

# **Bharat Heavy Electricals Limited**

(High Pressure Boiler Plant)
Tiruchirappalli – 620014, TAMIL NADU, INDIA
CAPITAL EQUIPMENT/ MATERIALS MANAGEMENT

**ENQUIRY** 

Phone: +91 431 257 7771

Fax: +91 431 252 0719 Email: rpmuthu@bheltry.co.in

Web: www.bhel.com

**NOTICE INVITING TENDER** 

TWO PART BID

Enquiry Number:

Due date for submission of quotation:

2631000068 24.07.2010 24.08.2010

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.

Please note that under any circumstances both delayed offer and late offers will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 hrs on the Date of tender opening.

Item	Description	Quantity
10	BAND SAW as per the technical specification, BHEL	
	commercial terms & conditions applicable (to be	1 No.
	downloaded from web site <u>www.bhel.com</u> or	1 140.
	http://tenders.gov.in)	

Important points to be taken care during submission of offer

1. Checklist to be duly filled and enclosed along with your offer, failing which the offer will not be considered for evaluation.

BHEL's General guidelines / instructions including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from BHEL web site <a href="http://www.bhel.com">http://www.bhel.com</a> or from the Government tender website <a href="http://tenders.gov.in">http://tenders.gov.in</a> (public sector units) Bharat Heavy Electricals Limited page) under Enquiry reference " 2631000068".

Tenders should reach us before 14:00 hours on the due date Tenders 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

Dy.Manager / MM / Capital Equipment

## BHARAT HEAVY ELECTRICALS LIMITED



429-002/A

ENQUIRY (INDIGENOUS)

( A Government of India Undertaking )
HIGH PRESSURE BOILER PLANT
PURCHASE DEPARTMENT - FOSSIL BOILERS
THIRUCHIRAPALLI - 620014
TAMILNADU (INDIA)

PHONE: 2577771 GRAMS: BHARATELEC FAX NO: 2520719

E-mail: rpmuthu@bheltry.co.in

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Web:

Enquiry No Enquiry Date Due Date for Quotation

2631000068 24.07.2010 24.08.2010

Please quote Enquiry No, Date and due date in all correspondences.

This is only a request for quotation and not an order

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	DAND CANY ( D. C. J. C. J. WOZ. L. W.	МО	1.000	1.00	30.04.11

BAND SAW for Bar Stock Stores-W37 in Valves dept.(Specification Enclosed)
BAND SAW

### General Note:

COMMERCIAL TERMS AND CONDITIONS

Bhel commercial terms & conditions with Price Bid and Bank Guarantee formats along with technical specifications can be download 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 page) under Enquiry reference "2631000068"

### 1..QUOTATIONS

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

Envelope I 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 commercial bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder.

Envelope II This sealed envelope should contain price details. This envelope should be clearly marked "Part II - Price bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder.

Both the envelopes (Part I & II) shall be put in one cover, duly sealed, superscribing as Part I and Part II of Enquiry 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).Late offers will not be considered.

 POINT TO POINT CONFIRMATION TO BHEL'S SPECIFICATION AND COMMERCIAL TERMS AND CONDITIONS SHOULD BE PROVIDED IN THE ENCLOSED SHEET.

The offers should reach us before the time of opening of tenders. The offers will be opened at 14:30 hours on the due date in the presence of the tenderers who may like to be present. Late tenders are liable to be rejected.

Yours faithfully, For BHARAT HEAVY ELECTRICALS LIMITED

R. PACHAMUTHU

MARKATATIANHOHASE

MM / GRASSI BOURBRIENT

BHEL, TRICHY - 620 014.



# BHARAT HEAVY ELECTRICALS LIMITED

( A Government of India Undertaking )
HIGH PRESSURE BOILER PLANT
PURCHASE DEPARTMENT - FOSSIL BOILERS
THIRUCHIRAPALLI - 620014
TAMILNADU (INDIA)

PHONE: 2577771 GRAMS: BHARATELEC FAX NO: 2520719

E-mail: rpmuthu@bheltry.co.in

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Web:

3. DETAILED CATALOGUE AND DRAWINGS SHOULD BE SENT ALONG WITH YOUR TECHNICAL OFFER.

### Enclosures:

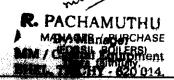
"LD clause has to be confirmed without fail."

"Payment to vendors will be made only thro E-Payment mode"

The offers should reach us before the time of opening of tenders. The offers will be opened at 14:30 hours on the due date in the presence of the tenderers who may like to be present.

Late tenders are liable to be rejected.

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED



# PART A.

#### SECTION - I : **COMPANY PROFILE**

The BIDDER is requested to provide details listed in the table given below:

S.No.	PARTICULARS	VENDOR'S RESPONSE
1.0	Number of Years of Experience of the	
BIDDER (Original Equipment Manufacturer)		
	in the field of Design, Manufacture, Supply	
	and Commissioning of Double Column	
	Bandsaw Machines.	
2.0	Number of Double Column Bandsaw	
	Machines supplied and installed till date in	
	the following category (based on CAPACITY	
	) with details on customers	
3.0	Details on Standards or Codes followed in	
	the Design of Bandsaw Machine	
4.0	Details of Manufacturing Facilities :	
	a) Fabrication Facilities	
	b) Heat Treatment Facilities	
	c) Machining/Grinding Facilities	
	d) Assembly & Testing Facilities	
5.0	Details of Quality System (with Stages of	
	Internal Inspection) followed for the	
	Fabrication / Machining and Testing of	
	Bandsaws	
6.0	Details on AFTER-SALES-SERVICE Set-Up	
	in INDIA for providing timely service	
	support to BHEL	

# <u>SECTION - II</u>: <u>QUALIFYING CRITERIA</u>

BIDDER has to meet the following requirements to get qualified for submitting an offer for the BANDSAW:

[Additional Sheets shall be attached with the OFFER, to provide requisite details]

S.No.	REQUIREMENTS	VENDOR'S RESPONSE
7.0	Only those BIDDERS (Original Equipment	
	Manufacturer), who have supplied and	
	commissioned at least One Double	
	Column Bandsaw with Cutting Capacity	
300 mm and above (suitable for either		
	square or circular shaped solid jobs in	
	steel) shall quote.	

S.No.	REQUIREMENTS	VENDOR'S RESPONSE
8.0	The Bandsaw Machine supplied under	
	Clause No. 7.0, should presently be	
	working satisfactorily for more than one	
	year after commissioning. However, if	
	such a Bandsaw has/had been supplied	
	to BHEL, then such machine should be	
	presently working satisfactorily since its	
	commissioning and acceptance in BHEL.	
	The following information should be	
	submitted by the BIDDER about the companies where similar machines have	
	been supplied.	
9.0	Name of the Customer / Company where	
9.0	the machine is installed.	
10.0	Complete Postal Address of the	
	Customer.	
11.0	Year of Commissioning.	
12.0	Parameters of Machine(s) supplied and	
	application for which the machine is	
40.0	supplied.	
13.0	Name and designation of the contact	
110	person of the Customer.	
14.0	Phone No., FAX No. and e-mail address	
15.0	of the contact person of the Customer.  Performance certificate from the	
15.0	customers regarding satisfactory	
	performance of BANDSAW Machine	
	supplied to them (Original Certificate or	
	Through E-mail directly from the	
	customer) in the FORMAT given in	
	<b>SECTION - IV</b> . The original performance	
	certificate may be returned after	
	verification by BHEL, if required by the	
	vendor.	

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## SECTION - III : BID / OFFER FORMAT

The BIDDER has to comply with the following, for accepting the Technical Offer for scrutiny by the Purchaser :

S.No.	REQUIREMENTS			
16.0	The BIDDER shall submit the offer in TWO PARTS - Technical			
	[with PART A & PART B] & Commercial and Price Bid.			
17.0	The OFFER shall contain a comparative statement of Technical			
	Specifications given by BHEL and the Offer Details submitted by the			
	Bidder, against each Clause. A just 'YES' or 'CONFIRMED' or 'NO-			
	DEVIATION' or 'COMPLIES' or 'ACCEPTED' or similar words in the			
	technical comparative statement may lead to disqualification of the			
	Technical Offer.			
18.0	The Technical Offer shall be supported by Product Catalogue and Data			
	Sheets in ORIGINAL and complete technical details of 'Bought-Out-			
	Items' with copies of Product Catalogue			
19.0	The Commercial Offer (given with the Technical Offer) shall contain the			
	Scope of Supply and the Un-Priced Part of the Price-Bid, for			
	confirmation of the inclusion of all the accessories, tooling, attachments,			
	auxiliary parts, spares, consumables, etc. with the main and basic			
	equipment, to meet the technical specification requirements.			
20.0	Earlier performance and field experience (service support) with BHEL			
	(if any) will be a reckoning factor for the technical qualification of the			
	OFFER.			

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# <u>SECTION – IV</u> : <u>PERFORMANCE CERTIFICATE</u>

# PERFORMANCE CERTIFICATE - [SAMPLE FORMAT]

(On Customer's Letter Head)

2. Make & Model of the Equipment :  3. Month & Year of Commissioning :  4. Application for which Machine is used :  5. a. Equipment Serial Number :     b. Cutting Capacity of Bandsaw :     c. Power of Bandsaaw Drive Motor in HP/kW :     d. Cutting Speed Range :     e. Length of Jobs / Components before Cutting :  6. Performance of the Machine : Satisfactory /     Good /     Average /     Not Satisfactory  7. Feed-Back on 'After Sales Service' from Supplier :  8. Remarks / Reasons for Recommendation :  Date: Signature & Seal of the Authority Issuing the Performance Certificate	1.	Supplier of the Equipment/Machine	:		
4. Application for which Machine is used :  5. a. Equipment Serial Number :	2.	Make & Model of the Equipment :			
b. Cutting Capacity of Bandsaw c. Power of Bandsaaw Drive Motor in HP/kW d. Cutting Speed Range e. Length of Jobs / Components before Cutting  6. Performance of the Machine  6. Performance of the Machine  7. Feed-Back on 'After Sales Service' from Supplier  8. Remarks / Reasons for Recommendation  Signature & Seal of the Authority	3.	Month & Year of Commissioning :			
b. Cutting Capacity of Bandsaw c. Power of Bandsaaw Drive Motor in HP/kW d. Cutting Speed Range e. Length of Jobs / Components before Cutting  6. Performance of the Machine  6. Performance of the Machine  7. Feed-Back on 'After Sales Service' from Supplier  8. Remarks / Reasons for Recommendation  Signature & Seal of the Authority	4.	Application for which Machine is used	:		
Good / Average / Not Satisfactory  7. Feed-Back on 'After Sales Service' from Supplier :  8. Remarks / Reasons for Recommendation :  Date: Signature & Seal of the Authority	5.	<ul><li>b. Cutting Capacity of Bandsaw</li><li>c. Power of Bandsaaw Drive Motor in HP/k</li><li>d. Cutting Speed Range</li></ul>		: : : :	
8. Remarks / Reasons for Recommendation :  Date: Signature & Seal of the Authority	6.	Performance of the Machine		:	Good / Average /
Date: Signature & Seal of the Authority	7.	Feed-Back on 'After Sales Service' fron	n Supplie	er	:
· · · · · · · · · · · · · · · · · · ·	8.	Remarks / Reasons for Recommendation	n		:
· · · · · · · · · · · · · · · · · · ·					
	Da	te:	•		9

### PART B

# TECHNICAL SPECIFICATIONS for BAND-SAW with HANDLING FACILITY

### 1.0 PURPOSE/APPLICATION:

The equipment is intended for sizing of tube bundles, forged and rolled bars in square-cut condition into small and varying lengths. The number of pieces per batch vary from single digit to few tens. A in-feed and cut-bit discharge (material handling facility) roller conveyor also shall form part of the supply.

### 2.0 JOB DETAILS:

2.1.0 Raw-material is in the form of seamless steel tubes and forged rods and hot-rolled bars in the form of bundles are also earmarked for cutting / sizing in the proposed band-saw machine.

### 2.2.0 MATERIAL SPECIFICATION:

- 2.2.1 SA 234 WPB, WPC, WP 12 and WP 22 (As per ASTM Standards for hot-formed & normalised forgings)
- 2.2.2 SA 105, SA 106 Gr.B/Gr.C, SA 210 Gr.A1
- 2.2.3 SA 182 F22, Sa182 F6 cl3, SA 213 T11/T22/T91 SA 335 Gr.P22
- 2.2.4 SA 240 TP 304, SA 312 TP 304, SA 312 TP 316

(Sl. No. 2.2.2 to 2.2.4 As per ASTM Standards)

- 2.2.5 OHTARON
- 2.2.6 As per Russian GOST Standards: 12 X 1M\( \phi \) / Steel
- 2.2.7 As per DIN Standards: X 20CrMoV12.1, 14MoV6.3,

15NiCuMoNb5

### 2.3.0 <u>MATERIAL SIZES</u>:

2.3.1 Job Diameter Range

(for Circular Jobs) : 25.4 mm to 300 mm

2.3.2 Wall Thickness Range

(for tubes) : 4.0 mm to 22 mm

2.3.3 Size of Tube Bundles : 500 mm x 500 mm Tube Diameter Range : 31.8 mm to 127 mm

2.3.4 Size of Rod Bundles : 400 mm x 300 mm Rod Diameter Range : 25.4 mm to 300 mm

2.3.5 Minimum Job Length (at In-feed side) : 1,000 mm

2.3.6 Job with Maximum Length (Infeed) : 12,000 mm

2.3.7 Job with Maximum Weight : 5,000 kgs.

### 3.0 MACHINE SPECIFICATIONS:

The offered equipment shall be a high production semi-automatic stock feed band-saw designed and built to the highest standards of quality and performance. The in-feed unit shall be powered stock feed system and have to automatically feed long work-pieces weighing upto 5,000 kgs. (5 MT).

The in-feed and out-feed (discharge) conveyor length have to be extended by adding Dead Roller Table to the Powered Tables on either side.

Sl.No.	PARAMETERS	SPECIFICATIONS	OFFER
3.1.0	BANDSAW MACHINE:		
3.1.1	Туре	Horizontal Cut-Off Bandsaw	
3.1.2	Cutting Capacity at 90 ° - SOLID	300 mm	
		(	
3.1.3	Cutting Saw Speed Range	15 to 100 mtrs./min.	
		(steplessly adjustable)	
3.1.4	Cutting Accuracy	Allowable Limit -	
		Taper 0.1 mm for φ 300 mm	
3.1.5	Band Saw Drive Motor Power	Bidder to Specify (Not to be less	
		than 15 kW) - Bidder to give	
		power calculations .	
3.1.6	Band Saw Dimensions	Bidder to Specify	
3.1.7	Band Wheel Diameter	Bidder to Specify	
3.1.8	(Flood) Coolant Flow Rate	Around 15 to 30 lits. /min. at 3	
		Bar delivery pressure	
3.1.9	Coolant Pump Motor Capacity	Bidder to Specify	
3.1.10	Coolant Tank Capacity &	Bidder to Specify	
	Dimensions		
3.1.11	Hydraulic Motor Capacity	Bidder to Specify	
3.1.12	Hydraulic Oil Tank Capacity	Bidder to Specify	
Sl.No.	PARAMETERS	SPECIFICATIONS	OFFER

3.1.13	Oil Cooler for Hydraulic Oil [BHEL preferred make is ADVANCE COOLING or any other reputed make, acceptable to BHEL]	Bidder to quote for an Oil Chiller of suitable rating, to always maintain the Oil Temperature in the Oil Tank, below 45 Deg. C.	Bidder to give technical details of the Oil Chiller with the Technical Offer
3.1.14	Total Power requirement in kVA	Bidder to Specify	
3.2.0	WORK HOLDING DEVICE:		
3.2.1	Work Holding Type	Right Angle & Hydraulically Clamped	
3.2.2	Infeed System	Powered	
3.2.3	Infeed Conveyor Length - Powered	4000 mm (minimum)	
3.2.4	Dead Roller Table (connected to powered infeed table)	In segments of 2000 mm	
3.2.5	Number of Dead Roller Table for infeed side extension	Minimum 4 Nos.	
3.2.6	Discharge Conveyor Length	3000 mm - Powered	
3.2.7	Dead Roller Out-feed Table	In segments of 2000 mm	
3.2.8	Number of Dead Roller Table for outfeed side extension	Minimum 3 Nos.	
3.2.9	Cut-Length Setting Range	100 mm to 6,000 mm	
3.2.10	Feed Stroke in Single Mode	Around 500 mm	
3.2.13	Speed and Feed Setting.	Bidder to provide a CHART	
		showing the recommended speed & feed for the bandsaw, for each	
		type of material listed under	
		Clause No. 2.2.0	
3.3.0	DESIGN & CONSTRUCTIONA		
3.3.1	Double column, horizontal feed	Bidder to give details	
	frame, guidance by two large-	8	
	section solid chromium plated		
	columns and maintenance free		
	sleeve bearings		
3.3.2	Sturdy Base / Heavy Bed to	Bidder to give details	
	provide rigid base to bandsaw		
	machine parts/components		
3.3.3	Inclined band travel feature.	Bidder to give details	
	designed to shorten the effective		
0.0.4	cutting length	P: 11 ( : 1 ( :1	
3.3.4	Mechanism and arrangement for accurate band/blade	Bidder to give details	
2.2.5	guidance	Diddon to the 1 of	
3.3.5	Automatic hydraulic band tension, monitored electrically, to ensure correct band tension with system for automatic	Bidder to give details	
	switch-off of drive		

Sl.No.	PARAMETERS	SPECIFICATIONS	OFFER
3.3.6	Guide arm setting is to be	Bidder to give details	
	synchronised with the	_	
	adjustment of the movable vice		
	jaw		
3.3.7	Provision to protect the saw	Bidder to give details	
	band from overloading.		
3.3.8	Work height selector to allow	Bidder to give details	
	raising of the band, to just clear		
	the material stock		
3.3.9	Central guide to provide a third	Bidder to give details [minimum	
	guide to stabilise the band at the	time to be taken for start of the	
	start of the cut	cutting operation]	
3.3.10	An electric motor driven brush	Bidder to give details	
	on either side of the blade for		
	blade cleaning (to remove the		
	chips from the gullets of the		
	blade teeth)		
3.3.11	Automatic load controlled feed	Bidder to give details	
	regulation to provide constant		
	cutting force		
3.3.12	Bandsaw Feed to stop	Bidder to give details	
	automatically once the saw		
	band stops		
3.3.13	Flood coolant system through	Bidder to give details.	
	an electrically driven pump.	[Coolant collection tank should	
	Separate pump units for flood	not be integral part of the	
	coolant and flushing of chips	machine. It should be separated	
	preferred. Chip cleaning gun for	from the machine base and kept	
	flushing to be provided.	adjacent to chip collection bin.]	
3.3.14	The Fixed Discharge Tables	Bidder to give details, elaborating	
	shall also have the arrangement	the features	
	for collection of spill-over		
	coolant (flowing from		
	pipes/jobs) during the cutting		
	and return to main coolant		
	collection tank.		
3.3.17	The method of changing the	Bidder to give details	
	saw band/blade should be easy		
0.0.10	and quick.	Bill in the state of	
3.3.18	The equipment shall have a	Bidder to give details	
	centralised Operator Control		
	Panel so that all cutting		
	parameters can be set from one		
0.010	position.	D:11 ( : 1 · · · · · · · · · · · · · · · · · ·	
3.3.19	Saw frame lift and lowering	Bidder to give details	
0.0.00	with safety switch	D:11 ( : 1 · · · · · · · · · · · · · · · · · ·	
3.3.20	Solid state circuitry for control	Bidder to give details	
	panel		

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Sl.No.	PARAMETERS	SPECIFICATIONS	OFFER
3.3.21	The equipment shall have a	Bidder to give details	
	centralised control for setting	G	
	the parameters from both		
	Operator panel as well as on		
	main panel.		
3.3.22	Indicators on the Main Machine	Bidder to give details	
	Panel to display the blade		
	speed & the blade cutting force,		
	Clamping pressure etc.,		
3.3.23	A fluorescent machine lamp	Bidder to give details	
	with protective cover to be		
	provided for cutting area		
	visibility.		
3.3.24	Replaceable Carbide strips for	Bidder to give details	
	band guide combined with		
	alignment rollers to provide		
	lasting accurate band guidance.		
3.3.25	Quick change from automatic	Bidder to give details	
	batch cutting to single cut		
	operation.		
3.3.26	Hydraulic double vice for	Bidder to give details	
	simultaneous clamping on both		
	sides of the saw band operated		
	by hydraulic cylinders with		
	regulated clamping pressure		
3.3.27	The hydraulic hold-downs are	Bidder to give details	
	to be provided as additional top		
	clamping for cutting Tubes /		
	Bars in bundle,		
3.3.28	Manual control of shuttle Vice	Bidder to give details	
	for moving work piece during		
	set-up operations.		
3.3.29	Shuttle vice has to clamp and	Bidder to give details	
	unclamp in sequence with	[The OFFER shall also include a	
	machine vice. The clamping	CHART giving the Clamp	
	pressure has to be adjustable	Pressure against various sizes of	
	with respect to the wall	Pipes given under <b>Clause No.</b>	
	thickness of the pipe material.	2.3.0]	
3.3.30	The face plates of all the vices	Bidder to give details [The	
	are to be of replaceable wear	Hardness of all Wear Plates	
	plates.	should be around 60 HRC].	
3.3.31	The Dead Roller Table provided	Bidder to give details	
	on both Infeed & Outfeed Sides		
	shall be interchangeable		
3.3.32	The Pitch of the rollers provided	Bidder to give details	
	in the Roller Table shall be close		
	enough to hold minimum size		
	of the job pieces cut off.		

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Sl.No.	PARAMETERS	SPECIFICATIONS	OFFER
3.3.33	Material Specifications & Details	Bidder to give Bill of Materials for	
		Roller Stands (including	
		Infeed, Outfeed and Dead Rollers	
		like Diameter, Thickness of Roller	
		Pipes, Diameter of Shaft, Dimensions of Roller Stand Structure, Size of	
		Plummer Blocks, etc.)	
3.3.34	List of band saw blades to suit	Bidder to give details	
	the various sizes (diameter and	0	
	thickness) of the job, shall be		
	indicated through a chart.		
3.3.35	Lifting Hooks	Details on the provision of Lifting	
	o o	Hooks (by EOT Cranes) for the	
		Main Machine Unit and Sub-	
		Assemblies	
3.4.0	SAFETY FEATURES:		
3.4.1	To stop the machine immediately,	Bidder to give details	
	if the saw blade breaks or any slip		
	during operation, due to jamming		
3.4.2	of blade into the work-piece.	D: 11	
3.4.2	The machine is to be equipped	Bidder to give details	
	with saw blade safety covers,		
	which covers the blade except		
3.4.3	for the actual cutting area.	Diddon to give details	
3.4.3	A safety interlock to stop the machine automatically if a	Bidder to give details	
	wheel cover is opened during		
	operation		
3.4.4	Saw frame lift and lowering	Bidder to give details	
0.1.1	with safety limit switch	Brader to give details	
3.4.5	For operator safety the machine	Bidder to give details	
	vice control is to be interlocked	0	
	with blade drive system (i.e, blade		
	drive will not operate unless		
2 = 0	machine vice is clamped).		
3.5.0	OPTIONAL ACCESSORIES:	D: 11	
3.5.1	Electric piece counter with display unit	Bidder to give details	
3.5.2	Chip Conveyor System with	Bidder to give details [to include	
3.5.2	Disposal Bucket	screw conveyor with drive, chip	
	Disposai Ducket	collection bin with wheels and lifting	
		hooks, suitable metallic filter mesh to	
		be provided for separating chips and	
		to prevent carrying over to coolant	
0.5.0	Certific a Death Control III 11 T	tank.]	
3.5.3	Cutting Depth Control Unit: To stop the machine automatically as	Bidder to give details	
	soon as the blade reaches the		
	required depth of cutting		
3.5.4	Overload Indicator :- to indicate	Bidder to give details	
	the overloading applied to the		
	bandsaw blade		
-	·	·	

Sl.No.	PARAMETERS	SPECIFICATIONS	OFFER
3.5.5	Blade Run-Out Detector : - To	Bidder to give details	
	stop the machine automatically		
	when the cutting goes taper		
	(i.e., deviation of cutting from		
	vertical direction).		
3.5.6	Remote Control Unit with 10	Bidder to give details	
	mtr. Long interconnecting cable		
	provided with protective		
	sheath, connected to the		
	machine main panel for		
	machine operations.		
3.5.7	Additional Optional Accessories	Bidder to give details	
	which enhance the productivity		
	of the machine to be described		
110	by the Bidder with the offer		T
	ELECTRICAL:		
4.1.1	•	HZ, 3 Phase AC (3 wire system with	
	out neutral) Power Supply Source	1	
	single point near the machine, as j	per layout recommended by	
	Vendor.	inquit brookers at a required for	
	All types of cables, connections, ci connecting BHEL's power supply	*	
	machine/control cabinets, shall be		
4.1.2	All electrical equipment shall be T		
4.1.2	degree of protection	Topicanzed and shan have if 54	
4.1.3	All electrical control cabinets & pa	anels should be dust and vermin	
1.1.5	proof	areis should be dust and verning	
4.1.4	*	abinets should be mounted on DIN	
1.1.1	Rail	achiels should be inculted on bit	
4.1.5		ovided with CFL lamps for sufficient	
		eceptacles of 220 Volts, 5/15 Amp.	
	_	ald have compatibility with Indian	
	equivalents.	1	
4.1.6	Motors shall be from M/s Siemen	s / ABB or other reputed make	
	conforming to IEC and acceptable	to BHEL	
4.1.7	All electrics shall be of reputed ma		
	mechanique.		
4.1.8	Electrical drives shall be of Siemer	ns / ABB / L&T / Danfoss /	
	Eurotherm and PLC of SEW / All	en Bradley / Siemens / Messung	
4.1.9	All components / devices / term	inals are to be incorporated with	
	ferrules.		
4.1.10		axes should be installed in metallic	
		the cable trays required for laying	
	of cables should be included in the		
4.1.11	Vendor should ensure the proper	earthing for the machine and its	
	accessories.		

R Sekar S Selladurai S P Vijay Kumar Page 7 of 10

Sl. No.	DESCRIPTION	OFFER
4.2 .0	HYDRAULICS & LUBRICATION	
4.2.1	Centralized Automatic Lubricating System to be provided with	
	metallic tubings.	
4.2.2	All hydraulic elements used shall be of standard ones and shall be of	
	Vickers / Rexroth or any other reputed make acceptable to BHEL.	
4.2.3	All hydraulic operating components to be mounted on the manifold	
	in a centralised place on the hydraulic power pack and the POWER-	
	PACK shall not be integral with the Machine Body	
4.2.4	All Hydraulic hoses shall be preferably from GATES, MARKWELL,	
	INSAFLEX, Parker Hannifin or other reputed make acceptable to BHEL	
4.2.5	Hydraulic circuits shall be designed with minimum number of	
	control valves and to suit oil of ISO VG 46 or 68 only. Also	
	MINIMESS checkpoints to be provided wherever pressure is required	
	to be read for setting and troubleshooting.	
4.2.6	The Oil-Cooler (Heat Exchanger) shall be of Air-Cooled Radiator	
	Type, to keep the oil temperature always below 50 Deg. C.	
4.2.7	All hydraulic solenoid valves shall be with LED indicator and	
	suitable for 24 V DC electric supply	
4.2.8	The equipment has to be guaranteed for its performance and also of	
	the sub-assemblies / bought-out items, for a minimum period of 24	
	months from the date of commissioning at BHEL Works.	
420	ENVIRONMENTAL PERFORMANCE OF THE MACHINE:	
4.3.0	[The Machine shall conform to following factors related to environment	t]
4.3.1	Maximum noise level shall be 85 dB (A) at normal load condition, 1 M away	
	from the machine with correction factor for back ground noise, if necessary.	
	This will be measured as per international standards like DIN 45635-16.	
	Vendor to demonstrate compliance to noise level, if so required.	
4.3.1	The machine shall be suitable for an ambient temperature of +45 ° C	
	and relative humidity of 95 % respectively, but both do not occur	
	simultaneously.	
4.3.2	If any safety / environmental protection enclosure is required it shall	
	be built in the machine by the vendor.	
4.3.3	Paint of the machine should be oil / coolant resistant and should not	
	peel off and mix up with coolant.	
	Painting shall be of two coats of SYNTHETIC ENAMEL GLOSSY FINISH APPLE GREEN PAINT.	
	AS PER IS 5/1994.Shade :(ISC)NO-281	
4.4.0	LEVELLING & ANCHORING SYSTEM	
4.4.1	Complete anchoring system including foundation bolts, anchoring	
1.1.1	materials, fixtures, leveling shoes etc shall be supplied for the	
	Machine etc.	
4.4.2	Bidder to provide details on the machine foundation and possibly the	
	tentative foundation drawing to be given with the TECHNICAL	
	OFFER.	
4.5.0	TOOLS FOR ERECTION, OPERATION & MAINTENANCE	
4.5.1	The vendor shall bring special tools & equipment and one set of machine	
1.0.1	manual, required for erection of the machine. Necessary tools like Torque	
	Wrench, Spanners, Keys, Grease Guns etc. for Operation & Maintenance of	
	the machine should be supplied.	
	List of such tools shall be submitted with offer	

R Sekar S Selladurai S P Vijay Kumar Page 8 of 10

Sl. No.	DESCRIPTION	OFFER
5.0	MACHINE SPARES :	
5.1.0	Itemised break-up of mechanical, hydraulic, electrical spares used on	
	the machine in sufficient quantity as per recommendation of Vendor	
	for 2 years of trouble free operation on three shifts continuous	
	running basis should be offered by vendor. The list to include	
	following, in addition to other recommended spares:	
	(Unit Price of each item of spare shall be offered)	
5.2.0	Mechanical & Hydraulic Spares: Bearings, clutches, gears and all	
	types of pumps, Valves, pressure switches / transducers, filters,	
	seals, O rings, Hydraulic Hoses, etc.	
5.3.0	Electrical: All types of Relays, Contactors, Proximity Switches, Push	
	Buttons, Indicating Lamps, Semiconductor Fuses, Special Fuses,	
	Circuit Breakers, Main Power Switch, PLC, etc.	
5.4.0	All types of spares for total machine and accessories should be	
	available for at least ten years after supply of the machine. If	
	machine or control is likely to become obsolete in this period, the	
	vendor should inform BHEL sufficiently in advance and provide	
	drawings of parts / details of spares & Vendors to enable BHEL to	
	procure these in advance, if required.	
5.5.0	Vendor to confirm that complete list of spares for machine and	
	accessories, along with specification / type / model, and name &	
	address of the spare Vendor shall be furnished along with	
	documentation to be supplied with the machine.	
6.0	INSPECTION & MACHINE ACCEPTANCE:	
6.1.0	The Machine shall be offered for inspection and performance prove-	
	out trials, for the design capabilities of the machine, at Vendor's	
	Works by BHEL Engineers, before dispatch.	
6.2.0	The Bidder shall train BHEL Personnel in Operation and	
	Maintenance (Mechanical and Electrical / Electronics) of the	
	Machine at Vendor's works.	
	The prove-out trials (at Vendor's Works and at BHEL Works) shall	
	be from among job materials and sizes indicated in Clause 2.0 above.	
6.3.0	The Bidder shall depute his engineer(s) - who are capable of	
	understanding English language and effective communicating	
	ability - for supervising the erection and commissioning of the	
	machine at BHEL Works. Service requirement like power, air &	
	water shall be provided by BHEL at only one point to be indicated	
	by BIDDER in their layout drawings.	
7.0	DOCUMENTATION:	
7.1.0	THREE sets of following documents (Hard copies) in English	
	language should be supplied along with the machine	
7.1.1	Detailed Operation and Maintenance manual of machine with all drawings	
	of machine assemblies / sub-assemblies / parts including Electrical /	
	Pneumatic/ Coolant / Hydraulic circuit diagrams. All Assembly/ Sub Assembly Drawings shall be supplied with the part list with component	
	specification / BOM also.	
	Component drawings for all wearing parts to be provided.	
7.1.2	Catalogues, O&M Manuals and drawings of all bought out items,	
	bearings wherever applicable.	
	1 O THE	1

Sl. No.	DESCRIPTION	OFFER
7.1.3	Electronic and electrical interconnecting drawings (i.e. Between	
	machine, control panel and drives).	
	Hard Copy in Original : 3 Nos.	
7.1.4	Hydraulic, coolant, lubrication and Electrical circuits with Bill Of	
	Materials	
7.2.0	Detailed specification of all rubber items and hydraulic/lube fittings	
	Hyd. Cylinder seals 'O' ring and Hyd. Hose dimension are to be	
	given. Manual should have all bearing details.	
7.3.0	The vendor shall submit complete Master List of parts used in the	
	machine.	
7.4.0	One additional set of all the above documentation on CD ROM,	
	wherever possible.	
8.0	FOUNDATION:	
8.1.0	BHEL shall construct complete foundation for the machine. Vendor	
	shall furnish the foundation details.	
9.0	SCOPE OF SUPPLY:	
	[The Un-Priced Commercial Offer shall contain the following detain	ls]
9.1.0	Basic Band-saw Machine with Standard Accessories	
9.2.0	Hydraulic Power Pack and Connected Circuitry with Tank	
9.3.0	Electrically run Flood Coolant Circulation System and Tank	
9.4.0	Complete Set of Work Holding Devices suitable for the listed sizes	
	of Pipes given under Clause No. 2.3.0	
9.5.0	Remote Control & Optional Accessories as recommended by the Bidder	
9.6.0	Inter-connecting Cables (with Plug-In connectors) and Hoses (with	
7.0.0	Quick-Fix couplings)	
9.7.0	Complete range of Band-saw Blades in packs of five numbers for the	
	sizes of jobs specified	
9.8.0	Complete set of Spares for Mechanical, Hydraulic, Electric and	
	Electronic elements as per <b>Clause 5.0</b>	
9.9.0	Set of Operating and Maintenance Tools	
9.10.0	Inspection and Performance Prove-Out at Vendor's Works	
9.11.0	Training in Operation & Maintenance of the total system for BHEL	
	Personnel	
9.12.0	Complete set of Documents as per Clause 7.0	
9.13.0	Erection & Commissioning at BHEL Works and Machine Prove-out	
	Trials for various sizes of jobs	

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### GENERAL TERMS AND CONDITIONS OF RA

- Against this enquiry for the subject item/system with detailed scope of supply as per enquiry specifications, BHEL may resort to "REVERSE AUCTION PROCEDURE" i.e., ON LINE BIDDING ON INTERNET.
- For the proposed RA, technically and commercially acceptable bidders only shall be eligible to participate.
- In case of RA, BHEL will engage the services of a service provider for conduct of the RA who will provide all necessary training and assistance to the bidders before commencement of on line bidding on internet.
- Business rules governing the RA will be communicated to the bidders through service provider for compliance.
- Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of RA. Without the compliance, the vendor will not be eligible to participate in the event.
- BHEL will provide a sample calculation sheet (in EXCEL format) which would help the bidders to arrive at "Net Cash outflow to BHEL" considering various price / cost elements like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) etc. for each of the bidders to enable them to arrive at "Net Cash outflow to BHEL" which is the amount the bidder would be bidding during the RA.
- RA will be conducted on scheduled date & time and at the end of event, the lowest bidder value will be known on the network.
- The lowest bidder has to Fax the duly signed "Price Break-up" in prescribed format as provided on case-to-case basis to BHEL through Service provider within 24 hours of Auction without fail.
- 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 further business with BHEL, as per the prevailing procedure.
- BHEL reserves the right to negotiate if need be, with the "L1" vendor of the Reverse Auction

# **MM:CAPITAL EQUIPMENT**

# Bharat Heavy Electricals Limited, Trichirapalli – 620 014 (To be filled and submitted along with offer )

**BHEL Enquiry No. 2631000068** Date:24-07-10

BHEL Commercial Terms and Conditions for	Vendor's Confirmation / Comments ( To be furnished along with
INDIGENOUS SUPPLIES	offer copy ( or ) Technical Bid Copy ( Part No - I )
Technical confirmation to BHEL's Specification as called for in BHEL Format shall be furnished. If needed additional sheets shall be used.	
<b>Prices</b> shall be <b>quoted item wise</b> only as per the model format enclosed.	
Prices shall be quoted on "FIRM PRICE" basis only. The prices should by only on F.O.R	
/ Despatching station basis inclusive of Packing & Forwarding charges if any. Applicable	
percentage of ED & Sales Tax (VAT) should be clearly indicated.	
Validity of offer shall be for a minimum period of 120 days from the date of Tender	
opening	
<b>Delivery period</b> from the date of Letter of Intent shall be clearly mentioned in the offer.	
<b>Liquidated damages</b> @ ½% per week subject to a maximum of 15% of the order value shall be applicable for delay in deliveries.	
Following Risk Purchase clause shall be applicable:	
The purchaser at his option will be entitled to terminate the contract and to	
purchase elsewhere at the risk and cost of the seller either the whole of the goods	
or any part which the supplier has failed to deliver or dispatch within the time	
stipulated or if the same were not available, the best and the nearest available	
substitute therefore. The supplier shall be liable for any loss which the Purchaser	
may sustain by reason of such risk purchases.  Submission of Performance Bank Guarantee (PBG):	
Vendor should provide a performance bank guarantee (PBG) for 10% of the total	
Purchase order value valid for a period of 12 months from the date of	
commissioning (or) 18 months from the date of dispatch whichever is later with an	
additional claim period of 2 months. This PBG shall form one of the documents for	
effecting payment. The PBG shall be submitted in non-judicial stamp paper value	
of not less than Rs.80/- issued by any one of the following banks who is a member	
bank in our consortium of banks.	
1) State Bank of India, 2) State Bank of Hyderabad, 3) State Bank of	
Travancore, 4) State Bank of Mysore, 5) Canara bank, 6) Bank of Baroda, 7)	
Punjab National bank, 8) Deutsche Bank, 9) HDFC Bank, 10) Standard Chartered Bank, 11) Citi Bank, 12) Standard Chartered Grindlays Bank 13)	
Bank of America and 14) Any one of the Nationalised banks.	
Payment terms for supply portion:	
100% payment will be made within 45 to 90 days after receipt and	
acceptance / commissioning of goods at BHEL. against submission of	
PBG for 10% of Order value with required validity. (or )	
80% value of the goods will be paid within 45 to 90 days against	
dispatch documents negotiated through bank. Balance 20% will be	
paid within 45 to 90 days from the date of commissioning / acceptance	
of goods against submission of supplementary invoice and also	
against submission of PBG for 10% of Order value with required	
validity. All bank charges are to vendor's account only.	
NOTE:	
All direct Payment of more than one lakh will be made through <b>E-mode</b>	
<b>Payment</b> . As per BHEL e-mode Format, which will be given at time of	
ordering along with order copy. (Original filled <b>E-mode payment format</b> is	
to be get it signed by the both vendor's authorized signatory and their	
banker's along with a copy of <b>cheque leaf / cancelled cheque</b> leaf for the	
respective account number and forward the original hard copy to	
BHEL/Trichy to process invoices for making payment, after supplies are	
made).	
,	Contd 2

### Page No.2

Erection / commissioning:	
Erection / commissioning shall be done at free of cost.	
The equipment shall be guaranteed for a period of 12 months from the date of	
commissioning.	
Equipment will be inspected and proved at vendor's works prior to dispatch.	
However final inspection and acceptance of equipment will be after installation at	
BHEL,Trichy.	
The vendor shall provide necessary drawings, Test Certificates and Operating	
Maintenance Manuals etc., as called for in the Technical Specification, in the	
required number of copies at no extra cost.	
Any warranty replacement during warranty period shall be supplied free of	
charge on FOR BHEL, Trichy basis.	
Offers should be submitted only in sealed cover super-scribing clearly the	
Enquiry reference and due date.	

### NOTE:-

- a) It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.
- b) Your specific acceptance to the BHEL Payment terms, LD, Risk Purchase Clause & Submission of PBG for 10% of the order value are essential for consideration of your offer. Other wise your offer is liable for rejection.

Signature & Office Seal of the vendor

	BHEL Enquiry No. & Date		Ven	dor's Offer Re	f No. & Date
	2631000068 & DT:24-07-10				
	MODEL PRICE BID FORMAT FOR INDIGE	NOUS			
	VENDORS			I	
SI No.	Description	1 10:4	Ot /	Data in Da	Value in Rs
<u> 1</u>	Description	Unit	Qty	Rate in Rs	value in Rs
2					
3					
4					
5					
6					
7					
8					
	Total Ex-works Value in Rs				
	Add Packing & Forwarding Charges if extra				
	FOR- Despatching Station Value in Rs				
	% of Excise Duty ( If Extra or If inclusive)				
	% of Excise Duty ( If inclusive)				
	0/ Calas Tay CCT against IICII Farms (If system)				
	% Sales Tax - CST against "C" Form (If extra)				
	% Sales Tax - CST With out "C" Form (if extra)				
	% VAT (if extra)				
	% VAT (if inclusive)				
	70 VYTT (II ITIOIGUIVO)				
	Approximate Freight Charges in Rs				
	Approximate Transit Insurance Charges in Rs				
	Installation / Commissioning Charges in Rs.				
	(If extra applicable )				
	% Service Tax (if extra applicable )				
	Consignment Package Details				
	American de Niet / Ores - W. i. I.i. I.i.				
	Approximate Net / Gross Weight in Kgs				
	Dimension of Consistential				
	Dimension of Consignment				
		Signat	ure & S	eal of Vendor	
		3:::	. 5. 0		
	NOTE:				

# **MM: CAPITAL EQUIPMENT**

# Bharat Heavy Electricals Limited, Trichirapalli – 620 014 (To be filled and submitted along with Offer)

**BHEL Enquiry No. 2631000068** 

BHEL Commercial Terms and Conditions for	Vendor's
IMPORT SUPPLIES	Confirmation / Comments
Technical confirmation to BHEL's Specification as called for in BHEL Format shall be furnished.	To be furnished
If needed additional sheets shall be used.	along with offer (or) Technical Bid – Part No. I
Prices shall be quoted item wise only as per the model format enclosed.	
Prices shall be quoted on "FIRM PRICE" basis only. The prices should be only on FOB/FCA	
basis inclusive of Packing & Forwarding charges if any.	
Validity of offer shall be for a minimum period of 120 days from the date of Tender opening	
<b>Delivery period</b> from the date of Letter of Intent shall be clearly mentioned in the offer.	
<b>Liquidated damages</b> @ ½% per week subject to a maximum of 15% of the order value shall be applicable for delay in deliveries.	
Following Risk Purchase clause shall be applicable:	
The Purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.	
Payment terms for Foreign vendor (Principal):	
80% value of the goods will be paid through an irrevocable Letter of Credit established by our bankers. Balance 20% will be paid against acceptance / commissioning of goods for which supplementary invoice and PBG for 10% of total Purchase order value shall be submitted. All bank charges outside India are to vendor's account only.	
Payment terms for Indian Agent:	
Indian Agency commission, if any, shall be clearly specified in the offer and the same will be paid in Indian Rupees against acceptance / commissioning of the equipment.	
Erection / commissioning:	
Erection / commissioning shall be done at free of cost.	
<b>Submission of Performance Bank Guarantee (PBG):</b> Vendor should provide a performance bank guarantee(PBG) for 10% of the total Purchase order value valid for a period of 12 months from the date of commissioning (or) 18 months from the date of dispatch <b>whichever is later</b> with an additional claim period of 2 months. This PBG shall form part one of the documents for effecting the balance 20% payment.	
Part Shipment or Transhipment is not permissible	
In case of any short shipment in the main equipment / spares, where separate rates are not available in the contract, the customs duty levied on such supplies , shall be borne by the supplier /	
Indian agent.	
Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL,	
Trichy basis.	
Equipment will be inspected and proved at vendor's works prior to dispatch. However final inspection and acceptance of equipment will be after installation at BHEL, Trichy.	
The equipment shall be guaranteed for a period of 12 months from the date of commissioning.	
The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no	
extra cost.	
Offers should be submitted only in sealed cover super-scribing clearly the Enquiry reference	
and due date.	

### NOTE:-

- a) It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.
- b) The prices are to be offered only on FOB/FCA basis, inclusive of Packing & Forwarding charges if any.
- c) Your specific acceptance to BHEL <u>Payment terms, LD, Risk Purchase Clause & Submission of PBG</u> for 10% of the order value are essential for consideration of your offer. Other wise your offer is liable for rejection.

Date: 24.07.2010

	BHEL Enquiry No. & Date	Vendor's Offer Ref No. & Date				
	2630900068 & 24.07.2010					
	MODEL PRICE BID FORMAT FO	R IMP	ORT			
SI No.	Description	Unit	Qty	Rate Currency	Value Currency	
1 2						
3						
4						
5 6						
7						
8						
9						
10						
	Total Ex-works Value in currency					
	Add Packing & Forwarding Charges if e OR FOB /FCA Charges if extra	xtra				
	FOB / FCA Value in Currency					
	Approximate Freight Charges in Currency Approximate Transit Insurance Charges	s in Cu	rrency			
	Installation / Commissioning Charges in Currency	1				
	(If extra applicable )					
	% Service Tax (if extra applicable )					
	Consignment Package Details					
	Approximate Net / Gross Weight in Kgs					
	Dimension of Consignment					
		Sig		& Seal of ndor		
	NOTE:					
	The Price Bid should be submitted str FORMAT	ictly in	line wit	th the above		

# PERFORMANCE BANK GUARANTEE

In accordance of M/s. Bharat Heavy Electricals Limited (A Government of India
undertaking, a company incorporated under the Companies Act 1956 having its Registered
Office at "BHEL House", SIRI Fort, New Delhi 110 049) through its High Pressure Boiler
Plant Division located at Tiruverumbur, Tiruchirapalli- 620 014 (hereinafter called
'the Company') having entered into a contract with
hereinafter called 'the said contractor '
which term includes 'suppliers' for the purpose of this Bond and under the terms and
conditions of the contract No
BHEL, Trichy and as per the contract, the contractor / supplier is to furnish a performance
Bank guarantee for Rs for the due performance of the equipment to be
supplied under the above referred contract and for the fulfillment of all the terms and
conditions of the contract, We(indicate the name of the bank) (herein
after referred to as the bank) at the request of (Contractor(s)) do here
by undertake to pay the company an amount not exceeding Rsagainst any
loss or damage caused to or suffered or would be caused to or suffered by the company by
reason of any breach by the said contractor (s) of any of the terms and conditions contained
in the said agreement.
m the said agreement.
2. We(indicate the name of the bank with full address), do hereby undertake to pay the amounts due and payable under this guarantee without any demur,
merely on a demand from the Company stating that the amount claimed is due by way of
loss or damage caused to or would be caused to or suffered by the Company by reason of
breach by the said Contractor(s) of any of the terms and conditions contained in the said
Agreement or by the reason of the contractor(s) 'failure to perform' the said agreement.
Any such demand made on the Bank shall be conclusive as regards the amount due and
payable by the Bank under this guarantee. However, our liability under this guarantee
shall be restricted to an amount not exceeding Rs
3. We undertake to pay unconditionally to the Company any money so demanded
notwithstanding any dispute(s) raised by the Contractor in any suit, or proceedings pending before any Court or Tribunal or Arbitration or before any other authority relating thereto our liability under this present being absolute and unequivocal. The payment under this
guarantee would not wait till the disputes have been decided by any Court or Tribunal or in
the arbitration proceedings or by any other authority. The payment so made by us under
this Bond shall be a valid discharge of liability for payment thereunder and the
Contractor(s) shall have no claim against us for making such payment.
4. We (indicate the name of Bank), further agree that the guarantee herein contained shall remain in full force and effect during the period that
would be taken for the performance of the said Agreement and that it shall continue to
be enforceable till all the dues of the Company under or by virtue of the said
Agreement have been fully paid and its claims satisfied or discharged or
till Office / Department/ Division of the Company certifies that the terms and conditions of the said Agreement have been fully
and properly carried out by the said Contractor(s) and accordingly
and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.
Sum antico

	1 age-2
5. (I) the _	Unless a demand or claim under this guarantee is made on us in writing on or before we shall be discharged from all the liability under this
guara	antee thereafter. But where such claim or demand has been preferred by the
Comp	pany with the Bank before the expiry of the said date, the claim shall be enforceable ithstanding the fact that the said enforcement is effected after the said date.
(ii)	For the purpose of this clause, any letter making demand on the Bank by M/s. BHEL dispatched by Registered Post with Ack.Due or by Telegram or by any Electronic media addressed to the above mentioned address of the Bank shall be deemed to be the claim / demand in writing referred to above irrespective of the fact as to whether and when the said letter reaches the Bank, as also any letter containing the said demand or claim is lodged with the bank personally.
t	We(indicate the name of Bank), further agree with the company hat the Company shall have the fullest liberty without our consent and without

- 7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
- 8. It shall not be necessary for the company to proceed against the contractor before proceeding against the guarantor-bank and the guarantee herein contained shall be enforceable against them notwithstanding any security, which the company may have obtained or obtain from the Contractor shall, at the time when proceedings are taken against the guarantor hereunder be outstanding or unrealised.
- 9. Any claim or dispute arising under the terms of this document shall only be enforced or settled in the Courts at Tiruchirapalli.
- 10. The guarantor hereby declare that it has power to execute this guarantee and the executant has full powers to do so on its behalf under the proper authorities granted to him/them by the guarantor.
- 11. We ......(indicate the name of Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the company in writing.

In witness whereof we	, (indicate the nam	e of Bank) have hereunto
setout Bank Seal the	day	month 200
BANK E-MAIL ID:	,	***************************************
BANK PHONE NO.		
BANK FAX NO:		

# **MM: CAPITAL EQUIPMENT**

# COMMERCIAL TERMS AND CONDITIONS

### 1.0 QUOTATIONS

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

Envelope I This scaled 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 commercial bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder.

Envelope II This scaled envelope should contain <u>Price Details</u>. This envelope should be clearly marked <u>"Part II - Price Bid"</u>, indicating Enquiry No., Due Date and Address & Reference of the Bidder.

Both the envelopes (Part I & II) shall be put in one cover, duly sealed, superscribing as Part I and Part II of Enquiry 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). Late offers will not be considered.

Tender should not be addressed to any Individual's name but only by designation to:

SR.MANAGER / MM /CAPITAL EQUIPMENT BHARAT HEAVY ELECTRICALS LIMITED HIGH PRESSURE BOILER PLANT TIRUCHIRAPALLI - 620 014 TAMIL NADU, INDIA

Contd 2/-

Tenders should be free from CORRECTION AND ERASURES, Corrections if any, must be attested. All amount 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 detailed technical literature, catalogue and detailed dimensional drawings in ENGLISH or otherwise, the offers will not be considered.

# 2.0 PART I (TECHNICAL & 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 to be provided if there are any deviation, the same should be clearly specified. Offers received without confirmation 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 catalogues 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. Incase of foreign bidder offer, the Principal's technical offer should be enclosed.

## 2.2 Commercial

This part shall include / indicate the following:

- 2.2.1. Port of shipment / Station of despatch
- 2.2.2. Terms of payment
- 2.2.3. Taxes & duties applicable.
- 2.2.4. Delivery Schedule

- 2.2.5. Offer validity
- 2.2.6. Country of origin
- 2.2.7. Percentage of agency commission if any along with a copy of Agency agreement.
- 2.2.8. A copy of "Un-Priced Part II" i.e., a copy of the Price Bid without the price details to be enclosed.

# 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 & 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 tender opening date.

Clarifications if any required by BHEL for Technical evaluation would be sought from Bidders before opening of Part II - price bid.

### 5.0 GENERAL

- 5.1. Incomplete offers will not be considered.
- 5.2. Fixed Price: 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 regard to total price.
- 5.3. Bid Currency: Indian bidders should submit the prices only in Indian Rupees. Foreign bidders may submit their bid in their home currency.
- 5.4. Terms of Delivery: Bidders are required to quote their best delivery period. Foreign Bidders should submit their offer for net FOB / FCA Nearest Sea / Air Port. Indian Bidders should submit their offer for FOR Despatching Station.

Contd 4/-

- 5.5. Taxes and Duties: All Taxes and Duties payable as extra to the quoted price should be specifically stated in offers along with CST & VAT / Tariff No. etc., failing which the purchaser will not be liable for payment of such Taxes and Duties.
- 5.6. Validity: The offers for main equipment and spares shall be kept open for acceptance for 120 days (one hundred and twenty days) from the date of opening of the tender (Part I).
- 5.7. Terms of Payment:
- 5.7.1. Indian Bidders
- 5.7.1.1. The preferred payment terms are indicated below:
- 5.7.1.2. 100% payment, within 45 to 90 days, after receipt / acceptance / commissioning of equipment at BHEL, Tiruchi, against submission of 10% Performance Bank Guarantee on total order value.

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5.7.1.3. 80% payment against documents through bank within 45 to 90 days, (after predespatch inspection) and balance 20% payment after receipt / acceptance / commissioning of the equipment 45 to 90 days, 45 to 90 days against submission of 10% Performance Bank Guarantee on total order value.

# 5.7.2. Foreign Bidders

An Irrevocable Letter of Credit shall be established for 80% of the value of the goods. Balance 20% shall be paid on receipt / acceptance / commissioning of the goods at BHEL against submission of Performance Bank Guarantee for 10% on total order value. All bank charges outside India are to Vendor's account.

5.8. Performance Bank Guarantee (PBG): The Bidder, in the event of an order, should furnish a bank Guarantee from an Indian Bank approved by BHEL, at no extra cost in a proforma prescribed by BHEL, along with the order, for an amount equivalent to 10% (Ten Percent) of the value of the contract. The PBG shall be valid for period of 18 months from the date of dispatch or 12 months from the date of receipt / acceptance / commissioning of the equipment at BHEL, Tiruchi whichever is earlier with additional claim period of 2 months.

Contd 5/-

The Performance Bank Guarantee shall be obtained from any one of the following banks who is a member bank in our consortium of banks.

- State Bank of India, 2) State Bank of Hyderabad, 3) State Bank of Travancore,
   State Bank of Mysore, 5) Canara Bank, 6) Bank of Baroda, 7) Punjab National Bank, 8) Deutsche Bank, 9) HDFC Bank, 10) Standard Chartered Bank, 11) Citi Bank, 12) Standard Chartered Grindlays Bank, & 13) Bank of America or any other Nationalised Bank
- 5.9. Liquidated damages: It is clearly understood among the parties to the contract the "Time is the essence of the contract". Therefore, the delivery of the goods specified in the purchase order should be made within the time prescribed. Where the seller supplies or despatches the goods, beyond the delivery period specified the purchaser will have no obligation to accept the goods. If accepted liquidated damages at the rate of 1/2% of the value of goods delayed for each week of delay subject to a maximum of 15% of the order value will be levied.
- 5.10. Risk Purchase: Alternatively the purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or despatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute therefor. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.
- 5.11. Indian Agency Commission: In case of Foreign Bidders, agency commission if any, payable to their Indian Agents, shall shown separately in the Offer. This will be paid by us in India, in Indian Rupecs, on satisfactory completion of the Contract. Copies of current Agency Agreement / Authorization Letter in respect of Agency Commission shall be furnished alongwith offer. For calculation of Rupee equivalent of Agency Commission, exchange rate as prevailing on the date of offer will be taken.

### NOTE:-

To curb possible manipulation by agents, it is desirable that as far as possible BHEL discourage in dealing with agents of OEMs. (Original Equipment Manufacture)s.

- i) When it is not possible to directly deal with OEMs and the involvement of agents become unavoidable, BHEL is made it clear to OEMs that while appointing Indian agents, it is responsibility to ensure that the agents are not representing other OEMs in the same tender.
- ii) OEMs should also ensure that banned agents / employees of banded agents are not engaged by them in any capacity. An undertaking to this effect should be taken by OEMs and provided for each tender. It is also made it clear that if at any stage it is found that the OEM has appointed an agent who
  - a. is banned by BHEL or
  - b. is an employee of a banned agent or
  - c. is found to be representing more that one OEM in the same tender the OEM (s) shall be disqualified
- 5.12. Test Certificates / Operating and Maintenance Manuals: The Bidders shall clearly mention in their offer, that Test Certificates and Operating Maintenance Manuals, etc., as called for in the Technical Specification, in the required number of copies will be provided at no extra cost.
- 5.13. Modvat Credit: (for Indian Bidders only) 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 his input materials, the effect of proforma credit should be passed on to the purchaser.
- 5.14. Packing and Marking: The Supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit.
- 5.15. BHEL 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 BHEL.