & Conditions.

Applicable for Indian bidders

(To be submitted along with the offer – please do not change the format)

BHPV Tender No: & Date:	Bidders Confirmation / response
Prices have been quoted on "FIRM PRICE" basis only.	Yes / No
Prices have been quoted on "F.O.R BHPV" basis only.	Yes / No
P & F and Freight (To be Included in Vendor's Scope)	
Insurance (Please confirm whether included or not)	
Validity of offer (we require a minimum period of 120 days from the date of Tender Opening – please Specify)	
Sales Tax (please Specify)	
Excise Duty (please Specify)	
Delivery period from the date of Purchase Order (please Specify). A loading @ ½ % of the Purchase Order value per week will be done for the grace period requested. For evaluation 4 weeks will be considered as one month. Vendors quoting a delivery period beyond the 'the requested delivery plus the allowed grace period' is liable for rejection.	
Liquidated damages as per clause 5.12 (we require acceptance to @ ½% per week subject to a maximum of 10%).	
Risk Purchase as per clause 5.13 (Offers from vendors not accepting the Risk Purchase terms will be rejected)	Yes / No
Payment terms (As per Clause No. 5.7.1)	
Contract Execution Bank Guarantee (CEBG) as per Clause 5.10 (Offers from vendors not accepting to submit CEBG will be rejected)	Yes / No
Performance Bank Guarantee (PBG) as per Clause 5.11 (Offers from vendors not accepting to submit PBG will be rejected)	Yes / No
Guarantee as per clause 5.9 (The equipment shall be guaranteed for a period of 18 months from the date of supply or 12 months from the date of commissioning and acceptance whichever is earlier). (Offers from vendors not accepting to the guarantee period will be rejected)	Yes / No
Inspection (please Specify)	
Erection & Commissioning/ Installation/ Training (Please confirm whether	
charges are included in the total cost or not)	
Approximate Net Weight of the total Consignment	
Approximate Gross Weight of the total Consignment	

CHECK LIST

Bidder's acceptance to BHPV's Standard Commercial Terms & Conditions.

Applicable for foreign bidders (To be submitted along with the offer – please do not change the format)

BHPV Tender No: & Date:	Bidders Confirmation / response
Prices have been quoted on "FIRM PRICE" basis only.	Yes / No
Prices have been quoted on "F.O.R BHPV" basis only.	Yes / No
P & F and Freight	
Insurance (Please confirm whether included or not)	
Validity of offer (we require a minimum period of 120 days from the date of	
Tender Opening – please Specify)	
Currency in which quoted (please Specify)	
Port of loading (please Specify)	
Country of Origin (please Specify)	
Sales Tax (please Specify)	
Excise Tax (please Specify)	
Delivery period from the date of Letter of Intent (please Specify)	
Liquidated damages as per clause 5.12 (we require acceptance to @ ½% per week subject to a maximum of 10%)	
Risk Purchase as per clause 5.13 (Offers from vendors not accepting the Risk	Yes / No
Purchase terms will be rejected)	
Payment terms (As per Clause No. 5.7.2)	
Agency commission (refer clause 5.14)	Acceptable / Not acceptable
Contract Execution Bank Guarantee (CEPG) as per Clause 5.10 (Offers from	Yes / No
vendors not accepting to submit CEBG will be rejected)	
Performance Bank Guarantee (PBG) as per Clause 5.11 (Offers from vendors	Yes / No
not accepting to submit PBG will be rejected)	
Guarantee as per clause 5.9 (The equipment shall be guaranteed for a period of	Yes / No
18 months from the date of supply or 12 months from the date of commissioning	
and acceptance whichever is earlier). (Offers from vendors not accepting to	
the requested guarantee period will be rejected)	
Inspection (please Specify)	
Erection & Commissioning/ Installation/ Training (Please confirm whether	
charges are included in the total cost or not)	
Approximate Net Weight of the total Consignment	
Approximate Gross Weight of the total Consignment	